

**Masaryk University
Faculty of Economics and Administration**



New Economic Challenges

1ST INTERNATIONAL PHD STUDENTS CONFERENCE

21. 1. - 22. 1. 2009

BRNO

Czech Republic

Editor: Mgr. Petr Červinek

Technical collaboration: Mgr. Petr Červinek

© Masarykova univerzita, 2009

ISBN 978-80-210-4815-7

The 1st International PhD Students Conference – New Economic Challenges was held Under the Auspices of the Dean of the Faculty of Economics and Administration of Masaryk University. The two-day conference served as a forum to present research papers and gave PhD students the opportunity to network.

The printed proceeding contains the papers of conference participants. It is also available in its electronic version: http://is.muni.cz/do/1456/sborniky/2009/New_Economic_Challenges.pdf.

International Conference Board

Chairman: doc. Ing. Martin Svoboda, Ph.D. Dean of the FEA MU

Members: prof. Ing. Ladislav Blažek, CSc. Head of the Department of Corporate Economy, FEA MU

prof. Dr. Dirk Kaiser HS Bochum, Germany

Professor Antonin Rusek Ph.D. Susquehanna University, U.S.A.

prof. Ing. Antonín Slaný, CSc. Head of the Department of Economics, FEA MU

doc. Ing. Eva Horvátová, CSc. KBaMF NHF EU Bratislava, Slovakia

doc. JUDr. Ivan Malý, CSc. Head of the Department of Public Economics, FEA MU

doc. RNDr. Milan Viturka, CSc. Head of the Department of Regional Economics and Administration, FEA MU

Ing. Martin Kvizda, Ph.D. Vice dean of the FEA MU

Ing. Josef Menšík, Ph.D. Vice dean of the FEA MU

Ing. Petr Smutný, Ph.D. Vice dean of the FEA MU

Mgr. Simona Škarabelová, Ph.D. Vice dean of the FEA MU

Ing. Petr Valouch, Ph.D. Head of the Department of Finance, FEA MU

Board of Organizers

Chairman: Ing. Jan Krajíček

Members: Mgr. Petr Červinek, Ing. Šárka Grigarčíková, Ing. Lenka Jaterková, Ing. Veronika Kartusová, Ing. Alois Konečný, Mgr. Ing. Eva Kutová, Ing. Dagmar Linnertová, Ing. Peter Mokrička, Ing. Lucie Obermajerová, Ing. Gabriela Oškrdalová, Ing. Tomáš Viktořík, Ing. Marek Pavlík

Reviewers:

doc. JUDr. Ivan Malý, CSc., Mgr. Simona Škarabelová, Ph.D. Ing. Petr Smutný, Ph.D., doc. RNDr. Milan Viturka, CSc., Ing. Josef Menšík, Ph.D., Ing. Zdeněk Tomeš, Ph.D., Ing. Petr Valouch, Ph.D., Ing. Jan Krajíček

CONTENTS

FINANCIAL MARKETS – THEORY AND PRACTICE	8
Borcuch – Financial stability in the European Union from the perspective of payment systems	9
Čurlejšová – Economic consequences of USD substitution as a reserve currency by EUR.....	16
Hendy – The right investment strategy?	21
Kiss – Analysis of Diversification Problems in the Case of Hungarian and Russian Pension Investments.....	26
Klimontowicz – Intangible assets in gaining the competitive advantage by Polish banks.....	31
Konečný – Selected possibilities of defence against takeovers	36
Krizek – Banking development in selected SEE countries - Evidence from Albania, Bosnia and Herzegovina, and Serbia.....	41
Krizek – Causality between financial development and economic growth – empirical evidence from transition countries	48
Kutová, Linnertová – Application of SEPA in the Czech Republic	54
Linnertová – Analysis of the Czech Capital Market	59
Lyčková – Specifics of the financial analysis of the commercial insurance companies.....	66
Málek – Technical analysis and its prediction of financial crisis	72
Mařovčíková – The effect of central bank’s and government’s measures in the wake of financial crisis on the respective financial markets.....	79
Moždiáková, Czudek – Functions and duties of A depository of collective investment funds	88
Muharremi, Koprencka – The financial system development and the financial stability in Balkan countries.....	95
Oškrdalová – Contracts for differences.....	108
Valová – Reliability of rating.....	113
ACCOUNTING AND TAXATION OF PROFIT AND NON – PROFIT SECTOR	119
Randová – Amendment to the value added tax act, no. 302/2008 coll. in force from 01.01.2009.....	120
Svoboda – Governmental Accounting in the Czech Republic.....	125
REGIONAL DEVELOPMENT AND ADMINISTRATION – THEORY AND PRACTICE	133
Antoušková, Kroupová – The influence of tourism on the environment.....	134

Balcha – The Impact of cultural Differences in Addressing social Problems.....	140
Brown – European Social Fund management and its contribution to regional development	148
Huderek-Glapska – The contribution of transport infrastructure to regional development. A case study of an airport	153
Lněnička – Agenda 21 and Local agenda 21 in Czech Republic.....	159
Luštický – The Regions’ programme Documents on Tourism from the point of view of strategic management.....	165
Nevěděl – Perceptions of local development	172
Opluštilová – The specifics of financial management of city districts in Corporate town Brno.....	177
Pařil – A comparative analysis of the regional policy in the Czech Republic and Austria	183
Pelegrinová – Regional disparities among EU new member states	189
Pešáková, Pudlo – Innovations in regions of Eastern Slovakia	195
Petr, Tonev – Alternative approach to human development measurement at regional level: the case of the Czech Republic.....	202
Rušin – Eastern Slovakia - new sphere of interest of foreign investors or a part of Slovakia condemned to permanent backward and immigration of labour forces. The role of management in this time.	216
Sokoli, Pulaj – The politics of regional development	220
Svobodová – Development of rural regions – on example of Hrotovicko microregion	234
DEVELOPMENT OF PUBLIC SECTOR – THEORY AND PRACTICE.....	239
Ali Taha, Dodecký – Process of strategic programme documents creation and programme of economic and social development of town Prešov.....	240
Darmopilová, Pavlík – Voucher schemes - threat or opportunity for the Czech healthcare sector.....	247
Morze, A. – Patients’ expectations towards health-care workforce.....	256
Morze, S. – Outsourcing in state-owned hospitals as a solution for effective cost management and budgeting.....	261
Popova – Corruption, voting and employment status. Evidence from Russian parliamentary elections	267
Řežuchová – Demand for public services: Impact on the methods of provision and financing.....	273
Šimonová – Cross-cultural communication in public administration.....	279
Wijesinghe, Hurta – Interaction between leader behavior and person-organization value fit on employee participation and trust.....	284

ECONOMIC THEORY, ECONOMIC POLICY AND ECONOMIC HISTORY	289
Černíková – Business cycle analysis of the EMU countries	290
Hrdličková – Reformative economic thinking in Czechoslovakia in the 1960s	299
Chmelová – The notion of rationality in economic theory	304
Idirisinghe Mudiyansele, Ondrčka – Knowledge Management as a Driving Tool of Macroeconomic Development	313
Jašová – Phillips curve, NAIRU and definition of economic cycle from labour market point of view in the Czech Republic at macro and mezzo-level	320
Köprülü – How to understand “New economy”?	327
Krčilková – Looking For Common Driving Factors in The European Union	332
Křístková – Effect of marginal propensity to save on the economy with use of CGE modelling	341
Ruban – Energy Factor of International Economic Relations	349
Sonntag – Understanding Household energy behavior The multi person case	356
Udvari – Potential economic effects of the Lomé conventions in Sub-saharan Africa	362
BUSINESS ECONOMICS, MANAGEMENT AND MARKETING	367
Birtu – Where is the world heading? – Towards information-based or knowledge-based society?	368
Drličková – Formulation and Translation of the Organizational Culture from Home Country to the Foreign Acquisition within an International Retail Organization	373
Eckenhofer – Strategic networking as a management tool	378
Hadryš, Niszczota – The influence of control and risk factors on changes in the financing of family-owned businesses	384
Halagová, Hricová – Implementation of corporate social responsibility in companies in Slovakia	391
Herath, Porvazník – Motivation and their use in behavior of farmers in technology adoption with reference to developing countries	396
Holoubek, Studeníková – Innovations Increase the Competitiveness of Firms via Quality Human Capital	402
Horváthová – Working motivation in specific company in Slovak Republic	407
Karabašová – The application of balanced scorecard in specific Slovak organization	413
Karpissová – Environmental management and its influence on a company performance	420
Kovářík, Kovářík, Klímek – Cluster analysis in marketing information system	426
Kozub – Cooperative image through web presentation	433
Minulescu – Industrial Ecology and Cement Manufacture	440
Pěkná – Management in education of employees in public administration	445

Pilat – Talent management as a mainspring for successful development of a company	450
Presová – Influence of contemporary IT trends on strategic management and organizational structures	456
Rubaninska – Sponsorship effectiveness and its impact on consumers’ attitudes.....	461
Taraba – Principles of Corporate Governance and Corporate Governance Code.....	468
Tišlerová – New trends in CRM: Call-centres	475
Váčková – Future of tourism.....	481
Závodná – Service sector and the future	488
Zhang, Wang – Behavior of creative employees and methods of increasing their creativity.....	498

FINANCIAL MARKETS – THEORY AND PRACTICE

FINANCIAL STABILITY IN THE EUROPEAN UNION FROM THE PERSPECTIVE OF PAYMENT SYSTEMS

Artur Borcuch

ANNOTATION

This article presents payment systems in the European Union from the perspective of financial stability. It is worth mentioning that payment systems area is emerging as a new discipline in economics and finance, which was regarded only as a technological infrastructure issue until recently. The amount of academic studies and researches produced to analyze its effect on macro and micro economy is quite limited in number. The impact of payment systems on financial stability remain to be further investigated.

KEY WORDS

Payment system, financial stability, euro, SEPA, TARGET 1, TARGET 2

INTRODUCTION

Presently payment systems area is emerging as a new discipline in economics and finance. Until recently this was regarded merely a technological infrastructure issue. A payment system consists of a set of instruments, banking procedures and typically, interbank funds transfer systems that ensure the circulation of money.

From the European Union perspective, payment systems have been growing in importance over the past two decades. This is a result of an increase in both the volume and the value of transactions stemming from money and foreign exchange markets and from financial markets in general. The introduction of Euro in 1999 fostered their integration in the Euro zone and in the European Union in general.

AIM AND METODOLOGY

The aim of this article is the analysis of impact of payment systems on financial stability in the European Union.

This article presents standard methodology for country tables and comparative tables on payment systems in European Union. The statistical tables comprise data from the European Central Bank and Bank of International Settlements reports.

RESULTS

Financial stability depends on well functioning payment systems. In 1999 Euro was introduced as an account currency. Either in 1999 was created large value payment system – TARGET for large payments in the European Union area. But during this time forgot of standardized retail payment system. Activated on January 2008 the SEPA system repairs that oversight. Few months earlier, on November 2007 system TARGET was exchanged to TARGET2 that uses a direct payment platform without intervention of any local RTGS. This direction strengthen financial stability in European Union.

The influence of payment system on financial stability

The country's payment system is made up of the settlement systems and instruments of payment available to the citizens and economy. Safe and efficient payment systems are a

major precondition for financial stability in a country¹. A safe payment system minimizes the risks involved in the transfer of monetary value. These risks are often collectively referred to as payment system risk².

It is worth mentioning that, the payment systems have been developed significantly over the last 20-30 years. We might ask, what were the other reasons for this increasing importance in payment systems?

Answering that questions, we should take into consideration four elements. Firstly, the overall activity of payment systems has increased significantly because of the rapid development in the area of information technology. The deepening of payment systems definitely means more effective allocation of resources. Secondly, together with the deepening of payment systems, these systems are also undergoing a period of rapid internationalization not only on the current account of the balance of payments, but also on the financial account. Thus there is a higher likelihood of contagion from other countries via payment systems, which could be hard to contain after a crisis arises. Thirdly, the integration of the financial markets and the development of non-banking financial intermediation means that there is a much wider group of payment system participants. And finally, much of the increased interest in payment systems could also be due to the introduction of the euro currency, in many countries, which has resulted in wider considerations of multinational payment systems³.

It is not a coincidence that the emergence of financial stability analysis appeared at the same time with the emergence of more sophisticated payment systems. The stability of the payment system has empirical links to the “quality” of the overall financial system⁴.

Fig.1: Some of the reasons why the attention paid to payment systems has a similar motivation to financial stability analysis

An unstable and unsafe payment system can itself represent a source of financial instability. It is evident that if a payment system allows frauds, it can destroy an otherwise relatively healthy financial system.
--

Financial instability can influence otherwise healthy payment systems and eventually destroy all the positive externalities related to the existence of a well-functioning payment system. Therefore, analysis of the reaction of payment systems to overall financial system instability is a valid interest of the central bank

The payment system plays the role of first buffer to potential financial instability. Thus the set-up and robustness of the payment system has an important signaling effect for overall financial stability
--

Source: Own elaboration based on: P. Racocho, The Payments Systems and the Financial Stability, Keynote Presentation at Conference “Payment Systems in Central and Eastern Europe”, Prague, July 8-9, 2004, p. 7.

Types of payment systems in EU

There are two main types of payment system: netting systems and real time gross settlement systems (RTGS), along with a variety of hybrids which combine features of these two main types in different ways⁵. Over the last 20 years, netting systems have been replaced by real-

¹ N. Jonker, *Payment Instruments as Perceived by Consumers – a Public Survey*, De Nederlandsche Bank Working Paper No. 053/2005, September 2005, p. 2.

² S. Chakravorti, *Analysis of systemic risk in multilateral net settlement systems*, “Journal of International Financial Markets, Institutions & Money” 2000, Vol. 10, Issue 1, January, p. 10.

³ P. Racocho, *The Payments Systems and the Financial Stability*, Keynote Presentation at Conference “Payment Systems in Central and Eastern Europe”, Prague, July 8-9, 2004, p. 2.

⁴ P. Racocho, *The Payments Systems and the Financial Stability*, Keynote Presentation at Conference “Payment Systems in Central and Eastern Europe”, Prague, July 8-9, 2004, p. 7.

⁵ T. Kristinsson, *Payment intermediation – evolution and current status*, „Monetary Buletin” 2000, No. 1, p. 46.

time gross settlements systems⁶. Furthermore, in the last 30 years, large-value payment systems have been revolutionized by electronic fund transfers. The interlinking of computers, the extraordinary increase in their capacity to store and process data, and developments in remote transmission techniques have enormously increased the payment flows generated by financial transactions⁷.

In many countries large value payment systems have been established to reduce the credit risk. In an large value payment systems, the largest payments, which are also the most important ones and carry the highest risk, are handled separately and effective methods are used to minimize the risk. In most cases the large value payment systems are RTGSs (where payment is made immediately if there are sufficient funds or secure authorization for lending), although there are also examples of netting systems which make strict demands regarding reserve funds aimed at ensuring final settlement. In the buildup to European monetary union, the central banks of the member countries were required to establish large value transfer systems, which then were linked into a common system under the name of TARGET. When the Euro was launched in the beginning of 1999, the system had been extensively tested and it has largely operated without any setbacks⁸.

Fig.2: Payment systems in some EU countries

Country	System		Type of settlement	Type of payment	Unit managing the system
France	TBF	Transferts Banque de France	RTGS	Large value	Central Bank
	PNS	Paris Net Settlement System	hybrid (DNS/RTGS)	Large value	Private sector
	SIT	Système Interbancaire de Telecompensation	DNS	Retail	Private sector
Germany	RTGS	Real-time gross settlement system of the Deutsche Bundesbank	RTGS	Large value	Central Bank
	RPS	Retail Payment System	DNS	Retail	Central Bank
Great Britain	CHAPS Sterling	Clearing House Automated Payment System Sterling	RTGS	Large value	Private sector
	CHAPS Euro	Clearing House Automated Payment	RTGS	Large value	Private sector

⁶ A. Martin, J. McAndrews, *Liquidity-saving mechanisms*, "Journal of Monetary Economics" 2008, Vol. 55, p. 555.

⁷ M. Aglietta, *Whence and Whither Money?* [in:] *The future of money*, OECD, Paris 2002, p. 52.

⁸ T. Kristinsson, *Payment intermediation – evolution and current status*, „Monetary Buletin” 2000, No. 1, p. 46-47.

		System Euro			
	BACS	BACS	DNS	Retail	Private sector
Italy	BI-REL	Bank of Italy Regolamento Lordo	RTGS	Large value	Central Bank
	BI-COMP	Bank of Italy Compensazione	DNS	Retail	Central Bank

Source: Prepared on the basis of: *Payment and settlement systems in selected countries*, Committee on Payment and Settlement Systems, Bank for International Settlements, April 2003; *New developments in large-value payment systems*, Committee on Payment and Settlement Systems, Bank for International Settlements, May 2005.

Fig.3: Relation between year large payment system turnover and GDP volume in some countries in 2000-2005 year

Country (system)	2002	2003	2004	2005
Germany (RTGSPlus)	58,2	59,5	57,3	61,8
France (TBF)	58,9	60,4	65,3	71,3
Italy (BIREL)	19,4	18,5	20,2	23,2
Great Britain (CHAPS Sterling)	45,7	46,1	44,5	42,9

Source: *Blue Book Addendum*, European Central Bank, Frankfurt am Main 2006.

TARGET and TARGET 2

TARGET was the Trans-European Automated Real-time Gross Settlement Express Transfer system, which is a mechanism to effect cross-border payments in euro on a real-time gross settlement basis. The 15 RTGS systems of the (pre-1 May 2004) EU and the Euro Payment Mechanism of the European Central Bank were linked to form the TARGET system⁹. In 2003, TARGET as a whole processed a total of 66,4 million payments with a total value of 420 trillion. This corresponds to a daily average of 261,200 payments with a value of 1,7 trillion¹⁰.

One of key factors in the design of the TARGET was the trade-off between risk and liquidity in gross and net payment systems. As a liquidity-intensive but safe RTGS international system, TARGET has been designed to minimize the systemic risk due to cross-border transactions¹¹.

⁹ P. O'Brien, *Role of Payment System Oversight in Financial Stability/Financial Infrastructure*, "Financial Stability Report" 2004, p. 155.

¹⁰ P. O'Brien, *Role of Payment System Oversight in Financial Stability/Financial Infrastructure*, "Financial Stability Report" 2004, p. 155.

¹¹ X. Freixas, B. Parigi, *Contagion and Efficiency in Gross and Net Interbank Payment Systems*, "Journal of Financial Intermediation" 1998, Vol. 7, Issue 1, January, p. 22.

Fig.4: Turnover in TARGET1

Year	Average daily value, EUR billions
1999	950
2000	1020
2001	1250
2002	1500
2003	1650
2004	1700
2005	1850
2006	2200

Source: *Financial Integration in Europe*, European Central Bank, April, Frankfurt 2008, p. 69.

In October 2002 the Governing Council of the European Central Bank decided on the long-term strategy for TARGET, the new project named as: TARGET2. TARGET2 is a system that provides extensively harmonized services via an integrated IT infrastructure and improves cost-efficiency. It is also prepared for swift adaptation to future developments, including the enlargement of the Eurosystem¹². TARGET2 was introduced in November of 2007 year. TARGET2 uses a direct payment platform (the SSP) without intervention of any local RTGS.

SEPA

28 January 2008 was the first major milestone in the introduction of the Single Euro Payments Area (SEPA) with the launch of the SEPA Credit Transfer (SCT) - the new file format for mass euro payment transactions. Four thousand banks throughout 31 countries (The so-called EU31 comprises the 27 existing members of the European Union plus Iceland, Liechtenstein, Norway and Switzerland) have committed to delivering the SCT to their corporate clients and have demonstrated this through the European Parliament Council (EPC) adherence agreement they have signed. In the six weeks since the launch of the SCT, the pan-European payments processor, Equens, has processed 500,000 SCT payments while SIA-SSB, which provides the EBA STEP 2 platform, processed 200,000 European credit transfers with a total value of €1.36bn in the first week of the SCT's launch¹³.

The SEPA is a domain in which 31 European countries are standardising euro payments and collections, and the countries of the Eurosystem¹⁴, further, are working to treat them as domestic transactions. Building SEPA is the largest payments industry initiative ever undertaken in Europe¹⁵. The EPC stated that SEPA would save the EU economy somewhere between 50 and 100 billion Euros a year. Half of these savings would be attributed to a squeeze on bank margins and the other on the effects of efficiencies in liquidity, working capital and transparency driven into the payments process¹⁶.

¹² C. Okay, *The Drivers of The Recent Payment Systems Reforms Globally*, "Central Bank Review 2" 2004, p. 85-86.

¹³ S. DeZoysa, *Update 2008: The Year SEPA Went Live*, "gtnews.com" 25.03.2008.

¹⁴ The Eurosystem comprises the European Central Bank and the National Central Banks of those countries that have adopted the Euro.

¹⁵ *World Payments Report 2007*, Capgemini, ABM AMRO and EFMA 2007, p. 10.

¹⁶ D. Shannon, *The emergence of prepaid cards in Europe*, "Card Technology" 2008, Vol. 20, Issue 4, April, p. 11.

Presently, over 4,300 banks are reachable for SEPA, which means they are able to accept payment instructions from their clients in the SCT format - an impressive figure representing more than 95% of total payments volumes in Europe¹⁷.

CONCLUSION

Payment systems play the crucial role in the stability of financial system. The introduction of the Euro in 1999 fostered their integration in the Euro area and in the European Union in general. Introduced in 1999 year TARGET is the RTGS system for the Euro, offered by the Eurosystem. TARGET was used for the settlement of central bank operations, large-value Euro inter-bank transfers as well as other Euro payments. From November of 2007 operates TARGET2.

Single Euro Payments Area initiative for the European financial infrastructure involves the creation of a area for the euro in which all electronic payments are considered domestic, and where a difference between national and intra-European cross border payments does not exist. It means that, the SEPA is next step in European financial system evolution.

BIBLIOGRAPHY

- [1] Aglietta M., *Whence and Whiter Money?* [in:] *The future of money*, OECD, Paris 2002. *Blue Book Addendum*, European Central Bank, Frankfurt am Main 2006.
- [2] Chakravorti S., *Analysis of systemic risk in multilateral net settlement systems*, "Journal of International Financial Markets, Institutions & Money" 2000, Vol. 10, Issue 1, January.
- [3] DeZoysa S., *Update 2008: The Year SEPA Went Live*, "gtnews.com" 25.03.2008.
- [4] *Financial Integration in Europe*, European Central Bank, April, Frankfurt 2008.
- [5] Freixas X., Parigi B., *Contagion and Efficiency in Gross and Net Interbank Payment Systems*, "Journal of Financial Intermediation" 1998, Vol. 7, Issue 1, January.
- [6] Jonker N., *Payment Instruments as Perceived by Consumers – a Public Survey*, De Nederlandsche Bank Working Paper No. 053/2005, September 2005.
- [7] Kristinsson T., *Payment intermediation – evolution and current status*, „Monetary Buletin" 2000, No. 1.
- [8] Martin A., McAndrews J., *Liquidity-saving mechanisms*, "Journal of Monetary Economics" 2008, Vol. 55.
- [9] *New developments in large-value payment systems*, Committee on Payment and Settlement Systems, , Bank for International Settlements, May 2005.
- [10] O'Brien P., *Role of Payment System Oversight in Financial Stability/Financial Infrastructure*, "Financial Stability Report" 2004.
- [11] Okay C., *The Drivers of The Recent Payment Systems Reforms Globally*, "Central Bank Review 2" 2004.
- [12] *Payment and settlement systems in selected countries*, Committee on Payment and Settlement Systems, Bank for International Settlements, April 2003.
- [13] Racocho P., *The Payments Systems and the Financial Stability*, Keynote Presentation at Conference "Payment Systems in Central and Eastern Europe", Prague, July 8-9, 2004.
- [14] Richthofen K., *SEPA: Industry Targets for Year-end 2008*, "gtnews.com" 16.09.2008.
- [15] Shannon D., *The emergence of prepaid cards in Europe*, "Card Technology" 2008, Vol. 20, Issue 4, April.
- [16] *World Payments Report 2007*, Capgemini, ABM AMRO and EFMA 2007.

¹⁷ K. von Richthofen, *SEPA: Industry Targets for Year-end 2008*, 16.09.2008.

Full name: Ph. D. Artur Borcuch

Institution: The Jan Kochanowski University of Humanities and Sciences/ Faculty of Management and Administration/ Institute of Management

Street: ul. Świętokrzyska 21

City: 25-406 Kielce [Poland]

Email: art123321@poczta.onet.pl

ECONOMIC CONSEQUENCES OF USD SUBSTITUTION AS A RESERVE CURRENCY BY EUR

Libuša Čurlejšová

ANNOTATION

Many economists predict that the euro could surpass the dollar as the premier international currency relatively soon. There is just one specific function of the two rival monies – their use in central bank reserves – ignoring all the many other roles that international currencies play. Worse, by concentrating purely on economic factors, it ignores the politics involved, which in practice could prove to be far more decisive.

KEY WORDS

Dollar, euro, reserve currency, foreign exchange reserves

INTRODUCTION

With economic consequences of the dollar by euro substitution, concern many studies, analysis and papers, mostly prepared by economists and politicians in the USA. The target is to present loss of U.S. dollar hegemony effect on the world finance market. Among most widely known papers belong papers Dr. Rona Paula, Michaela Rowbothama, Paula O' Neilla and others. Their meaning rests especially in theory creation, which attack new world-wide events, define measure of interest individual economic groups and the way of participation on all-world wealth. On one hand of the problem, the USA is the economically strongest state in the world, which meaning, inter alia, is that the currency of the USA is using as reserve currency. On the other hand, there is Europe, as the credible rival.

AIM AND METODOLOGY

The aim of this contribution is to focus on the problem of consequences of dollar substitution quantification, on the measurements proposal, which will reduce possible risks and economic potential utilization.¹

RESULTS

At the moment, the world's biggest foreign currency reserve is the US dollar. This is because, historically, the American economy has been the most secure and powerful economy. However nowadays, there is one realistic credible competitor – the euro. Whether the dollar might eventually follow the precedent of the pound and cede its status as leading reserve currency and whether the euro and Europe is ready for such step, to replace the dollar's stand, is hard to say and predict. Actual state of affairs, from economic as a political point of view, is very complicated. Therefore, here are the facts and the judgment is on the reader.

¹ A lot of thoughts are from prognoses, but they are not without foundation. The projections are firmly based on hard data, formal modelling and a variety of detailed scenarios. But I dare say, that in many papers I miss the combination of political analysis with economic theory in the study of world economy (International Political Economy).

Will the Euro replace the Dollar as the world's reserve currency?

Since 1971, the USA began to sense first problems in the monetary field and these problems are progressively strengthened. Record high prices of gold and oil, then the subsequent fall in prices and decrease of U.S. dollar value lead to increasingly economists and politicians deal with the idea of substitution dollar by another currency. In case of substitution dollar by euro, European Union will not need (and also not keep in banks) dollars to purchase oil, because of paying in their currency. Potentially euro acceptance as a reserve currency will give rise to economic prosperity in Europe and will strengthen its position at the expense of the USA.² China and Japan will probably not deny this opportunity as well. It will allow them to reduce dollar reserves and to more diversify their portfolio. It is assumed that one third of their dollar reserves are they going to keep, the second third is going to the market and with the third they are going to pay future payments. Russia also has an interest in transition to euro. The major oil and gas consumer are European countries; part goes to China and Japan. Euro acceptance as medium of payment for oil and gas will allow Russia trade with Europe in its own currency and over time it will lead to simplification the trade with China and Japan. Arabian countries exporting oil have also interest in the euro acceptance, because it will enable them to eliminate growing dollar reserves. As well as Russia, trade these countries primarily with Europe, so they absolutely have an interest in European currency use.³ It will increase their stability and decrease monetary crisis risk. Complicated problem presents quantification of positives and negatives of this one to second reserve currency transition. In this field it is necessary to analyze the problems resulting from economically reasonable facts and their solution inhere in this plain field, which problems have connection with political situation.

Why the euro may soon replace the dollar:

- *the dollar has been very weak in the past years* - against the euro, the dollar has fallen by over 30% since 2001, and also against the yen and other currencies; this means that countries holding reserves in dollars are seeing a decline in their value (e.g. China has over \$1,400 billion of dollar reserves, 20% devaluation represents a significant loss for them).⁴
- *the weakness of the dollar may continue* - US interest rates have fallen and may continue to fall by more than the interest rates in Europe; as interest rates in the US are low, it becomes less attractive to buy dollars, so the devaluation will continue.
- *national economic reasons and the exchange rate policy* - the central bank of countries which use the euro as a monetary anchor must hold foreign exchange reserves in euros, to be able to influence their own exchange rate against the euro over the intervention in the market.

² Based on the economic fundamentals, the euro certainly has the potential to become the second reserve currency for the world's financial system. Together, if and when all the nations of European Union join, the EMU will be larger than the United States. In some key indicators of international strength (economic power, capacity value and the functioning of financial market), the euro nations are already stronger.

³ The strongest against the dollar reflect the opponents of the U.S. foreign policy as Venezuelan President Hugo Chavez, Iranian hade of state Mahmoud Ahmadinejad and Russian President Vladimir Putin. All three countries are major producers of black gold. For the euro, began to sell oil in 2000 Iraqi dictator Saddam Hussein in the U.N.O Oil- for- Food Programme rather than an act of vengeance against the Americans, than from the business strategy. Iran has planned to open a stock exchange, on which oil, in contrast to the world markets, would trade in euros. Venezuela with Iran suggested its partners in OPEC to calculate the prices of black material on the basis of basket of several currencies and not just the dollar already in November 2007. On the issue of the move from the dollar to the euro, are the biggest oil exporters still crushed. While Russia, Norway, Iran, Venezuela and Algeria are sold raw material for the euro, Saudi Arabia, Kuwait and Iraq sold still in dollars. Other exporters accept in the oil trade dollars and euros too.

⁴ <http://www.economistsview.typepad.com>

- *systematic reasons* – current international monetary system, so called bipolar monetary system, based on the dollar and the euro, can be divided into two sub segments: US - European and US –Asian, and the G7 countries, which are not the EMU members (USA, Japan, Canada and Great Britain) hold a certain amount of foreign exchange reserves in euros, to be able to participate in intervention in EUR/USD market.
- *investment strategy* – profitability is very important for these central banks, which in recent years accumulated huge reserves for foreign interventions and they do not have to hold these reserves in liquid form, but they can invest them into more profitable assets.

Moreover, the growing appeal on the euro comes from several factors: the euro zone is comparable to the U.S. economy in terms of GDP and trade openness; the European Central Bank has kept inflation in check; the EU experiences nothing like America's current account deficit and external debt⁵. But still, it can take quite a while for the euro to become widely used as a reserve currency.

At present, the euro only accounts for a little over a quarter of world reserves, against the dollar's share of two-thirds. People accept dollars for the same reason they accept gold, because they believe that other people will always accept them. There are several reasons for this belief:

- *the size of the U.S. market and its ability to grow larger*, which gives people confidence that they will always be able to buy with dollars valuable things
- *faith*, based on U.S. political stability and on the relative transparency of American political and financial institutions
- *a large supply of dollars in the world*

Reserve growth in recent years has been dramatic, with emerging markets and developing countries tripling their reserves since 1998. In addition, rising prices for oil and other commodities have increased foreign reserves in fuel-exporting countries. These reserves come primarily from U.S. current account deficits. Even a limited shift out of dollar assets, the researchers say, could result in significant exchange rate movements - in particular, sizable dollar depreciation. The analysts assess the impact of the euro on international reserve holdings. The results show an increase in the shares of both the dollar and the euro in recent years at the expense of other currencies, with the euro gradually becoming more important, especially in the developing world.













In addition, in recent years the spreads on transactions in the euro have fallen sharply and have narrowed significantly for industrial countries' currencies as well, thus making diversification away from the dollar more attractive. The researchers perform some simulations for four emerging market countries (Brazil, Russia, India, and China) that have recently accumulated large foreign reserve assets and find larger weights for the euro than the aggregate estimate for the "representative central bank." This indicates that the euro's challenge to the dollar might occur sooner than imagined. If we look on the figure 1, we can note, that all the mentioned countries (BRIC countries⁶), are all between the top ten countries by foreign exchange reserves. If we consider Mexico (16.rank with 83,963 millions of \$) and Korea (7.rank with 200,500 millions of \$), which are currently the world's 13th and 14th largest economies in terms of nominal GDP just behind the BRIC and G7 economies, joining

⁵ www.nber.org

⁶ In economics, BRIC or BRICs is an acronym that refers to the fast growing developing economies of Brazil, Russia, India and China.

the BRIC countries with the idea of dollar challenge, or any other country or countries, who will enthuse over this idea, it can be realistic.⁷

Figr.1: List of top ten states by foreign exchange reserves

Rank	Country/Monetary Authority	Foreign exchange reserves (millions of USD)	Figures as of
	 World (sum of all countries)	\$ 7,410,757	--
1	 People's Republic of China (does not include Hong Kong SAR Macau SAR)	\$ 2,000,000	Nov 2008
2	 Japan	\$ 977,700	Oct 2008
	 Euro zone (EU member states which have adopted the euro, incl. ECB)	\$ 530,173	Sep 2008
3	 Russia	\$ 455,730	Dec 2008
4	 Republic of China (Taiwan)	\$ 278,150	Oct 2008
5	 India	\$ 245,857	Dec 2008
6	 Brazil	\$ 207,539	Dec 2008
7	 South Korea	\$ 200,500	Nov 2008
8	 Singapore	\$ 168,802	Sep 2008
9	 Hong Kong	\$ 160,557	Sep 2008
10	 Algeria	\$ 149,806	Sep 2008

Source: <http://www.economicshelp.org>

Mark: Foreign exchange reserves in a strict sense are only the foreign currency deposits held by central banks and monetary authorities. However, the term foreign exchange reserves in popular usage commonly includes foreign exchange and gold, SDRs and IMF reserve position as this total figure is more readily available, however it is accurately deemed as official reserves or international reserves.

CONCLUSION

Governments hold foreign currency reserves to help deal with issues such as depreciation in their currency. At the moment, the world's biggest foreign currency reserve is the US dollar; about 64% of the world's foreign currency reserves are currently denominated in dollars. This is because, historically, the US economy has been the most secure and powerful economy. However, with the continual decline in the dollar, many countries fear that the dollar is no longer the best currency to use and increasingly countries are switching to other currencies such as the euro. This means, that the idea of replacing the dollar as the world's reserve currency is becoming quite realistic and no doubt, that the euro is one of the real alternatives.

BIBLIOGRAPHY

- [1] The development of the performance of the Slovak economy in the years 1996 - 2006. International scientific conference "New trends - new ideas 2008", Znojmo, Czech Republic.
 [2] Trends in world market – new records of the year 2008. European Science Conference Doctoral studies members MendelNET PEF 2008, Brno, Czech Republic.

⁷ I took these two countries because of the popularity of Goldman Sachs thesis „BRIC“ (the acronym was first used by the bank holding company Goldman Sachs in 2001); and this term has sometimes been extended to „BRICK“ (K for South Korea) and „BRIMC“ (M for Mexico).

- [3] Globalization, route guidance to foreign markets. International scientific conference “Globalization and its socio-economic consequences ‘08”, Žilina, Slovakia.
- [4] Utilization of some non-standard derivatives in business firms. International scientific conference, Olomouc, Czech Republic.
- [5] The development of financial market of the European Union in the background of global competition. International scientific conference the members of doctoral studies and experienced moneymen - FOR FIN 2008, Smolenice castle, Slovakia.
- [6] Euro new dollar? International Baťa conference for members of Doctoral studies and young scientific workers, Zlín, Czech Republic.
- [7] The end of the US dollar hegemony. IMEA 2008, International conference students of the doctoral studies, Liberec, Czech Republic.

Ing. Libuša Čurlejová
The Faculty of National Economy
Department of Banking and International Finance
Dolnozemska Street 1
Bratislava
curlejova.libusa@gmail.com

THE RIGHT INVESTMENT STRATEGY?

Andrea Hendy

ANNOTATION

The paper focuses on a reaction to the present climate in the financial market and deals with the problems of investing in today's financial market. The article focuses on two investment alternatives: low risk and high risk, to demonstrate, with defined conditions in advance, that the more conservative alternative is in the long term, more lucrative and can better secure investments in the case of an unexpected situation; such as the one in which the financial market finds itself currently. Even with a less-riskier alternative, the importance lies on which type of investment instrument has been chosen. In the model example, property investment has been chosen to illustrate a lower risk alternative and a combination of investment instruments: share funds, building savings, pension funds, has been chosen to illustrate the higher risk alternative. A record of estimation in both alternatives is presented in the paper. The conservative alternative is the correct choice of investment instrument because, in the long term, it tends to be more lucrative.

KEY WORDS

Investment strategy, conservative strategy, less conservative strategy.

INTRODUCTION

In today's financial market, is it possible to plan long term anymore? By constructing a financial model and showing its progress through a predetermined set of conditions, it is able to replicate how it would function in a real situation.

AIM AND METHODOLOGY

The aim of the title is to show how to invest money in the current financial climate, and to secure it against possible collapses of the financial market. The methods used are analytical, descriptive, comparative and constructive.

RESULTS

The results show the effectiveness of low risk and high risk investments, and their impact on the final outcome of the investment period.

This article was written due to the current state of the financial market. It deals with the problems of investing into today's financial market and whether it is possible to find an investment instrument that brings a profitable return on the money, which can bring decrease and joint risk is adequate. The situation on financial market at present shows that economic theory in a substandard situation is failing and that the common precepts are increasingly invalid. For example, shares in monetary funds are a stationary and conservative investment – the situation is showing that even these instruments can be unprofitable (bank bankruptcy). The cuts in interest rates should be an incentive for an increase in the demand for bank loans –

true, but if banks make it more difficult to be granted a loan, which is the situation in today's financial market.

Is it possible to find a way out? If you chose the right conditions for your investment strategy, then yes. Let us create a model situation where a conservative investor, 30 years old with a monthly income of 40,000 Kč, has 1,500,000 Kč that he wants to invest over a 30 year period and then use during his retirement. Two strategies have been chosen for this investor – a low risk variant and a higher risk variant. In the higher risk strategy the investor will diversify the risk through the use of different investment instruments by corporations that have been chosen due to their stability and profitability. Stock funds, stavebni sporeni, pension funds can be considered as they create the investment mechanism for this instrument.

In the more conservative variant the investor will use money to buying the property to the value of 2,500,000 Kč for renting. Because the amount of own money is not large enough it is necessary to use a bank loan to the sum of 1,000,000 Kč. The type and term of loan chosen is a bank loan with a maturity of 15 years and an interest rate of 5.02% p.a., 5.95% RPSN.

The property is a 4 room flat, 80m2, with a current market value of 2,500,000 Kč, located in Brno. The property is bought in December and from January of the following year the mortgage repayments will start and the property will be rented. The investor has a tenancy agreement meaning that the flat will be rented for the whole period of the investment. The flat will be rented to 6 co-tenants at 2,500 Kč per person, which means a combined monthly return from the renting fee of 15,000 Kč. Other costs, such as electricity, water, and heating, are 6000 Kč. All other costs, up to a maximum of 5,000 Kč per month, are to be undertaken by the tenants.

After applying the exact details of each variant, the results are shown below:

A comparison of the lower risk variant and the higher risk variant in Kč

Lower risk variant

Initial investment	1500000
Outcome	3957703
Profit	2457703
Profit over 30 years in %	163,85
Average profit in % p.a.	5,46
Monthly income in Kč	10300

Higher risk variant

Initial investment	150000
Outcome	4320560
Profit	2820560
Profit over 30 years in %	188,03
Average profit in % p.a.	6,26
Monthly income in Kč in case of selling property	11800

Source: author

Despite the use of stricter risk investment instruments, which charge higher interest than conservative investment instruments, it is the more conservative variant that brings a better return of profit. The money from renting is used for other investment funds, stavebni sporeni, pension funds, etc. All the generated money is then placed into these investment instruments where it is possible to use every possible state benefit and tax relief. These figures take into account the cost of the bank loan (mortgage), as well as any applicable taxes.

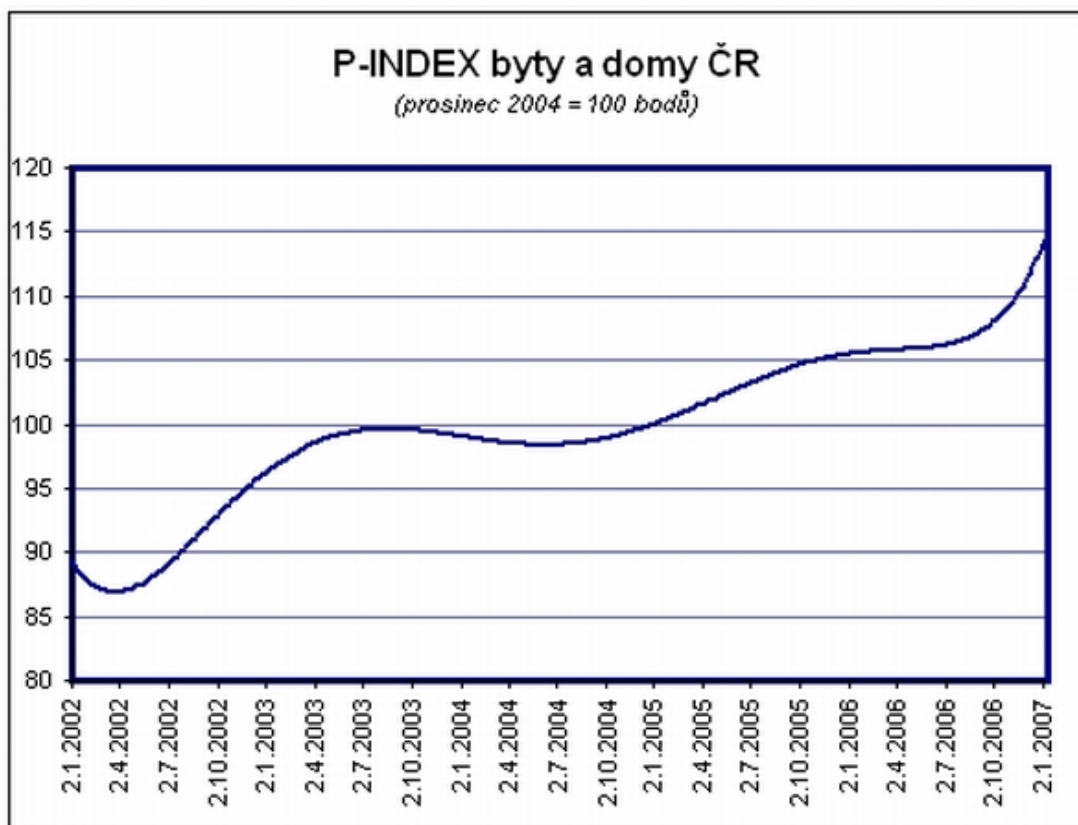
Could it be possible that the lower risk variant provides a better return on investment than the higher risk variant?

The answer can be found in selecting the right choice of model for investing into today's financial market. The stock index could be seen as being on a "swing" and that every prognoses about reassuring and pacifying the market, in the case of the American government and others, will encourage investment of the right money into the right companies, is not always correct and every new day brings yet another surprise.

What happens if the investor is currently at the end of his investment period and his money is in a position when he wants to take it out of the investment instrument? The progress of the market and profit which were very good last year can not also make the investment strategy for this year very good too. If we look at, for example, the Prague stock index, PX, had a value on 28.12.2007 of 1851.1 but its value after 11 months, on 28.11.2008, was only 863.2. The London stock index, FTSE 100, had a value on 28.11.2007 of 6306.20 but after 11 months, on 28.11.2008, the value was 4288.00.

And what about the price of the property? We can follow the progress of the prices, for example through the P-INDEX. The P-INDEX follows the progress of prices on the property market and it shows a break-even value of the properties, and it is around these prices that the value of the properties are spiralling.

We have a P-Index for houses and flats for all of the Czech Republic. It shows the prices for every house and flat in the Czech Republic. The progress of the P-INDEX is set in percentage points, the index had a value of 100 points on 31.12.2004.



Source: http://www.p-index.cz/templates/rhuk_solarflare/images/v-graf.jpg (3.12.2008)

In the case of investing money into property, when the investor chooses the correct local market, into which he buys the property, the fluctuation of the price can influence his profit; but under the right circumstances the risk of loss is very small. Even so, the price of property does not normally have such rapid fluctuation as shares, or other investment obligations, etc.

If the investor rents the property, the fluctuation of the financial market does not influence his profit. On the contrary, it can bring him greater profit because when it is not an ideal time to obtain a bank loan for the buying of property, the demand for renting is higher.

Which is better? Is it better to be an investor that likes to risk or to be an investor that chooses a more conservative approach to investing money, even if that investment is over a long period of time?

The course of time might show that having the right investment mix is better than have money in gold or property, but when I have to choose between a good night's sleep or better profit, my choice is obvious.

BIBLIOGRAPHY

- [1] Kohout, P. Investiční strategie pro třetí tisíciletí, Praha: Grada Publishing, spol. s r.o., 2000 ISBN 80-7169-942-X
- [2] Pavlát, V. a kolektiv Kapitálové trhy, Professional Publishing, 2005 ISBN 80-86419-87-8
- [3] Syrový P., Novotný M. Osobní a rodinné finance, Praha: Grada Publishing, spol. s r.o., 2003 ISBN 80-247-0478-1
- [4] http://www.p-index.cz/templates/rhuk_solarflare/images/v-graf.jpg

Ing. Andrea Hendy
MZLU Brno
Zemědělská 1
613 00 Brno
andrea.jannova@centrum.cz

ANALYSIS OF DIVERSIFICATION PROBLEMS IN THE CASE OF HUNGARIAN AND RUSSIAN PENSION INVESTMENTS

Gábor Dávid Kiss*

ANNOTATION

Funded pillar relieves the state budget from financing the pension system deficit, as benefit depends on portfolio management and future economic growth. The establishment and reform of Hungarian second pillar (1998 and 2007) and establishment of three pillar Russian pension system (2002) allows building diversified portfolios for asset managers. Effectiveness on integrated global capital market allows conversion between different time and liquidity levels. Therefore mispricing in one segment could accelerate divergence between fundamental and market value in other segments too. This analysis with a market risk-based approach suitable for the idea of long term pension investments, examines these inter-market correlations driven by special circumstances and leptocurtism.

KEY WORDS

leptocurtism, correlation, diversification, funded pillar

INTRODUCTION – AGEING AND PENSION REFORM

Countries experience population ageing as a result of the steep drop in fertility rates and the increase in longevity. Longevity here represents the case when a larger proportion of the population is less economically active and more dependent on others. In the Central and Eastern European transitioning countries, the problem of aging is accelerated by a labour-market crisis, with an emerging share of early retired and inactive people despite of the shorter life expectancy. As result of using the pension system as a ‘transformation buffer’, a large deficit was caused in the pay-as-you-go pension systems due the gap between the declined income base and the tightened beneficiaries. Fiscal positions provide little cushion against population ageing resulting in an increased burden on the working population. [2, 14, 16, 17]

Many European countries diverted their pension systems driven by the World Bank recommendation summarized in the “Averting the Old Age Crisis” report. This recommendation identifies three functions of old age financial security programs, namely redistribution, saving, and insurance. [9].

The quality of a pension system can be described by the following measures: (1) ability to meet its formal obligations; (2) maintenance of the purchasing power of pension payments; (3) maintenance of an established ratio of pensions to wages; and (4) adequacy of a target value of the replacement coefficient or index [7]. In the case of funded pillars (second, third or fourth) this quality depends on contributions in the past, income accruing from the investment in the future, and managerial costs and fees during the accumulation period – besides demographic and labour market conditions [18].

The first systemic pension reform in Central and Eastern Europe was approved in Hungary in 1997 with the introduction of a privately-managed mandatory pension funds (MPF) as second pillar. MPF assets had increased to 9,7 percent of GDP in 2006, which compares to assets of 2.6 percent of GDP managed by the voluntary pension funds, which has been operating since 1993 (the third pillar). Developments differed from assumptions. Firstly, participation in the

* Useful interactions with P. Kuba, E. Megyeri and K. Botos are acknowledged.

second pillar was higher than expected. Portfolios were too conservative with slow growth, while operational costs remained high. [10] After regulatory changes in 2006, government bonds remained as a dominant component in the portfolio (51%), while shares and investment funds has an increasing role (33%) at the end of 2007. [4].

The Russian pension reform was implemented in 2002, with a flat social pension in the first pillar and a mandatory “second pillar” with individual savings account. State owned asset manager, the Vnesheconombank has a monopolistic role in the first and second pillar. The Private Asset Managers and Non Governmental Pension Funds (in the third pillar) have only 4% share from the whole pension asset. State managed portfolios remained very conservative with a share of government bonds at 88,4% at the end of 2007. It is despite of the Government Resolution #379 of June 30, 2003, which allows holding shares of open joint-stock companies up to 65 percent. [5, 7]

AIM AND METHODOLOGY

Pension reforms and modifications in these states characterized by a slow and steady shift in pension investment policy into a direction of capital market-based approach. But how could market risks influence the growth of pension assets? Is there a real danger, that market turmoil will put a higher volatility inside the pension system after the reform?

To reduce market risks we could build a well diversified portfolio as CAPM suggests - but in this case we have to believe in the constant level of cross correlations. Segments of the global capital market are not independent from each other [8]. Global integration of real economies and convertibility tend to move together with the financial markets [3]. However, under extreme bullish and bearish (leptocurtic) circumstances, volatility diffuses through market [6] causing high correlation [15]. Therefore, correlation is unstable and time-series of rates are non-stationaries [1, 11].

While the extraordinary market events undoubtedly explain the strong rate falls and leaps on the global capital market between different countries and instruments, its conventional VAR-based measurement has a number of weaknesses. To focus only on the standard deviation of one instrument makes us blind on an integrated and effective market. To study the effects of market integration and extraordinary events (leptocurtism) on pension investments, the change of cross correlations among the domestic bond-, stock market, global resource-, and stock markets was measured in this study. The method is based on our former test study, in which we examined how extraordinary events on one market segment could effect other segments [12]. GARCH models are used to measure market segment dependency too [13], but we did not want to give up on our fine parameterization during our modeling.

The examined portfolio represents potential domestic capital markets of these pension funds (MAX state bond index, BUX stock market index in Hungary and GKO-OFZ long-term state bond rates, RTS stock market index in Russia), and main global segments (Dow Jones Composite stock market index in USA, Brent type Crude Oil price and Gold prices in London). The logarithmic yield of these instruments was measured on a 698 trading day long interval (9. January 2006 – 21. November 2008). This time period included quasi zero-sum bullish and a bearish trend.

This study focuses on the change of aggregated correlation in the portfolio. At first it is necessary to optimize the length of the period of all partial correlations to avoid distortions such as too short periods with high fluctuation, weekend-effect, too much smoothing or aggregation errors coming from positive and negative sides of correlation (black out effect). During the optimization process, 11, 15, 19, 23, 27, 31, 35, 39 trading day long periods were examined. As an outcome, the 23 trading day long period with 149 fluctuations was found to have a local minimum. Black out effect had a global minimum at this case, with 9.05% probability of common existence of partial correlations under -0.7% and above 0.7%. Partial

correlation (1) meant in this case the correlation between yields of instruments i and j in t_n time from (2) data.

$$(1) \text{ (corr}_{i,j} = \text{corr}_{i,j}(t_n))$$

$$(2) r_i(t_{n-11}), r_i(t_{n-10}), \dots, r_i(t_n), \dots, r_i(t_{n+10}), r_i(t_{n+11}); \\ r_j(t_{n-11}), r_j(t_{n-10}), \dots, r_j(t_n), \dots, r_j(t_{n+10}), r_j(t_{n+11})$$

The arithmetical aggregation of partial correlations change (4) of aggregated correlation could be defined as an adaptation of derivation at continuous functions in the case of R aggregated correlation (3) in domain of $\{t_0, t_1, t_2, \dots, t_n, \dots\}$ discrete set.

$$(3) R = R(t_n) = \sum_{i,j} | \text{corr}_{i,j}(t_n) | / (|I| \times (|I| - 1) \times 0,5) = \sum_{i,j} | \text{corr}_{i,j}(t_n) | / 21$$

$$(4) D_R = D_R(t_n) = (R(t_n) - R(t_{n-1}))$$

Turning points were set by $D_R(t_n) \times D_R(t_{n+1}) < 0$ cases, therefore monotone emerging and declining periods $\{l_1, l_2, \dots, l_k\}$ could be defined.

Change of aggregated yield (5) was generated (6) by the same way, so monotone emerging and declining periods $\{m_1, m_2, \dots, m_o\}$ between turning points (7) were defined too.

$$(5) M = M(t_n) = \sum_i r_i / |I| = \sum_i r_i / 7$$

$$(6) D_M = D_M(t_n) = (M(t_n) - M(t_{n-1}))$$

$$(7) D_M(t_n) \times D_M(t_{n+1}) < 0$$

Monotone periods of aggregated yields were longer than monotone periods of aggregated correlation $\{l < m\}$, therefore finite number of monotone aggregated correlation periods could be classified under each monotone aggregated yield periods.

The outputs of these processes were row vectors (8), which could classify onto two parts (“normally” and “extraordinary”) after 2 step clustering and hierarchical clustering.

$$(8) (r_m, t_m, l_d: D_R(t_n) \times D_R(t_{n+1}) < 0, R_{ld}, l_e: D_R(t_n) \times D_R(t_{n+1}) > 0, R_{le})$$

r_m : average decline/emergence of monotone aggregated yield

t_m : length of monotone aggregated yield period

l_d : numbers of monotone declining aggregated correlation periods inside this monotone aggregated yield period

R_{ld} : average decline of monotone aggregated correlation level inside this monotone aggregated yield period

l_e : numbers of monotone emerging aggregated correlation periods inside this monotone aggregated yield period

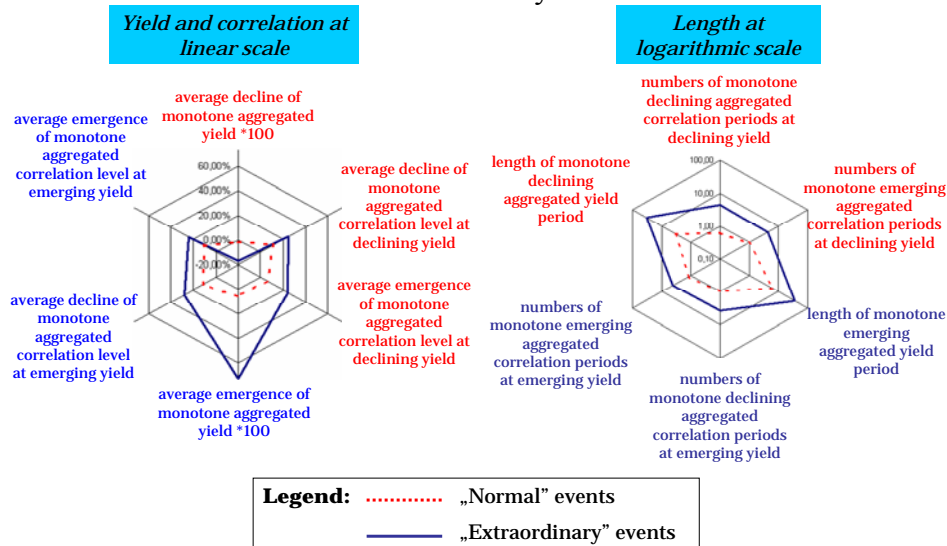
R_{le} : average emerge of monotone aggregated correlation level inside this monotone aggregated yield period

RESULTS

During the whole 3 year interval, Hungarian and Russian markets were not independent from the global benchmarks – aggregated correlation was 44.18%. There was a strong connection between the Russian domestic stock and bond market (75.15%), which was not true in Hungary (25.6%). The Hungarian governmental bond benchmark (MAX) was only in strong

connection with gold price (73.26%), while connection %) remained weaker with Brent-type oil (61.5%), Dow Jones Composite (56.94%) and RTS (46.42). The Hungarian governmental bond market was more sensitive for the price of oil and gold, than the Russian rate of long-term governmental bonds – with neutral (-7.43%) and adverse (-24.56%) connection. Dow Jones Composite strongly moved together with Russian and Hungarian stock and bond market (above 56%).

Fig.1 Characteristics of “normal” and “extraordinary” events



Source: own calculations

By applying the fine-tuned, 23 trading day long periods approach (figure 1.), “normal” and “extraordinary” changes were identified. Under normal circumstances there were quite short monotone periods at aggregated yields (monotone decline: 3.32 days; monotone emergence: 6,39 days), with weak average change in yields (-0,02%/day – -0,05%/day). Average emergence and decline of monotone correlation periods remained weak (under 11,25%), and mostly one normal monotone yield period included one monotone correlation period. Extraordinary changes were longer (more than 35 days) and stronger (-0,17%/day – 0,72%/day), while a monotone aggregated yield period included at least 4 emerging and 4 declining monotone correlation period, which were higher than 23%. Extraordinary growths of aggregated yield remained smaller but needed more time than in the cases of extraordinary declines.

CONCLUSION

Extraordinary events could influence pension savings even if they remain inside the domestic markets, because markets of governmental bonds and shares are integrated in the international capital markets. Therefore, we cannot avoid market risks by limiting the investment policy by pushing pension funds into the direction of buying only “risk free” governmental bonds. If a country with a domestic capital market lacking of instruments, opens its real economy while maintaining convertibility, it is better to authorise non-domestic, external pension investments.

BIBLIOGRAPHY

- [1] BERA, A. K. – KIM, S.: **Testing Constancy of Correlation and Other Specifications of the BGARCH Model with an Application to International Equity Returns.** Journal of Empirical Finance Vol. 9, 2001. pp. 171-195
- [2] BOTOS K.: **Pénzügyek és nemzetközi versenyképesség.**, In: Pénzügypolitikai stratégiák a XXI. Század elején, prof. Dr. Huszti Ernő DsC. Egyetemi tanár a Pénzügyi intézményrendszer, a tudomány és a felsőoktatás szolgálatában tiszteletkötet 75. születésnapja alkalmából, Budapest, Akadémia Kiadó, 2007. pp 11,
- [3] CHEN, NAI-FU – ZHANG, FENG (1997): **Correlations, Trades and Stock Returns of the Pacific-Bassin Markets.** Pacific-Bassin Finance Journal Vol. 5, 1997.pp. 559-577
- [4] GAÁL A.: **A magánnyugdíjpénztárak befektetési szabályozásának változása.** PSZÁF 2007.
- [5] GAJDAR E. – MAU, V.: **Russian Economy: Trends and Outlooks in 2007.** Moscow, Institute for Economy Transition, 2008. Issue 29
- [6] GIARDINA, I. – BOUCHAUD, J.-P. – MÉZARD, M. (2001): **Microscopic Models for Long Ranged Volatility Correlations.** Physica A Vol. 299, 2001. pp. 28-39
- [7] GURVICH, E.: **The Future of Russia's Pension System.** Problems of Economic Transition, Vol. 50 No. 9, January 2008. pp. 66-104.
- [8] EOM, C. – OH, G. – KIM, S.: **Deterministic Factors of Stock Networks Based on Cross-Correlation in Financial Market.** Physica A Vol. 383, 2007. pp. 139-146
- [9] HOLZMANN, R. – HINZ, R.: **Old-Age Income Support in the 21st Century: An International Perspective on Pension Systems and Reform.** World Bank 2005
- [10] IMPAVIDO, G. – ROCHA, R.: **Competition and Performance in the Hungarian Second Pillar.** World Bank WB 3876, 2006
- [11] JIANG J. – MA, K. – CAI, X.: **Non-Linear Charactersitics and Long-Range Correlations in Asian Stock Markets.** Physica A Vol. 378, 2007. pp. 399-407
- [12] KISS G. D. – KUBA P.: **Diverzifikáció a komplex tőkepiacokon.** Budapest, Hitelintézeti Szemle 2009.
- [13] KUPER, G. H. – LESTANO: **Dynamic Conditional Correlation Analysis of Financial Market Interdependence: An Application to Thailand and Indonesia.** Journal of Asian Economics Vol. 18, 2007. pp. 670-684
- [14] MADDALONI, A. – MUSSO, A. – ROTHER, P. – WARD-WARMEDINGER, M. – WESTERMANN, T.: **Macroeconomic Implications of Demographic Developments in the Euro Area.** ECB Occasional Paper Series No. 5 1 / August 2006
- [15] OBSTFELD, M.; TAYLOR, A. M.: **Globalization and Capital Markets.** Massachusetts, National. Bureau of Economic Research, Working Paper 8846, 2002
- [16] OECD: **Ageing and Employment Policies Project.** 2006.
- [17] SIERHEJ, R.: **Pension Reforms in Central and Eastern Europe (CEE): The Case of Poland.** Warsaw, International Monetary Fund, European Pensions and Investments Conference Vienna, January 31-February 1, 2008
- [18] SIMONOVITS, A.: **Nyugdíjrendszerek: tények és modellek.** Budapest, Typotex, 2002

Gábor Dávid Kiss, Ph.D student

University of Szeged, Faculty of Economics and Business Administration, Doctoral School in Economics

Kálvária sugárút 1.

Szeged

Kiss.Gabor.David@eco.u-szeged.hu

INTANGIBLE ASSETS IN GAINING THE COMPETITIVE ADVANTAGE BY POLISH BANKS

Monika Klimontowicz

ANNOTATION

Over the two last decades intangible assets has become a crucial factor which is directly connected with achieving banks' competitive advantage. Competitive intangibles directly impact effectiveness, productivity, wastage and opportunity costs within an organization and finally the general financial results. Banks in Poland are aware that intangible assets are of great importance in the process of gaining competitive advantage. They use mostly market-based assets, knowledge-based assets, technology-based assets and customer-based assets in that process.

KEY WORDS

intangible assets, competitive advantage, banks' value

INTRODUCTION

Owing to increased competition of the financial service industry, internationalization and globalization, implementation of new products, changes in consumer needs and technological progress, banks find themselves faced with the necessity of specifying the determinants of competitive advantage.

Marketing, over the last two decades, has become a crucial factor which is directly involved in charting a bank's future. Strategies oriented towards defining the target mix of future consumers has become a routine topic of discussion. At the same time better product, convenience and lower fees are not enough to make the consumers to be loyal.

Undoubtedly the intangible assets are the items that create the loyalty of customers, competitive advantage and banks' value in a long-term perspective. Recent studies have found intangible assets to be large and important but difficult to be measured. Competitive intangibles directly impact effectiveness, productivity, wastage and opportunity costs within an organization and finally the general financial results.

This paper presents how banks in Poland use intangible assets in the process of achieving competitive advantage.

AIM AND METODOLOGY

The purpose of this paper is to identify the intangible assets which influence the process of gaining the competitive advantage and to present Polish banks' experience in using them. It is prepared combining descriptive theoretical and empirical analytical methods.

RESULTS

Nature and kinds of intangible assets

Nowadays the real worth of bank is based on assets that economists have not always known how to measure – intangible assets. Current financial statements provide very little information about these assets. Much of the information that is provided is partial, inconsistent and confusing, leading to significant costs to companies and investors.¹ However

¹ Lev B., „Remarks on the Measurement, Valuation, and Reporting of Intangible Assets.”, Federal Reserve Bank of New York Economic Policy Review, September 1, 2003, <http://www.highbeam.com/> [December 23, 2008]

the intangible assets are the source of competitive advantage². They are the claim to the future benefits and generally they are now worth an average three times more than the physical assets a company may possess³. Fig. 1 presents how many times selected Polish banks' market value is higher than their assets value.

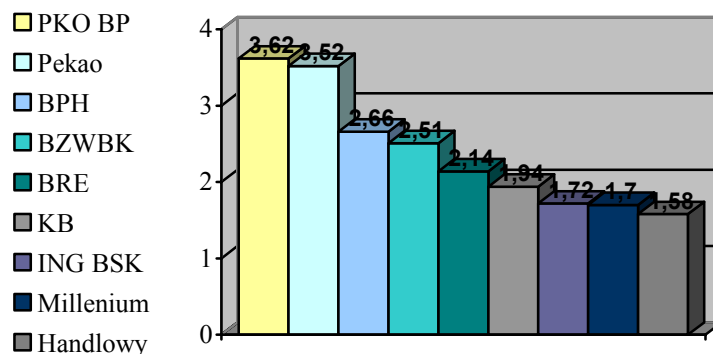


Fig. 1. Market value of selected Polish banks converted to 1 PLN of ownership capital.

Source: Hucik-Galicka S., "Majątkowa metoda księgową - cz.1", www.waluty.com.pl [December 23, 2008]

According to Low and Kalafut research up to 35% investors' decisions is based on intangible assets⁴. There are a wide variety of intangible assets present in today banks' environment. All of them have the following attributes:

- are not physical in nature,
- have specific identification and recognizable description,
- are subject to private ownership and transferability,
- generate some measurable amount of economic benefit in the form of an income increase or a cost decrease which may be measured in any of several ways including net income, net operating income or net cash flow, etc., and
- enhance the value of other assets with which it is associated.⁵

The question is which intangible asset is crucial for gaining competitive advantage. Among the types of them that banks increasingly recognise are:

- market-based assets which include brand name, distribution channels, etc.,
- knowledge-based assets which rise from the quality of personnel service,
- customer-based assets which include customer databases,
- technology-based assets which rise from bank's innovative work.

Other intangible assets include contracts, which became a more-critical management area as outsourcing increases, and statutory-based assets, more commonly known as intellectual property: patents, copyrights, trade name, and the like.⁶

² Harasim J., Strategie marketingowe w osiągnięciu przewagi konkurencyjnej w bankowości detalicznej., Wydawnictwo Akademii Ekonomicznej w Katowicach, Katowice 2004, p. 62-75

³ Wagner, Cynthia G. "Making Intangible Assets More Tangible.", The Futurist, World Future Society 2001, <http://www.highbeam.com/> [December 23, 2008]

⁴ Low J., Kalafut P. C.: Niematerialna wartość firmy. Oficyna Ekonomiczna, Warszawa 2004, p. 12

⁵ Green A., „Intangible Assets in Plain Business Language”, VINE: The Journal of Information and Knowledge Management Systems, Vol. 37, No.2, 2007, p. 238-239

⁶ Wagner, Cynthia G., "Making Intangible Assets More Tangible.", The Futurist, World Future Society 2001, <http://www.highbeam.com/> [December 23, 2008]

Market-based Assets

The first group of intangible assets that surely impact banks' position at the financial market is their image. It is important for every bank activity and makes it possible to remain competitive. The image of the bank is related with people attitudes, feelings and expectations and it is influenced by many factors.⁷ One of the most competitive image factor is good brand because it makes the bank and its services recognizable and memorable at the market. The Ranking of the most precious Polish brands shows the strength of Polish banks' brands. It is the first research on Polish market based on financial criteria and verifying in what extend recognisability, prestige, loyalty and the other quality factors influence the brand value. According to the ranking the brand strength is the most important factor because it is a measure of management effectiveness. It shows the relation between the brand value and annual sales value. The fig. below presents the strongest bank's brands in Poland.

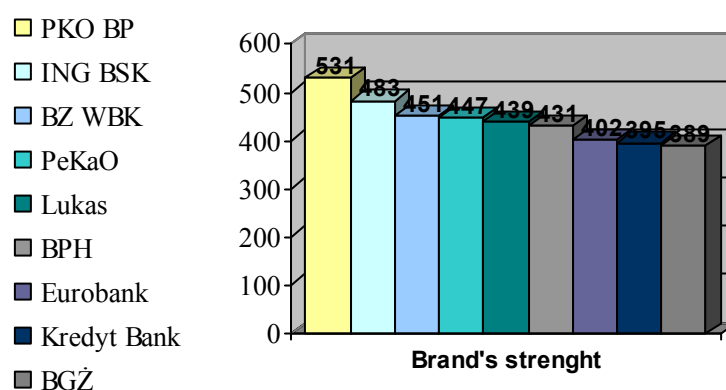


Fig. 2. The strongest banks' brands in Poland.

Source: "The Ranking of the most precious Polish brands", 2008, www.rankingmarek.pl

The next market-based intangible assets are distribution channels and sales strategy. For half of the millennium most of the banks have worked on the basis of physical distribution. Nearing the end of the first decade on the new millennium electronic distribution has matured, works and is proven. Bankers have added automated teller machines, call centres, the internet and the mobile as an extra layer on the foundation of the branch distribution system. The past few years they focus on the multichannel sales strategy and transformation project to improve branch sales⁸.

Knowledge-based Assets

The expansion of services sector, stronger competition and the emergence of new information technology have accelerated the shift toward a knowledge-based or innovation-driven activities which rely largely on human capital and knowledge. Knowledge embodied in intellectual assets is becoming crucial for firms' competitiveness and growth. Competition is forcing many companies to accumulate intellectual assets and use them effectively to produce profitable innovation. The intellectual assets are not always separately identifiable, but tend to be complementary and can overlap significantly. They by themselves neither create value nor generate growth. They need to be combined with other factors. The ability to create economic value from intellectual assets is highly contingent on the management capabilities of

⁷ Jagelaviciene A., Stravinskiene J., Rutelione A., Image Factor which Determine Choice of the Bank., Engineering Economics 2006, No 4, p. 87-89

⁸ Skinner, Chris. "Technology: Shaping Tomorrow - Fundamentally Flawed Thinking - It is High Time That Retail Banks Stopped Thinking of Electronic Channels as Extensions of the Branch and Started Thinking About the Electronic Structure as the Foundation upon which All the C." The Banker. FT Business. 2008, <http://www.highbeam.com/> [December 27, 2008]

individual bank. The role of management is to direct investments to areas of higher expected returns and develop processes ensuring that those returns are realised.⁹

Customer-based Assets

The last group of intangible assets relates to effective usage of banks' databases that is aimed to attract and retain clients by better identifying their needs. It enables banks to prepare their customer-oriented strategy, to develop better information about clients, to better serve clients' needs and reap profits through increased cross-selling and up-selling. The bank services industry is the consumer-focused one and the good customer service is the goal to which most of these banks aspire. Document such as Good Banking Practise Code presents principles to which most banks have agreed and to which they have committed themselves to comply. Today in Poland a large-scale computer system that stores detailed historical data on customer transactions is implemented in banks and it is used for client segmentation and preparing direct marketing campaigns. According to Brzozowska research Polish banks use their databases mostly for mailings (78% of them) and e-mailings (65%) but during the last decade the importance of call centres increases systematically.

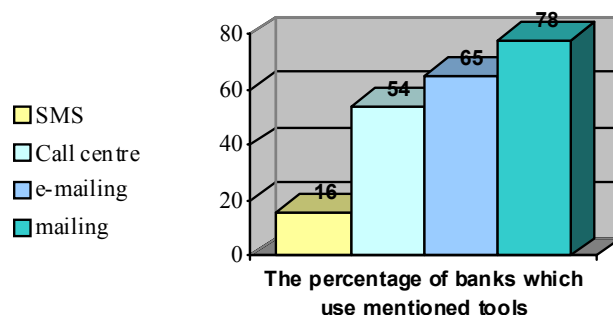


Fig. 2. Tools used by Polish banks in direct marketing campaigns

Source: Brzozowska I., *Marketing bezpośredni w bankowości detalicznej*, *Zarządzanie zmianami Biuletyn POU*, December 2008, nr 12

Technology-based Assets

Apart from customer-related intangibles, trade names and trademarks current technology is often the primary intangible asset identified and valued. True sustainable advantage will only be created by those banks that successfully integrate their use of client information, sales process across all channels and their technology platforms into a complete and comprehensive solution for clients.¹⁰ The single euro payment area (SEPA) concept in the European Union is an example of external factor which may stimulate banks' technological development. Surely banks which embrace SEPA as a great opportunity to expand their business will offer add value to its clients service. But it should be stressed that SEPA activities have to be viewed within banks' overall strategy of achieving competitive advantage through optimized processing in a vastly changing European payments landscape where new entrants are emerging and the existing providers are consolidating. SEPA is a huge change, but rapid response to changing business and industry requirements and environment is essential for gaining competitive advantage. Taking into account web culture which creates a generation of people who live and work differently from previous generations the next generation of client will be the most influential factor in the future of banking technology.

⁹ Bismuth A., „Creating Value from Intellectual Assets”, *Journal of Intellectual Capital*, Vol. 9, No.2, 2008, p. 228-224

¹⁰ Ptak L., „Measuring Client vValue”, *CMA Management*, June 2001, p.38

CONCLUSION

Whereas the particular intangible assets are used by Polish banks in the process of gaining the competitive advantage, the same cannot be said in relation to the application of the complex marketing strategy to banks in their totality. The market-based assets, knowledge-based assets, customer-based assets and technology-based assets are thought to be crucial in the process of achieving competitive advantage. The market-based assets which include brand name, distribution channels, etc. are commonly used by Polish banks. The brand strength index shows that banks manage their brands and image. The intellectual assets are not separately identifiable in Polish banks but they realise that they are becoming crucial for their competitiveness and growth. The next group of intangible assets relates to effective usage of banks' databases that is aimed to attract and retain clients by better identifying customers' needs. Customer-based intangible assets enable banks to prepare bank's client relationship strategy, to develop better information about clients, to better serve their needs and reap profits through increased cross-selling and up-selling. The last group of intangibles focuses on gaining competitive advantage through optimizing technological processes. Those banks that successfully integrate their use of client information, sales process across all channels and their technology platforms into a complete and comprehensive solution for clients will create sustainable advantage, but still the integrative perspective of intangible management still remain the exception.

BIBLIOGRAPHY

- [1] Bismuth A., „Creating Value from Intellectual Assets”, *Journal of Intellectual Capital*, Vol. 9, No.2, 2008
- [2] Brzozowska I., „Marketing bezpośredni w bankowości detalicznej.”, *Zarządzanie zmianami Biuletyn POU*, December 2008, nr 12
- [3] Green A., „Intangible Assets in Plain Business Language”, *VINE: The Journal of Information and Knowledge Management Systems*, Vol. 37, No.2, 2007
- [4] Harasim J., „Strategie marketingowe w osiągnięciu przewagi konkurencyjnej w bankowości detalicznej”, *Wydawnictwo Akademii Ekonomicznej w Katowicach*, Katowice 2004
- [5] Hucik-Galicka S., „Majątkowa metoda księgową - cz.1”, www.waluty.com.pl
- [6] Jagelaviciene A., Stravinskiene J., Rutelione A., „Image Factor which Determine Choice of the Bank.”, *Engineering Economics* 2006, No 4
- [7] Lev B., „Remarks on the Measurement, Valuation, and Reporting of Intangible Assets.”, *Federal Reserve Bank of New York Economic Policy Review*, September 1, 2003.
- [8] Low J., Kalafut P. C.: *Niematerialna wartość firmy*. Oficyna Ekonomiczna, Warszawa 2004
- [9] Ptak L., „Measuring Client Value”, *CMA Management*, June 2001
- [10] Skinner, Chris. "Technology: Shaping Tomorrow - Fundamentally Flawed Thinking - It is High Time That Retail Banks Stopped Thinking of Electronic Channels as Extensions of the Branch and Started Thinking about the Electronic Structure as the Foundation upon which All the C." *The Banker*. FT Business. 2008.
- [11] Wagner, Cynthia G.. "Making Intangible Assets More Tangible.", *The Futurist*, World Future Society 2001.

Monika Klimontowicz

Karol Adamecki University of Economics in Katowice, Poland

ul. 1 Maja 50, Katowice

mklimontowicz@ekonom.ae.katowice.pl

SELECTED POSSIBILITIES OF DEFENCE AGAINST TAKEOVERS

Alois Konečný

ANNOTATION

The aim of the paper “Selected possibilities of defence against takeovers” is implemented analysis of methods used by defence against takeovers. It will concentrate on methods connected with the financial market too. Implemented analysis should distinguish selected forms of defence against takeover; describe all their incentives, features and impacts. It should describe the possibilities in the terms of Czech capital market and especially Czech legislation.

KEY WORDS

Financial market, takeover, takeover defence, mergers, acquisitions

INTRODUCTION

In the recent years¹ there was seen a big wave of mergers and acquisitions. To these mergers and acquisitions must forego some type of takeover. These can be friendly or hostile. In case when it is hostile takeover, management of the assumed companies often tries to do everything to forestall the takeover. They have often a lot of motives that force them to try to stop the merger. And because these takeovers are often done via financial markets, we should also concentrate on the techniques that use financial market and its advantages and disadvantages. Financial market can be used on one hand as a tool for takeover but on the other hand as a tool for defence against takeover.

Till now we had mentioned that the management tries to protect its company against takeover due to a lot of (often personally) reasons. But on the other side we should notice that there is a big effort of contemporary or future shareholders (or stakeholders) to prevent an effective defence. It is caused by the fact that the successful defence techniques, especially these ones that use financial market, induce lower spot and share price. And because according to present financial theories the main incentive for investors is not the share dividend but the growth of market capitalization of the company (respectively share price) or minimally the combination of these two incentives (formulated e.g. in the Price earnings ratio – P/E), they try to prevent it. The main question is if it is privilege of management or of shareholders to decree whether there will be some prerogative techniques in the statutes or whether the company ever tries any other consequent defence technique. In my opinion, the management is in its company only stuff and managers should not rule in these important questions of company life. In real world though we can unfortunately realize that this privilege does not belong to the shareholders, whose capital is invested in the company, but to managers who should only “serve” to shareholders. Instead of this they, due to their personal reasons, approve a lot of defence precautions. Finally – who is dominant depends only on legislation of particular country and on prevailing ability of management.

¹ The first huge wave (not first in order) of takeovers that had caused origination and installation of defence possibilities into statutes was in 80's in United States of America – more information about waves of mergers and acquisitions can be found e.g. in Kislingerová, 2007.

There are three main types of defence techniques – precautions at the level of company statutes then financial techniques and in the end strategic and structural alterations.

AIM AND METODOLOGY

The aim of this paper is implemented analysis of selected methods used by defence against takeovers. It will concentrate on methods connected with the financial market too. In my research I will use these scientific methods: Analysis and comparison.

RESULTS

Implement analysis should distinguish selected forms of defence against takeover, describe all incentives, features and impacts of these selected forms of defence against takeovers. It should also describe the possibilities in the terms of Czech capital market and especially Czech legislation. From the three main types of defence techniques I will occupy myself due to limited extent of this paper only with the forms came under the first type – under precautions at the level of company statutes and I will probe their admissibility in accordance with Czech legislation.

PRECAUTIONS INCLUDED IN COMPANY STATUTES

These precautions are dependent of the shareholders' agreement. You can see, because of shareholders' antipathy to defence techniques in recent years (and because the precautions in company statutes are approved by shareholders) these types of defence are not very common in present days. Firstly I would like to say that a lot of types I will mention in this section are only theoretic concepts too. Secondly at particular concepts (as in all this paper) I will try to compare these concepts with legislation that regulates this field.

Other name used for these precautions is "sharks repellent"². The first possibility of sharks repellent is for example obligation to pay the same price for all gained shares in the company. This is intended as a defence against bilayer offer. This is for the first time, when I will mean The Act No. 104/2008 Coll., concerning takeover bids and amending some other Acts (further only the Takeover Bid Act). This act took effect on 1 April 2008 and from its third article I infer that this obligation does not have to be in company statutes because it is expressed obligatory in this act. There is said³ that persons that have according to this act some obligations by takeover bid have to provide all shareholders (who hold the equal rights to takeovered company) with the equal handling unless the act says something other.⁴

Second expression of obligation mentioned above that support my interpretation can we find in Article 17 that concerns of restriction of gaining target company shares by the acquiring company and by other persons. There is said that during the duration of takeover bid (who and in which cases has to offer takeover bid is said in other part of this Act) must nor the proposer nor the persons who cooperate with him make any legal transactions directed to gain shares of target company in other conditions than are incorporated in the takeover bid except the cases mentioned further. And all the cases mentioned further concern events when the acquiring company has to break this rule due to commitments that have originated from the contracts that have been agreed before there has originated the obligation to offer the takeover bid; or due to legal duties; or due to the fact that acquiring company is some

² LEVY, S.; SARNAT, M., 1999; Proceeding ideas also from ROMANČÍKOVÁ, 2007

³ Translation of all legal acts in this paper is own author's work.

⁴ Letter a, article 3

special corporate body like e.g. bank; or if the acquiring company becomes permission from the Czech National Bank.

And the third – and best formulated - expression of this idea contains The Article 20 – Consideration in takeover bid. This article says that the price or exchange ratio offered as a consideration in takeover bid⁵ is (in accord with the number 2) the same for all the recipients who have the same share / right.

Last but not least we should notice the Article 22 – Conditional takeover bid that once again says that there must not be any condition in takeover bid unless it is condition its accomplishment is dependent on proposer's consideration.

In the part above there has been spoken about obligation to pay for all gained shares the same price and it had to be without any affectable conditions. The next defence that can be comprehended in company statutes is gradually voted board – this type is named **staggered board**. Its core is e.g. in prescription of structure of directors' board and in the way how its members are voted. The aim is to ensure long time stability of company managing board and to prevent the raiders (acquiring company or natural body) from gaining control over the acquired company. But it should be mentioned that staggered board is only theoretical concept because it is used that in company takeover the whole board of managers of the acquired company resign.

Next concept that is also mainly theoretical is method named **fair price**. It lies in the fact that there is stipulated an adequate price for that can be the company sold to everyone. This fair price is usually derived from the historical prices of company shares from three to five years time period. The first disadvantage of this concept is though that the three-year old price does not have any connection to present value of the company. The second disadvantage is that there is a question whether the share price (gained from the financial market) ever has any connection to company value⁶. From these disadvantages you can deduce that it is not possible to extrapolate or even anticipate present or future share price.

Other possibility of sharks repellent is installation (in company statutes) of specific claim – e.g. that there is need absolute or qualified⁷ majority of all shareholders by approval of non-standard bilayer takeover bids or other selected company transformations that have not been ratified by executive company board.

PARTICULAR LEGAL ASPECTS OF PRECUTIONS IN STATUES

When we ask for the possibilities of defence against takeovers, we can concentrate on the question who makes decision about defence or acceptance of takeover bid according to Czech legislation. The Act No. 104/2008 Coll., concerning takeover bids and amending some other Acts, Article 15 – Neutrality obligation of target company board gives unambiguously preference to the shareholders because it says that from the time when members of managing board come to know about the fact that shareholders of their company will be offered with some takeover bid, they are not allowed to take measures that can cause that their shareholders will not be able to decide about takeover bid voluntarily with all needed knowledge.

⁵ This consideration can be made in cash or in other shares, possibly as a combination of these two possibilities.

⁶ But on the other side market capitalization is often used in computing of merger costs, synergic effects etc.

⁷ And there can be assessed how high have to be qualified majority – it can be more than two thirds.

Managing board members should also (number 1, letter b) abstain till publishing of takeover bid from whichever that can thwart it BUT⁸ in case when such handling is particularly adopted by the shareholder's meeting.⁹ This shareholder's meeting can be also summoned in shortened period – in a fortnight – but on the other hand at this meeting there are inefficient all limitations of voting rights appointed by company statutes or by agreement between target company and its shareholders or between its shareholders mutually.¹⁰

In Takeover bid Act we can find next very important Article. It is the Article 32 – Breakthrough principle. In this article are embraced some rules that can render soever defence harmless anyway. There is written that the shareholder's meeting of the acquired company can – when they got takeover bid – choose that they will put some chosen rules mentioned in paragraphs 2 to 5 into effect. They have to approve this with the same majority that is required for the change of company statutes. But there are some mainly formal barriers to this proceed. This decision has to be written in Companies register and company have to inform financial market supervision boards in all countries where its shares are listed on capital market. And the same procedure has to be accomplished when the shareholder's meeting takes its decision back. In the next part I would like to describe possibilities of these legal restrictions of effective defence against takeover.

Firstly in the period when the takeover bid is binding, restrictions of transmissibility of target company shares that is constricted by the company statutes or by agreement between target company and its shareholders or between shareholders mutually are under the terms of takeover bid ineffective towards proposer.

Secondly the same condition as in paragraph above is valid also after bindingness of takeover bid but only if the proposer himself or together with cooperating persons has so big participation on registered capital that he will obtain more than three quarters of rights to vote connected with the participation. The only exception for these rules is in paragraph 5 – these rules are not applicable to prior shares or to similar commercial instruments.

CONCLUSION

In this paper I have occupied myself with the forms of defence against takeovers, but not with all the forms, only with one big branch - with precautions at the level of company statutes. I described these forms and then probed their admissibility in accordance with Czech legislation. As we had seen this branch is regulated mainly by two relatively new acts - Act No. 104/2008 Coll., concerning takeover bids and amending some other Acts and than Act No. 125/2008 Coll., on Transformation of Companies and Cooperatives.

From the gained knowledge we can conclude that while in some countries (e.g. United States of America) there are a lot of possibilities in introduction of precautions into company statutes, in the Czech Republic there is strict legal environment that regulates a lot of these possibilities or even it outlaws them.

The requirement of the same price for the same shares is, as I had showed, unambiguously expressed in Takeover Bid Act, staggered board is not regulated in any Act, but it is only theoretic concept, similarly to fair price concept. The only useful possibility of precautions

⁸ and there I apprehend the biggest possibility for the management of acquired company – in legal borders of Czech legislation

⁹ or when it is its legal obligation; or it is common step in everyday company life

¹⁰ § 32, number 1, paragraph 3 of the Takeover Bid Act

at the level of company statutes are particular possibilities of restriction of rights to vote. These restrictions are limited by the Takeover Bid Act too, but in some cases they are allowed and in my opinion this is in Czech legislation the only effective and allowed way of takeover defence from the mentioned forms.

BIBLIOGRAPHY

- [1] HAIM, L., SARNAT, M.: Kapitálové investice a finanční rozhodování. 1st Edition. Praha: Grada, 1999. 924 pages, ISBN 80-7169-504-1
- [2] KISLINGEROVÁ A KOL.: Manažerské finance. 2nd revised and replenished Edition. Praha; C. H. Beck, 2007. 745 pages. ISBN 978-80-7179-903-0.
- [3] KUSÁK, M : Fúze a akvizice jako nástroj růstu a restrukturalizace podniku. 1st Edition. Praha; VŠE: Doctoral dissertation thesis, 2002. 160 pages.
- [4] ROMANČÍKOVÁ, E. in: BEŇOVÁ, E., HÁČIK, V., ROMANČÍKOVÁ, E., SCHULTZOVÁ, A., NEUBAUEROVÁ, E., BELIČKOVÁ, K., ZUBALOVÁ, A., SOBEK, O., JANKOVSKÁ, A., CHOVANCOVÁ, B., HORVÁTOVÁ, E., MAJTÁNOVÁ, A., POLAVKOVÁ, K.: Finance a mena. 2nd Edition. Bratislava: Iura Edition, 2007. 391 s. ISBN 978-80-8078-142-2

Legislation

- [5] Act No. 104/2008 Coll., concerning takeover bids and amending some other Acts
- [6] Act No. 125/2008 Coll., on Transformation of Companies and Cooperatives

Web Sites:

- [7] www.damodaran.com
- [8] www.ksb.cz

Alois Konečný
Department of Finance, FEA MU
Lipová 41a
Brno, 602 00
alois@econ.muni.cz

BANKING DEVELOPMENT IN SELECTED SEE COUNTRIES - EVIDENCE FROM ALBANIA, BOSNIA AND HERZEGOVINA, AND SERBIA

Tomas Krizek

ANNOTATION

The shortened paper introduces findings of a study conducted during 2008 at University of Economics, Prague which analyzed banking sectors in selected countries of CEE region, in particular Albania, Bosnia and Herzegovina, and Serbia. It also compared their development to the Czech Republic as it is CEE country with one of the most advanced banking sectors in the region.

General development, development of banking sector as well as banking market and financial performance of banks were examined and followed by summary conclusions and also recommendations that should ensure stable future growth as well as recommendations for potential investors in banking sector of these countries.

The whole study is available upon request in an electronic form.

KEY WORDS

Banking, development, SEE region, Albania, Bosnia and Herzegovina, Serbia

INTRODUCTION

This paper summarizes findings of a recent study focused on banking sector in Albania, Bosnia and Herzegovina, and Serbia. The study assessed past development and current situation of their banking in comparison with another post-socialistic country – the Czech Republic. All three countries belong to the CEE region, or more precisely among the SEE countries. They have been chosen due to their recent history and political situation. All of the countries have some issues in common but they also differ significantly. The Czech Republic has been chosen as one of the most developed transition countries in the CEE region.

AIM AND METODOLOGY

Even though a broad analysis of the selected countries has been conducted it is not possible to unambiguously say which of the examined countries has the most developed banking system. As usual each country has its specifics and different way of transition towards a modern banking system and the assessment also depends on the measures chosen. Therefore the aim of the paper was to collect the most relevant financial and macroeconomic information about the countries and consequently to draw conclusions regarding the development, possible ways for improvement and suggestions for potential investors.

The three mentioned countries were selected due to their concurrent similarity and diversity. On the one hand all the countries are from the SEE region which belongs to the less developed ones within the Europe and they also belong to the post-socialistic countries; furthermore very important economic and political changes happened during the 90's. On the other hand the countries differ in the way how political and economic changes took place.

The study was based on a financial analysis of the banking system as a whole and also on financial analysis of individual banks. So that the findings could be interpreted easily, a comparison with the situation in the Czech Republic was conducted. In order to render the financial findings in the right way also a qualitative analysis was worked out.

In general, the main indicators the paper focuses on are the economic growth, country rating by rating agencies, assessment of banking reforms done by the EBRD, total assets, total credits to economy, branch banking figures, profitability ratios, and others. Similar indicators was used also to compare the performance of individual banks.

RESULTS

Macroeconomic Development

Looking at the macroeconomic indicators Albania seems to be going the right direction even though it is the least advanced country. On the other hand, Serbia is already relatively developed in comparison with the other countries but its outlook is rather stable. Bosnia and Herzegovina (BiH) is situated somewhere between. Compared to Albania, BiH had better starting position but the necessary structural changes have not been happening fast enough.

Fig.1 Macroeconomic indicators (H1 2008)

	Population	Inflation	Unemployment	GDP Per capita (PPP)	GDP (mEUR)	GDP growth	Monthly wage (EUR)
Czech Republic	10 403 100	6.9%	6.6%	20 237	127 908	6.6%	781
Albania	3 619 778	3.9%	13.0%	6 300	7 922	6.0%	260
Serbia	8 032 338	10.1%	24.4%	9 621	32 100	7.3%	484
BiH	3 842 942	5.0%	29.0%	6 300	14 223	5.8%	416

Source: Statistical offices, Central Intelligence Agency

The situation is also reflected in the country ratings; Albania being quite successful lags only a few steps behind the Czech Republic. There is almost the same gap in rating is then between Albania – Serbia and Serbia – Bosnia and Herzegovina. Due to huge problems in mid 1990s the banking reforms in all the countries started with delay and had different progress; nowadays the countries are assessed by the EBRD in its Structural Change Indicators Report similarly but still lagging behind the Czech Republic.

Fig.2 Country ratings of local currency bonds (July 2008)

	Standard and Poor's	Moody's	Fitch
Czech Republic	A+	A1	AA-
Albania	A-*	A3	A-*
Serbia	BB-	Ba3*	BB-
BiH	B*	B2	B*

*Not rated; for comparison reasons figure approximated based on ratings by other agencies

Source: Standard and Poor's, Moody's Investors Service, Fitch Ratings

Banking Market

If we assume that the more concentrated the banking market in transition countries is, the more consolidated and thus more advance it is, Albania is quite persuasively the leading country from the group. From this point of view Serbian banking market is quite fragmented. The concentration indicators such as Herfindahl-Hirschman Index, Top 5 and Top 4 assets concentration suggest the necessity of further sector consolidation mainly in Serbia and Bosnia and Herzegovina.

Fig.3 Country ratings of local currency bonds (July 2008)

	HHI	Top 5 banks	Top 4 banks
Czech Republic*	1 300	65.0%	59.8%
Albania	1 550	72.0%	64.9%
Serbia	622	46.1%	40.0%
BiH	937	59.3%	52.0%

* Estimations based on own calculations

Source: National banks, company information

All the examined countries are also targets for big European banking groups; Intesa Sanpaolo, ProCredit, and Raiffeisen being only some of them. All of the main banking groups present in at least one country are also present in Serbia. Such a fact may be explained by the relatively large size and consequent attractiveness of the Serbian market. Considering the geographic origin of the banking groups Bosnia and Herzegovina is clearly dominated by Austrian banking groups.

Even though Serbia is the country with the biggest market in terms of assets, its size amounts to only 13% of the size of the Czech banking market. However, the relative capitalization of Serbian banks is slightly higher and reaches approximately one third of the Czech market. Both Albania (EUR 6.1 bil. assets, EUR 0.4 bil. capital) and Bosnia and Herzegovina (EUR 10.0 bil. assets, EUR 1.2 bil capital) lag behind Serbia (EUR 18.4 bil. assets, EUR 3.2 bil. capital). Even though the figures equal more when related to the number of inhabitants, Albania is still behind the other two countries except loans granted. Annual growth of the main balance sheet indicators ranged approximately between 20% and 70% and outperformed the Czech development. However, the assets growth in Albania slowed down significantly to only 19.6% over 2007.

Fig.4 Main balance sheet indicators (2007)

EUR mil.	Assets		Loans		Deposits		Capital
	Nominal	Growth	Nominal	Growth	Nominal	Growth	Nominal
Czech Republic	142 489	18.6%	82 655	19.7%	91 803	17.0%	9 766
Albania	6 068	19.6%	2 401	54.6%	5 299	27.7%	435
Serbia	18 393	71.2%	8 714	33.7%	11 308	43.7%	3 212
BiH	10 013	33.3%	5 748	29.9%	7 555	34.8%	1 190

Source: National central banks, banking associations, and company information

Albania is doing well in terms of balance sheet figures related to the number of employees and bank branches and even outperforms Serbia in this respect; Bosnia and Herzegovina is at approximately the same level as Albania. The conclusion may be high employment in Serbian banking sector and thus low utilization of human resources and potential of bank branches.

Financial Performance

Low utilization of resources in Serbia can be illustrated on the financial performance. Even though the ROAA for Serbia was 1.9% (0.3% points higher than in Albania and 0.5% points higher than in the Czech Republic), the ROE was only 8.7% (Albania 19.9% and the Czech Republic 18.4%). Bosnia and Herzegovina performed even worse with ROAA of only 0.9% and ROE of 6.4% in 2007.

Fig.5 Main financial indicators

	Net profit (EUR mil.)	ROAA	ROE	Regulatory capital	Capital adequacy	Non- performing loans	Loans to assets
Czech Republic	1 794	1.4%	18.4%	6.9%	11.5%	2.8%	58.0%
Albania	87	1.6%	19.9%	7.2%	18.1%	6.5%	39.6%
Serbia	279	1.9%	8.7%	17.5%	27.4%	5.1%	47.4%
BiH	76	0.9%	6.4%	11.9%	16.4%	1.8%	57.4%

Source: National central banks, banking associations, and company information

Despite the poor financial performance, without any significant reasons, Bosnia and Herzegovina had the lowest proportion of non-performing loans on total assets of only 1.8% and thus surpassed not only Albania (6.5%) and Serbia (5.1%) but also the Czech Republic (2.8%). Capital adequacy was in all the countries well above the minimum legal requirements.

With respect to number of bank employees, branches, ATMs, POS, and payment cards Serbia is the leading country and is in both absolute and relative figures quite well comparable to the Czech Republic. Albania is again far behind the other countries.

Fig.6 Bank network extension

	Banks	Employees	Bank branches	ATMs	POS	Payment cards
Czech Republic	37	41 207	1 862	3 357	53 265	10 100 000
Albania	17	5 168	392	433	1 776	616 375
Serbia	34	30 874	2 464	2 074	57 000	5 700 000
BiH	29	9 895	728	655	14 076	1 528 498

Source: National central banks, banking associations, and company information

All the above mentioned findings lead to a conclusion that the three examined countries differ a lot in the way they progress in the transformation process. Albania had very bad starting position and is still lagging behind the other compared countries in absolute figures but the system seems to be well functioning and with a good growth outlook (except assets growth). With regard to the performance figures, the banks seem to be well managed. Not only has Albania the best profitability ratios but in general it can utilize its resources quite successfully.

Serbia had very good starting position and still leads the group in the absolute figures. In some aspects it can even catch up with the Czech Republic as one of the most developed banking systems in the Central and Eastern Europe. The biggest problem of Serbia is its low utilization of resources and financial leverage resulting in poor relative performance indicators. Nevertheless, it is developing in more quantitative than qualitative way in contrast to e.g. Albania.

Bosnia and Herzegovina is country with quite ambiguous banking system which is hard to assess. The development seems to be quite chaotic as well as the overall economic situation. Such a fact is also incorporated in a very poor country rating by international rating agencies. Nevertheless, the development will rely also on the political development in the country. The situation in Bosnia and Herzegovina is even more difficult as there are two separate federal entities and ethnic tensions among the citizens. Even though the banking framework is comparable to the other countries, the future development is quite uncertain.

Recommendations

Several steps can be done to improve the overall banking situation in the examined countries but they have to be adjusted to the needs of each country separately. Albanian banks seem to be well managed, nevertheless, to ensure stable growth, the citizens should be more incentivized by the banks to use the banking services. Even though the amount of loans granted growth quite fast, amount of assets lags far behind. Once interesting services for reasonable starting prices could make Albanians use the banking services more which would finally lead to market growth. It is also necessary to broaden the branch network as well as the network of POS, ATMs and usage of payment cards. This lack of banking infrastructure seems to be the biggest weakness of Albanian banks.

On the other hand, Serbian banks have already developed sufficient banking infrastructure but improvements in the strategic and financial management will be the key for future successful growth. Serbian banks lack operational efficiency due to overemployment and ineffective work. Decrease in the gap to the Czech Republic would be then just a matter of time.

A combination of the above mentioned approaches is suitable for Bosnia and Herzegovina. Individual figures as well as particular figures for each bank should be examined and necessary steps taken. It is not easy to draw recommendations for this country as all the figures differ quite significantly. The particular recommendation would also differ with respect to the political division of the country into two separate federal entities.

In general, investing into banking business can be considered as a valuable longer-term investment. An example of a very successful investment can be the Raiffeisen Bank. It has branches in all the three countries and it is the market leader on all of them. Acquisition of an existing bank could be recommended in Albania due to its good management, on the other hand, it is more desirable to settle a brand new bank in Serbia and to some extent also in Bosnia and Herzegovina as the restructuring of an existing banks would be probably too difficult.

CONCLUSION

With regard to the findings mentioned in this paper, both Albania and Serbia would be good receivers of new banking investment due to their macroeconomic as well as microeconomic situation and outlook in banking. Nevertheless, different forms of investments would be suitable. The situation in Bosnia and Herzegovina is very difficult to assess due to unstable sociopolitical as well as economic situation. Even though the countries seem to be on a right way of development, they still lag far behind the Czech Republic.

To ensure future growth, incentives for customers to use the banking services more should be introduced, the quality and range of services increased, the banking infrastructure improved (mostly in Albania and Bosnia and Herzegovina), and better operational and financial management implemented.

BIBLIOGRAPHY

- [1] Agency for statistics of Bosnia and Herzegovina: Statistical publications and reports.
- [2] Banking Agency of Federation of Bosnia and Herzegovina: Annual and Quarterly Reports 2002-2008.
- [3] Banking Agency of Republika Srpska: Annual and Quarterly Reports 2002-2008.
- [4] Barisitz, Stephan: On the Catching-Up Route – The Development of Banking in Serbia and Montenegro since 2000, Oesterreichische Nationalbank, 2003.
- [5] Bosnian Banks: Annual reports for 2004, 2005, 2006, and 2007.
- [6] Centralna Banka Bosne i Hercegovine: Annual Report 2007.
- [7] Centralna Banka Bosne i Hercegovine: CBBH Info Q1 2008.
- [8] CIA – The World Factbook: Albania, Bosnia and Herzegovina, Serbia, Czech Republic.
- [9] Czech Banking Association: Bankovní sektor ČR v grafech.
- [10] Czech Banks: Annual reports for 2004, 2005, 2006, and 2007.
- [11] Czech Ministry of Foreign Affairs: Souhrnná teritoriální informace – Bosna a Hercegovina.
- [12] Czech National Bank: Banking information and publications.
- [13] Czech Statistical Office: Statistical information and publications.
- [14] European Bank for Reconstruction and Development: Structural Change Indicators.
- [15] Federation of Bosnia and Herzegovina, Federal Office of Statistics: Statistical publications and reports.
- [16] Fitch Ratings: Sovereigns.
- [17] Index Mundi: Bosnia and Herzegovina unemployment rate
- [18] Intelace: Top 200 banks in CEE – 2007 edition.
- [19] IntelliNews: CEE financial sector report – 2007.
- [20] IntelliNews: Payment cards in CEE – 2007.
- [21] IntelliNews: SEE financial sector report – 2007.
- [22] International Monetary Fund: Bosnia and Herzegovina – 2008 Article IV Consultation, Preliminary Conclusions of the Mission.
- [23] International Monetary Fund: Bosnia and Herzegovina, Selected Issues 2007 – Credit Growth, Bank Soundness, and Banks' Foreign Liabilities.
- [24] International Monetary Fund: Serbia – Financial System Stability Assessment, Washington, 2006.
- [25] Mágel Tamás: The Banking Sector of Bosnia and Herzegovina – The Dominant Role of Austrian Banks, Oesterreichische Nationalbank.
- [26] Moody's: Sovereign Rating List.
- [27] National Bank of Serbia: Banking Supervision – Quarter Reports.
- [28] National Bank of Serbia: Price Movements in the Republic of Serbia.
- [29] Oesterreichische Nationalbank: Conference on European Economic Integration – Banking reform in Southeast Europe (Accomplishments and challenges).
- [30] Republika Srpska, Institute of Statistics: Statistical publications and reports.
- [31] SEE Europe: Southeast Europe Investment Guide 2007.
- [32] Serbian Banks: Annual Reports for 2004, 2005, 2006, and 2007.
- [33] Southeast European Times: Albania assigned first sovereign ratings by Moody's.
- [34] Standard and Poor's: Sovereign Ratings.
- [35] Statistical Office of the Republic of Serbia: Average salaries and wages, by sections of activities 2002 – 2005.
- [36] Statistical Office of the Republic of Serbia: Economic trends in the Republic of Serbia in 2007.
- [37] Statistical Office of the Republic of Serbia: Monthly Consumer Prices for Serbia.

[38] Tchana Tchana: The Empirics of Banking Regulation, Fulbert, University of Cape Town, Universite de Montreal, June 2008, Munich Personal RePEc Archive.

Full name: Tomas Krizek

Institution: University of Economics, Prague, Faculty of finance and Accounting, Department of Banking and Insurance

Street: Náměstí Winstona Churchilla 4,

City: Praha 3, 130 67

Email: tomas.krizek@gmail.com

CAUSALITY BETWEEN FINANCIAL DEVELOPMENT AND ECONOMIC GROWTH – EMPIRICAL EVIDENCE FROM TRANSITION COUNTRIES

Tomas Krizek

ANNOTATION

The paper tries to add some findings to the never-ending economic discussion about the existence and direction of causality between development of financial sector and economic growth. Both theoretical and empirical evidences have already been raised supporting either the dependence of economic growth on development of financial sector or the idea that financial development is just residual consequence of economic growth.

New statistical approach described in this paper should contribute to the discussion. The statistical model is based on correlation between two time series – one being the economic growth rate, the other being financial sector reform index prepared by the European Bank for Reconstruction and Development (EBRD). Nevertheless, as the discussion is quite complex, it is really just a piece of a puzzle which absolutely cannot solve the entire lasting feud on the causality between financial development and economic growth.

KEY WORDS

Causality, dependence, financial development, economic growth, EBRD

INTRODUCTION

Although some well-known economists do not include the development of financial sector in their papers about economic growth, most of the economists can agree that there is a clear link between development of financial sector and economic growth. The most important ideas and evidences have been summarized by Levine (1996). What has not been agreed upon is the causality of the nexus. Even though many evidences have been raised, they support either of the causalities – dependence of economic growth on the financial development or the fact that financial development is just a residual consequence of economic growth. Also empirical evidences based on statistical calculations have been introduced.

Finding the right way of dependence might help us to understand the economical processes taking place in transition countries and consequently to support faster development of such countries.

AIM AND METODOLOGY

The aim of this paper is to contribute with empirical findings to the above mentioned discussion on the causality between financial development and economic growth. The statistical model is based on correlation analysis between two time series. The first time series is the rate of economic growth based on data published by EBRD; the second time series is based on the structural change indicators for financial sector reform also published by EBRD. The structural change indicators range between 0 and 4 indicating the absolute level of financial reform development in selected transition countries including 28 countries from Europe as well as from the Middle-East. Even though the time series contain data for only 20 years, it should be enough also with respect to the political and economic changes taken place in 1989 and lack of relevant data before this year.

So that the way of causality could be determined, the shift of time series had to be conducted. Lets assume that the economic growth is caused by development of financial sector. Consequently, the increase in the financial reform indicator (FRI) should be followed by additional growth of the GDP. Such a causality may be discovered by correlation analysis of the shifted time series – i.e. the increase in the financial reform indicator in 1989 would influence the GDP growth rate in 1990, 1991, 1992 or later. In this paper only the shift plus/minus three years was considered, i.e. the increase in FRI in 1989 can influence only the GDP growth rate up to year 1992. Seven correlation analysis for each country has thus been conducted – one neutral correlation (same time series) and six shifted correlations (+/- three years). Based on the highest correlation coefficient for each of the correlation analyses conducted, the conclusions were drawn.

The statistical model is quite simple and lacks any adjustments for other relevant proxies. Improvement of the model in such respect should be the matter of further discussion. It can be also argued if different data set would not be more relevant – e.g. the correlation between changes (deltas) in the selected indicators. On the other hand, the selected indicators seem to be the most relevant ones also with regard to the irrelevant results when using the deltas in the correlation analysis in this case.

RESULTS

The results of the shifted correlation analysis are summarized in the following table. The highest correlation coefficients for each country have been highlighted. If the highest correlation coefficient is in the left part of the table, the shift is negative which implies that the banking development depends on the GDP growth. On the other hand, if the highest correlation coefficient is in the right part of the table, it implies positive shift and dependence of GDP growth on banking development.

Fig.1 Correlation coefficients for shifted time series

Country	Dependence of Banking development on GDP growth			No depend.	Dependence of GDP growth on Banking development		
	-3 years	-2 years	-1 year	0	+1 year	+2 years	+3 years
Albania	-0.065	0.313	0.493	0.478	0.550	0.442	0.148
Armenia	0.575	0.624	0.691	0.639	0.673	0.642	0.348
Azerbaijan	0.861	0.878	0.895	0.822	0.709	0.571	0.401
Belarus	0.428	0.613	0.490	0.231	0.208	0.287	0.238
BiH	-0.029	0.004	0.068	0.109	0.217	0.513	0.608
Bulgaria	0.663	0.784	0.879	0.788	0.657	0.638	0.697
Croatia	0.473	0.655	0.789	0.769	0.689	0.532	0.421
Czech Rep.	0.647	0.792	0.808	0.578	0.355	0.347	0.369
Estonia	0.841	0.920	0.911	0.635	0.472	0.351	0.463
Macedonia	0.718	0.806	0.868	0.772	0.685	0.532	0.349
Georgia	0.545	0.678	0.787	0.830	0.838	0.754	0.503
Hungary	0.760	0.785	0.874	0.723	0.701	0.615	0.631
Kazakhstan	0.849	0.887	0.887	0.844	0.775	0.697	0.624
Kyrgyz Rep.	0.737	0.858	0.719	0.482	0.304	0.077	-0.149
Latvia	0.779	0.872	0.755	0.517	0.399	0.211	0.212
Lithuania	0.783	0.875	0.866	0.754	0.580	0.470	0.284
Moldova	0.724	0.820	0.577	0.481	0.323	0.227	0.281

	Dependence of Banking development on GDP growth			No depend.	Dependence of GDP growth on Banking development		
Mongolia	0.620	0.647	0.707	0.692	0.654	0.679	0.709
Montenegro	0.385	0.426	0.473	0.426	0.394	0.389	0.460
Poland	0.038	0.631	0.762	0.607	0.759	0.619	0.326
Romania	0.167	0.314	0.528	0.749	0.847	0.740	0.508
Russian Fed.	0.811	0.775	0.671	0.511	0.419	0.251	0.199
Serbia	0.251	0.350	0.371	0.396	0.419	0.443	0.270
Slovak Rep.	0.872	0.917	0.793	0.507	0.320	0.351	0.398
Slovenia	0.514	0.743	0.928	0.910	0.742	0.509	0.429
Tajikistan	0.281	0.382	0.452	0.500	0.558	0.625	0.678
Ukraine	0.850	0.880	0.809	0.660	0.519	0.463	0.453
Uzbekistan	0.776	0.802	0.783	0.669	0.525	0.419	-0.019

Source: Own calculations

If the results are summarized, delay of -0.643 years with average correlation coefficient of 0.782 is the final result. It indicates strong dependence of banking development on economic growth with a delay of about half a year. If only the relevant results (meaning results with negative delay) are considered (columns rDelay and rCorrelation coefficient), the analysis indicates even stronger correlation with delay of about 1.5 year.

Fig.2 Maximum correlation coefficients for shifted time series

Country	Results		Relevant results	
	Delay	Correlation C	rDelay	rCorrelation C
Albania	1	0.550	-	-
Armenia	-1	0.691	-1	0.691
Azerbaijan	-1	0.895	-1	0.895
Belarus	-2	0.613	-2	0.613
BiH	3	0.608	-	-
Bulgaria	-1	0.879	-1	0.879
Croatia	-1	0.789	-1	0.789
Czech Rep.	-1	0.808	-1	0.808
Estonia	-2	0.920	-2	0.920
Macedonia	-1	0.868	-1	0.868
Georgia	1	0.838	-	-
Hungary	-1	0.874	-1	0.874
Kazakhstan	-1	0.887	-1	0.887
Kyrgyz Rep.	-2	0.858	-2	0.858
Latvia	-2	0.872	-2	0.872
Lithuania	-2	0.875	-2	0.875
Moldova	-2	0.820	-2	0.820
Mongolia	3	0.709	-	-
Montenegro	-1	0.473	-1	0.473
Poland	-1	0.762	-1	0.762
Romania	1	0.847	-	-
Russian Fed.	-3	0.811	-3	0.811

Serbia	2	0.443	-	-
Slovak Rep.	-2	0.917	-2	0.917
Slovenia	-1	0.928	-1	0.928
Tajikistan	3	0.678	-	-
Ukraine	-2	0.880	-2	0.880
Uzbekistan	-2	0.802	-2	0.802
Total	-0.643	0.782	-1.524	0.820

Source: Own calculations

Even though there are some countries where the correlation analysis indicates dependence of economic growth on the development of financial sector, the reverse dependence work in most of the countries. Moreover, the dependence seems to be quite important due to high correlation coefficient. The results thus suggest the idea that development of financial sector is just residual effect of economic growth. Such a conclusion would imply that it is rather impossible to support the economic growth in transition countries by reforms in financial sector and that the reforms is rather caused by financial needs of growing economy.

Discussion

Results of the correlation analysis seem to be quite persuasive in this case clearly indicating dependence of financial development on economic growth. The results should be valid also across the different countries – European vs. Middle-East countries. It would be interesting to conduct the same analysis also for different set of countries, e.g. Latin transition economics. Based on the discussion and reaction to the paper the model might be further improved so that it is controlled also for the most important dummies. Nevertheless, even now it provides for sufficient description of the relationship between banking reforms and economic growth during the past 20 years in one particular region.

Although the findings of the paper suggest that transition countries cannot increase the economic growth rate by introduction of financial sector reforms, it may not be the whole truth. The findings rather say what is happening than describe how the causality between the economic growth and financial development works. Maybe the causality could be the other way round if the governments tried to actively reform the financial sector before such reforms are enforced by economic growth.

CONCLUSION

Even though the results of this paper support the idea that the financial reforms just passively adopt to the economic growth, it may be just a half of the truth. According to the results, it is absolutely clear that for the time being the economic growth was the cause of the financial reforms rather than its actively promoted consequence. On the other hand, it is just a description of the current status which does not tell us how it could be if the governments tried to promote the economic growth by financial sector reforms.

To obtain such detailed results as to whether the government actively tried to promote the economic growth by reforms of financial sector would need deep analysis of a particular country or small group of countries. Statistical analyses can only describe what happens rather than why it happens.

Nevertheless, the contribution to the discussion about the direction of the causality is clear. According to the results, the financial sector reforms are inevitable consequence of economic growth. As already mentioned, the model should be further improved so that it controlled for important dummies that the model does not consider and which might influence the results. It would be also valuable to conduct such an analysis also for another region.

BIBLIOGRAPHY

- [39] Bencivenga, Valerie R., and Smith, Bruce D. "Financial Intermediation and Endogenous Growth," *Review of Economics Studies*, April 1991, 58(2), pp. 195-209.
- [40] Cameron, Rondo; Crisp, Olga; Patrick, Hugh T. and Tilly, Richard, eds. "Banking in the Early Stages of Industrialization: A Study in Comparative Economic History," New York: Oxford University Press, 1967.
- [41] Carosso, Vincent. "Investment Banking in America," Cambridge, MA: Harvard University Press, 1970.
- [42] Diamond, Douglas W. "Financial Intermediation and Delegated Monitoring," *Review of Economic Studies*, July 1984, 51(3), pp. 393-414.
- [43] European Bank for Reconstruction and Development: Macroeconomic Performance Tables – Growth in real GDP.
- [44] European Bank for Reconstruction and Development: Structural Change Indicators.
- [45] Greenwood, Jeremy and Jovanovic, Boyan. "Financial Development, Growth, and the Distribution of Income," *Journal of Political Economy*, October 1990, 98(5,Pt.1), pp. 1076-1107.
- [46] Greenwood, Jeremy and Smith, Bruce. "Financial Markets in Development, and the Development of Financial Markets," *Journal of Economic Dynamics and Control*, 1996.
- [47] Hicks, John. "A Theory of Economic History," Oxford: Clarendon Press, 1969.
- [48] Lucas, Robert E. "On the Mechanics of Economic Development," *Journal of Monetary Economics*, July 1988, 22(1), pp. 3-42.
- [49] King, Robert G. and Levine, Ross. "Finance and Growth: Schumpeter Might Be Right," *Quarterly Journal of Economics*, August 1993b, 108(3), pp. 717-38.
- [50] King, Robert G. and Levine, Ross. "Finance, Entrepreneurship, and Growth: Theory and Evidence," *Journal of Monetary Economics*, December 1993c, 32(3), pp. 513-42.
- [51] King, Robert G. and Levine, Ross. "Financial Intermediation and Economic Development," in *Financial Intermediation in the Construction of Europe*. eds. Colin Mayer and Xavier.
- [52] King, Robert G. and Rebelo, Sergio T. "Transitional Dynamics and Economic Growth in the Neoclassical Model." *The American Economic Review*, Vol. 83, No. 4 (Sep., 1993), pp. 908-931.
- [53] Loayza, Norman, and Ranciere, Romain. "Financial Development, Financial Fragility, and Growth," *International Monetary Fund*, 2005.
- [54] McKinnon, Ronald. "Money and Capital in Economic Development," Washington, DC: Brookings Institution, 1973.
- [55] Robinson, Joan. "The Generalization of the General Theory," in *The Rate of Interest and Other Essays* London: MacMillan, 1952.
- [56] Ross, Levine. "Financial Development and Economic Growth," *The World Bank*, 1996.
- [57] Sirri, Erik R. and Tufano, Peter. "The Economics of Pooling," in *The Global Financial System: A Functional Approach*. eds. Dwight B. Crane, et al., Boston, MA: Harvard Business School Press, 1995, pp. 81-128.

Full name: Tomas Krizek

Institution: University of Economics, Prague, Faculty of finance and Accounting, Department of Banking and Insurance

Street: Náměstí Winstona Churchilla 4,

City: Praha 3, 130 67

Email: tomas.krizek@gmail.com

APPLICATION OF SEPA IN THE CZECH REPUBLIC

Eva Kutová, Dagmar Linnertová

ANNOTATION

This proceeding is focused on the impact of Single Euro Payment Area on the Czech banking sector. The aim is to analyze effects and consequences on the Czech banking sector and to analyze current situation of SEPA application in the Czech Republic. At the beginning we describe SEPA and reasons for establishment. In the following text we analyze the impact of SEPA on costs and revenues of banks in different phases of this project and we discuss current situation in the Czech Republic. Method of analysis, synthesis and description will be used.

KEY WORDS

Single Euro Payment Area, direct debits, credit transfers, payment cards, impact on revenues and costs, current situation.

INTRODUCTION

Project Single Euro Payments Area (SEPA) or Integrated Retail Payments Market represents another step towards closer European integration. It is an area in which consumers, companies and other economic actors will be able to make and receive payments in euro, whether between or within national boundaries under the same conditions, rights and obligations, regardless of their location.

The main purpose of this project is to strengthen competition and innovation and to improve the quality of customer services. Customers face many difficulties when making euro retail payments to other euro area countries. Cross-border payments very often turn out to be more time-consuming. Moreover there are various payment instruments, standards and processing infrastructures for retail payments in different countries. In such an environment, companies are forced to maintain bank accounts in all countries in which they do business. SEPA will enable to make and receive payments anywhere in the euro area with only one bank account and with uniform set of payments instruments. In fact the difference between domestic and cross-border payments will disappear.

This project was started by the establishment of the European Payment Council (EPC), which consists of 65 European banks, 3 European credit sector associations and the Euro Banking Association (EBA). EPC supports and promotes the creation of SEPA and defines new rules and procedures for euro retail payments. In addition to European Union countries, Iceland, Switzerland, Norway and Lichtenstein are involved. Eurosystem (the European Central Bank (ECB) and the national central banks of the euro area) is also involved in this project, because it is responsible for the smooth operation of payments system in the euro area and therefore places particular emphasis on the creation of SEPA in the euro area. On the legal side, payments and related services are currently treated differently in each euro country. Therefore Payment Service Directive (PSD) was created, which will apply to both SEPA products and to existing national products. By 1 November 2009 all EU members need to transpose the PSD into national law.

The aim of SEPA is to advance European integration with competitive and innovative euro area retail payment market that can bring with it higher service levels, more efficient products

and cheaper alternatives for making payments and will be conducted entirely electronically. To fulfill the main goal, new SEPA payments instruments were created - SEPA credit transfers, SEPA direct debit, SEPA card payments.

AIM AND METHODOLOGY

The reason for writing this contribution is its topicality. The first payment instrument – credit transfer has been used in the European financial market since January 2008, the second one - direct debit will be launched on 1.11.2009. The new Payment Instrument Directive will come in force in the same date. All these events mark the first step in a migration process over the next few years during which customers will move from existing payment instruments to new SEPA instruments. In this migration phase clients can use both types of instruments. The main goal of this phase is to motivate clients to use new SEPA instruments. It is planned that by the end of 2010 majority of retail payments will be made via new SEPA payment instruments.

The aim of this proceeding is to analyze current situation of SEPA application in the Czech Republic and effects of SEPA on the Czech banking sector.

RESULTS AND DISCUSSION

To analyze possible impact of SEPA on Czech banks we divide realization of SEPA into few phases. In the first phase necessary infrastructure, instruments and rules are made and a trial run is carried out. In the second phase (migration or coexistence phase) banks offer old payment instruments, as well as new SEPA payment instruments. In the third phases only SEPA instruments are used and in the fourth phase all payments are conducted only electronically (so-called E-SEPA). It is obvious that expected effects on banks' costs and revenues arising from realization of SEPA vary according to the different phases.

We assume two opposing effects, which determine the overall SEPA impact: competition effect and improved cost efficiency. Since January 2008 SEPA credit transfers are used simultaneously with old payment instruments, so the migration phase is in process. This duality will lead to higher costs due to the setting-up of the new schemes and their coexistence with old ones. During this phase the impact on revenues is limited, because the cross-border competition is not expected to materialize. In the long-run we suppose, that costs and revenues will be affected. Some banks expect new business opportunities, but the growing cross-border competition might decrease revenues and squeeze margins. On the other hand, economies of scale and scope, possible reduction of manual processes and increasing competition might lead to substantial potential cost savings. The following table shows possible financial impact on the European banks under the different phases.

Table 1: SEPA impact aggregate results for an average European bank including balance revenues¹

Impact	SEPA coexistence	Ideal SEPA world	E-SEPA
Revenue	-4,4 (-3,2)	-7.6 (-5,3)	-9.9 (-8,4)
Cost	4,8 (4,8)	-1,3 (-1,3)	-6,8 (-6,8)
Net	-9,2 (-8,1)	-6,3 (-4,0)	-3,0 (-1,5)

Source: ECB calculations on the basis of banks' responses to the fact finding questionnaire

Possible impact of SEPA can be also dealt with from the view of SEPA payment instruments (table 2, table 3). We assume that owing to SEPA the volume of direct debits will significantly increase in all phases, which would largely compensate for the downward pressure on prices caused by cross-border competition. First, the volume of direct debits is

¹ Figures shown in brackets exclude balance revenues.

expected to increase due to opening-up of the euro payment market across borders. Second, owing to consolidation and concentration and growth in payments business banks might be able to expand their market share for direct debits. Third, customers likely switch from other payment instruments (e.g. cheques) to direct debits. On the cost side, banks expect a substantial rise in the short run due to costly adjustments, administrative and commercial costs, fraud management costs and net losses from fraud. In the medium and long run, costs will decrease due to efficiency gains in payment processing and more frequent usage of remote channels by service users.

Table 2: SEPA revenue impact by payment instrument

SEPA revenue impact by payment instrument	Baseline	SEPA coex.	Ideal SEPA	E-SEPA
1. Transaction and processing				
1.1. Transaction fees				
1.1.1. Cash	3,3	3,3	3,4	3,9
1.1.2. Direct debits	12,7	12,5	12,5	12,3
1.1.3. Credit transfers	19,3	19,0	17,3	15,0
1.1.4. Card payments	27,7	25,6	26,0	25,7
1.1.5. Cheque payments	3,1	3,0	2,8	2,2
1.1.6. Priority payments	1,5	1,5	1,3	1,1
1.1.7. Additional/value added serv.	2,1	2,2	2,2	2,5
1.2. Processing special cases	7,1	7,1	7,1	7,1
2. Distribution and maintenance	14,6	14,5	14,5	14,6
3. Balance revenue	57,9	54,1	51,2	50,6
Total revenue	159,8	152,7	147,7	144,1
Total revenue (% change)		-4,4	-7,6	-9,9

Source: ECB calculations on the basis of banks' responses to the fact finding questionnaire

Revenues from credit transfers would remain stable in the coexistence phase. Like direct debits, credit transfers would partly benefit from a volume transfer from other payment means. This positive effect will be probably compensated by downward pressure on prices due to increased competition. In the short run distribution and production costs will increase owing to coexistence of the current and SEPA payment instruments. In the long run costs are expected to be compensated by the expected increased efficiency through the use of more remote channels and significant reductions in labour-intensive payment process within the banks.

In the cards business banks, the impact of SEPA is not expected to be material. Banks will encourage customers to change their payment behaviour and to replace their payment instruments with more efficient and less costly means. Some banks will have additional costs related to the issuance of new SEPA payment cards. Payment instrument which is expected to be phased out in the long run is cheque. Revenues on cheque payments would only be marginally impaired in the short run. In the long run we assume substantial decrease. Distribution and production costs savings are likely to arise in some markets due to reduction of cheque payments. In the migration phase banks expect slight increase in marketing and communication costs linked to informing and educating banks' clients about new instruments and rules. These costs will diminish in the long run. Banks will also face higher IT system and development costs in the migration phase.

Banks might expect not only changes in payments system, but also in balance. Clients can for example choose foreign banks' account according to more profitable interest rate. This trend is expected to be in the near future because of internet banking. Easier operating of bank accounts and more active clients might cause higher volatility of bank revenues. This trend might lead to concentration on short-term investments.

Table 3: SEPA cost impact results by payment instrument

SEPA cost impact results by payment instrument	Baseline	SEPA coex.	Ideal SEPA	E-SEPA
2. Transaction and processing				
2.1.1. Cash	14,7	15,0	14,6	14,0
2.1.2. Direct debits	5,4	5,8	5,5	4,6
2.1.3. Credit transfers	11,3	12,1	10,8	9,6
2.1.4. Card payments	12,9	13,1	13,3	13,3
2.1.5. Cheque payments	5,8	5,8	4,7	4,1
2.1.6. Priority payments	0,4	0,4	0,4	0,3
2.1.7. Additional/value added serv.	1,8	1,9	1,9	2,0
3. Distribution and maintenance	20,2	21,6	20,2	18,5
4. IT system and development	10,4	12,0	10,7	10,5
5. Overheads	17,1	17,0	16,7	16,2
Total cost	100,0	17,0	98,7	93,2
Total cost (% change)		4,8	-1,3	-6,8

Source: ECB calculations on the basis of banks' responses to the fact finding questionnaire

Current situation in the Czech Republic

Five Czech banks signed the contract about approach to SEPA. In the field of payment cards, obligatory usage of chips was approved. The situation in particular countries is different, for example in the Czech Republic banks managed the transition to chip payment cards without any problems and most ATM and payment terminals have been adjusted, to the contrary in the Netherlands and in Norway banks have not started yet.

Another problematic area concerns about direct debits. In the Czech Republic we have different model of direct debit so-called "debtor's mandate". For example in Germany direct debit works in a different way. You tell your number of bank account to your supplier and he informs his bank – the bank to which will be paid, that it has an agreement to debit your bank account. Your bank is without any information. This system is called "creditor's mandate". Our system is more safe, but it is very hard to persuade banks from other countries to change their systems. We hope, that it is probable, that both these systems will be used in the future.

CONCLUSION

The SEPA project represents a major step towards closer European integration. SEPA will become a reality when all euro payments in the euro area are treated as domestic payments, and when the current differentiation between national and cross-border payments disappear. SEPA will bring substantial economic benefits and opportunities as it will foster competition and innovation and improve conditions for customers. The overall impact of SEPA varies across SEPA phases. It is anticipated, that two opposing effects will determine the benefits and challenges of SEPA. First, SEPA will increase competition in the banking industry as it removes the barriers, which protect national markets. Second, SEPA will ensure cost savings in payment processing and give rise to business opportunities. In the short run the banking

sector expects initial investment costs and a relatively limited impact on revenues. In the long term costs are expected to decrease because of potential economies of scope and scale and innovations. Revenues will be affected by increased cross-border competition and by new market entrants.

The best advice to banks is to minimize the migration phase, because of high costs related to implementation of SEPA. Longer migration phase should be as short as possible. Another important aspect, which affects costs and revenues, is bank's approach to SEPA. New and innovative products, new markets and new relationships could bring new sources of revenue for banks. Banks that embrace new technological developments and opt for additional services will create new opportunities and increase their benefits.

Czech banks seem to be successful in adopting new SEPA payment instruments. Credit transfers are used in Czech banking sector without any problems, direct debits is planned to be launched in November 2009.

BIBLIOGRAPHY

- [1] BEŇOVÁ, Elena – HÁČIK, Vladimír – ROMANČÍKOVÁ, Eva – SCHULTZOVÁ, Anna – NEUBAUEROVÁ, Erika – BELIČKOVÁ, Kornélia – ZUBALOVÁ, Alena – SOBEK, Otto – JANKOVSKÁ, Anežka – CHOVANCOVÁ, Božena – HORVÁTOVÁ, Eva – MAJTÁNOVÁ, Anna – POLAVKOVÁ, Katarína. */Financie a mena/*. 2. dopln. a preprac. vyd. Bratislava: Iura Edition, 2007. 391 s. Ekonómia. ISBN 978-80-8078-142-2
- [2] HŘEBÍČKOVÁ, E.: *Dopad SEPA na Evropský bankovní sektor*. Brno: Mendelova zemědělská a lesnická univerzita Brně, 2007. s. 62-68. ISBN 978-80-903966-6-1.
- [3] HŘEBÍČKOVÁ, E.: *How can Single Euro Payment Area affect European banks?* Zlín: Univerzita Tomáše Bati ve Zlíně, 2008. 530 s. ISBN 978-80-7318-663-0.
- [4] CHUCHVALCOVÁ, J. *Příprava na SEPA je z velké části hotová, na euro teprve začíná* [online]. 2007, únor. Dostupné z http://bankovnictvi.ihned.cz/3-20492260-sepa-900000_d-3b
- [5] JEDLIČKA, J. *Právní rámec pro SEPA před schválením* [online]. 2007, červen. Dostupné z http://bankovnictvi.ihned.cz/3-21386440-sepa-900000_d-94
- [6] KOVÁČ, K. *SEPA: dlouhodobé zisky převažují* [online]. 2007, srpen. Dostupné z http://bankovnictvi.ihned.cz/3-21861330-sepa-900000_d-95
- [7] *SEPA: Mění se svět platebních služeb - sborník příspěvků*. Praha: Francouzsko-česká obchodní komora, Česká národní banka, Česká bankovní asociace, 2008.
- [8] PANTŮČKOVÁ, J. *SEPA: banky v ČR „mají z velké části splněno“* [online]. 2007, leden. Dostupné z http://bankovnictvi.ihned.cz/3-20208800-sepa-900000_d-25
- [9] SCHMIEDEL, H. *The economic impact of the euro payments area*, [online]. 2007, srpen. Dostupné z <http://www.ecb.int/pub/pdf/scpops/ecbocp71.pdf>
- [10] *Jednotná oblast pro platby v eurech (SEPA)*, [online], 2006. Dostupné z http://www.ecb.int/pub/pdf/other/sepa_brochure_2006cs.pdf
- [11] <http://www.ecb.int/home/html/index.en.html>
- [12] <http://www.europeanpaymentscouncil.eu/>

Eva Kutová
Masaryk University, Faculty of Economic and Administration
Lipová 41 a
602 00, Brno
eva.hrebik@centrum.cz

ANALYSIS OF THE CZECH CAPITAL MARKET

Dagmar Linnertová

ANNOTATION

In this proceedings analyzed Czech capital market according to main characteristics of liquid market. At the beginning there is described liquid market and its characteristics. Then there is described short history of Prague Stock Exchange. At the end there is chosen Vienna Stock exchange and implemented comparison of market capitalization and volume of trade in both Stock Exchanges. There is also implemented comparison of spread only two stocks traded in both Stock Exchanges.

KEY WORDS

Capital market, analysis, Prague Stock Exchange, Vienna Stock Exchange, the Czech Republic

INTRODUCTION

Capital market is a market with long term securities. In this market there is trading financial instruments with maturity at least 1 year. Free financial resources are provided for middle- and long-term time horizon. In the capital market there is trading financial instruments like stocks, bonds, etc. Issuers of these securities are for example government, companies or local government or banks. Level of revenue, risk and liquidity depends on the financial instrument but compared with money market, the market with short-time securities, there are higher revenues and risk as well. The liquidity depends on financial instrument and on market where the instrument is traded. In the Czech Republic the capital market is represented by two main institutions Prague Stock Exchange and RM – System. Prague Stock Exchange is the most typical market that is opened especially for big institutional investors. This organization started in 1993 when was reopened after more than 50 years. It is organization only for licensed traders. It means that it is based on membership principle. On contrary RM-System is used typically by small private individual investors. In the proceeding there will be used PSE as the institution represented by the Czech Capital market. One of the basic functions of the Stock Exchange is the function of liquidity. It means that proprietor of a financial instrument has the right to sell the instrument for price that corresponds with current demand and supply. Liquid capital market is considered to be breadth, resilient and depth.

AIM AND METHODOLOGY

The aim of this proceeding is implemented analysis of the Czech capital market based on its breadth, depth and resilience. In proceeding are used at most methods of analysis and comparison.

RESULTS

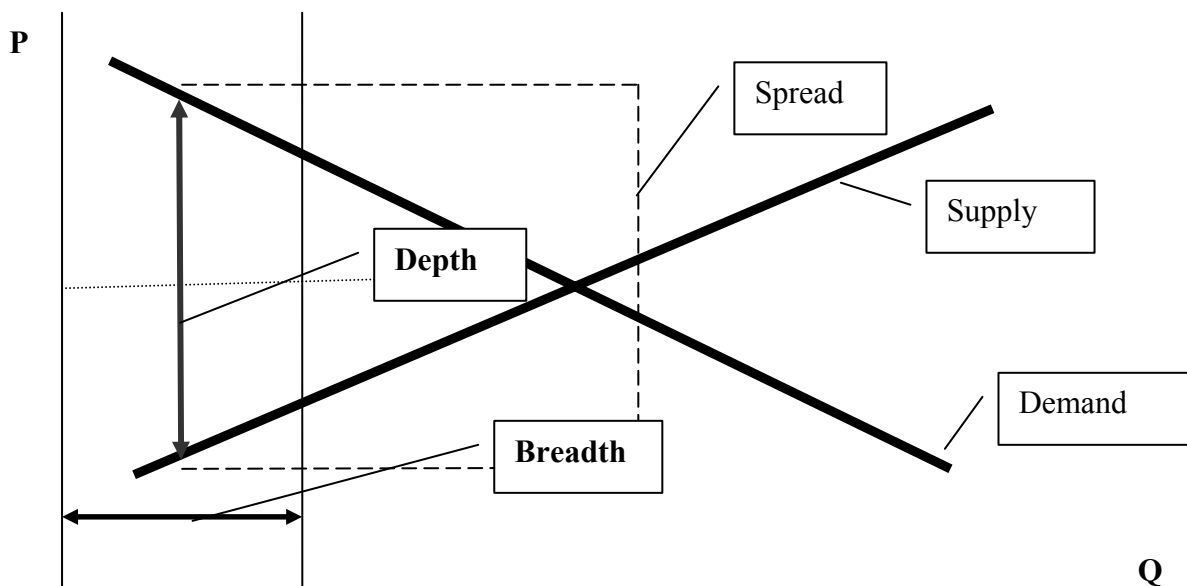
One of the basic and the most important function of Stock Exchange is its function of liquidity. In a Stock exchange market participant can sell particular stock in price that corresponds with the current ask and bid price and the number of security owner are unlimited. Stock market cares about tradability and liquidity of financial instruments it means transformation of financial instruments into cash with the lowest transactional costs. If tradability of financial instruments was not provided by Stock Exchange investors hesitate if invested their financial resources especially in the case of long term investments with limited possibility of convertibility in cash. In this negative case the particular parts of free financial resources were not efficiency used and investors will be also expected higher revenues from

their investments. A liquid asset is characterized by having small transactional costs, easy trading and timely settlement and large trades have only limited impact on the market price. Level of liquidity of the market and thus if stocks exchange provides trading function can be reviewed according to particular characteristics.

Liquid market

Liquid market is considered to be breadth, resilient and depth.

- Breadth market: market with a lot of participants and volume of trade is high. Bid-ask spread of market makers quotations is low. It means that liquidity in this market is higher and risk lower.
- Resilient market: this market is characteristic by quick supply of bid and offer orders and their quick projection into quotation. The market resilience is the speed of the prices to return to their equilibrium after a shock in the market.
- And finally depth market: market that is able to absorb higher volume of transaction without suffering of transactional volatility. The market depth is measured with the size of transaction required to change the price of assets. In contrary to depth market we speak about shallow market. Alternative definition of shallow market says that shallow market is characterized with smaller number of investors and fewer choices of financial instruments and less diversified investors¹. Aspect of resilience and breadth of market are harder to measure because of need detailed information about every single transaction in the market that may not be available.



Czech Capital Market

Czech capital market was established in 1871. From 1971 to 1938 Prague Stock Exchange works as a trader with stocks and commodities as well. In interwar period Prague Stock Exchange was the most important trader with sugar. Activities of PSE² were stopped in 1938 and were related with the Munich dictate. After short PSE recovery after WWII Prague Stock Exchange has been closed for more than 50 years. In 1991 was established the Committee for reestablishment of PSE and Prague Stock Exchange as a joint-stock company was established

¹ In these characteristic there is also added immediacy which defined as the speed with which orders can be executed.

² PSE stands for Prague Stock Exchange

on 24th November 1992. Trading in PSE parquet was opened on 6th April 1993 with 7 issuances of securities.

Czech equity market

Value of issuance increased by 383 % or increased from 42, 6 billion CZK in 1994 to 163.5 billion CZK in 1999. The value and number of issuance was in the first period influenced by privatization process as well. In 1993 number of 995 issuances from the first privatization wave was introduced in Stock Exchange market and in 1995 number of 674 issuances were introduced in Stock Exchange market. In 1997 1301 illiquid issuances were taken off the Stock Exchange market. In following period from 2000 to 2007 the value of issuance moved from 264, 1 to 1013.

Market capitalization during the period from 1994 to 2007 has rising trend that was interrupted only in the middle of 1990's e.g. in 1997 or at the beginning of the 2000's. From the market capitalization was very important year 2002 when first foreign issuance started trading in Czech Stock Exchange market. Nowadays foreign capitalization represents very important part of total value of market capitalization of Czech Stock Exchange market. At the beginning of the 1990's growth of market capitalization was related with growth of number of issuance rather than growth in issuance prices. But since 1996 number of issuance is declining and since 2002 in Stock Exchange market there is rising value of domestic issuance capitalization because of growth their prices then growth of their number.

Despite the slow growth with regard to the share issuance, share trading activities in PSE were relative active. Value of quarter transaction is rising from 15 billion CZK in 1999 to about 245 billion CZK in 2007 (only with interruption in the middle of 2006).

Main problem of limited maturity of the Czech Stock Exchange market is that is shallow and thin. Implications of these problems are reflected in the risk related with investment. Risk of every single security can be divided in two main parts. First part represents risk that can be eliminated by diversification this risk is also known as an unsystematic risk, second part of risk is represented by systematic risk that is caused by general movement of a market and can be limited by diversification. This undiversified part represents premium that is composed of general, local, public or political risk and of specific Stock Exchange market conditions as well. To see differences between thin and shallow and breadth and depth can be illustrated in situation in Prague and Vienne Stock Exchange. Although both countries are similar according to history, culture and social relations in these countries had a different development in the 20th century.

Comparison of PSE and Wiener Stock Exchange History of Wiener Stock Exchange

Wiener Bourse was founded in 1771 by Maria Theresia. In the initial years, the exchange served mainly as a marketplace for trading bonds, bills of exchange and foreign currencies. Special intermediaries, the Official Brokers were responsible for the smooth operation of trading. The Official Brokers received a commission for each trade mediated. On some days, over 2000 persons met on the exchange floor for trading.

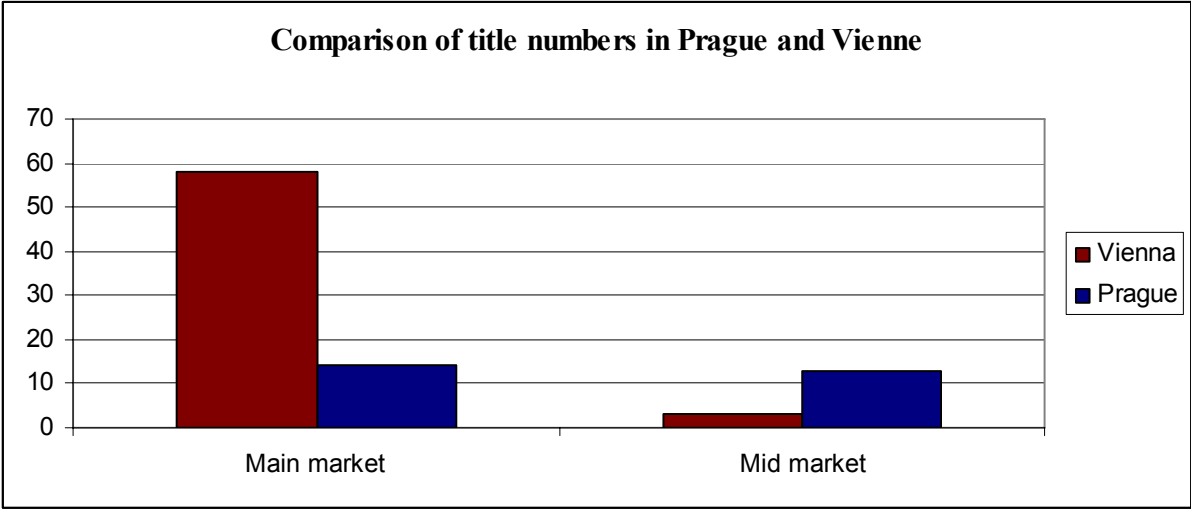
The new market segmentation was implemented in the second quarter of 1999. It groups the diverse market segments by liquidity and market making criteria. A major milestone was the introduction of the Xetra trading system in November 1999. At the beginning of 2002, the prime market was created when the new market segmentation was introduced. Transparency and liquidity on the market in Vienna improved enormously with imposition of compliance

with the more stringent criteria of the prime market such as accounting in accordance with IFRS or US-GAAP, heightened disclosure requirements and higher free float.

Vienna equity market

Vienna equity market is represented by main market and mid market. In the main market there are trading the most liquid stocks call blue chips. This market is represented by 58 titles in the mid market there are trading less liquid titles number of them is 3. In the Vienna Stock Exchange the dominant role is same to the Czech Republic represented by prime market but the number of titles in these both countries is different. In the Czech prime market there is only 14 titles in the free market (less liquid market same to mid market in Vienna Stock Exchange) there are 13 titles. Two issuances are traded in both in the Vienna and in the Prague (Erste Bank, Vienna Insurance Group).

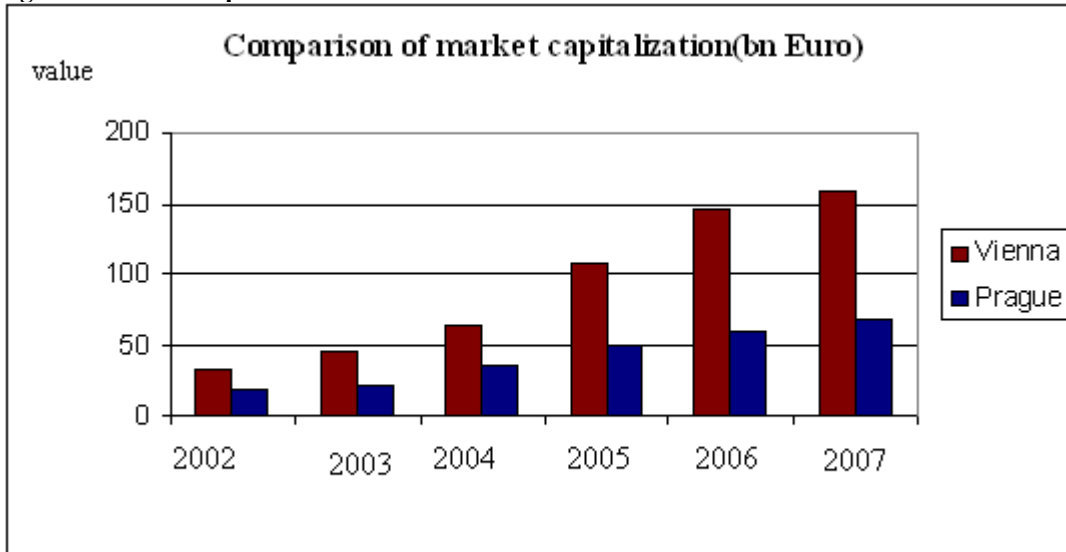
Figure 1 Comparison of title numbers in Prague and Vienna



Source: Patria, a.s.

There is also rising trend of market capitalization in Vienna Stock Exchange the value of capitalization grew about 489 % from 32, 24 billion EURO to 157, 9 billion EURO between 2002 and 2007. The Vienna Stock Exchange market is active as well the trading volume grew about 927 % between 2002 and 2007 from 19,08 billion EURO to 176,65 billion EURO.

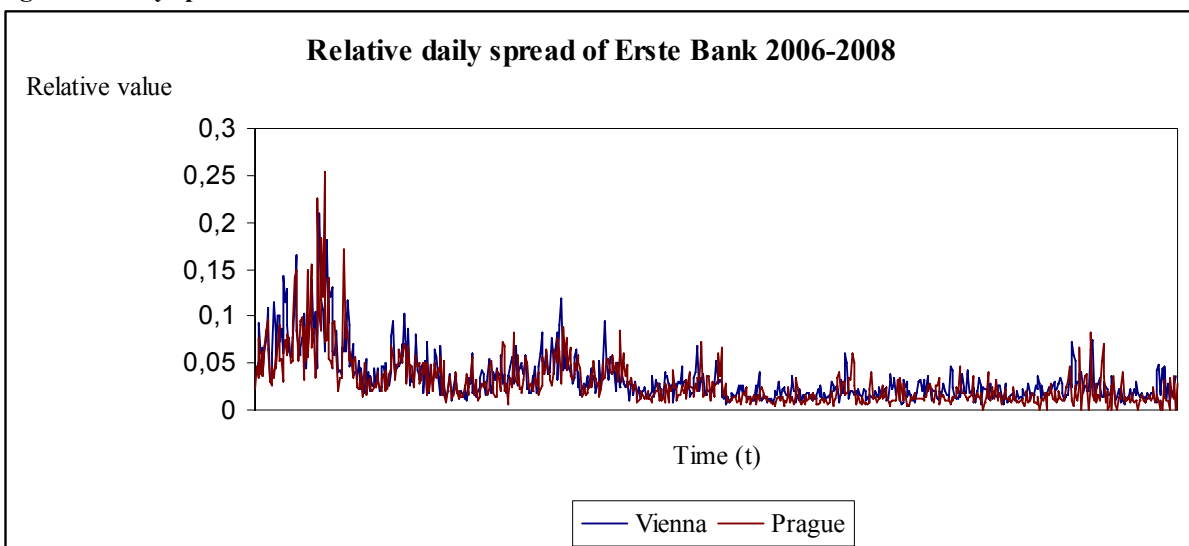
Figure 2: Market capitalization



Source: Patria. a.s.

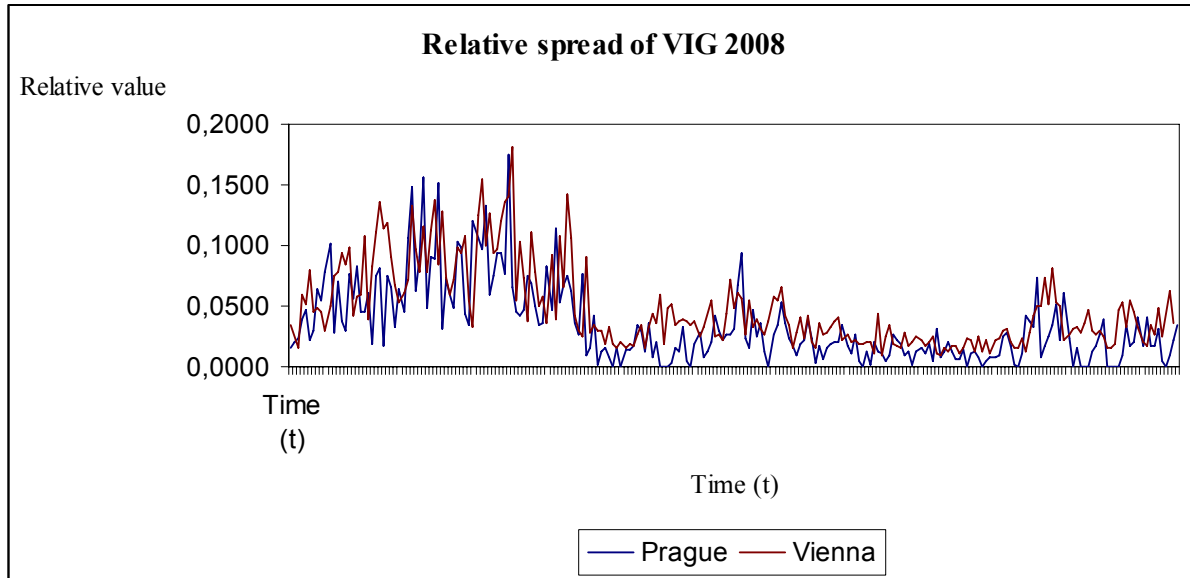
Definition of shallow market is also said that in this market there is higher spread between bid and ask price. In this article was analysed spread between best bid and ask prices of Erste Bank and Vienna Insurance Group only two securities trading in both Stock Exchanges. Although Vienna Stock Exchange is more depth and breadth than Prague the spread between bid and ask prices in investigated time period was closer in Prague than in Vienna. Erste bank was examined from 2006 to 2008 and average daily spread between ask and bid price was 2,9 % in Prague and 3,3 % in Vienna. Vienna Insurance Group was examined only from 2008 and average daily spread between ask and bid price was 3,4 % in Prague and 4,8 % in Vienna.

Figure 3: Daily spread of Erste Bank



Source: Patria, a.s.

Figure 4: Daily spread of VIG



Source: Patria, a.s.

CONCLUSION

If we look in number of titles traded in the Prague Stock Exchange we see that Czech capital market is still thin and shallow. Although the number of titles is rising the pace of this growth is slow and insufficient. In the Vienna Stock Exchange that should be comparable with Prague Stock Exchange is traded 4 times more securities than in Prague. Also market capitalization and volume of trade of the Czech capital market is insignificant as compared to situation in Vienna. On the other hand surprisingly one factor that describes market depth of breadth is spread between bids and asks prices and these two spread in analyzed two stocks traded in both Stock Exchanges were closer and thus better in Prague than in Vienna.

REFERENCES

- [1] Beňová, Elena, Háčik, Vladimír, Romančíková, Eva , Schultzová, Anna, Neubauerová, Erika , Beličková, Kornélia , Zubařová, Alena, Sobek, Otto – Jankovská, Anežka – Chovancová, Božena, Horváthová, Eva, Majtanová, Anna , Polavková, Katarína.: *Financie a mena*. 2. dopln. a preprac. vyd. Bratislava: Iura Edition, 2007. 391 s. *Ekonomía*. ISBN 978-80-8078-142-2.
- [2] Blake, David: *Analýza finančních trhů*. 1st Edition. Praha: Grada, 1995. 623 pages. ISBN 8071692018.
- [3] Jílek, Josef: *Kapitálový a derivátový trh*. 1st Edition. Praha: Bankovní institut, 1998. 370 pages.
- [4] Pavlát, Vladislav: *Kapitálové trhy a burzy ve světě*. Praha: Grada, 1993. 389 pages.
- [5] ISBN 8085424908.
- [6] Veselá, Jitka: *Investování na kapitálových trzích*. Praha: ASPI, 2007. 703 pages. ISBN 9788073572976

Web pages:

www.patria.cz

www.pse.cz

www.wienerborse.at

Dagmar Linnertová
Faculty of Economics and Administration
Masaryk University
Lipová 41a
Brno
Dagmar.Linnertova@seznam.cz

SPECIFICS OF THE FINANCIAL ANALYSIS OF THE COMMERCIAL INSURANCE COMPANIES

Tat'ána Lyčková

ANNOTATION

Theory of the financial analysis of the commercial insurance companies is just at the beginning of its development and at the moment is quite difficult to find some detailed information about that problems in professional bibliography. However, continual development of the insurance market emphasize the importance and necessity of paying more attention to this issue. The scope of the paper is therefore to consider the specifics resulting from the nature of the business activities of the commercial insurance companies and to present an overview of the financial analysis methods of the insurance companies.

KEY WORDS

financial analysis, commercial insurance companies, solvency, profitability, premium, technical reserves.

INTRODUCTION

Nowadays, the world economy encounters the financial crisis which brings along a new view of the further economic entities development. For the future, we can expect, among others, higher investors and creditors cautiousness, pressure on the necessity of the presenting more detailed information by the companies and thereby even the increasing importance of the financial analysis methods.

The financial analysis is defined as a systematic analysis of the data included in the basic financial statements. Its purpose is to assess the financial situation of the company and to provide the information needed for the management and further planning.¹ Market economy, based on a continual competition, drives even the commercial insurance companies to behave the same as other commercial entities operating on the requisite economic effects. Income and profits have to be high enough to meet their obligations and enable further development.

However, within the financial analysis of the insurance companies it is necessary to take into account the specifics resulting from the nature of their business activities. The main objective of the insurance companies is to provide an insurance protection for the particular price - premium. The most of the premiums are accumulated in technical reserves that are used for the payments of the insurance benefits in case of the fortuitous event. Due to the long-term time gap between the collection of premiums and the payment of the insurance benefits, the technical reserves are being invested at the financial markets to achieve its appreciation. In consequence of those activities, insurance companies have different structure of the basic financial statements, such as a balance sheet, profit and loss statement and a cash flow statement, which leads to a necessity of using the different modified financial analysis methods.

¹ KISLINGEROVÁ, E. a kol. *Manažerské finance*, 2007, s. 31-32; RŮČKOVÁ, P. *Finanční analýza – metody, ukazatele, využití v praxi*, 2007, s. 9.

AIM AND METHODOLOGY

The aim of the paper is to describe modified financial analysis methods that are used within the assessment of the financial situation of the commercial insurance companies and to determine the main specifics resulting from the nature of their business activities. For this purpose it will be used the methods of analysis, synthesis and description.

RESULTS

Financial analysis of the commercial insurance companies as well as of the common business companies is based, in fact, on the horizontal and vertical analysis of the absolute figures included in the basic financial statements and its ratios. Horizontal analysis consider the unit and percentage changes of the absolute figures in time. Vertical analysis monitor particular items of the financial statements in proportion to some total value (usually total balance etc.). The main difference resulting from the nature of the insurance companies business activity is the structure and content of the balance sheet and income statement – see table 1 and table 2.

Table 1: Simplified balance sheet of the commercial insurance company

Assets	Liabilities
Long term intangible fixed assets	Equity
Financial investments	Technical reserves
Unit linked financial investments	Unit linked reserve
Debtors - <i>receivables from direct insurance</i> - <i>reinsurance receivables</i> - <i>other receivables</i>	Other provisions - <i>corporate income tax provision</i> - <i>other provisions</i>
Other assets - <i>long term tangible fixed assets, inventories</i> - <i>cash in hand and cash on accounts with financial institutions</i>	Creditors - <i>payables from direct insurance</i> - <i>payables from reinsurance</i> - <i>other payables</i>
Prepayments and accrued income	Accruals and deferred income

Source: Annual Report 2007 - AMCICO AIG Life (První americko-česká pojišťovna, a.s.), http://www.amcico.cz/web/cz/o_nas/vyrocní_zpravy_a_finanční_přehled/vyrocní_zpravy/vyrocní_zpravy.

Table 2: Simplified income statement of the commercial insurance company

Technical account non-life insurance	Technical account life insurance
Earned premiums, net of reinsurance: - <i>gross written premium</i> - <i>outwards reinsurane premium</i> - <i>change in the gross amount of unearned premium reserve</i> - <i>change in the reinsurer´s share of the unearned premium reserve</i>	Earned premiums, net of reinsurance: - <i>gross written premium</i> - <i>outwards reinsurance premium</i> - <i>change in the unearned premium reserve, net of reinsurance</i>
Other technical income, net of reinsurance	Income from financial investments
Claims expenses, net of reinsurance: - <i>paid claims</i> - <i>change in reserve for claims</i>	Revaluation gains on fiancial investments
Net operating expense	Other technical income, net of reinsurance
Other technical expenses, net of reinsurance	Claims expenses, net of reinsurance - <i>paid claims</i>
Change in the equalisation reserve	- <i>change in reserve for claims</i>
Result for the technical account - non-life insurance	- <i>changes in other technical reserves, net of reinsurance</i>
	Net operating expenses
	Expenses from financial investments
	Revaluation losses on financial investments
	Other technical expenses, net of reinsurance
	Result for the technical account - life insurance
Non- technical account	
Result for the technical account - non-life insurance	
Result for the technical account - life insurance	
Other income	
Other expense	
Income tax on profit from ordinary activities	
Profit from ordináty activities after tax	
Other taxes	
Profit for the current period	

Source: Annual Report 2007 – AMCICO AIG Life (*První americko-česká pojišťovna, a.s.*), http://www.amcico.cz/web/cz/o_nas/vyrocní_zpravy_a_financní_přehled/vyrocní_zpravy/vyrocní_zpravy.

Financial analysis of the commercial insurance companies is more complicated in comparison with the common business companies. It is necessary to take into account both underwriting of the insured risks and financial investments of the technical reserves in dependence on the risks and its yield. Further, approach to the life insurance companies needs to be strictly separated from the approach to the non-life insurance comanies.

Another differance of the analysis of the commercial insurance companies consist in the approach to the total costs. While the common business companies are able to assess their future costs quite accurately, it doesn't mean so unique estimator for the insurance companies. For the calculation of the future costs, insurance company has to build on the costs realized in previous financial years.

As seen above, in table 1 and table 2, there are specific items in the balance sheet and income statement that don't appear in common business companies but need to be considered within the financial analysis of the commercial insurance companies, such as for example:

- written premium, net earned premiums,
- deferred acquisition costs,
- claims expenses,
- receivables and payables from direct insurance and reinsurance,
- technical reserves in proportion to the equity or assets, etc.

This fact results to the necessity of using, apart from the standard financial analysis ratios, even the special modified ratios that put the particular items of the balance sheet and income statement of the insurance companies in correlation. Table 3, below, shows the most important ratios applied to the common business companies and to the insurance companies.

Table 3: Financial analysis ratios

Standard financial analysis ratios	Special modified ratios applied to the insurance companies
(1a) Liquidity (current ratio) = current assets/short term liabilities	(1b) adequacy of current assets = technical reserves/current assets
(2a) profitability (ROA) = EBIT/total assets	(2b) proportion of reinsurance = gross written premium/net written premium
(3a) activity (Total Assets Turnover Ratio) = sales/assets	(3b) technical coverage ratio = (technical reserves + equity)/net earned premium
(4a) debt ratio = debt/total assets	(4b) solvency ratio = equity/net earned premiums
(5a) earnings per share = net profit/number of shares	(5b) reserves investment = financial investments/technical reserves
	(6b) technical reserves to equity = technical reserves/equity
	(7b) asset leverage = investments/net earned premiums
	(8b) reserve ratio = technical reserves/net earned premiums

Source: KELLER, J., MESRŠMÍD, J. Finanční analýza v pojišťovnictví, 1998. KISLINGEROVÁ, E. a kol. Manažerské finance, 2007.

It is necessary to point out that the analysis of the mentioned ratios itself is not sufficient for the overall assessment of the financial situation of the commercial insurance company. The conclusions have to be made with regard to the long term performance and also financial results of other competitors in the sector. Next Table 4 shows the recommended values of the particular financial analysis ratios.

Table 4: Recommended values of the financial analysis ratios

(1a) 1,5-2,5	(1b) < 100 %
(2a) 3,28 %*	(2b) inexplicit
(3a) 1	(3b) > 150 %
(4a) inexplicit	(4b) 30-50 %
(5a) high	(5b) < 350 %
	(6b) > 100 %
	(7b) high
	(8b) 100-150 %

Source: KISLINGEROVÁ, E. a kol. *Manažerské finance*, 2007, RŮČKOVÁ, P. *Finanční analýza – metody, ukazatele, využití v praxi*, 2007, www.standardandpoors.com.

CONCLUSION

The financial analysis of the commercial insurance companies is very specific and variable activity that requires extraordinary consideration. Due to the nature of the insurance companies business activity, balance sheet and income statement have different structure and consist of specific items. Using of common financial analysis methods for the assessment of the financial situation of the commercial insurance companies wouldn't be wrong but definitely even not sufficient. The increasing importance of the insurance companies demand a generalization of the financial analysis methods of the commercial insurance companies that are currently not so well harmonized. The aim of the paper was to lay the brief foundations for the future more detailed research of the financial analysis theory of the commercial insurance companies.

BIBLIOGRAPHY

- [1] BEŇOVÁ, E., HÁČIK, V., ROMANČÍKOVÁ, E., SCHULTZOVÁ, A., NEUBAUEROVÁ, E., BELIČKOVÁ, K., ZUBALOVÁ, A., SOBEK, O., JANKOVSKÁ, A., CHOVANCOVÁ, B., HORVÁTOVÁ, E., MAJTÁNOVÁ, A., POLAVKOVÁ, K. *Financie a mena*. Second edition. Bratislava : Iura Edition, 2007. 391 s. ISBN 978-80-8078-142-2.
- [2] ČEJKOVÁ, V., NEČAS, S., ŘEZÁČ, F. *Pojistná ekonomika I*, First edition Brno: Masarykova univerzita, Ekonomicko-správní fakulta, 2004. 66 p. ISBN 80-210-3557-9.
- [3] ČEJKOVÁ, V., NEČAS, S., ŘEZÁČ, F. *Pojistná ekonomika II*, First edition Brno: Masarykova univerzita, Ekonomicko-správní fakulta, 2005. 56 p. ISBN 80-210-3662-1.
- [4] GRÜNWARD, R., HOLEČKOVÁ, J. *Finanční analýza a plánování podniku*. First edition Praha: Ekopress, s.r.o., 2007. 318 p. ISBN 978-80-86929-26-2.
- [5] KISLINGEROVÁ, E. a kol. *Manažerské finance*. Second edition Praha: C.H.Beck, 2007. 745 p. ISBN 978-80-7179-903-0.
- [6] KELLER, J., MESRŠMÍD, J., *Finanční analýza v pojišťovnictví*, *Pojistné rozpravy*, 1998, no. 3, p. 5-14, ISSN 0862-6162.
- [7] PASTORÁKOVÁ, E. *Finanční analýza v poisťovniach – praktikum*, First edition Bratislava: EKONÓM, 2007. 108 p. ISBN 978-80-225-2319-6.
- [8] RŮČKOVÁ, P. *Finanční analýza – metody, ukazatele, využití v praxi*. First edition Praha: GRADA Publishing, a.s., 2007. 120 p. ISBN 978-80-247-1386-1.
- [9] www.amcico.cz – official web pages of AMCICO AIG Life (První americko-česká pojišťovna, a.s.).

* The value is recommended to be higher than the rate of return on investment in treasury notes, currently 3,28 %.

[10] www.standardandpoors.com – official web pages of Standard & Poor's rating company.

Ing. Taťána Lyčková
Department of Finance
Faculty of Economics and Administration
Masaryk University
Lipová 41a, 602 00 Brno
Czech Republic
63341@mail.muni.cz

TECHNICAL ANALYSIS AND ITS PREDICTION OF FINANCIAL CRISIS

Petr Málek

ANNOTATION

Topic “Technical analysis and its prediction of financial crisis” determines two points of view. Technical analysis and financial crisis itself. First, we have to speak about the global financial crisis of 2008. It is a major financial crisis, the worst of its kind since the Great Depression in 1929. The underlying causes leading to the crisis had been reported in journals for many months before September 2008. Since September 14th, when Lehman Brothers announced bankruptcy, many things happened such as the sale of Merrill Lynch, problems with liquidity in American International Group (AIG), etc.

KEY WORDS

financial system, capital market, financial crisis, the Prague stock exchange, financial instrument, technical analysis, methods of the technical analysis,

INTRODUCTION

Since the global crisis arose, resulting in a number of European bank failures and declines in various stock indexes, large reductions in the market value of equities and commodities worldwide. The world economy is in a recession. My task is to find if it was possible to know (before September 2008) by the help of technical analysis that the price of financial instruments would “go down”.

AIM AND METODOLOGY

The technical analysis is defined as an analysis which, by the help of historical development of financial instruments, determines future. Technical analysis tries to show us if the financial instrument will grow, decline or will be stable.

The goal of the submitted thesis: “Technical analysis and its prediction of the financial crisis in 2008” is to analyze issues concerning the technical analysis itself and show technical analysis as a tool which could (or could not) predict financial crisis. According to these aims the whole thesis is structured.

Methods of description, analysis, and synthesis will be used for this purpose.

RESULTS

This paragraph must be divided into two parts. First part must present expected results. Second part must present real results. In this moment I do not have real results yet, that is why these results will be shown in the part of “conclusion”.

I expect that these methods of the technical analysis will show us, either that these methods could predict financial crisis (fall of financial instruments) or could not. In this moment I tend towards they (methods of technical analysis) could not predict financial crisis. But because of some words¹ I have to confirm this statement or refuse it. My confirmation (or refusal) will be

¹ Ludvik Turek, president of „CZECH NATIONAL ASSOCIATION OF TECHNICAL ANALYSIS“ declares technical instruments can anticipate financial crisis.

presented in the third part of this essay and partly in the part “conclusion”. I will investigate some of the financial instruments² by the help of technical analysis methods³.

Theoretical resources

This part must evaluate theoretical resources with special attention given to the stock exchange, like the Prague stock exchange and other significant capital markets in the world.

The object of an investigation is a capital market where long-term demand for free financial instruments encounters long-term supply for free financial instruments. Another definition declares that the capital market is the [market](#) for [securities](#), where [companies](#) and [governments](#) can raise long-term funds.⁴

This market consists of a primary and a secondary market. The primary market is the place where new bonds issues and stock are sold to investors. The secondary market is the place where existing securities are sold and bought from one investor by another one. It is usually a stock exchange (the New York stock exchange, the Prague stock exchange and many others).

The stock exchange is highly organized form of the market. This form differs from another markets by specific features. Mainly, a subject of the business are substituable subjects, which are standardised and are convertible.⁵ These subjects are not physically in the stock exchange. The stock exchange has determined minimal acceptable quantity for the business, it is called “lots”. There is defined a way of doing business, the way of paying and the way of pricing. If we call market the stock exchange there must be regular time for business.⁶ Because of this purpose the stock exchange must be operated in accurately determined place. There must be defined a circle of persons who are entitled to do business.

Before I start with a methodology of technical analysis I have to announce something about financial instruments.⁷ Technical analysis is a group of methods which serves to deciding on buying and selling of *financial instruments*. For our purpose we will denote financial instrument as a tool which provides us to do business. It means it is the instrument which can generate profit, but it is the potencial instrument which can provide our loss.

Methodology

This part deals with methodology of the technical analysis. The methodology includes tools of the technical analysis, which I use in the last part of my essay. It means, in this part I could present charts, formation and technical indicators like moving averages, oscillators (Wilder relative strenght index, On balance volume, ...). These methods could show us if the technical analysis is method which could predict financial crisis.

Simply, technical analysis tries to find future value of financial instrument. On the basis of historical development advise us whether the value of technical instrument will grow, will decline or will be stable. This is a method which is very difficult and almost impossible.

² What is financial instrument is defined below.

³ Something about technical analysis methods is presented in the part “Methodology”.

⁴ http://en.wikipedia.org/wiki/Capital_market.

⁵ ROSE, PETER, S. Peněžní a kapitálové trhy. 89th page.

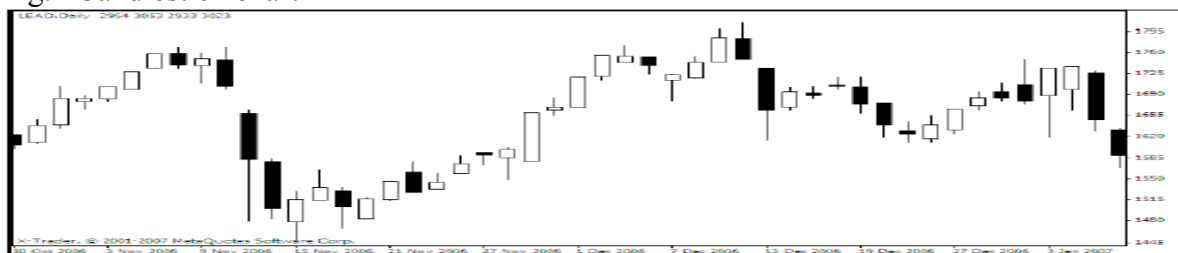
⁶ Accurately given the stock exchange hours and the stock exchange calendar.

⁷ It is necessary to know basic information about financial instruments to understand technical analysis.

There are many methods of technical analysis.⁸ Unfortunately we have no space to investigate every one.⁹ So I present just some of them, but firstly I will display basic characteristic of most of them. Each method shows (or tries to show) us the future direction of financial instrument on the basis of a primary estimation or a secondary estimation. The primary estimation recommend us to buy, to sell or to wait. The secondary estimation advises us in the situation of overbought or oversold.¹⁰

Very important part (in my opinion the most important) of methodology are “charts methods”. We can divide them into two group: charts and charts formation. We have two basic kinds of charts. First group of charts gives us information about price, second group gives us information about price and about volume. We can see one chart of second group in the picture below.

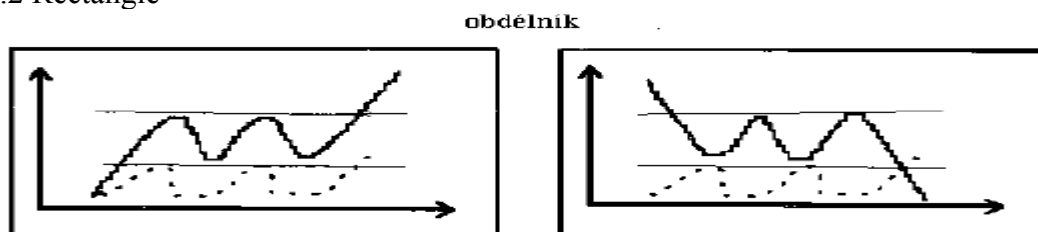
Fig.1 Candlestick chart



Source: <http://www.xtb.cz/forex.php?p=96>

Charts formation can be applied for the whole market, portfolios or securities. Technical analysis assumes that there exist charts formations which are regularly repeated. And because of this repetition we can expect future direction. In the next chart we can see one of them.

Fig.2 Rectangle



Source: VIŠKOVÁ, HANA. *Technická analýza akcií. Publ. 1 st. Praha: Prepress, 1997. 119 p. ISBN 80-86009-13-0. p.23*

Technical indicators are methods which are partly connected with charts. The connection is following: Technical indicator is a mathematical function which for particular business day refers particular real number. The function is constructed on the basis of volume, price knowledge and vector parametres. In order to technical indicator have predicative ability it must be fitted into the chart. In the essay I will show three indicators (moving average, moving average convergence divergence – MACD and on balance volume). Also I will use three financial instruments which were (or still are) affected by financial crisis. Results will be presented in the next part in the three figures with a small commentary. On the basis of the

⁸ In my opinion there is maybe about 500 methods, maybe more, but no less.

⁹ In the world of computers, good software can show us whole technical analysis in seconds. For example I show some programs like: AMI Broker, Amateur Invest, etc.

¹⁰ In the situation of overbought we can expect price decline. In the situation of oversold we can expect price arise.

results I can judge if technical analysis could predict financial crisis. But firstly I have to write sth about indicators, which I use.

Moving averages; as a first indicator I will use 30days simple moving average. This moving average will be connected to DAX index. If technical analysis is predictive, 30days simple moving average will show us signal to sell DAX before September 2008. DAX is a [Blue Chip stock market index](#) consisting of the 30 major [German](#) companies trading on the [Frankfurt Stock Exchange](#). Prices are taken from the electronic [Xetra](#) trading system. This index, in my opinion, can truly represent German economy in the time of financial crisis.

MACD (moving average convergence divergence); for our purpose we use MAS indicator, it is quite similar but easier for counting. It is the indicator which presents difference between short-term moving average (12 days) and one long-term moving average (26 days). If this indicator is negative (minus) and the second day will grow up positive value, it is an impulse to buy. Impulse to sell is opposite. This indicator I will present on CEZ chart, I will present it here because CEZ has the biggest representation in PX index.

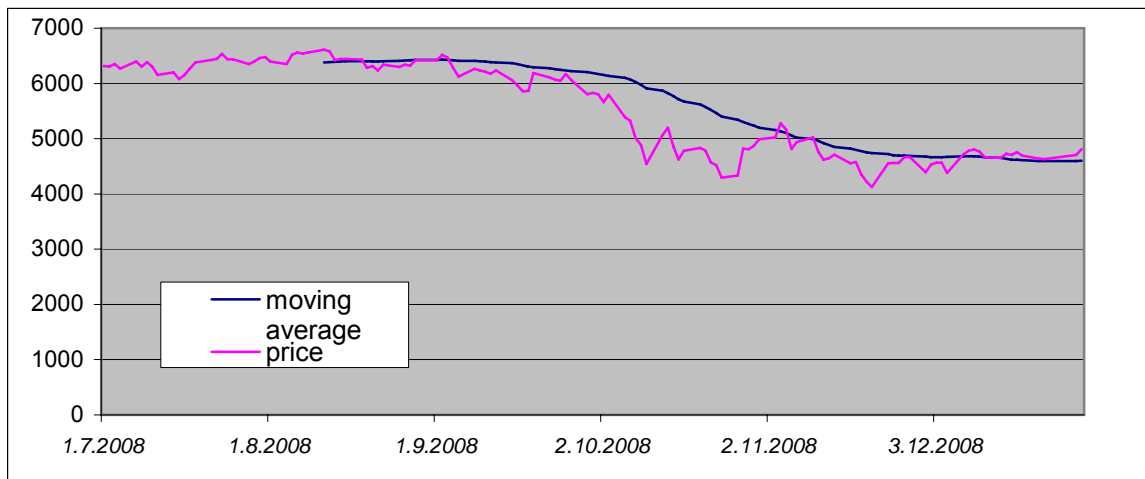
RSI (relative strenght indicator); it is the technical momentum indicator that compares the magnitude of recent gains to recent losses in an attempt to determine overbought and oversold conditions of an instrument. RSI indicator can reach value from 0 to 100. A financial instrument is deemed to be “overbought” once the RSI approaches the 70 level. If the RSI approaches 30, it is an indication that the financial instrument may be getting oversold and therefore likely to become undervalued. RSI indicator is connected to NYSE composite index (United States economy).

Prediction of financial crisis

In the last part I use tools (which I present in the paragraph above) and I try to confirm (or reject) supposition, which declare, that the technical analysis is a tool, which can predict financial crisis. So technical analysis analyses many indexes, stocks, warrants, etc. On the basis of this analysis I show possibility of preventing financial crisis in the future. Or not.

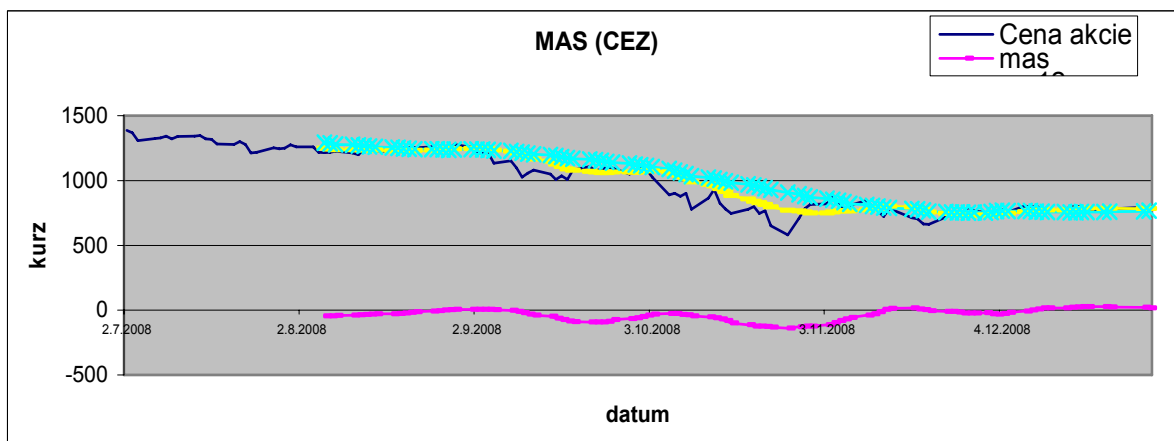
In the figure below (Fig. 3 Moving average) we can see some purchase and selling signals. If the daily price curve cut through moving average curve from below, we would buy financial instrument. It is a signal for buying. If the daily price curve cut through moving average curve from the top, we would sell financial instrument. It is a selling signal. From these signals I chose one, the signal from 4th of September. It is selling signal. If we used this signal we would save many financial resources. But on the other hand If we followed all of them (signals) we would lost more.

Fig.3 Moving average (DAX)



Source: Own construction

Fig.4 MAS indicator (CEZ)



Source: Own construction

What can you see in the the 4th figure? There are three buy and two sell impulses. For the purpose of our essay I am interested in beginning of september (before financial crisis arose in the shape of big decline). 8th of September there is sell impulse, on this account I can say technical analysis can predict financial crisis, but there is “but”. The “but” is buy impulse 8 days before. If we bought CEZ we would lose 10 percent of our invested finances. Another three instruments are irrelevant for us.

Here I have to say MAS indicator couldn't predict financial crisis, but if we followed this indicator we would lose less than regular investor.

In the last figure there is relative strength indicator connected to NYSE composite. This indicator offers us only purchasing signals.¹¹ RSI indicator didn't reach level of 70, that's why we have no signal to sell. *That's why we can say RSI indicator in this case don't predict financial crisis.*

¹¹ This is presented above.

Fig. 5 RSI indicator (NYSE composite)



Source:

http://money.cnn.com/quote/chart/chart.html?pg=ch&symb=nyse&time=6mo&freq=1dy&charts=0&comp=&compidx=aaaaa%7E0&ind_compind=&uf=0&lf=2&ma=0&maval=60

CONCLUSION

In this essay our possibilities were limited. That's why I used three financial instruments. First of them, NYSE composite, was connected to RSI indicator. This connection didn't show us any possibilities how to anticipate financial crisis. Second financial instrument, simple 30 days moving average, in connection with DAX index showed us more. If we followed some market signals¹², not whole of them, we could save some financial resources. To say true, it is almost impossible to choose right one. That's why neither in this case we can't use technical analysis results to predict financial crisis. Last financial instrument, CEZ share, and technical indicator, MAS indicator, showed us more than another two before.¹³ There were market signals which predicted price decline, but there were also signals which didn't. But if we followed these signals we would save more than regular investor.

In normal conditions, technical analysis is used by many investors in the equity market, especially to determine the bullish and bearish stocks. But in this extremely period¹⁴, when financial crisis withers everything around, almost all principles of technical analysis have failed, we consider technical analysis is just theory.

LIST OF REFERENCES

- [1] BLAKE, D. *Analýza finančních trhů*. Publ. 1st Praha: Grada Publishing, 1995. 624 p. ISBN 80-7169-201-8.
- [2] BRADA, J. *Technická analýza*. Published 1st in Prag: Vysoká škola ekonomická v Praze, 2000. 171 p. Bibliography: p. 171-196. – Notes. ISBN 80-245-0096-5.
- [3] MISHKIN, F., S. *The economics of money, banking and financial markets*. 7th publishing. Boston: Addison- Wesley, 2004. 679 p. ISBN 0321122356.

¹² One was mentioned page before (4 th September).

¹³ In terms of anticipating financial crisis.

¹⁴ Volatile period; period of financial and economic crisis.

- [4] MUSÍLEK, P. Trhy cenných papírů. Published. 1st Prag: Ekopress, 2002. 459 p. Bibliografie: s. 449-456. – Rejstřík. – Slovník základních pojmů. ISBN 80-86119-55-6.
- [5] ŠEVČÍK, A. - FUCHS, D. – GABRIEL, M.. *Finanční trhy*. 1st publ. Brno: Masaryk University, 2001. 149 p. ISBN 80-210-2696-0.
- [6] VÍŠKOVÁ, HANA. Technická analýza akcií. Publ. 1 st. Praha: Prepress, 1997. 119 p. ISBN 80-86009-13-0.

[I] <http://www.czechwealth.cz> (personal web page of Ludvik Turek, president of czechnational association of technical analysis).

[II] <http://finance.yahoo.com> (Yahoo web page, financial area)

[III] <http://stockcharts.com> (technical analysis and charts web page).

[IV] <http://www.trademethod.com> (trade methods web page).

Ing. Petr Málek

Masaryk University, Faculty of Economics and Administration

Lipová 41a

Brno

99563@mail.muni.cz

THE EFFECT OF CENTRAL BANK'S AND GOVERNMENT'S MEASURES IN THE WAKE OF FINANCIAL CRISIS ON THE RESPECTIVE FINANCIAL MARKETS

Daniela Mat'ovčíková

ANNOTATION

The research paper presents the impact of the recent global financial crisis, describes the situations in chosen economies and the results prove that monetary and fiscal measures are not supporting the financial markets well enough and avoided to calm down the emerged state of affairs.

KEY WORDS

Financial crises, central banks, monetary policy, governmental help, financial markets, stock exchanges.

INTRODUCTION

In the light of current events related to the financial crises, this paper shortly summarizes the situation in chosen countries together with the grounds of this state of affair. This development has been mainly caused by extremely favorable economic conditions in the USA and the rest of the world, namely low interest rates, low and stable inflation, and sound growth. The principal factor, low interest rates, transcended to indebtedness and eagerness to invest mainly into the property markets and when the increased asset prices immediately followed, this fact amounted to even higher obligations. At the same time, financial markets became the place of aggressive tactics with desire to gain the highest possible yield. One driving force behind the development was the large American investment banks with their highly leveraged new products that had been mispriced. The birthplace of financial crises, the United States of America, has been due to that heading into colossal hardship. The country's lenient credit measures fired back and thereafter got everything in motion. In time of globalization the domino-effect broadened briskly into Europe and even Asia has not stayed immune to its undesirable consequences. Central banks and governments of almost every industrial country are coming to their own assistance and implement specific measures that should be theoretically helpful. At the same time they cooperate and search for unified measures. If appropriate tools are used, the economy should respond instantly. Considering that stock exchanges symbolize the highest organizational form of financial markets, the attention is focused on them. The American Federal Reserve System, the European Central Bank, the Bank of England, the Bank of Japan and many more are hoping to slowly benefit from their painstakingly thought of maneuvers. On the other hand, the fiscal policy is an additional tool that utilizes both sides of a budget in order to reach the desired effect mainly through taxes and government expenses. The authorities of almost every country are pumping extra additional packages into their economies that are primary directed towards saving financial institutions and indirectly on the whole society mainly thanks to psychological effect. Hence the issue today is less about the original problems, but rather about general confidence and methods that can be exercised in case of anytime impending distress.

AIM AND METODOLOGY

The impact of all constructive moves, mainly lowering of discount rates and an additional government help, is scrutinized on the financial markets of given countries with an emphasis on the stock exchanges and their paramount indices. Most experts' claim that used procedures has not had any effect on the market, so this theory is being tested. Data are meticulously

collected from NYSE Euronext, NASDAQ, Tokyo Stock Exchange, London Stock Exchange and Frankfurt Stock Exchange, and their main indices such as Dow Jones, NASDAQ, Eurostoxx 50, FTSE 100, Nikkei 225 and DAX 30 are looked at. In the end all measures of central banks and governments and their influence on stock exchanges are clearly demonstrated with a help of graphs. Trend analysis is used in this paper.

RESULTS

It seems that interference into economy has lost its validity for now. While countries are taking necessary steps to cushion the impact of the global financial crises, it has not helped to increase the confidence and observed stock exchanges have not reacted according to the theoretical principles.

Germany

Germany represents the biggest European economy that produces almost 21% of an eurozone GDP production¹. After financial crises reached Europe, the situation in this country has become so dramatic that it has been threatening to knock down the country's banking system. While it is usual for banks to bail out each other in time of need, the insolvency and problems with liquidity prevented every financial institution from an access to further additional funding and banks themselves had been having difficult time to keep afloat. Irony is that Germany's public-sector banks speculated far more dangerously than private banks and invested heavily in American sub-prime mortgage securities. There are few reasons for this, but one stands out the most. The government was requested to withdraw its guarantee of protection for state-owned banks from July 2005 that had a devastating effect on the public-sector banks. Earlier they were able to borrow money at basic rates, which in turn allowed them to offer loans at lower rates than their private competitors. Consequently, funds dried up and many of the public-sector banks began speculating with high-risk securities.

As soon as the financial crises broke down, the distressed German banks tried desperately to save their positions. The situation started to be most dramatic at Düsseldorf-based IKB, the first German bank that was almost driven into bankruptcy. As the insolvency of a bank with such a high credit rating could have triggered an unprecedented loss of confidence in the German financial market and in addition a number of other banks had deposits at IKB worth a total of €18 billion, IKB had to be saved. After 3 bailouts equaling to €5 billion from its main shareholder KfW, an additional help from the state worth of €1.9 billion and after-tax loss of €540 million for the first 3 months of fiscal year 2008/09, KfW sold in August 2008 its shares to a private investor Lone Star. Furthermore the Special Fund for the Stabilization of the Financial Market (Sonderfonds Finanzmarktstabilisierung – SoFFin) authorized guarantees to IKB in the amount of up to €5 billion to secure the repayment of bonds to be issued by IKB in the future. The guarantees were authorized also by the EU Commission.²

Besides IKB, more banks got a financial dose. West LB got €1 billion of financial help coupled with €3 billion of loan guarantees from the state, Sachsen LB received €2.73 billion in loan guarantees, HSH Nordbank had to write off €450 million and got €30 billion of a governmental help. Colossal Hypo Real Estate Holding AG, a company in size comparable to Lehman Brothers, was offered initially €35 billion, one fourth from private banks and the rest from a German treasurer, but in the end, got a higher 50 billion euro rescue package that prevented it from toppling over. In December 2008 Hypo Real Estate Group decided upon

¹Eurostat statistics

² IKB Deutsche Industriebank web page

strategic realignment and restructuring to sustainably align the business model to changed market conditions, to reposition itself as a specialist for Real Estate Finance and Public Sector Finance, in Germany and Europe, funded through Pfandbrief issuance, to reduce the Group's cost base, and streamline its structure as financial results are expected to be burdened further.³ This company was replaced in December 2008 in DAX 30 index, the main index of Frankfurt Stock Exchange and as the results would prove in Figure 2 even the state bailout did not prevent DAX 30 from falling down in the observed period.

Because Germany is a eurozone member, its monetary policy is not performed by its Bundesbank but directed from the European Central Bank (the ECB) that is ironically based in Germany. In theory, a lower discount rate of the ECB should encourage easier access to money, lead to a decrease of an interest burden and stop a panic on financial market. The desired effect has not been seen yet, even after few cuts of the ECB discount rate as Figure 1 confirms.

The United Kingdom

The United Kingdom has been greatly affected by the recent development and the government and the Bank of England has been taking extensive arrangements in order to prevent an economy from deteriorating. Northern Rock, the first nationalized bank in February 2008 and the British mortgage lender Bradford & Bingley following in October 2008 were wisely rescued. The British decision was to save the core of the national banking system and create a more realistic structure than the blanket guarantees offered in Ireland for example. It was Ireland's emergency guarantee of all deposits which set off the nuclear reaction and large British deposits were being sucked out, into unreal Irish bank guarantees at an alarming rate. Lack of lending between banks forced to intervene on an unprecedented scale, offering the equivalent of hundreds of billions of pounds in „emergency“ loans to bail out banks. This was supposed to have the effect of rebooting interbank lending. Contrary, investors responded by selling off their shares in banks and building societies.

On 8th of October 2008 the British Government announced a bank rescue package of around £500 billion (\$850 billion at the time). The plan consisted of three parts. Firstly, £200 billion were made available to the banks in the Bank of England's Special Liquidity scheme. Secondly, the Government increased the banks' market capitalization, through the Bank Recapitalization Fund, with an initial £25 billion and another £25 billion provided if needed. Thirdly, the Government decided to temporarily underwrite any eligible lending between British banks up to around £250 billion.⁴ In addition, the amount of the guarantee of bank deposits rose from 35,000 pounds to 50,000 pounds and short-selling in 34 financial stocks was banned by the Financial Services Authority in September 2008 until January 2009.

Starting from October 2008, the UK government carried on in the national process by injecting £20 billion into the Royal Bank of Scotland. This bank was one of the worst affected with £6 billion worth of assets being written off. The state gained a 60% stake. Moreover, Lloyds and HBOS merged in November 2008 with the state having a 43.5 % stake in newly established Lloyds Banking Group.⁵ What is more, the Barclays bank sought some sort of private investment and obtained in the end 9 billion of pounds from the government. In the return for the bailout, the banks agreed to cancel dividend payments until the loans will be repaid, had board members appointed by the Treasury, and limited executive pay.⁶

³ Hypo Real Estate Group web page

⁴ CRS Report for Congress

⁵ United Press International

⁶ The Economist

The sums pledged were large enough to meet all the capital required to support the capital of each major domestic bank. The use of high yielding preference shares and permanent income bearing securities is likely to mean the government may end up owning some of the troubled banks, yet its ability to control them all, and their lending, is a certainty. This multiple approach is already being favorably viewed in other countries; it is speedy, cheaper and turns the all-important psychology from one of utter despair to merely gloom. It is more effective, and overall less burdensome on the taxpayer than any other solution.

While Britain is tackling the financial crises in timely fashion, it has not been immune to a recession which it already entered. As part of the rescue plan, a VAT sales tax were cut from 17.5 % to 15 %, the lowest level allowed by the European Union on 1st of December 2008 , in order to boost consumers' spending power before Christmas and defend against the deeper recession. Foreign dividends were exempted from tax in an effort to allay concerns that have led several big companies to shift their tax domicile to Ireland.

Furthermore a 45 % income tax rate on individual earnings of over 150,000 pounds up from the current top rate of 40 % is planned to be launched from 2011.⁷

Britain is one of the countries hardest hit by the global credit crisis as British banks have racked up losses bigger than anywhere else in the world. Foreign investors are less willing to finance the UK because of its record debt burden and slumping economic output. The rush to sell sterling means prices of imports like clothing and electronic goods will rise, holidays will cost more and overall living standards will suffer. British companies have already announced the loss of 38,588 jobs⁸ from October till December 2008 and more job cuts are expected. As it can be seen in Figure 2 these measures had no an expected effect on London Stock Exchange and it pivotal FTSE 100 index.

Japan

Japan is only one of many industrialized economies to suffer another financial crisis in the past 15 years. The country experienced huge difficulties after the bursting of a bubble. Japan's five bank bailout packages in the late 1990s may have hold some lessons. Most of the packages were administered by the Deposit Insurance Corporation of Japan (DICJ) at that time. The packages had an announced value of \$495 billion. The DICJ reported that it had provided \$399 billion to Japan's troubled financial institutions of which it later recovered \$195 billion. Overcoming the crisis in Japan's banks took a combination of capital injections, new laws and regulations, stronger oversight, a reorganization of the banking sector, moderate economic recovery, and several years of banks working off their non-performing loans.⁹ It is something the rest of the world could learn from right now.

Japan has the world's second-largest economy. While European and American financial titans fought and some collapsed, Japan's giant banking groups and smaller banking houses stood relatively unhurt up until October 2008. The Japanese became very cautious after the bitter experience of the cleanup. One result was that they seem to have largely avoided the risky subprime loans that set off the current crisis therefore the growing global credit crisis had not yet fully appeared there. In Japan, it took a "lost decade" to work through those debts. The

⁷ Reuters

⁸ Dunkley, J.

⁹ Nanto, D.

subprime-related losses at Japanese financial companies have totaled just \$8 billion, out of global subprime-related losses that some say could total \$1 trillion.

The problem for years has been that the nation's banks have too much cash, not too little. And while the American Federal Reserve System seems to be digging through the entire American financial sector, the last time this central bank intervened in markets, it did so in dollars instead of yen in order to help international markets. Therefore it seems Japan has enough cash to finance its own needs.

The country sits on a \$14 trillion pile of household savings, the product of decades of trade surpluses and frugal lifestyles. This has allowed Japan to finance its immense \$8.1 trillion fiscal deficit and still have enough money left over to be the world's largest creditor nation for the last 17 years. The nation's net overseas assets, the sum of all Japanese investments abroad, minus what foreigners hold in Japan, reached a record 250 trillion yen or \$2.4 trillion in 2007. That means that Japan's domestic economy had been largely insulated from global credit market turmoil because it did not borrow from those markets. At the same time, with so much money flowing out, usually into safer investments like Treasuries, stability in the United States clearly matters.¹⁰

On the other hand, Japan is not completely resistant to the global crises. It is reportedly planning an ambitious scheme to relieve the country's banks of trillions of yen in bad loans. Apparently the government and the Bank of Japan are considering spending 10 trillion yen (£76.4bn) on corporate debt, stocks, commercial paper and derivatives. This is a result of further gloomy predictions that expect Japan to face a period of deflation next year for the second time in a decade.

The package, which may be in place as early as March 2009, bears the hallmarks of Japan's last big bank bail-out between the late 1990s and 2005, when the government spent billions of yen on bad loans to keep the country's banking system afloat. The Bank of Japan will help firms gain access to new funds by increasing its outright purchase of Japanese government bonds to 1.4 trillion yen (£10.74bn) a month from 1.2 trillion yen, and temporarily buying commercial paper, a form of short-term unsecured borrowing, outright. The government, meanwhile, has unveiled 12 trillion yen in extra stimulus spending and a record 88.5 trillion yen budget for next year as the export-dependent economy feels the full force of the credit crisis unfolding in the USA and Europe.

The problems facing the Japanese economy in 2009 were underlined at the end of December 2008 when the Tokyo Stock Exchange closed for the year having recorded its biggest annual percentage loss on record, with Nikkei average's yearly loss of more than 42%.¹¹

The United States of America

The background to American current financial problems is that the country as a whole is highly leveraged. There is too much debt and too little saving. Efficient borrowing and lending can be very valuable, but too little saving for the whole country and for individuals during their productive years reduce efficient investment and the income growth it produces and exposes the economy's vulnerability to shocks. Due to earlier high confidence into the dollar foreigners were willing to invest in the United States, largely in government and private sector debt, and consequently helped to finance a large current account deficit. The long-

¹⁰ Fackler, M.

¹¹ McCurry, J.

lasting financial turmoil is the symptom of the structural imbalances in the real economy. Over the long time, expansive monetary policies were coupled with implicit and explicit bailout guarantees, and this distorted the process of capital allocation. Many debtors reached their debt limit and creditors decreased that limit. Foreign creditors have been getting ready to reduce their holding of the USA debt in a drastic way and the Federal Reserve System (the Fed) and the government came to help in order to prevent the country from further downfall. The governmental takeover of the mortgage agencies Fannie Mae and Freddie Mac in September 2008¹² bailed out the monetary authorities of China, Japan, Russia, and other foreign countries that hold agency debt. As a result the Treasury offered these countries a leeway to unload their US assets at subsidized prices, all at the cost of the US taxpayer.

The gloomy fate was destined for Lehman Brothers, one of the most prestigious players on Wall Street. The company filed for bankruptcy protection on 15th of September 2008 after a frenzied weekend of negotiations failed to find a way of saving itself. In a separate development Merrill Lynch was taken over by Bank of America for \$50 billion, a move that redeemed it from Lehman's fate. Both companies expanded aggressively into property-related investments, including so called sub-prime mortgages, loans to people on low incomes or with poor credit histories. The bank has lost \$14billion in the past 18 months after being forced to take huge write-downs on the value of those investments.¹³

The largest government intervention in decades saw a \$700billion (£380bn) bail-out of the banking industry¹⁴. The limit of a federal guarantee on bank deposits was raised from \$100,000 to \$250,000 until the end of 2009. Momentarily, there are unlimited guarantees on deposits in accounts that do not give interest.¹⁵ While the Fed and the U.S. government are making effort to “unfreeze” the banking system, the financial crisis is not over. Neither tax rebates nor low interest rates nor higher or lower exchange rates can do the job of reviving an economy that is burdened by debt loads that are too high. The stock exchanges are not reacting positively to all those moves and the main indices are going steadily down, as Figure 2 display.

The summary of the findings

It is clearly visible from Figure 1 that central banks of the United States of America, the United Kingdom, the European Union and Japan has tried to lower their discount rates from April 2007 till December 2008 in order to ease an access to substantially needed funds. Especially the Fed decreased its rate by more than 85% what has been unheard of so far. As mentioned previously, all central banks injected every economy with additional liquidity, but it did not influence the stock exchanges as Figure 2 exhibits.

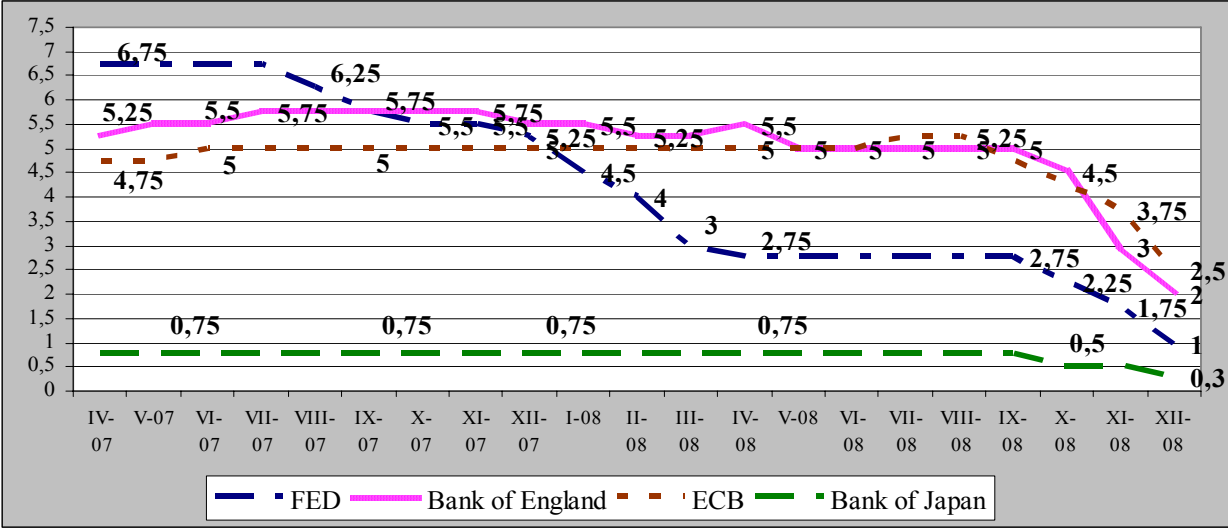
¹² Sweet, K.

¹³ Wearden, G., Teather, D. and Treanor, J.

¹⁴ BBC News

¹⁵ Balakrishnan, A.

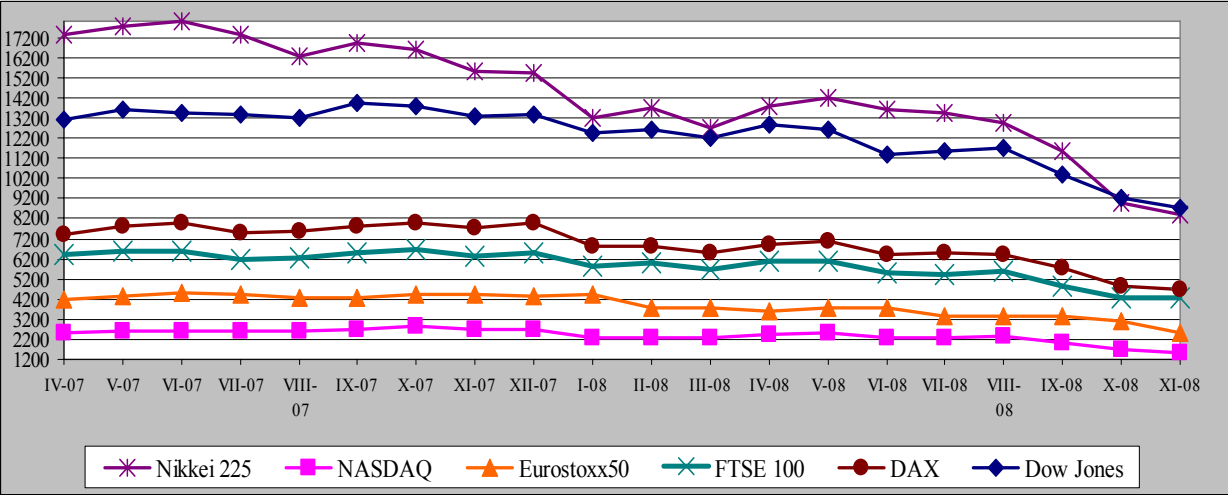
Fig. 1: The course in the discount rate changes of observed central banks.



Source: www.bankofengland.co.uk, www.boj.or.jp, www.ecb.int, www.federalreserve.gov

Figure 2 pictures the evolution of the principal indices of each characterized country, namely Dow Jones and NASDAQ in the USA, FTSE 100 in the UK, Nikkei 225 in Japan, Eurostoxx 50 in the eurozone and DAX in Germany. The value of Dow Jones went down from 13120 to 8690 points that represents almost 34% decrease and NASDAQ deteriorated by approximately 41% from 2558 till 1518 points. FTSE 100 decreased its value by 34% (a fall from 6419 points to 4226), Nikkei 225 fell down by astonishing 52% (a slump from 17377 points to 8400), Eurostoxx 50 lowered its value by 39% (a drop from 4178 to 2553) and DAX experienced 37% depreciation (from 7369 to 4666 points).

Fig. 2: The trend in the reaction of monitored indices.



Source: www.kurzy.cz

CONCLUSION

Beyond doubt, financial modernization without effective regulation does not work well. In the world of sophisticated financial markets, it is very easy for financial institutions to hide the

risk in their portfolios and make them look sounder than they really are. Clearly, some principal framework is needed in order to prevent any repetition in the future and profound restructuring of global capital should follow. It will all require enduring diligent work that should pay an attention to a simple fact that fiscal and monetary policies are not serviceable. Income multiplier simply does not work and lower interest rates do not efficiently stimulate spending. Quite the opposite happens; it makes all course of action much foggy and a work of all participating much harder. The crisis also confirms that some types of government involvement in financial markets, especially through backing of financial institutions, generate not wanted outcomes that inevitably end up with taxpayers footing the bill.

BIBLIOGRAPHY

1. Balakrishnan, A. (October 21, 2008). *Financial crisis: action taken by central banks&governments*. Retrieved December 10, 2008, from <http://www.guardian.co.uk/business/2008/oct/13/creditchunch-marketturmoil1>
2. BBC News. (October 3, 2008). *House backs \$700bn bail-out plan*. Retrieved December 10, 2008, from <http://news.bbc.co.uk/2/hi/business/7651060.stm>
3. CRS Report for Congress. (November 10, 2008). *The U.S. Financial Crises: The Global Dimension with Implications for U.S. Policy*. Retrieved December 28, 2008, from <http://graphics8.nytimes.com/packages/pdf/topics/fincris1.pdf>
4. Dunkley, J. (December 31, 2008). *Financial crises: UK job losses*. Retrieved January 2, 2009, from <http://www.telegraph.co.uk/finance/financetopics/financialcrisis/3542572/Financial-crisis-UK-job-losses.html>
5. Eurostat statistics. Retrieved December 10, 2008, from http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1996,45323734&_dad=portal&_schema=PORTAL&screen=welcomeref&open=/t_na/t_nama/t_nama_gdp&language=en&product=REF_TB_national_accounts&root=REF_TB_national_accounts&scrollto=0
6. Fackler, M. (September 19, 2008). *In Japan, Financial Crisis Is Just a Ripple*. Retrieved December 10, 2008, from <http://www.nytimes.com/2008/09/20/business/worldbusiness/20yen.html>
7. Hypo Real Estate Group web page. Retrieved December 30, 2008, from <http://www.hyporealestate.com/eng/index.php>
8. IKB Deutsche Industriebank web page. Retrieved December 12, 2008, from http://www.ikb.de/content/en/press/press_releases/2008/081008_Q1.jsp
9. McCurry, J. (December 30, 2008). *Japanese banks could receive \$ 110 bn bail-out*. Retrieved January 2, 2009, from <http://www.guardian.co.uk/business/2008/dec/30/japan-banks-recession>
10. Nanto, D. (September 29, 2008). *The U.S. Financial Crises: Lessons From Japan*. Retrieved December 10, 2008, from <http://fpc.state.gov/documents/organization/110816.pdf>
11. Reuters. (November 6, 2008). *Britain cuts consumer tax in stimulus package*. Retrieved December 10, 2008, from <http://www.france24.com/en/20081124-britain-cuts-consumer-tax-stimulus-package-economy-crisis>
12. Sweet, K. (September 07, 2008). *Government Seizes Fannie Mae, Freddie Mac*. Retrieved December 28, 2008, from <http://www.foxbusiness.com/story/markets/government-seized-fannie-mae-freddie-mac/>
13. The Economist.(November 6, 2008). *Reshaping the lanscape*.Retrieved December 10, 2008, from http://www.economist.com/world/britain/displaystory.cfm?story_id=12564689

14. United Press International.(December 12, 2008). *HBOS shareholders agree to let bank merge*. Retrieved December 27, 2008, from http://www.upi.com/Business_News/2008/12/12/HBOS_shareholders_agree_to_let_bank_merge/UPI-14831229108608/
15. Wearden, G., Teather, D. and Treanor, J. (September 15, 2008). *Banking crisis: Lehman Brothers files for bankruptcy protection*. Retrieved December 10, 2008, from <http://www.guardian.co.uk/business/2008/sep/15/lehmanbrothers.creditcrunch>
16. www.bankofengland.co.uk
17. www.boj.or.jp
18. www.ecb.int
19. www.federalreserve.gov
20. www.kurzy.cz

Full name: Ing. Daniela Maťovčíková
Institution: VŠM/ City University
Street: Bezručova 64
City: 911 01 Trenčín
Email: dmatovcikova@vsm.sk

FUNCTIONS AND DUTIES OF A DEPOSITARY OF COLLECTIVE INVESTMENT FUNDS

Michaela Moždiáková, Damian Czudek

ANNOTATION

The purpose of this paper is to analyse the institute of a depositary of collective investment funds, i.e. to describe and evaluate current state of affairs in the Czech Republic. In particular, the paper is focused on analysis of primary legal regulations, which are related to the investigated issues, from which typical functions and principles of activities of a depositary of collective investment funds imply and which form base for determination of duties and powers of the depositary of collective investment funds towards the Czech National Bank, management companies, collective investment funds and, in particular, to the investors.

KEY WORDS

Collective investment funds, depositary, duties, functions, investment company, management company, unit trusts

INTRODUCTION

The problem of institute of the depositary of collective investment funds is rather new in Czech law environment. For that reason authors would like initially introduce the subjects of collective investment, then the characteristics of institute of the depositary of collective investment funds, including short historical discursion. The authors would also like to pay attention to the fundamental functions of the depositary of collective investment funds as well as to the principles of activities of the depositary. The authors will also pursue duties and powers of the depositary of collective investment funds, which are set by public law legal regulations mentioned below and by civil law depositary contract between the depositary and the collective investment fund, where particular powers and duties of both contracting parties can be arranged according to current legal regulations framework. Consequently, authors would like to bring in the overall summary of depositaries undertaking in the Czech Republic, including their short introduction. In the last part of the paper, the authors will evaluate the current situation and draw reader's attention to typical problems causing heated discussions within professional public.

AIM AND METHODOLOGY

The authors came out with their theoretical analysis from current state of affairs of legal regulation, which is valid and effective in the territory of the Czech Republic to this date, i.e. Act No. 184/2004 Coll., on Collective Investment Schemes and Decree No. 115/2007 Coll. on details on duties performance of depositary of collective investment funds, furthermore from articles published in professional magazines and monograph related to collective investment, commercial law and financial law in general. Regarding the practical basis, the authors drew up overall summary of the depositaries and they mainly used information provided by the Czech National Bank and by depositaries web sites.

RESULTS

The result of our analysis contains a complex and compact overview of information and knowledge about institute of the depositary of collective investment funds in the Czech Republic. The result is coming out from theoretical and legislative regulation framework

on one hand and from present practice in the field of collective investment market on the other hand.

Subjects of collective investment

The Act No. 184/2004 Coll., on Collective Investment Schemes defines collective investment as business whose object consists of collecting financial means through the subscription of shares of an investment fund or issue of unit certificates of a unit trust, investment according to the principle of risk spreading, and further management of assets¹.

It means that we can distinguish two basic kinds of collective investment funds in the Czech Republic - these are investment funds and unit trusts; further complex subdividing, as for the purpose of this paper, is irrelevant. A collective investment fund may entrust on the basis of a contract the management of its assets to an investment company, called a management company², which is third basic subject in the field of collective investing.

The institute of the depositary of collective investment funds

The Act No. 184/2004 Coll., on Collective Investment Schemes determines one of the most important obligations³ of collective investment funds. It says that every collective investment fund must have its depositary⁴. The institute of the depositary of collective investment funds is a problem that the Czech Republic law⁵ and the European Union law⁶ put emphasis on.

The depositary⁷ of collective investment funds can be only a bank with its registered office in the territory of the Czech Republic or a foreign bank that has a branch located in the territory of the Czech Republic, whose banking licence includes the authorisation to perform activities of a depositary⁸. The banking licence with authorisation is accorded after fulfilling of all requirements by the Czech National Bank in the licensing procedure⁹.

The depositary of a collective investment funds is legally and proprietary independent subject (the bank) separated from the management company, the investment company or the unit trust and does not only keeps records of the assets of the collective investment fund, but controls whether the collective investment funds dispose of their assets in accordance with effective regulation and with the statute of particular collective investment funds too. This means the depositary constitutes the first level of supervision in the capital market supervision at the present time; the second level is performed by the Czech National Bank. The specific and actual position of depositary of a collective investment fund is set by the effective

¹ Article 2 paragraph 1 of Act No. 184/2004 Coll., on Collective Investment Schemes, as amended.

² Specified in article 4 paragraph 6 of Act No. 184/2004 Coll., on Collective Investment Schemes, as amended.

³ In Špička, J. *Investiční společnosti, investiční fondy : kolektivní investování a jeho právní úprava*, Praha: Management Press, 2003, str. 16.

⁴ Article 3 paragraph 1 of Act No. 184/2004 Coll., on Collective Investment Schemes, as amended.

⁵ Decree No. 115/2007 Coll., on details on duties performance of depositary of collective investment funds, as amended.

⁶ Dědič, J., Čech, P. *Obchodní právo po vstupu ČR do EU, aneb, Co všechno se po 1. květnu 2004 v obchodním právu změnilo*, 2. vydání. Praha: Ivana Hexnerová - Bova Polygon, 2005, str. 288.

⁷ Liška, V., Gazda, J. said, that the word depositary comes from Italian word “depositum” which originally means movable asset deposited to the custody on the base of trust agreement. The function of depositary is in historical point of view closely associated via unit trusts with Anglo-American collective investment systems. From the half of 19. century was entire property of unit trusts (regularly) deposited in a bank, which disposed with that property within given instruction.

⁸ Article 20 paragraph 2 of Act No. 184/2004 Coll., on Collective Investment Schemes, as amended

⁹ Article 1 paragraph 3 letter j) of Act No. 21/1992 Coll., on Banks, as amended

regulation and by the civil law contract on performance of activities of depositary concluded with subjects of collective investment (depositary contract)¹⁰.

Functions and principles of activities of the depositary

The fundamental functions of the depositary of collective investment funds are common business, control and protective function. These functions are closely related to the specific duties and powers of the depositary. These will be mentioned below.

The business function lies in provision of services by the depositary to the collective investment funds on contractual and commercial ground in the market environment. The competitive background forces the depositary to improve quality and prices of its services. The control function is one of the most important, therefore it is necessary and desirable to keep it on high level¹¹. Professionals agree with the fact that only banks have all necessary instruments to perform depositary activities in accordance with the requirements to carry out the control in real. The protective function covers protection of investors from the risks based on the possibility of occurrence of damages on the investors' property caused by unlawful, illegal or irresponsible actions of collective investments funds¹².

Knowledge and compliance of principles of depositary activities had been inadequate, heterogeneous and void from both sides (depositaries and collective investment funds) for a long time, therefore the Czech National Bank issued a manual called "Zásady činnosti depozitáře (DEPZ)"¹³ (The principles of activities of the depositary). The main principles are the following ones: the principle of professionalism, the principle of communication, the principle of investors' protection, the principle of professional care and the principle of active control.

The principle of professionalism lies in professional, personal, economical and technical preconditions for performing activities of depositaries, which are necessarily guaranteed by banking licence with special authorization. The communication between the depositary and a collective investment fund is crucial and it should be open and helpful, preventing from problems and dealing with existing problems after mutual consultations. A special bank department is usually charged with performance of function of depositary and is responsible for the communication with other bank departments and collective investment funds.

The principle of investors' protection contributes to preservation of economical balance. Protection has to be reasonable. It means that it should prevent from misuse of entrusted property or committing a crime, but it should not support investors in frivolous and irresponsible behaviour. The principle of professional care consists of claim of professionalism (i.e. having knowledge and ability to resolve problems) and carefulness (i.e. being active and having the effort). Professional care should be always considered in accordance with objective criteria as probable and presumable proceeding and routine of reasonable professional. The principle of active control presents position of depositary in the first level of the two-level supervision and means that the depositary is obliged to observe

¹⁰ Article 20 paragraph 3 of Act No. 184/2004 Coll., on Collective Investment Schemes, as amended

¹¹ It would be undesirable for collective investment supervision to have nonworking depositary, which charges low price for provided services due to lower costs reached by derogation from its control function and its duties

¹² More in Liška, V., Gazda, J.: *Kapitálové trhy a kolektivní investování*, 1. vydání. Praha: Professional Publishing, 2005, str. 294.

¹³ Zásady činnosti depozitáře (DEPZ); (Principles of activities of the depositary). Available at: http://www.cnb.cz/m2export/sites/www.cnb.cz/cs/dohled_fin_trh/dohled_kapitalovy_trh/download.../metodika_depz_20030523.pdf

activities of collective investment funds, to get all necessary information, to evaluate the activities by comparing with set rules and, in case of breach, to take remedies.

Duties and powers of the depositary

Duties and powers of the depositary are settled by legal regulation, especially by Act No. 184/2004 Coll., on Collective Investment Schemes (primary regulation) and Decree No. 115/2007 Coll., on details on duties performance of depositary of collective investment funds and by the civil law contract between the depositary and a collective investment fund.

It is obvious that as for the purpose of this paper we can remark only the essential duties and powers of the depositary. Due to legal regulations mentioned above, the depositary has the duty to provide safe-keeping of the assets, custody, establishing the accounts required for keeping records of all its financial means, keeping records of movement of all financial means, executing instructions of an investment fund, investment company or another entity that manages the assets of a collective investment fund, providing for settlement of transactions in the assets of a collective investment fund within usual deadlines. The depositary is obliged to control certain activities and their accordance with the legal regulations and the statute of the collective investment fund such as issuing and repurchasing shares or unit certificates of a collective investment fund, calculation of current value of a share or a unit certificate, usage of yield and the method of valuation of the assets of a collective investment fund.

The depositary has power to ask the collective investment fund for its statute and other documentation required for the performance of activities of the depositary, further for information about any intended purchase or sale of a movable asset except for securities or real estates for purposes of collective investment within a stipulated deadline and get the respective draft contract prior to its execution. If the depositary, within the performance of its activities, encounters a fact indicating that the collective investment fund has violated legal regulations, statute, a depositary contract or a management contract (e.g. by instruction given at variance with legal regulation, the statute, the depositary contract or a management contract), or finds out about a fact that could significantly influence the value of shares or unit certificates of the collective investment fund or if a depositary has a justified suspicion of a potential harm to the interests of the shareholders or unit-holders of this collective investment fund that could lead to a significant deterioration of the economic position of a collective investment fund, it is both empowered and obliged to discuss this fact with the investment company or the investment fund and to notify with no delay the Czech National Bank of this fact and must not execute the instruction.

The duties and powers settled by the contract between the depositary and a collective investment fund are, in most cases, more detailed and try to cover insufficient legal regulations and loopholes. Unless it is civil law contract¹⁴, the cogent legal regulation¹⁵ adjusts firm boundaries¹⁶ such as 6 months minimum notice period, and deals with case of cessation of the depositary or the collective investment fund. The contract is crucial for setting forms of mutual communication, forms, terms and deadlines of all processes. The quality of the contract depends solely on both contractual sides and their experience.

¹⁴ Due to Act No. 513/1991 Coll., Commercial Code, as amended

¹⁵ Article 20 paragraph 3 of Act No. 184/2004 Coll., on Collective Investment Schemes, as amended

¹⁶ More in Kotásek, J., Pokorná, J., Raban, P. a kol. *Kurs obchodního práva: právo cenných papírů*, 4. vydání. Praha: C. H. Beck, 2005, str. 377.

Depositaries in the Czech Republic

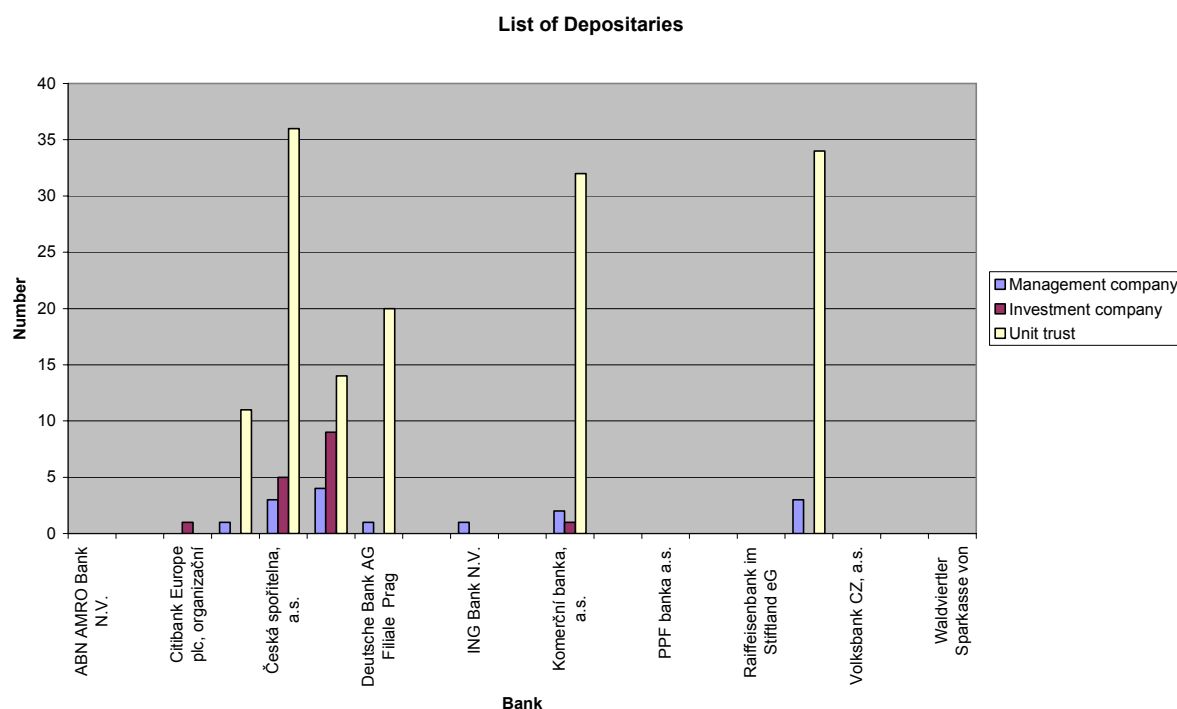
The banking licence including authorisation to perform activities of a depositary of collective investment funds listed nineteen subjects (banks) at the end of 2008. Nevertheless, it is necessary to comment upon the current situation. From 19 banks mentioned above, only 8 perform activities of a depositary (they are active depositaries for at least one subject of collective investment fund). Among three strongest banks belong: Česká spořitelna, a.s., UniCredit Bank Czech Republic, a.s., Komerční banka, a.s. The only criterion for comparison was the absolute number of clients. Other criterions, e.g. monthly depositary fee, were not available because of contractual base of relationship between the depositary and its client.

Fig.1 The list of Depositaries

The list of Depositaries			
Bank:	Management company	Investment company	Unit trust
ABN AMRO Bank N.V.	0	0	0
Banco Popolare Česká republika, a.s.	0	0	0
Citibank Europe plc	0	1	0
COMMERZBANK Aktiengesellschaft	1	0	11
Česká spořitelna, a.s.	3	5	36
Československá obchodní banka, a. s.	4	9	14
Deutsche Bank AG Filiale Prag	1	0	20
HSBC Bank plc - pobočka Praha	0	0	0
ING Bank N.V.	1	0	0
J & T BANKA, a.s.	0	0	0
Komerční banka, a.s.	2	1	32
LBBW Bank CZ a.s.	0	0	0
PPF banka a.s.	0	0	0
Raiffeisenbank a.s.	0	0	0
Raiffeisenbank im Stiftland eG	0	0	0
UniCredit Bank Czech Republic, a.s.	3	0	34
Volksbank CZ, a.s.	0	0	0
Všeobecná úvěrová banka a.s.	0	0	0
Waldviertler Sparkasse von 1842	0	0	0

Source: The Czech National Bank

Fig. 2 Graph: The list of Depositories



The number of depositaries is small, consequently new collective investment funds have not enough opportunities to choose, because in the Czech Republic there are only 5 depositaries with sufficient experience with performing the functions of the depositary of collective investment funds on high level.

CONCLUSION

The depositary of collective investment funds is legally and proprietary an independent subject (a bank with its registered office in the territory of the Czech Republic or a foreign bank that has a branch located in the territory of the Czech Republic with a banking licence that contain the authorisation to perform activities of a depositary), which is separated from collective investment subject and constitutes the first level in the capital market supervision. The fundamental functions of the depositary of collective investment funds (the common business, the control and the protective function) and the main principles of its activities (the principle of professionalism, the principle of communication, the principle of investors' protection, the principle of professional care and the principle of active control) create general foundation and are closely connected to exactly defined duties and powers of the depositary set by legal regulations (public matter) and by depositary contract (civil matter) - these determine specific, actual and unique position of the depositary. The situation on depositaries market in the Czech Republic is inconsistent; there are both strong banks with years of experience and banks with no practice, it is quite difficult to analyze deeply the state of affairs due to insufficient information resources.

BIBLIOGRAPHY

- [1] Act No. 21/1992 Coll., on Banks, as amended
- [2] Act No. 184/2004 Coll., on Collective Investment Schemes, as amended
- [3] Decree No. 115/2007 Coll. of 9th May 2007 on details on duties performance of depositary of collective investment funds, as amended
- [4] Dědič, J., Čech, P. *Obchodní právo po vstupu ČR do EU, aneb, Co všechno se po 1. květnu 2004 v obchodním právu změnilo*, 2. vydání. Praha: Ivana Hexnerová - Bova Polygon, 2005, 485 s. ISBN 807273122X
- [5] Kotásek, J., Pokorná, J., Raban, P. a kol. *Kurs obchodního práva: právo cenných papírů*, 4. vydání. Praha: C. H. Beck, 2005, 728 s. ISBN 807179855X
- [6] Liška, V., Gazda, J.: *Kapitálové trhy a kolektivní investování*, 1. vydání. Praha: Professional Publishing, 2005, 525 s. ISBN 8086419630
- [7] Šebestová, A., Smutný, A. *Aktuální otázky právní úpravy kolektivního investování*. [Quoted 18.12.2008]. Available at: <http://portal.justice.cz/soud/soubor.aspx?id=65670>
- [8] Špička, J. *Investiční společnosti, investiční fondy : kolektivní investování a jeho právní úprava*, Praha: Management Press, 2003, 133 s. ISBN 8085603330
- [9] Zásady činnosti depozitáře (DEPZ). Available at: http://www.cnb.cz/m2export/sites/www.cnb.cz/cs/dohled_fin_trh/dohled_kapitalovy_trh/download.../metodika_depz_20030523.pdf

Michaela Moždiáková, Damian Czudek
Právnická fakulta Masarykovy univerzity
Veveří 70
Brno
m.mozdiakova@gmail.com, damian.czudek@gmail.com

THE FINANCIAL SYSTEM DEVELOPMENT AND THE FINANCIAL STABILITY IN BALKAN COUNTRIES

Oltiana Muharremi, Luciana Koprencka

ANNOTATION

The political development of last decades specially the 90 years events are accompanied with a development process end rapid economic growth.

This development is accompanied with financial market growth and strengthening in all the Balkan countries notably of bank system growth.

The principal factor which influenced the bank system consolidation is their privatization and the penetration of accredited banks which brings foreign capitals and experience.

So, the financial system is able to accomplish three main functions:

- 1) To realize in effective way the distribution of the economic resources during the time.
- 2) To evidence exactly and to administrate the financial risks
- 3) To absorb calmly the surprises and the knocks from financial markets.

The Central Banks of the Zone had achieved extraordinary progresses. The bank surveillance is improved; Slovenia and Croatia are the first in this direction, when the bank surveillance is based on risks and legal frame regulatory is almost complete.

Albania and Bosnia are proceeding with big steps to the regulated bank systems and the implementing of the surveillance based on risks is in process.

The commercial banks are sophisticated and the foreign proprietorship in the sector is in common and in some cases is dominating.

Croatia still now has the higher percentage of foreign proprietorship into the bank sectors followed by Bosnia and Albania.

The capital market development wasn't the same in the region.

Croatia has achieved extraordinary progress in this field with high growth in pension and investments funds. The situation is different in other countries because they had some difficulties in this direction.

The non banking financial sector is not developed so rapidly as the banking system in all the Balkan.

INTRODUCTION

The Balkans countries had in the last decades a positive development with high economic growth rates and generally low inflation rates.

Financial sectors in those countries have undergone fundamental changes since the beginning of transition about two decade ago. In the formerly planned regimes, financial markets were non-existent, and these sectors consisted almost entirely of so-called mono banks that collected deposits, remunerating them at regulated rates, and provided loans based on decisions in planning bureaux.

This positive economic development is accompanied with a high number of financial reforms. Upon transition, the mono banks were broken up to form a two-tier structure of a central bank and commercial banks, with the latter being restructured, recapitalized and privatized. In addition, newly founded private banks entered the market, often supported by fairly liberal licensing and rather loose regulatory regimes.

During 1990 those reforms decelerates. The cause was the unfavorable economic and political developments in the region, but in 2000 this had a high run-up as a result of a stable environment.

The transformation effects are decisive not only for the financial sector. From the results of a study of the European Bank for the Development and the Reconstruction the transformation of banking sector in the economies of the post communist countries is stimulating the competition in the non financial sector, improving so the entrance of the external financial resources, in the direction of the growth of the quantity also in the decrease of the borrowing costs facilitating so the entrance in the merchandise and services markets.

The financial system in those countries before 1990 was a centralized banking system with a considerable number of commercial banks.

After 1990 commence the privatisation process but the major number of assets of the banks was state – owned.

METHODOLOGY

The used methodology intends to be in function of the goals placed for the study about financial stability. The methodology used in this study focus the realization of vision, mission, goals and functions and the role of the legal frame regulatory. The research, consist in composition of development strategies and reforms.

THE MAIN ARGUMENT

Legal framework regulatory. Financial system development. Financial stability in Balkan countries.

KEY WORDS

financial system, banking sector, stability, development, capital market,

CHAPTER 1. THE FINANCIAL SYSTEM DEVELOPMENT IN SOME BALKANS COUNTRIES

“The financial system is determined like a integral connection, interchange, transfers, intercession in monies and like a integral flow, operations and financial institutions, wich creates a consecutive chain and which, only born like an whole, like a logical and functional continuity of each-others, give sense to financial system itself.”

1. A financial system offers the necessary tools to make possible *the movement through time of economic resources* between different subjects and countries.
2. The tools and the techniques assured from him enables *the risks management*, because each only movement of financial flow constitutes at the same time also the risk transfers from one part to another.
3. A financial system facilitates the merchandises and services exchange obtaining the necessary tools for the compensation and the payments, in each countries in every time between different economical subjects with a possible lower consumption of resources and time for the devolutions.
4. Ensures at the same time *the resources integration* also make possible the *proprietorship division* of companies in the concept of the total capital invested, without fragmenting the fisical complexity of the oneness.

The three essential functions of a modern banking system are payments settlements and record-keeping, efficient intermediation between savers and investors, and the provision of the appropriate system wide liquidity using indirect monetary policy instruments.

The financial system development comes as the answer of the economical system development of a country. In the centrally planned economy, money served as a unit of account and played a limited role as a medium of exchange.

A two-track financial system was maintained in which cash was used for transactions involving house households while transactions within the state sector, including those between state-owned production enterprises, involved no monetary payment. The passivity of money was supported by a banking sector in which the mono-central bank was a record-keeping entity for transactions between production units. In most centrally planned economy specialty banks existed separately from the central bank and performed specific functions.

A state savings bank with an extensive branch network was responsible for collecting household deposits.

A foreign trade bank handled all transactions involving foreign currency. An agricultural bank provided short-term financing to the agricultural sector. A construction bank funded long-term capital projects and infrastructure development. Hence, banking activities were segmented along functional lines and played a subservient role to central planning.

Intermediation between savers and borrowers was internalized within the state banking apparatus basically through a system of directed credits to state to state-owned enterprises for both investments needs and budgets allocations for working capital necessary to meet the output plan.

Credit evaluation and risk management was irrelevant.

The employees of the banking sector involved in international arrangements did consider foreign exchange risk.

The development of the banking sector involved the creation of a two-tier system with commercial and retail activities carved out of the portfolio of the mono-central bank

The central bank is responsible for the supervision and the monitoring the nascent banking sector including the monetary policies, exchange rate policy,

The second tier of the banking sector consists of the newly created commercial banks, the specialty banks foreign banks.

The banking system in Croatia and Slovenia was quite different from countries like Albania, Bulgaria and Romania.

Both countries were republics of Yugoslavia and as such they inherited the legacies of the Yugoslavian banking system.

First since the 1950s Yugoslavia had the two-tier banking system in which republic-level commercial banks had significant exposure to foreign currency flows.

Second Slovenian and Croatian banks were not state-owned as in other economic planned countries, some of which were owned collectively as were all the enterprises under the Yugoslavian system of self-management.

Third in Yugoslavia each republic except Serbia had only a main bank, for example, Ljubjanska Banka operated 13 of 16 banks in Slovenia and held about 83% of all banking assets in 1980s.

Fourth, the establishment of internal company bank in 1970s led to excessive numbers of small unhealthy banks in each country.

Fifth, 85% of all foreign exchange deposits collected by republic banks in Yugoslavia were remitted to the National Bank of Yugoslavia in Belgrade.

Croatia

In June 1991 Croatia had 26 banks, 6 of which were new private banks and 2 of which were republic in coverage Privredna Banka Zagreb and Zagrebcka Banka. At that time about 50 % of banking assets and the bulk of all household deposits were claims on the NBY. The total cost of bank recapitalization resulting from the blocked foreign exchange deposits at the NBY amounted to 22.6% of GDP.

In the end of 1990s in Croatia were 50 banks 23 of which were new domestic private banks and one was a foreign bank Raiffeisen Zentralbank.

The recapitalization of the old banks left the state holding a majority stake in the other 26 banks.

In the end of 1996 four of the large banks were in financial distress. Slavenska Banka entered voluntary rehabilitation in October 1995 while the other three banks were forced into rehabilitation in 1996 according to the law. In Croatia, bank rehabilitation consists of three stages: financial restructuring in which debts are written off and bad loans are transferred to a workout agency, operational restructuring in which management is usually changed and the privatization to a strategic foreign investor.

All major Croatian banks were state owned after rehabilitation.

The privatization process in the banking sector made that in 2000s in Croatia operated 44 banks from which 21 were domestic private banks, 7 were foreign Greenfield operations, 13 were domestic banks sold to foreigners, and only 3 remained state owned.

Croatia has made the strongest commitment to foreign control of its banking sector of any TE to date. Growth of foreign Greenfield banks has been dramatic over the last three years of the decade and the largest domestic banks are now under foreign control. The foreign owners bring with them banking expertise, but also Croatia is poised to improve its intermediation effectiveness measures.

Slovenia

After the declaration of the independence in 1991, Slovenia has also to do with the blocked foreign exchange deposits at the NBY. From around one billion US dollars in deposits which were collected by Ljubljanska Banka from all the branches throughout Yugoslavia a half of them were from branches outside of Slovenia almost in Croatia.

In 1993 the bank rehabilitation began with the government assuming responsibility for the frozen accounts of all Slovenian depositors.

This rehabilitation program also dealt with bank solvency problems caused by the losing of 40% of the enterprises clients markets in the former Yugoslavia.

Unlike the Croatia, bank rehabilitation dealt with the blocked deposits and bad loans contemporaneously. This program resulted in the effective nationalization of the large banks so that all major banks in Slovenia became state-owned banks.

In 1995 there were licensed 41 banks to operate in Slovenia, from which 6 were foreign Greenfield banks.

By 2000, 31 banks were operating from which only 5 banks were foreign owned.

The majority of banking assets was held by domestic private banks.

The foreign banks had made a little impact in Slovenia.

In 2001 Societe General purchased 96 % of SKB bank shares and this transaction represents the first significant penetration of the Slovenian banking sector of a foreign investor.

The total assets of the three savings banks at the end of 2001 stood at €69 million, implying that their share in Slovenia's banking environment remains small at 0.4% of assets.

Savings and loan undertakings have been given time until December 2004 to adapt to the provisions of EU directives which govern credit institutions. Those which have not declared

an intention to wind up businesses are obliged to comply with the provisions of the Banking Act. As for the future of the savings and loan companies, many of them did not meet the requirement of the Bank of Slovenia (BoS) to achieve at least half of the required nominal capital.

During the following years Slovenia was included in different processes of banking system privatization.

The foreign exchange market in Slovenia is composed of spot and forward markets (transactions between banks, between banks and enterprises, between banks and nonresidents and between banks and households; the central bank's operations are not included) and foreign currency exchange offices.

Unlike Croatia, Slovenia has not committed to foreign control of its banking sector although the intermediation effectiveness measures of primary deposit collection are currently comparable in the two countries.

The main features of Slovenia's banking system over the past few years have been a stable market share of the largest banks and a relatively high concentration of banks.

Bulgaria

During most of the communist era, all banking functions were concentrated in the BNB, which had absorbed through the process of nationalization all existing commercial banks. In the 1980s in Bulgaria, eight sectoral banks were established, the first of which Minerbank appeared in 1981, to provide long-term financing to enterprises in specific sectors. At the end of 1989, following the dramatic political changes that year, the banking system moved to a two-tier system with a central bank on one tier and the commercial banks on a second tier. The sector-specific banks were then transformed into universal banks, which provided loans to all sectors of the economy.

So in 1989 were created 59 commercial banks. Each of their credit branches of the central bank; Bulgarian National Bank (BNB), was left to do business on its own like an individual bank.

In 1991 there were 69 commercial banks in Bulgaria consisting of the specialty banks, the hived off commercial branches and two new banks.

After the 1993 a consolidation period began with the formation of the Bank Consolidation Company following a voluntary merger of 22 of the newly formed commercial branches to form United Bulgarian Bank.

Unlike in other pre-transition banking systems, Bulgarian commercial banks granted foreign exchange credits to Bulgarian enterprises without holding foreign exchange deposits. This currency mismatch proved to be a problem for the solvency of the banking system. Government bonds denominated in foreign exchange were used to recapitalize the largest banks.

The mid-90s was a period of a significant financial distress for the Bulgarian banking system. In 1996 the government launched a program that integrated bank rehabilitation with enterprise restructuring in an attempt to solve the financial problems of the banks.

In 1997 a full-blown currency crisis erupted as the lev depreciated significantly resulting in a redistribution of wealth toward holders of foreign exchange assets. A currency board was established in July with a limited facility for intervention in the banking sector in the event of the large systematic risk.

The commercial bank had been recapitalized previously with ZUNKs one effect of the currency crisis was a further improvement of their balance sheets through capital gains on these assets. In contrast the market shares of the savings banks dropped as its assets and liabilities were both lev-denominated.

In 1995 there were 46 banks operating in Bulgaria, 5 of which were foreign owned.

By the end of 1997 28 banks continued to operate in Bulgaria, of these 7 were majority foreign-owned. In March 2000, the National Bank of Greece acquired a 90 % stake in the already privatized UBB with the EBRD holding the remaining 10% of the shares.

By 2000, only 19.2 % of bank assets in Bulgaria remained with 5 state owned banks while 25 foreign banks accounted for 74% of total banking assets. Only two of the major Bulgarian banks had not been sold to a strategic foreign investor.

Since mid-1997, Bulgaria had made a strong commitment to foreign control of its banking sector; its intermediation effectiveness measures are currently stronger than those of the other two former Yugoslav republic.

Primary deposits collection is still low, around a half of the ratios in Croatia and Slovenia. Bulgaria will soon challenge Croatia for the TE with the largest percentage of banking assets in foreign hands.

Romania

At the end of 1995, there were 24 banks operating in Romania of which 5 were fully state owned and only 1 was majority foreign owned. The big five state owned banks holding 73% of the banking assets, were remnants of the planning period.

By the middle of the decade, both Bankorex and Banka Agricola were in financial distress do to accumulating bad debts from directed credits to the energy and agricultural debts, respectively. The full nature of their problems became apparent in 1997.

Throughout the decade Casa de Economical si Consemnatiuni lost its monopoly position over household deposits rapidly due to the competition of private banks that offered higher interest rates.

The real GDP growth resumed in 1993 despite inflation of 165% raised a bite to 42, 2% in 1999. In 1997, directed credits were terminated and the exchange rate was liberalized as a part of a program of macroeconomic shock therapy. A recession and bank crisis followed. The shock therapy program hastened the recognition of the accumulated problems in the banking sectors.

At the end of 1998, 36 banks were operating in Romania of which 7 were state-owned and 16 were majority foreign owned.

At the end of 2000, there were 33 banks operating in Romania, of which 4 were majority state –owned, 23 were foreign owned and 6 were domestic private banks. In September 2000, 49.6% of all banking assets were held by foreign banks and 47.7% were held by state owned banks.

After the privatization of Banca Agricola in April 2001 the percentage of foreign banks in Romania increase by another 4-5 %.

The Romanian government seems committed to cede control of its banking system to foreigners.

Currently the intermediation measures are quite high and the ratio of business loans to GDP is comparable to that in Bulgaria but the measurement of deposits collection is excessively low.

Albania

The two-tier banking system was created in Albania in 1992 with the transfers of commercial business from the Bank of Albania to the National Commercial Bank.

The state Savings Bank was a monopoly collector of the household deposits and the rural accounts were held at the Rural Commercial Bank of Albania (RCBA). The first foreign bank Albanian-Italian bank was opened in 1993. The banking assets to GDP were 61.4%, the total loans were 5.6% of GDP and the individual deposits were 11.3% of GDP. The qualified loans were calculated to be 12.5% of total loans. By 1995 the three state owned banks accounted for 95.6% of all banking assets while the three foreign banks held the remained 4, 4%.

The major financial environmental event of the decade in Albania is the rise and fall of the pyramid schemes, the collapse of these schemes had a measurable effect on the structure of the banking sector. In 1996 one year prior to their collapse the three state owned banks still maintained virtual control of the banking system even though five foreign banks were operating in Albania.

In the second half of the decade, the Albanian banking system has been actively financing the fiscal deficit by purchasing high-yield, between 9 and 13% real rates of return, government securities. Albanian banks are providing little or no intermediation to the enterprise sector.

In Albania about 5% of large enterprises and only 2% of SMEs use bank financing. About 2% of the SMEs in Albania list foreign banks and 2% list local banks as a source of funds.

The RCBA was liquidated in 1998; most of the deposits were transferred to the Saving Bank and the bad debts were eventually placed in a loan workout agency.

In the end of 1998 the numbers of banks in Albania were 10, 8 of which were foreign owned.

At the end of the decade 13 banks are operating in Albania.

Much of the bank leading in Albania is undertaken by small foreign banks using sources other than individual deposits to finance their activities.

The denationalization of the Savings Bank was a turning point in the history of the Albanian banks, for it used to be the major bank in the country with 65% of deposits in ALL and it changed the Financial System as it is still today.

The banking system is liquid; the liquid actives comprise 75 % of the total actives.

The level of the banking system crediting of the services sectors has a dropping inclination, whereas that system has increased crediting for some sectors and activities that do not effect directly the economic growth but indirectly.

83% of loans are in foreign currency especially in Euro and USD. Nowadays in Albania is operating 16 banks with a total of 190 branches, 101 agencies and 3 branches abroad.

CHAPTER 2. THE FINANCIAL SYSTEM CHARACTERISTICS.

The most important characteristic of financial system of the countries in the region is the domination of the banking system and the capital markets are undeveloped.

The region had more success in the banking reform than in the non banking financial institutions and in the negotiable instruments markets.

Aftermath those countries had supported important reforms in the banking sector.

Those countries had done struggles to improve the legal and regulator frame and so to apply and reinforce the capability of national banking authorities.

The financial system of those countries is dominated from the banks.

In Croatia around 80 % of all assets of financial system are banking assets, in the others countries this percentages is generally higher.

This market was profitable. The return of the average capital of the portfolio for the banks on the average for system but also for the specific banks frequently is 20-25 %.

All systems come across the financial deepening and the concentration growth.

The creation of a big number of powerful players increases the competition.

Albania is a typical example. We found an industry banking which is prepared well to support the markets growth, while the Central Bank is operating rapidly directly to the system modernization. The banking sector already is denationalized.

The second important characteristic is that the foreign Banks specially the Banks of the UE Countries had gained a prevalent position in the local banking system.

Those foreign banks play a fundamental role in the banking system transformation direct to an efficient and stable system through the transfer of the techniques and administrative knowledge offering a leading and organization model inflicting efficient payment systems and an effective risk analysis.

The foreign banks are contributing to the financial system stability through the expertise transfers especially in the direction of the loan valuation. The general effects of the reliable and correct analysis had maximal importance for all the economy and couldn't be underestimate.

The role of those banking in the development of financial resources of investments and loans for big and small enterprises is determinative in the creation of financial stability reducing the informal economy and funneling more money through the formal system.

Those banks contribute also in the banking sector efficiency. A study done in 2005 in almost 300 banks in 15 ex communist countries indicates that the banking sector where the foreign bank has the big part of total assets, check in lower costs. In the same contest the denationalized banks when the foreign ownership is higher are most efficient. And finally the foreign banks encourage the direct foreign investments in the region.

But the enlargement of the specific banks with foreign ownership in the developing countries while is advantageous creates at the same time shackles between countries which serve like a bed for the crisis expansion.

The chain crisis happened when the knowledge or the risk materialization in one of those countries stimulates a reappraise or a big risk in other countries when the banks signify similar and endangering exhibition.

From this reason the banks decelerates or changes the loans growth in those countries, think which influence in the incoming capital flows.

The potential for crisis distress will increase if the banks followed common strategies in the region, because this delivers to similar types of exhibitions across the countries.

Notwithstanding, most of the major international banks which operates in those developing economies countries monitoring the risks in large group basis and take strategic decisions in the central residency. They depute their daily operational decisions to the local managers in their agencies and branches in relation of the bank and the country.

This centralization help that the capital is diversifying in more productive investments projects. Notwithstanding this can reinforce also the crisis shackle channels enabling that the unions of banks with foreign ownership reduce the exhibitions in a countries like an answer of the losings somewhere else in the region.

Fig. 1: Ownership Categories: % of Assets

	YEAR	FOREIGN	STATE OWNED
ALBANIA	1995(6)*	4.4(3)*	95.6(3)*
	2000(13)	35.2(12)	64.8(1)
BULGARIA	1995(46)	0.6(5)	58.4(12)
	1997(28)	18.0(7)	67.1(16)
	2000(35)	74.0(25)	19.2(5)
CROATIA	1995(53)	0.2(1)	54.2(13)
	1997(60)	3(7)	32.7(7)
	2000(44)	83.6(20)	6.1(3)
RUMANIA	1995(24)	1(1)	73.0(5)
	1998(36)	27.5(16)	58.9(7)
	2000(33)	49.6(23)	47.4(4)
SLOVENIA	1995(41)	3.8(6)	42.8(3)
	2000(31)	5.5(5)	43.0(3)

* Number of banks is in parentheses

CHAPTER 3. FINANCIAL INTEGRATION AND FINANCIAL STABILITY IN THE BALKANS COUNTRIES

3.1 Some characteristic of the financial integration process in Balkans Countries

From historical point of view, different UE countries had overlive in the past some macroeconomic challenges, which are now present in the Balkans Countries, like the confront with the capital flows during the entrance and the economic integration of their countries. Each economic region has its characteristic. The region situation is complex and it is similar with developing economic countries.

- 1- In the course of the last decade, the financial sector is shifting to the universal banking system, when the majority of the banks had foreign capital and when the presence of UE financial institution is higher. The capital flows funneled through the banking sector had influenced the rapid growth of domestic credit in almost all the countries.

- Meanwhile those, the non banking sector, the negotiable instrument market and the stock-market play a little role in the financial intermediation.
- 2- The presence of the foreign banks is followed with an assured environment for the credit process, also a governance and better administration of distress, supported from the approximation process of the domestic standards of supervisory banking with the regulatory framework of UE. The financial integration with the UE is similar with the financial integration process of the new member state of the UE. The empiric evidence on the transition economies indicate that the foreign ownership conduces in the major effectiveness of banking sector, which implies a lower capital cost.
 - 3- The financial deepening and the progress in institutional environment had preceded the total opening of the current account, which must be the better way to the financial globalization. Through the last researches, the creation of minimal conditions in the aspects of market financial growth, institutional quality, governance and macroeconomic policies, made possible that the countries with developing economies can presume more from the financial globalization. The market growth of healthy financial institution promotes the economic growth. Regardless from all those developments, the financial deepening and the approximation of institutional and governance standards with the best international practices is else distant the fulfillment in the Balkans Countries. The way to a new equilibrium is confronting with enough risks and a big number of high challenges. Those challenges can be classified in three categories: institutional, macroeconomic and financial stability. Concerning the institutional challenges, the legislative reforms are still uncompleted. The important lines of financial markets- like negotiable instrumental- in some cases are lacking or are undeveloped. Over all, is important to accept that is not sufficient only the legislative subject but also the reform implementation. A weakly legal system, delicate proprietorship rights, the not complete implementation of agreement and the malversation are all factors which prohibits the efficient growth of the banking and financial intermediation, and also those hinders the long term crediting for the general sector.

3.2 The financial stability challenges

Except the macroeconomic challenges, the major capital flows and the rapid growth brings a succession of risks for the financial stability. When we evaluate those risks, we must consider that this rapid growth of the loan in the private sector reflects extensively the “catching-up” effect because all countries of Balkans Countries had a lower level of financial intermediation.

The rapid growth of credit can conducted in the financial disarrangement, but not necessary. We can know exactly the current risk that a specific norm of credit enlargement can induced for the financial stability, but the past experience shows a closely monitoring of the credit growth development.

We can distinguish three kinds of risks which request closely monitoring.

First, is perceived that a big part of the credit finance the consumption more than the investments, thing which inflicts the risks of over credit from individuals which had a few experience in their managing debt.

Secondly, the rapid credit growth made more difficult the credit quality evaluation.

The high capacity of new credits attempt to decrease the reports of bad loans in short run, for the reason that the potential problems of the portfolio quality generally are materialize with a considerable retardation. For more the rapid growth of loans should bring also lower standards for the revision, conducing so to loan those clients which are fewer credible for

loans. This can conduce in aggravation because the revive ability of the loan portfolio toward the economic downfall is still untested.

Finally the most part of loans in foreign exchange or loans indexed in banks portfolio shows for the risks growth of big inconsistency in money values in private non financial sector.

As the local person who receive credit don't earn the profit in foreign currency is an important part of credit distress. In Asia, the external short-term borrowing growth, in foreign currency, in the mid -1990, made that the region countries were exposed through exchange currency rate distress. When the external value of their foreign currency decrease, the foreign debt, outspoken in local currency term and as part of GDP increase, conducting so in the expiatory inability of non protected creditors and contributing in the aggravating of the 197-1998 crisis.

All those distresses ask that the charged authorities with the supervisions banking dedicate a straitlaced vigilance. The central banks charged with this responsibility in the region are totally conscientious for the distresses than can meet and had taken already concrete measures. Meanwhile, the supervision authorities must take in consideration the international financial integration in their daily activities.

In those countries when the branches of major foreign banks played a main role in the banking sector of the expectant country, with a big systematic influence, the possibility for the collaboration between the local and foreign supervisors is stronger.

Certainly the implementation of standards and regulations facilitate the supervisors jobs in their countries (when had the central residence) and in the expectant country. In consequence parallel with the general call to create and stimulate institutional agreement, which ensure the independence, the responsibility and the healthy domestic governance of supervisions authorities, the financial integration exhibit the additive challenge of the coordination of supervisions authorities in the international level.

CONCLUSIONS

The economic transition period of the 1990s was very difficult for Balkan countries. Although the movement to a two-tier banking system was swift, this organizational change masked many operational difficulties.

Among the Balkan countries with the centrally-planned system Bulgaria was the first country that undertook changes in the traditional socialist banking system. It introduced two-tired banking system in 1987, and clearly divided competence of national bank and regional banks.

Banks owned by foreign investors, mainly from the Euro area, have become the dominant players in all banking sectors of the region, expressed as a share in the number of banks operating as well as in total banking sector assets. Conversely, the share of state-owned banks in total banking sector assets has significantly declined in recent years, as governments realized that bank failures were associated with substantial fiscal costs.

The strong presence of Euro area banks improves the financial sector's environment in the region for two reasons. First, it allows the import of "reputational capital" (Hellman and Murdock, 1998) or "franchise value" (Demsetz, Saidenberg and Strahan, 1996).

In the early years of transition, financial sectors in Balkans Countries were characterized by relative depth and poor environment, partly due to the socialist legacy and partly to financial sector reforms that largely failed to address issues related to the quality of financial sectors' environment.

- After the outbreak of financial crises, financial sectors' environment has substantially improved, with harder budget constraints, tighter banking supervision and regulation and the opening to foreign banks.

- Since 2000 there have been signs indicating that financial development in a proper sense, i.e. based on financial deepening and a good environment may have started in the region, with the strong growth in credit serving as the main indicator.

An interpretation is that it is the quality of the financial sector and its environment that mattered for growth, rather than financial deepening. Indeed, together with higher macroeconomic stability, higher creditor right protection and increasing foreign bank penetration are found to have a positive and statistically significant impact on growth.

Our results suggest that, together with stability-oriented policies, a sound legal environment and the opening up of the financial sector are instrumental in ensuring that the ongoing credit expansion in the region goes hand-in-hand with growth.

It is also possible to conclude that the policy regarding foreign dominance of banking assets, and the consequent dramatic improvements in the stability of that sector, can be largely explained by the policies themselves and not the economic recovery that began to gather steam later on in the decade. Finally, is very important the role of foreign banks in the commercial field versus the comparative advantage of domestic banks at the retail level. Nevertheless, the adoption of a universal banking structure combined to produce competitive pressures that benefited the economy as a whole.

The financial sector reform has to include integral and harmonized changes in all its segments: banking, insurance, and equity market, position of institutional investors and supply of financial instruments.

Only with successfully synchronized (and not partial) changes in all these segments, can an efficient financial system be established.

BIBLIOGRAPHY

[1] Adam, A, T Kosma and J. McHugh (2003), Trade Liberalization Strategic: What could South Eastern Europe learn from CEFTA and BFTA?, IMF Working Paper, International Monetary Fund, Washington DC, May.

[2] Bajraktari, Rexhina & Brahja, Ermira (1999), "Albania: Country Profile", in "Capital Markets in Central and Eastern Europe", ed. by C. Helmenstein, Edward Elgar Publishing Ltd.

[3] Blanchard, Olivier (1997), "*The economics of Post-communist Transition*", Clarendon Press, Oxford.

[4] Beck, T., R. Levine and N. Loayza, 2000, Finance and the Sources of Growth, Journal of Financial Economics, 58, 261-300.

[5] Croatian National Bank, 2003, Introduction to the CNB Quarterly Report, number 80, March 2003, Zagreb.

[6] EBRD, *Transition Report* (various issues).

[7] IMF, (2005), "Albania: Financial System Stability Assessment -FSSA", IMF Country Report No. 05/274, August 2005, International Monetary Fund, Washington, D.C.

[8] Gomel, Giorgio, 2002. Banking and Financial Sector in Transition Countries and Convergence towards European Integration, mimeo, http://eaces.gelso.unitn.it/Eaces/work/Papers/Gomel-eaces_080502-rev.pdf

[9] Khan, Mohsin S. and Abdelhak S. Senhadji (2000): "Financial Development and Economic Growth: An Overview", IMF Working Paper 00/209.

[10] Keren, M. and G. Ofer, 2002, Globalization and the Role of Foreign Banks in Economies in Transition, mimeo, <http://eaces.gelso.unitn.it/Eaces/work/Papers/Globalization%20and%20the%20Role.pdf>

- [11] Kernoham, D. "Reserve Balkanization? Trade Integration in South East Europe" Centre for European Policy Studies Working Document No 249, August 2006-12-19.
- [12] Koivu, T., 2002, Does Financial Development Affect Economic Growth in Transition Countries? ; Paper presented at the BOFIT seminar, Bank of Finland, 20 May 2002.
- [13] Labus, M.(1998), *Financial Sector in Yugoslavia*, in: Pitić,G.(ed.), Challenges and Opportunities for the Economic Transition in Yugoslavia, International Conference Proceedings, 5-6 November, 1997, Belgrade, Economic Institute, pp.32-48.
- [14] Levine, Ross, Norman Loayza, Thorsten Beck (1999): "Financial Intermediation and Growth: Causality and Causes", Policy Research Working Paper, World Bank, No 2059.
- [15] Miller, J. and S. Petranov (2001): "The Financial System in the Bulgarian Economy", BNB Discussion Paper Series, DP/19/2001 (third revised edition).
- [16] Roland, Gerard (1994), "The role of political constraints in transition strategies", *Economics of Transition*, volume 2(1), pp. 27-41.
- [17] Sundararajan, V.(1992)., *Central Banking Reforms in Formerly Planned Economies*, Finance and Development, Vol.29, No.1, March 1992, p.11.
- [18] Taylor, John B., 1995, "The monetary transmission mechanism: An empirical Framework", *Journal of Economic Perspectives*, Fall 1995, 9, 11-26.
- [19] Tang, H. E. Zoli and I. Klytchnikova, 2000, Banking Crises in Transition Countries. Fiscal Costs and Related Issues, World Bank Policy Research Paper, No. 2484, Washington D.C.
- [20] Wagner, Nancy and Dora Iakova (2001): "Financial Sector Evolution in the Central European Economies: Challenges in Supporting Macroeconomic Stability and Sustainable Growth", IMF Working Paper 01/141.

Web site

Albanian Securities Commission - www.asc.gov.al
 Bank of Albania - www.bankofalbania.org
 Monitor Economic Magazine - www.monitor.com.al
 World Bank - www.worldbank.org

MA.Oltiana Muharremi
 University of Vlora
 Faculty of economics.
 Departaments of business
 Lagjia Pavaresia. Skele. Vlore.Albania
oltianam@univlora.edu.al

MA.Luciana Koprencka
 University of Vlora
 Faculty of economics.
 Departaments of business
 Lagjia Pavaresia. Skele. Vlore.Albania
lkoprencka@univlora.edu.al

CONTRACTS FOR DIFFERENCES

Gabriela Oškrdalová

ANNOTATION

The subject of the paper “Contracts for differences” is an analysis of contracts for differences. The paper includes a contracts’ definition, deals with their advantages and hedging and speculation using possibilities for investors.

KEY WORDS

financial products, leverage, contracts for differences, speculation, hedging

INTRODUCTION

Contracts for differences (CFDs) belong to interesting modern financial products that have developed on financial markets in recent years. They present an alternative to direct trading in underlying assets (for example stocks, commodities) that are appropriate for retail investors too. Their rising popularity among investors is caused principally by their simplicity, low charges, financial leverage trading and possibility for using these contracts not only for the speculation but also for the hedging.

AIM AND METHODOLOGY

The objective of the paper is an analysis of contracts for differences and their using possibilities and subsequently formulation of conclusions and recommendations for investors. The positivistic and normative methodologies are used in this paper. The aim is reached by general-science methods, primarily by the analysis, description, comparison and synthesis.

RESULTS

A contract for differences can be defined as a bilateral agreement – an agreement of a buyer and a seller – on the financial settlement of the difference between the underlying asset’s price in the moment of opening this contract and the underlying asset’s price in the moment of its closing. Underlying assets can be stocks, indices, currencies and commodities.

The rising popularity of contracts for differences is connected with advantages of these contracts. Advantages of these modern products are:

- financial leverage trading,
- low margins,
- possibility for profits not only on bull but on bear markets too,
- the simplest investment on the fall,
- many underlying assets from around the world,
- not only speculation using possibilities but hedging using possibilities for investors,
- electronic dealing and so a quick and effective direction settlement,
- low charges.

Financial leverage trading

By contracts for differences it is not necessary to have money to the extent of trading underlying assets in contrast to common trading with underlying assets. It is caused by the margin. By contracts for differences an investor does not give the total value of underlying assets, he/she can give only a part of the total value of underlying assets – the margin. Thanks to the margin an investor can buy with the same invested capital more

underlying assets than by common trading (for example when the margin is 10 % of the total value of bought underlying assets, the investor can buy ten times more underlying assets than by the common purchase way).

Using of the margin leads to the financial leverage trading by contracts for differences. It is necessary to realize that using of the financial leverage by trading allows to reach not only higher profits for investors but it brings higher risks for investors too (if contracts for differences are not used to the hedging). Every change of the underlying asset's price leads not only to the higher percentage increase of the invested capital (the margin) but to the higher percentage decrease too. So the financial leverage allows investors to reach higher profits with the same invested capital or to use smaller underlying asset's price changes to higher increase invested money. But it is very important to understand well the construction of these products and to weigh run risks.

Amount of margin

The amount of the minimal necessary margin for opening and holding a position ranges usually from 10 to 20 % of the total trade value. But in some cases it can be 90 % of the total trade value too (for example by contracts for differences with a small stock title as an underlying asset). The amount of margin depends on the underlying asset and the current market situation. Besides this the amount of the margin changes in course of time. First of all it is influenced by the total market volatility and the volatility of individual underlying assets.

Mark-to-market

Opening positions by contracts for differences are appreciated in the real time. It means if an investor reaches a profit thanks to underlying asset's price changes, the reached profit will be credited on the investor's account immediately, if an investor reaches a loss, the realized loss will be taken off. Unlike the common trade way with underlying assets investors in the open position have the realized profit disposal immediately and they can use it wickedly their decision (for reinvestments, for consumption...). It is necessary to realize that investors can reach profits without closing positions in contracts for differences and they do not give up subsequent profits.

Interest

By contracts for differences an investor does not invest in underlying assets the total value of bought underlying assets but only its part by way of a margin (see above). For that reason interest is credited on an account of an investor in the short position and interest is deducted of an account of an investor in the long position. It means if an investor is in the short position (he/she expects a decrease of the underlying asset's price, he/she is a seller in a contract for differences) interest will be credited on his/her account every day. If an investor is in the long position (he/she expects an increase of the underlying asset's price, he/she is a buyer in a contract for differences) interest will be deducted of his/her account every day.

Some exception is an intraday contract for differences – an investor opens and closes his/her position in this product within a day. In this case interest is not credited on an account of the investor in the short position and interest is not deducted of an account of the investor in the long position.

Using possibilities

Contracts for differences can be used as an alternative to an initial direct investment in underlying assets or as a supplement of the existing investor's portfolio.

Alternative to an initial direct investment in underlying assets

If an investor decides to substitute by contracts for differences an initial direct investment in underlying assets, he/she can invest in these contracts the same amount of money as he/she would use for direct trading with underlying assets or he/she can use only a part of money that would be used by direct trading. If an investor decides to use the same amount of money he/she would use by direct trading with these underlying assets for contracts for differences on chosen underlying assets, the amount of checked underlying assets will be multiplied thanks to the financial leverage. In this case it will bring the investor a possibility to reach higher profits and losses than by direct trading. If an investor decides to use only a part of the amount of money he/she would use by direct trading with these underlying assets for contracts for differences on chosen underlying assets, he/she can check the same amount of underlying assets thanks to the financial leverage too. Remaining money can be invested in other financial assets. Possibly a part of remaining money can be used for an additional investment in contracts for differences.

Supplement of the existing investor's portfolio

Contracts for differences can be used to supply the existing investor's portfolio, and not only for hedging but for speculation too.

Contracts for differences – speculation and hedging

Investors can use contracts for differences not only for the speculation on the bull and bear market but for the hedging too.

Speculation on the bear market

By contracts for differences an investor can profit on an underlying asset's price decrease. Using contracts for differences is advantageous for the investor because he/she does not have to look for somebody who would be ready to lend chosen underlying assets for the operation sell short (sometimes it can be problematic). The investor who expects a decrease of the underlying asset's price can simply sell contracts for differences on this underlying asset and then in the future buy back these products (the investor's position in these contracts gets closed). If the underlying asset's price decreases during this time, the investor (the speculator on the bear market) will reach the profit of the difference between the selling price and the buying price of the underlying asset.

Speculation on the bull market

By contracts for differences an investor can profit on an underlying asset's price increase too. Instead of the direct buying of underlying assets an investor can use advantages of contracts for differences. The investor who expects an increase of the underlying asset's price can simply buy contracts for differences on the chosen underlying asset and then in the future sell back these products (the investor's position in these contracts gets closed). If the underlying asset's price increases during this time, the investor (the speculator on the bull market) will reach the profit of the difference between the selling price and the buying price of the underlying asset.

Hedging

It is possible to use contracts for differences not only for the speculation but for the hedging too. For example: an investor wants to hold the bought underlying assets and he/she is afraid of a decrease of their price. He/she can hedge his/her position in these underlying assets by contracts for differences – he/she sells contracts for differences on these underlying assets. In the whole time when the investor holds these underlying assets in his/her portfolio and he/she has sold contracts for differences on these assets, price changes of these assets have no bearing on the investment's value. As soon as the investor gains back confidence in the hold underlying assets (eventually he/she sells these underlying assets) he/she closes his/her position in these contracts for differences.

CONCLUSION

A contract for differences can be defined as a bilateral agreement – an agreement of a buyer and a seller – on the financial settlement of the difference between the underlying asset's price in the moment of opening this contract and the underlying asset's price in the moment of its closing. A buyer of contracts for differences (an investor in the long position) expects an increase of the chosen underlying asset's price. A seller of contracts for differences (an investor in the short position) expects a decrease of the chosen underlying asset's price. Underlying assets can be stocks, indices, currencies and commodities.

Contracts for differences have many advantages, for example: financial leverage trading, low margins, possibility for profits not only on bull but on bear markets too, the simplest investment on the fall, many underlying assets from around the world, not only speculation using possibilities but hedging using possibilities for investors, electronic dealing and so a quick and effective direction settlement and low charges.

Contracts for differences can be used as an alternative to an initial direct investment in chosen underlying assets or as a supplement of the existing investor's portfolio. The aim of using of these products can be not only the speculation on the bull or bear market but the hedging too.

BIBLIOGRAPHY

- [1] BEDNÁŘ, K.: Škola investora: CFDs - výhody. *Ipoint : Finanční noviny* [on-line]. [31. 7. 2008]. Available on WWW: <<http://ipoint.financninoviny.cz/skola-investora-cfds-vyhody.html>>.
- [2] BEDNÁŘ, K.: Škola investora: Co jsou to CFDs. *Ipoint : Finanční noviny* [on-line]. [31. 7. 2008]. Available on WWW: <<http://ipoint.financninoviny.cz/skola-investora-co-jsou-to-cfds.html>>.
- [3] CFDS : CONTRACTS FOR DIFFERENCE: CFDs : Co jsou CFDs?. *CFDs : Contracts for Difference* [on-line]. [31. 7. 2008]. Available on WWW: <http://www.cfds.cz/index.php?m=co_jsou>.
- [4] CFDS : CONTRACTS FOR DIFFERENCE: CFDs : Finanční páka. *CFDs : Contracts for Difference* [on-line]. [31. 7. 2008]. Available on WWW: <<http://www.cfds.cz/index.php?m=finpaka>>.
- [5] CFDS : CONTRACTS FOR DIFFERENCE: CFDs : Náklady CFDs. *CFDs : Contracts for Difference* [on-line]. [31. 7. 2008]. Available on WWW: <<http://www.cfds.cz/index.php?m=naklady>>.
- [6] CFDS : CONTRACTS FOR DIFFERENCE: CFDs : Použití CFDs. *CFDs : Contracts for Difference* [on-line]. [31. 7. 2008]. Available on WWW: <<http://www.cfds.cz/index.php?m=pouziti>>.

- [7] CFDS : CONTRACTS FOR DIFFERENCE: CFDs : Ukázky obchodů. *CFDs : Contracts for Difference* [on-line]. [31. 7. 2008]. Available on WWW: <<http://www.cfds.cz/index.php?m=ukazka>>.
- [8] CFDS : CONTRACTS FOR DIFFERENCE: CFDs : Výhody CFDs. *CFDs : Contracts for Difference* [on-line]. [31. 7. 2008]. Available on WWW: <<http://www.cfds.cz/index.php?m=vyhody>>.
- [9] COLOSSEUM: CFDs : Výhody CFDs. *Colosseum* [on-line]. [31. 7. 2008]. Available on WWW: <<http://www.colosseum.cz/index.php?m=trhy&sub=cfds&sub2=vyhody>>.
- [10] COLOSSEUM: Trhy : CFDs. *Colosseum* [on-line]. [31. 7. 2008]. Available on WWW: <<http://www.colosseum.cz/index.php?m=trhy&sub=cfds>>.
- [11] E-BURZA: Koncepce a fungování CFDs. *E-burza* [on-line]. [31. 7. 2008]. Available on WWW: <<http://www.e-burza.cz/SHARE-CFDS-OBCHODOVANI/Koncepce-a-fungovani-CFDs.html>>.
- [12] MAZUR, J.: Obchodování s CFDs akciemi a komoditami CFDs, Forex...ze seriálu Finanční deriváty. *Ipoint : Finanční noviny* [on-line]. [5. 8. 2008]. Available on WWW: <<http://ipoint.financninoviny.cz/obchodovani-s-cfds-akciemi-a-komoditami-cfds-forex-ze-serialu-financni-derivaty.html>>.
- [13] TRADERSNO1: Koncepce obchodování CFDs a FOREX. *TradersNo1* [on-line]. [31. 7. 2008]. Available on WWW: <<http://www.tradersno1.com/cz/KONCEPCE-CFDS-A-FOREX/Koncepce-CFDs-a-Forex.html>>.
- [14] X-TRADE BROKERS: Příklady obchodních transakcí. *X-Trade Brokers* [on-line]. [23. 9. 2008]. Available on WWW: <<http://www.xtb.cz/forex.php?p=65>>.
- [15] X-TRADE BROKERS: Úvod. *X-Trade Brokers* [on-line]. [23. 9. 2008]. Available on WWW: <<http://www.xtb.cz/forex.php?p=64>>.

Ing. Gabriela Oškrdalová
 Department of Finance
 Faculty of Economics and Administration
 Masaryk University
 Lipová 41a
 Brno
 Czech Republic
oskrdalo@econ.muni.cz

RELIABILITY OF RATING

Ivana Valová

ANNOTATION

Rating assesses the credit worthiness of a subject. Rating typically tells an investor or lender the probability of the subject being able to and disposed to pay back a loan. It is calculated from history of the subject, but current information and financial data too. A poor credit rating indicates a high risk of defaulting on a loan and therefore leads to higher interest risk or credit decline by the creditor. External rating of a corporation is a financial indicator to potential investor of debt securities and is assigned by external rating agencies (e. g. Moody's, Standard & Poor's, Fitch Ratings). In connection with the present circumstances on financial market the external rating agencies are criticized for alleged participation in world financial crisis. The question of preciseness and reliability of rating is opened again.

KEY WORDS

External rating, Financial crisis, Internal rating, Rating agency, Reliability of rating.

INTRODUCTION

Risks are uncertainties resulting in adverse variations of profitability or in losses. There are a large number of risks in the banking sector. Most of them are well known. Credit risk is the most important of risk categories in banking. Hence the regulators insisted on continuously improving measurement of credit risk in order to quantify the amount of capital that banks should hold. Traditional measures of the credit quality of debts or debtors are ratings.

AIM AND METODOLOGY

The article gives brief information on credit risk and its measurement and points out the necessity and interest of measuring, managing and monitoring of the banking risks to each bank. The aim of the paper is emphasized importance of rating and range of its use in banks. In terms of those and world financial crisis, the question of preciseness and reliability of rating will be opened.

The basic method of submitted article is the deduction. It is gone from common pieces of knowledge and theory to particulars.

RESULTS

Banking risks are defined as adverse impacts on profitability of several distinct sources of uncertainty. In connection with Basel II, it is very often discussed the credit risks, market risks and of recent years operational risks too.

The first of all risks in terms of importance is credit risk. Credit risk is the risk of loss due to a deterioration of the credit standing of a borrower. We may not forget the view of the risk differs for the banking portfolio and the trading portfolio. Traditional measures of the credit quality of debts or debtors are ratings. Major feature of rating system are:

- external ratings (made by external rating agencies, e.g. Moody's, Standard & Poor's, Fitch etc.) or
- internal ratings (most of banks' clients do not have assigned external rating, so banks use internal rating scale; internal rating scales of banks are customized to banks' requirements, and usually characterize borrower's risk and facility's risk).

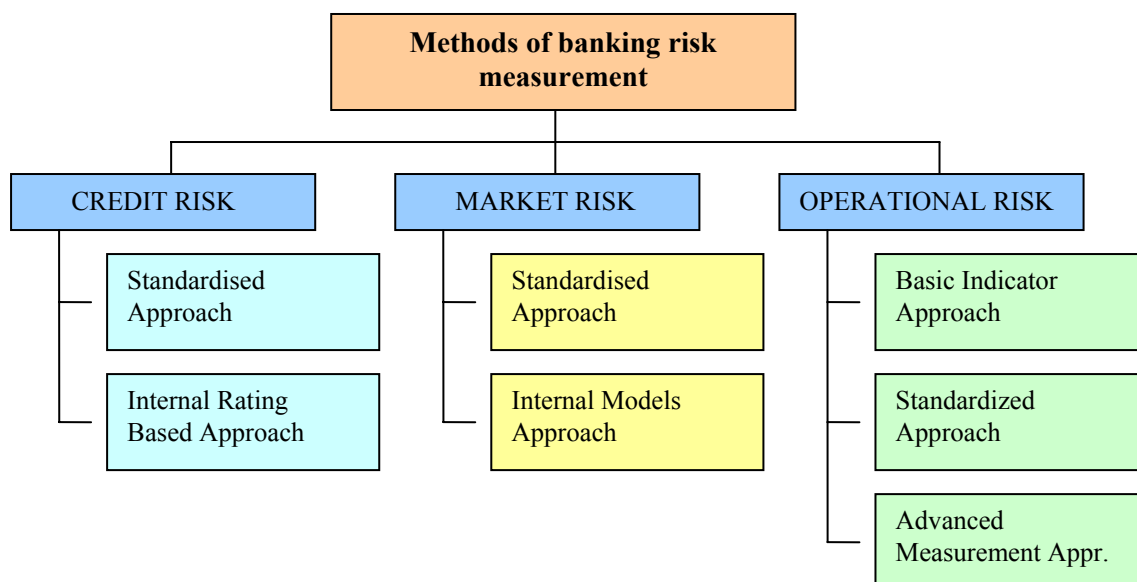
Credit ratings are used not only by banks, but also by investors, issuers and governments. Regulators use credit ratings or permit rating to be used for regulatory purposes. E.g. under the Basel II banking regulators can allow banks to use credit rating from certain approved rating agency, when calculating their net capital reserve requirements.

Rating is an inherent part of bank credit process and is used for the determination of:

- Expected loss,
- Economic capital,
- Regulatory capital,
- Reference limits,
- Loan loss provision and so on.

Rating is ordinal measures of credit risk, but it is not sufficient to value credit risk. Because of that there are portfolio models used. Scheme 1 shows an overview of the methods for risk measurement in accordance to Basel II.

Scheme 1: The methods for risk measurement within Pillar 1 (in accordance to the Basel II)



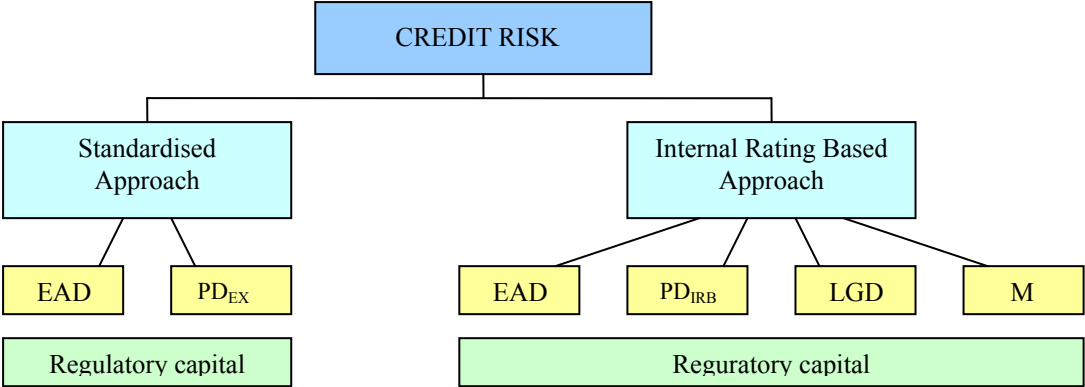
Source: Self-structure.

Different options for credit risk are:

- *Standardised Approach (STA)*
It is the simplest method. The risk weights are derived from ratings set by registered external rating agency, External Credit Assessment Institutions or Export Credit Agencies.
- *Internal Rating Based Approach (IRB)*
 - Foundation IRB Approach (FIRB)
By the method bank uses own estimates of the probability of default of its client and banking supervisory determine the other characteristics.
 - Advanced IRB approach (AIRB)
All the components are determines by banks.

The major credit risk components are exposure at default (EAD), probability of default (PD), loss given default (LGD) and maturity (M). A “risk weight function” converts the risk components into risk weights for calculating risk weighted assets.

Scheme 2: The major credit risk components



Source: Self-structure.

Note: PD_{EX} is probability of default based on external credit assessments and PD_{IRB} on internal rating.¹

The term “default”² can be distinguished from the terms “insolvency”³ or “bankruptcy”.⁴ Default can be of two types:

- *Debt services default* happens, when the debtor has not made a scheduled payment of interest or principal.
- *Technical default* occurs, when an affirmative or a negative covenant is violated.

Rating and external rating agencies

Generally, a *rating* can be defined as the evaluation or assessment of something, in terms of quality, quantity or combination of both. A *credit rating* assesses the borrowing power of an individual, corporation or country. Simplified it is possible to say that credit rating is calculated from financial history of certain subject and current assets and liabilities. Usually, credit rating tells creditors or investors the probability of the subject (potential debtor) being able to pay back a loan during one year. A low (weak) credit rating indicates a high risk of defaulting (high probability of default) on a loan. In such a case bank sets a high interest rate or refuses to extent a loan. The credit rating is most frequently assigned by credit rating agencies. Detailed rating scales of external rating agencies have 20 levels, ignoring the near default rating levels.

¹ Risk weights are a function of PD and LGD.
² "Default" essentially means a debtor **has not** paid a debt which he/she/it is required to have paid.
³ "Insolvency" is a legal term meaning that a debtor is **unable** to pay his debts.
⁴ "Bankruptcy" is a legal finding that imposes **court supervision** over the financial affairs of those who are insolvent or in default

Tab. 1: Rating scales of external rating agencies

Rating agency	Rating marks										
Standard & Poor's	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	BBB-	BB+
	BB	BB-	B+	B	B-	CCC	CC	C	D	-	-
Moddy's Investors Service	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Baa1	Baa2	Baa3	Ba1
	Ba2	Ba3	B1	B2	B3	Caa	Ca	C	-	-	-

Source: Self-structure.

Criticism of external rating agencies

In connection with the present circumstances on financial market the external rating agencies are criticized for alleged participation in world financial crisis. The question of preciseness and reliability of rating is opened again. Agencies have been subject to the criticisms. Here are presented some of them:

- *Credit rating agencies do not downgrade companies promptly enough.*

There have been cases of companies' ratings staying at investment grade few days before the company went bankrupt, despite the fact that agencies had been aware of the company's problems for some months.

- *How is possible that many of American banks had had till their bankruptcy very good or excellent rating?*

Rating agencies bear in mind not only leverage of subject, but also potential support at the hands of parent company, regulatory institutions or government. If it is expected to the support, final rating mark of the subject is improved. Practice mostly shows force of rule "too big to fail". There is necessary to point out "mostly".

- *Credit rating agencies have too familiar a relationship with management assessed company.*

In opinion of some critics rating agencies meet too often or frequently in person with the management of many companies. They advise them on measure and actions the company should take to achieve and maintain a certain rating. Here is evident possibly opening to undue influence.

- *Danger of the weak rating: the low or lowering credit rating by a rating agency can get assessed subject to a vicious cycle.*

Poor rating would go up interest rates for the subject meaning it will be increased loan costs of the company. In addition other contract with banks may be affected adversely because of capital requirements. Capital requirements of financial institutions depend on the rating of the structured assets they hold.

- *The financial markets crisis opened another problem: the question of external rating agencies regulation.*

Rating agencies assess subjects of market, but do not inhere in competitive environment and are not regulated and supervised. These facts along with authority growth of rating agencies disturb others subjects. Agencies do not object to regulation, but are afraid of forfeiting independence.

CONCLUSION

While timing may be influenced by regulatory requirements, many institutions are seeking to create competitive advantage by implementing best practices in credit risk management. In pursuit of this objective, many institutions are developing internal rating systems for low default sectors, including large corporations, banks, project finance, real estate and other specialized finance.

External rating agencies provide credit assessment templates, containing both quantitative and qualitative risk factors, for “hard to rate” sector, where historical data or model are lacking. Because rating agencies are independent agencies and use different survey techniques, final rating mark of certain subject or instrument may be diverse.

External rating analyses fundamental quality of investment instrument or subject and does not assess its rate of profit or credit risk. External rating is not possible allowed to be investment recommendation.

Agencies have been subject to the criticisms because of do not downgrade companies promptly enough, have too familiar a relationship with management assessed company, danger of vicious cycle, external rating agencies not regulation etc.

In today’s financial and economic crisis environment, many financial institutions are striving to improve their risk management methods in order to ensure that they are compliant with Basel II requirements. The basic prerequisites for managing a credit portfolio and ensuring acceptable, risk based liquidity require precise assessments of credit risks and collateral. This is the foundation of successful credit risk management.

BIBLIOGRAPHY

- [1] DVOŘÁK, P. *Bankovníctví pro bankéře a klienty*. 3. vyd. Prague: Linde, 2005. 681 s. ISBN 80-7201-515-X
- [2] FABOZZI, F. J., *The handbook of asset/liability management: state-of-the-art investment strategies, risk controls, and regulatory requirements*. Rev. ed. Boston: Irwin, c1996. vi, 506 s. ISBN 1557388008
- [3] PETRJÁNOŠOVÁ, B. *Bankovní management*. 1. vyd. Brno: Masaryk University, 2004. 132 s. ISBN 80-210-3481-5
- [4] ROMANČÍKOVÁ, Eva. *Na jedné straně ochrana - na druhé bankrot*. In *Hospodářské noviny*, 1993, roč. 37, č. 226, s. 7.
- [5] ROMANČÍKOVÁ, Eva a kol. *Financie a mena*. 2. dopln. a preprac. vyd. Bratislava : Iura Edition, 2007. 391 s. Ekonómia. ISBN 978-80-8078-142-2.
- [6] UYEMURA, D. G., *Financial risk management in banking: the theory & application of asset & liability management*. New York: McGraw-Hill, c1993. xviii, 361 s. ISBN 1557383537
- [7] Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions (recast version of Directive 2000/12/EC)
- [8] Directive 2006/49/EC of the European Parliament and of the Council of 14 June 2006 on the capital adequacy of investment firms and credit institutions (recast version of Directive 93/6/EC)
- [9] <http://www.bis.org> (official websites of the Basel Committee on Banking Supervision)
- [10] <http://www.cnb.cz> (official websites of the Czech national bank)
- [11] <http://www.czech-ba.cz> (official websites of the Czech banking association)

[12] <http://www.europa.eu.int> (portal of the European union)

Contact:

Ing. Ivana Valová

Masaryk University

Faculty of Economics and Administration

Lipová 41a

602 00 Brno

fipo@centrum.cz

**ACCOUNTING AND TAXATION OF PROFIT AND NON –
PROFIT SECTOR**

AMENDMENT TO THE VALUE ADDED TAX ACT, NO. 302/2008 COLL. IN FORCE FROM 01.01.2009

Kateřina Randov

ANNOTATION

Amendment to the Value Added Tax Act, No. 302/2008 Coll. which comes in force from 01.01.2009 (hereinafter referred to as the “Amendment”) is the largest since the force of the Value Added Tax Act, No. 235/2004 Coll (hereinafter referred to as the „VAT Act“), which was approved shortly before the Czech republic had become a member of European Union. This amendment contains 313 items and some of them have only technical character. Furthermore, in lots of areas it brings many significant changes.

KEY WORDS

value added tax, VAT act, amendment, directive, harmonization, provisions, incompatibilities, turnover, deduction, reverse charge services, taxable person, rates, interests, taxable amount

INTRODUCTION

The aim of the Amendment is to harmonize the provisions of the VAT Act with applicable Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax (hereinafter referred to as the „Directive“).

AIM AND METHODOLOGY

The main aim of the paper is to focus on some of the main significant changes that the Amendment contains and compare it with the provisions of the VAT Act, which is in force in 2008. Another aim of the paper is to point out selected provisions that could be still in contrary with the Directive.

RESULTS

Overview of the most important changes mentioned in this paper:

- definition of the turnover,
- place of supply in case of supply of reverse charge services provided by the taxable person directly to a foreign person or taxable person from another Member State, who is established or has its fixed establishment in the territory of the country
- correction of rates and the amount of tax
- transfer of interests in companies and its intermediation
- assessment of taxable amount according to Section 36 (6) of the VAT Act

Definition of the turnover

The Amendment is significantly changing the definition of turnover for the purpose of compulsory registration for value added tax, so unifies conditions for all taxable persons who carry out economic activity thereby.

The terms “revenues” and “earnings” have been removed and replaced by the term “consideration”.

Turnover is going to include consideration for effected supplies and the consideration obtained before the date of supply (advance payments) will be therefore included into the turnover at the date of the supply of particular transaction.

As a result of this change it will not matter whether the taxable person is obliged to keep accounting records, to keep records for the purpose of tax calculation or only records of incomes and claims.

The type of accountancy is not decisive anymore, consideration for supplies defined by the VAT Act shall enter into the calculation of turnover even if it is accounted as the budget revenue outside the earnings, which relates to the local government authorities.

Another important difference from the rules in force until the end of 2008 fall on the persons who matched the definition of a bodies governed by public law, for example the states, regional or local government authorities. Since the beginning of 2009 these taxable persons includes into their turnover for the purpose of compulsory registration also the transfer and letting of land, buildings, apartments and non-residential premises exempted from tax according to Section 56 of the VAT Act, unless those activities are ancillary activities carried out occasionally.

Unlike the law in force in 2008 the Amendment sets up the rule to include into the turnover only transactions with its place of supply on the territory of the Czech republic.

Place of supply of miscellaneous services

Amendment brings changes in the provisions of Section 10 (6) and (7) of the VAT Act regulating application of reverse charge mechanism.

The reverse charge mechanism is for example used in case of supply of the following services:

transfers of copyrights, the services of consultants, the supply of staff, advertising, banking, financial, insurance, telecommunications, radio and television broadcasting, electronically supplied services.

The principle of reverse charge mechanism is that the place of supply of certain services shall be moved to the state where the customer (recipient) of this services has established his business or has a fixed establishment for which the service is supplied. While the customer has to be the foreign person established outside the Community or the taxable person established in the Community but not in the same country as the supplier.

In this context, there should be noted the general rule which says that if the place of supply of these services is not in the territory of the Czech republic, this services are not subject to tax in the Czech Republic. These supplies are charged without any output tax with an entitlement to a tax deduction.

Since the force of the Amendment for the application of the principle of reverse charge mechanism may no longer have to be satisfied the condition that the customer (recipient of supply) or the service supplier, who is a foreign person or taxable person from another Member State, has no fixed establishment in the territory of the Czech republic.

This provision used to be in contradiction with Article 56 of the Directive.

For the purposes of determination the place of supply of reverse charge services, therefore, since the 1.1.2009 depends only whether the services are provided to the fixed establishment placed in the Czech Republic or directly to the registered office, which is located outside the territory of the Czech republic or whether the services are provided by the fixed establishment in the Czech Republic or by the registered office, which is placed outside the territory of the Czech republic..

If the service is supplied by the taxable person directly to the fixed establishment placed in the Czech republic, it is a domestic taxable transaction.

Practical examples:

Supplier	Customer	Services	The services are supplied for	Place of supply of transaction
CZ VAT	AT VAT	advertising services	AT registered office	AT
CZ VAT	AT VAT with CZ establishment	services of accountants	CZ establishment	CZ
CZ VAT	AT VAT with CZ establishment	services of lawyers	AT registered office	AT
PL VAT	CZ VAT	supply of staff	CZ registered office	CZ
SK VAT	CZ VAT with SK establishment	services of engineers	SK establishment	SK
US taxable person	CZ VAT with DE establishment	telecommunications services	DE establishment	DE

The amendment also brings a new provision of Section 10 (14), which regulates the situation when the Czech taxable person supplies reverse charge services under Section 10 (6) to the foreign (third country) taxable person, which is also registered for tax in the Czech Republic or the situation when foreign taxable person or other Member state taxable person supplies reverse charge services to another foreign taxable person which is also registered for tax in the Czech republic, if the actual consumption or use of the services by that person (recipient of service) was in the Czech republic. In case of such situation is the place of supply of transaction determined in the territory of the Czech Republic.

Correction of rates and the amount of tax

According to the VAT Act applicable until the end of 2008, the taxable person was in accordance with the provisions of Section 49 (1) obliged to make correction of rates and amount of tax only in case if he applied for chargeable event other than the current reduces or standard rate or tax exemption and thereby reduced his tax liability. On the contrary, according to Section 49 (2) of VAT Act he did not have the possibility of correction of wrongly higher charged tax rate, which was in contradiction with the Directive.

The Amendment regulates the provisions of Section 49 into accordance with the Directive, which does not restrict the opportunity to make a correction in both directions.

Until the 31.12.2008 is the taxable person or person identified for VAT according to Section 96 of VAT Act, who applied or reported tax in other way than is stipulated in the VAT Act and increased output tax or his tax liability, entitled to make the correction in the regular tax return for taxable period in which was the corrective tax document (issued according to Section (50) of VAT Act) delivered to the customer (the taxable person or person identified for VAT). Such a situation is considered as an separate taxable transaction.

The costumer will make in accordance with the received corrective tax document the correction of the tax deduction in the regular tax return for the taxable period in which was the corrective tax document delivered to him.

This provision is used for example in cases where the taxable person instead of the reduced tax rate applied the basic tax rate or instead of the exemption with an entitlement to a tax deduction applied incorrectly the output tax.

It is possible to make correction no later than 3 years after the end of the taxable period in which was occurred the original event.

Transfer of interests in companies and its intermediation

According to Section 14 (5) (c) of the VAT Act the transfer of interests of companies or associations, is not considered to be supplying of the service, and therefore is not subject to tax.

Here arises a contradiction with the Directive, where under Article 135 (1) (f) is the exemption applied to transactions, including negotiation, in shares, interests in companies or associations, debentures and other securities.

Into the calculation of coefficient for tax proportional deduction in accordance with Section 76 (3) of the VAT Act are not included all financial services, if those activities are ancillary activities carried out by the taxable person occasionally.

Whereas that the transaction of interests in companies is not covered by the VAT Act among the financial services or other transactions exempted without an entitlement to a tax deduction, so even though it is not in this case only the ancillary activity carried out by the taxable person occasionally, despite of the fact that these transactions will not be to enter into the calculation of the coefficient, because they are not in accordance with the VAT Act the subject to tax.

Determination of taxable amount according to Section 36 (6) of the VAT Act

Where a taxable person for example exploits the tangible property for purposes unrelated to its economic activities, the taxable amount shall be determined as the purchase price of the goods or, in the absence of the purchase price, the cost price, determined at the time when the supply takes place. In the case of providing services for a similar purpose, the taxable amount shall be the full cost to the taxable person.

Until 31.12.2008 in these cases, the taxable amount was determined by special law, concretely the Evaluation of assets and the changes of some laws Act No. 151/1997 Coll., as amended.

The newly modified provisions will cause problems in practice, especially with the determination of the amount of the full cost price, determined by the taxable person at the time of supply of goods or services.

The purpose of this change was coordination of the relevant provisions of the VAT Act in accordance with the Directive.

However, in the provision of Article 72 of the Directive is the “open market value” essentially defined as the price established between independent supplier or customer in the territory of a Member State in which is the transaction subject to tax. Only when it is not possible to determine the “open market value” in this way, it is considered in the case of goods, an amount that is not less than the purchase price or similar goods or the cost price, and in the case of services, an amount that is not less than the full cost to the taxable person of providing the service.

CONCLUSION

In the Section 1 of the Amendment is stated that this law incorporates the relevant provisions of European Community, in particular Council Directive 2006/112/EC on the common system of value added tax, as amended by Directive 2006/98/EC and Directive 2006/138/EC. Despite all the efforts of law-makers some of the incompatibilities with the Directive rules appears in this Amendment or changes that may are not in the direct contradiction with the Directive, but can cause problems especially to the taxpayers in their daily practise.

The purpose of the Amendment has not been completely fulfilled because of the reasons mentioned above. Anyway, it is a further important step towards the harmonization of Czech legislation in the field of indirect taxes with the directives of the European Community.

BIBLIOGRAPHY

- [1] MATTHAUSOVÁ Blanka; RAMBOUSEK Jan. Daň z přidané hodnoty – Směrnice Rady o společném systému daně z přidané hodnoty a zákon o dani z přidané hodnoty. 2. vyd. Praha: ASPI, 2008. 508 s. ISBN 978-80-7357-369-0.
- [2] STRAKOVÁ Hana; KUNEŠ Zdeněk. Zákon o DPH s komentářem a příklady ve znění účinném od 1.1.2009. 1. vyd. Praha: Bilance, 2008. 348 s. ISBN 978-8086371-51-1.
- [3] ÚZ č. 690 Zákon o dani z přidané hodnoty jak vyplývá ze změn provedených zákonem č. 302/2008 Sb. s účinností od 1.1.2009. Ostrava: Sagit, 2008. 176 s. ISBN 978-80-7208-701-3.
- [4] ÚZ č. 632 Zákon o dani z přidané hodnoty 2008. Ostrava: Sagit, 2007. 176 s. ISBN 978-80-7208-643-6.

Ing. Kateřina Randová
Vysoká škola báňská – Technická univerzita Ostrava
Ekonomická fakulta
katedra účetnictví
Sokolská 33
701 21 Ostrava 1
katerina.randova@vsb.cz

GOVERNMENTAL ACCOUNTING IN THE CZECH REPUBLIC

Michal Svoboda

ANNOTATION

This paper describes the ongoing public sector accounting reform in the Czech Republic, its assumptions, structure, organizations involved, key issues, new accounting approaches and timeline. Paper provides an international comparison with the EU regulation, as well as with the “OECD area” countries.

KEY WORDS

Governmental accounting, Public sector, Accrual basis, Financial statements, Consolidated financial statements, Heritage assets, Infrastructure assets, Strategic military assets, Strategic inventories, True and fair view, IFRS, IPSAS.

INTRODUCTION

The current situation in public sector financial management in the Czech Republic is considerably affected by the absence of well timed and quality data. Mostly, this management is not connected with accounting system or with financial statements, but with partial and incomplet records. Also the evidence and control of public finance expenditures is performed only for purposes of the state budget, which means it is cash based, not accrual based.

In May 2007 the Governmental resolution [6] was approved, that should ensure creating of new central government accounting system in the Czech Republic. Ministry of Finance of the Czech Republic is in charge of accomplishing this mission until 2010. This new governmental accounting will identify, gather and disclose all relevant information on economical and financial situation of the State including the management of public finance during some period (accounting period) in comparison with historical indicators. To become more effective public sector financial management, more effective expenditures and their control, relevant information at all levels of management and more trustful public resources reporting is necessary.

In other words, if a private sector company needs relevant information for decision making and the source of this information is its accounting system and financial statements, it is doubtless, that the State and its executive bodies (Central and local government and its agencies) need this kind of information as well.

Gains of whole this reform could not be quantified easily, especially its qualitative characteristics. Finally, they will lead to public economies because of rationalization and automation of some control procedures, including oversight of the public. There is no doubt about self-regulation effect of accounting as a tool of true and fair view of economic situation and public sector financial management. That is why gains of this new system should dominate.

AIM AND METODOLOGY

Subject of this paper are public sector accounting entities in the Czech Republic (“selected” accounting entities), i.e.:

- departments (ministries),
- governmental organizations,
- municipalities,
- allowance organizations,
- state funds and agencies,
- Czech television, Czech radio, etc.

It is aim of this paper to analyze proposed set of new financial statements of central government, which should be prepared fully on accrual basis, for all types of public sector accounting entities mentioned above. To make the project of Governmental accounting realizable, partial tasks are necessary to make up (step by step approach):

1. to analyze and to assess current situation,
2. to obtain experience from another (mostly European) countries,
3. to assess the suitability of International Public Sector Accounting Standards (IPSAS),
4. to assess needs and possibilities of public sector accounting entities,
5. to assess factuality, cohesion and justness of these partial steps,
6. to create the Conceptual framework of Governmental accounting,
7. to create a legislative basis for Governmental accounting.

Each of these steps is described below.

Analysis and assessment of current situation

Financial statements of public sector accounting entities in the Czech Republic are traditionally partly cash based (budgetary connected accounts), partly accrual based. It is not possible for them to give a true and fair view of economical situation of the State, especially because of these important facts:

- some groups of assets are not reported properly, e.g. heritage assets, infrastructure assets and strategic reserves (strategic inventories) are not reported at all,
- some long term receivables and liabilities are reported as current,
- some assets and liabilities are not evaluated properly,
- there is a weak connection between statement of financial position and cash flow statement (cash flow statement is prepared separately, it is not a part of the set of financial statements).

It seems obvious, that a new set of fully accrual based financial statements are needed to get a true and fair view of economical situation of the State.

Experience from another countries

Nowadays, several European countries are running their own accounting reforms, which very often lead to fully accrual based financial statements. It is noticeable, how some countries are coming up with different approaches leading to different conclusions in case of public sector accounting and financial reporting. In following paragraphs, I am going to describe some of them. Sometimes a dividing of countries into two groups is made: so called “Anglo-Saxon” countries and Continental European countries. Professor Chan [1] mentions some characteristics of each group in case of relationship between accounting and budgeting: In “Anglo-Saxon” countries, accounting exerts influences on budget and key financial measures are accrual reported assets (rights) and liabilities (obligations). In Continental European countries, accounting is very often subordinated to budgeting and key financial measures are obligations and cash flows, both very typical for Czech Republic. Here comes further comparison:

Sweden

Fully accrual governmental accounting was implemented in 1993. It was one of many reforms implemented in 1990’s. The aim was higher flexibility and performance. These factors have meant increase of accountability for financial and operating results. Monitoring of performance (total costs of government programmes and activities, etc.) was enabled by this new accounting model [2].

Switzerland

The Swiss Confederation developed “New accounting model” and used it for the first time in 2007. Firstly, cash or financing aspects remained the key point, because a balance between revenue and expenditure in fiscal policy management is always required. Secondly, to produce more meaningful financial statements, to enable comparability with private sector, to increase transparency and finally to strengthen confidence among the public, as the only comprehensive and generally accepted set of guidelines for the public sector, IPSAS standards were used as a base for the “New accounting model” in Switzerland [3].

Netherlands and Norway

After considering all circumstances, responsible bodies in both these countries decided not to adopt accrual based financial reporting and standards. It is not because there is likely the only international source of useful accounting standards for public sector – IPSAS, but because responsible managers realized, that the accrual base is not suitable for their public sector accounting at all (even in Netherlands some practical testing inside accounting entities was proceeded). One of reasons was a strong connection between accounting and budgeting, which was necessary not to disrupt. [4, 5]

New Zealand

This country represents the “Anglo-Saxon area”. New Zealand was the very first country, which decided to adopt accrual basis for public sector – for governmental accounting. IPSAS standards were refused as not practically enough tested and not comprehensive enough for purposes of public sector. However, the accrual base was still treated as the right one. So the accounting and financial reporting standards of New Zealand are based on IFRS.

Eastern Europe

During a few last years, Romania developed new fully accrual based accounting standards for Governmental accounting. They are based on IPSAS. This is similar to some another Eastern European countries, they decided to reform public sector accounting. It is very often connected with creating the “Treasury” systems in these countries, e.g. Latvia, Lithuania and Slovakia.

Suitability of International Public Sector Accounting Standards (IPSAS)

As suggested above, an international comparison is very important step and could provide much useful information and many interesting opinions. In the Czech Republic, as well as in most another countries mentioned, IPSAS standards were the first impeached. In spite of the fact, that moving from cash based accounting to accrual based accounting is more than desirable, the set of IPSAS standards as a whole were found as not suitable for Czech Republic governmental accounting. It was mainly because of these factors:

- IPSAS are more conformable with “Anglo-Saxon” law system, rather than with Continental European law,
- there is no other country using IPSAS as a whole for a longer time,
- important issues typical for public sector accounting entities were not concerned with by IPSAS until recently (taxes, transfers, subsidies, etc.)¹,
- IPSAS do not reflect connection between accounting and budget management rules, which persists.

IPSAS as a whole were refused, but some approaches were evaluated as useful and appropriate. It was reporting of heritage assets, infrastructural and strategic military assets and strategic inventories, typical assets for public sector accounting entities (see below), they were mostly not reported and accounted for so far. The true and fair view will also be strengthened by accounting for depreciation and impairment of assets, which is still absent for some of public sector accounting entities! By this the private sector approach, like in IPSAS, is more obvious.

Assessment of needs and possibilities of public sector accounting entities

Public sector accounting entities like municipalities or governmental organizations dispose of special assets different from private sector accounting entities. On that account, these assets should be accounted for and reported separately, e.g.:

Heritage assets

Heritage assets in general could be assets, which have historic, technological, scientific, artistic, geophysical or environmental qualities and are held by accounting entity because of their contribution to knowledge and culture [13, 14]. So that could be historic buildings, archeological sites or collections held by museums or galleries etc.

In case of the Czech Republic, reporting of heritage assets is obligatory for public sector accounting entities from the year 2009 (accounting period starting on January 2009), with the possibility of optional lag up to three accounting periods (up to the year 2012). Heritage assets are historical properties (buildings, bridges etc.) and historical and artistic collections held by galleries or museums. Their evaluation is almost impossible to measure because of their

¹ Currently, there are quite new standards concerned with these issues, e.g. IPSAS 23, IPSAS 24, etc.

historical significance. That is why a “fictitious” evaluation at 1 Czech Koruna² is used, if an asset was not purchased and thus its evaluation (historical cost) is known.

Infrastructural assets

Roads, highways, water-supply infrastructure or engineering networks are appropriate to report as infrastructural assets. An exposure draft of governmental financial reports will very probably contain this type of assets and it will also depend on experts’ suggestions, whether the necessity of reporting infrastructural assets overweight or not. Because also private sector accounting entities can report them, for example as long term tangible assets.

Strategic military assets

These assets deserve a special “treatment” because very often, their confidentiality is needed. Like infrastructural assets, all circumstances connected will be discussed during nearest months.

Strategic inventories

Strategic inventories of oil, gas, vaccines, food tins, etc. are proposed to be reported as well. In general, they are stocked to be consumed on certain occasion in the future, that is why their reporting as stocks is proposed, no matter if the accounting entity holds them for a longer time (longer than for one year).

Impairment and Depreciation of assets

Currently, among all “types” of public sector accounting entities only some of them account for depreciation of assets. Accounting for impairment of assets is even more exceptional. These facts mean a serious deface of true and fair view of economic situation of these accounting entities. That is why these methods are proposed as obligatory.

Conceptual framework of Governmental accounting

By the Governmental resolution from May 2007 [6] basic principles and the Conceptual framework of the Governmental accounting [11] were approved. Following rules were stated:

- system of legal, technical and other tools will be created in order to ensure timely, complete and true information of financial situation of the State,
- in frame of Governmental accounting, the ability of the State (or an accounting entity on its behalf) to present financial statements of the Czech Republic must be ensured,
- rigorous digitalization and computerization of accounting records (bookkeeping) incl. EDI³ based on XML and higher emphasis on control mechanisms is necessary to ensure an effective accounting,
- public sector accounting entities will report contingent assets and liabilities to get better view of net equity of the State,
- financial resources connected with the state pension system and social politics are desirable to monitor,

² Czech currency

³ Electronic Data Interchange

- connection between (state) budget and accounting system is necessary,
- to ensure better quantification and evaluation of resources available for obligations (payables) cover, market price will be used more often as an evaluation method,
- an effective flow and gathering of information is needed in order to get an effective financial management of the State.
- reporting of the State will regard rules and demands of ESA 95⁴,
- higher level of public expenditures control will be emphasized,
- each step and procedure proposed will be assessed in order to ensure, that its information gain overweight its induced spending (a confidential regime at exceptional cases is possible).

To make these rules, which I mentioned above, practicable, it is essential to specify, which subject or accounting entity is authorized to present financial statements of the State. Next step is to qualify, which accounting entities are subject to the Governmental accounting, i.e. how many accounting entities are there in the public sector of the Czech Republic for purposes of the Governmental accounting (so called “Selected accounting entities”). With respect to all factors described in this part, amendments to (novelization of) the Accounting act [7] are necessary. Legislative and substantive procedures and changes are presented in the next part of the Paper.

RESULTS

Accounting act and financial statements

During the spring 2008 a proposal of Accounting act, including specifying of “selected” accounting entities and the entity responsible for presentation of financial statements of the State, were presented by the Ministry of finance. Consequently, the Parliament approved this proposal so it is forced since July 2008, effective from January 2010.

According to this act, these financial statements will be prepared and presented:

- Statement of financial position (assets and liabilities of the State),
- Statement of income (expenses and revenues of the State),
- Cash flow statement,
- Statement of changes in equity,
- Notes.

Crucial fact is that no special accounting entity or governmental organization will arise (like an accounting court or a supreme accounting office). On the basis of consultations performed with law experts, the State will not be an accounting entity as well. Ministry of finance will be responsible for gathering of all information needed and for preparation and presentation of financial statements of the Czech Republic.

⁴ European System of Accounts

Executive ordinances

Accounting act delegates authority to the Ministry of finance to create executive ordinances. This is the way, how the preparation of above mentioned statements is possible. There will be three special ordinances about:

- consolidation procedures,
- technical issues,
- inventory taking.

Consolidation procedures

Some special consolidation procedures are being developed, because there are some special characteristics typical for public sector in the Czech Republic they are necessary to respect. However, financial statements of the State are consolidated statements, technically very similar to private sector consolidated statements, e.g. one of most important procedures will be the bilateral relationships settlement. In case of methods of consolidation, the full method and equivalence are likely going to be used. For consolidation, some levels of relevance will be defined. There are further ongoing consultations to specify all conditions and procedures required.

Technical issues

This ordinance will arrange the form of accounting records (technical form, mixed form, etc.) their encryption and transfer to the Central system of accounting information of the State, central information office. It is noticeable that no special unique software will be engineered. Accounting software ordinarily used by accounting entities will be taken in use.

Inventory taking

No special effective inventory taking legislation was available so far (one was used years ago). However, it is inevitable for “selected” accounting entities to use some to avoid their law insecurity and lack of asset register evidence.

A remark procedure for these three ordinances has already started. Final versions are expected in few following months.

CONCLUSION

Creating of governmental accounting is just a first step. Quality and effective continuous management of this system is necessary. Accrual based accounting and reporting ensures that mentioned financial statements give true and fair view of financial situation and financial performance of individual governmental accounting entities, thus of the whole public sector. If these mentioned approaches are involved, it will be possible to measure and to assess the financial position of public sector accounting entities for the first time in history of the Czech Republic.

BIBLIOGRAPHY

- [1] Chan, James L., "Global Government Accounting Principles", in *Public Management, Accounting Standards and Evaluation Models*, ed. by P. Einhorn and D. Braunig (Baden-Baden, Germany: Nomos Verlagsgesellschaft, 2001), pp. 152-163. [<http://jameslchan.com/papers/Chan2001GlobalGAP.pdf>]
- [2] The Swedish Financial Management Authority, *Accrual Accounting in Swedish Central Government*, Ekonomiprint, 2001, ISBN 91-7249-112-4
- [3] *The Federal Finance Administration of Switzerland*, NAM – The New Accounting Model of the Swiss Confederation, 2008 [http://www.efv.admin.ch/e/dokumentation/downloads/themen/rrm/NAM_brochure_E.pdf]
- [4] Tijsseling, Ids; Verheij, Peter, *The Audit-function in Holland, Control systems: A Key Factor in the Achievement of Central Government Accounting Reform* (European Seminar), Paris, 18-19 September 2008
- [5] Ulla, Pal, Norwegian Ministry of Finance – Applying Accrual Concepts for Budgeting, 8th Annual Public Sector Accruals Symposium, Paris, 3-4 March 2008
- [6] Usnesení vlády České republiky ze dne 23. května 2007 č. 561 k vytvoření účetnictví státu.
- [7] Zákon č. 563/1991 Sb., o účetnictví, ve znění pozdějších předpisů
- [8] Vyhláška č. 505/2002 Sb., kterou se provádějí některá ustanovení zákona č. 563/1991 Sb., o účetnictví, ve znění pozdějších předpisů, pro účetní jednotky, které jsou územními samosprávnými celky, příspěvkovými organizacemi, státními fondy a organizačními složkami státu, ve znění pozdějších předpisů
- [9] České účetní standardy pro účetní jednotky, které účtují podle vyhlášky č. 505/2002 Sb., ve znění pozdějších předpisů
- [10] Svoboda, Michal, *Některé aspekty implementace mezinárodních účetních standardů IPSAS do českých účetních předpisů*, Diploma thesis, University of Economics in Prague, Faculty of Finance and Accounting, Diploma thesis supervisor doc. Ing. Ladislav Mejzlík, Ph.D., 2008
- [11] Ministry of Finance of the Czech Republic, *Základní principy vzniku účetnictví státu*, [http://www.mfcr.cz/cps/rde/xber/mfcr/Principy_vz_ucetnictvi_statu_CSU.doc]
- [12] Ministry of Finance of the Czech Republic, *Důvodová zpráva k zákonu č. 304/2008 Sb., kterým se mění zákon č. 563/1991 Sb., o účetnictví, ve znění pozdějších předpisů, a některé zákony, č. j. 28/87748/2007*
- [13] IFAC – Mezinárodní federace účetních: *Příručka dokumentů Rady pro mezinárodní účetní standardy pro veřejný sektor*, 2005, Překlad NKÚ, ISBN 80-239-7238-3
- [14] The Accounting Standards Board 2008, *Financial Reporting Exposure Draft 42 – Heritage Assets*, 2008, ISBN 978-1-84798-088-5
- [15] Sekce veřejného sektoru na stránkách Mezinárodní federace účetních na adrese: <http://www.ifac.org/PublicSector/>
- [16] Mezinárodní účetní standardy pro veřejný sektor na adrese: http://www.ipsas.org/en/ipsas_standards.htm

Michal Svoboda (mailto:xsvom33@isis.vse.cz)
University of Economics Prague,
Faculty of Finance and Accounting,
Department of Financial Accounting and Auditing
Winston Churchill Sq 4
130 67 Prague 3
Czech Republic

**REGIONAL DEVELOPMENT AND ADMINISTRATION –
THEORY AND PRACTICE**

THE INFLUENCE OF TOURISM ON THE ENVIRONMENT

Michaela Antoušková, Zdeňka Kroupová

ANNOTATION

Tourism is very important part of national economies. It significantly contributes to economical development of regions and nations. According to the current statistical data, tourism is defined as one of the most profitable and rapidly developing industries in the world. Moreover it influences several other areas, beside economical impacts it has also social and cultural impacts. It helps many regions to start their economical development that may lead to increase of foreign investment, because the tourist destination may become more attractive for foreign investors that multiple the economical effects of the development. For many regions, tourism is the most important source of financial resources, for many regions the only source. According to the WTTC data the employment in tourism represents more than 8% of all employment that means 1 job in every 12 jobs in the year 2007. It is also recognized that travel and tourism economy contributed by 10,4 % to the world economy in the year 2007 and it is estimated that this contribution will rise to 10,7 % in ten years. Travel and tourism industry represents around 12% of total world exports,. WTTC also expects that tourism generate 7 060,3 bn USD of economic activity (total demand) in 2007, and should growth to 13 231,6 bn USD in ten years. Total demand is expected to grow by 4,3% per annum. There are not only positive effects of tourism. Increasing tourism activities bring also environmental problems, such as pollution, erosion, damage of monument and nature, noise. This article focuses on these negative effects of tourism and the impacts of tourism on the environment. One of the methods to express the influence of tourism on the environment is the Defert function, which is calculated in the paper in the first part. The second part of the paper focuses on pollution, especially emission of carbon dioxide, and calculate the price of these negative effects, that is not included in the price of the trip. The paper focuses on the Southern Bohemian region.

Pieces of knowledge introduced in this paper resulted from solution of an institutional research intention MSM 6046070906 „Economics of resources of Czech agriculture and their efficient use in frame of multifunctional agri-food systems“.

KEY WORDS

Tourism, Defert function, Emission of carbon dioxide, Negative effects of tourism.

INTRODUCTION

In the past there has not been given such an attention to the environment. Economic policies were oriented generally on economic grow and liberalization, that can be documented on the General Agreement on Tariffs and Trade or on the North American Free Trade Agreement. At that time, increased pollution was considered as an acceptable side effect of production. However as the countries reached higher standards of living, they paid greater attention on the environment and so the first legislation in the environment has appeared.

The concept of sustainability has its origins in the environmentalism that grew to the prominence in the 1970s. Since the late 1980s sustainable development has become a theme discussed in the field of tourism and has made a part of tourism studies. Since than several definitions of sustainable tourism has appeared. One of widely used definitions tells sustainable tourism development focuses on leading to management of all resources in such a way that can fulfill economic, social, and aesthetic needs, while maintaining cultural integrity, essential ecological processes, and biological diversity and life support systems. The World

Tourism Organization adds that sustainable tourism development meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. Sustainable tourism can be defined as every tourist activity that preserves for a long time the natural, cultural and social resources, contributing to the well-being of individuals living in those tourist areas.

The sustainability stands on the three pillars:

- ❖ Ecological sustainability (ecological processes, biodiversity, biological resources)
- ❖ Social and cultural sustainability
- ❖ Economic sustainability

Other point of view offers sustainable development based on the three core principles:

- ❖ Quality (quality experience, quality of life, quality of environment)
- ❖ Continuity (continuity of natural resources, continuity of culture, continuity of visitor interest)
- ❖ Balance (balance of needs of hosts, guests and environment)

In the literature dealing with sustainable tourism there can be found four approaches:

- ❖ Polar opposites concepts with the main idea that alternative tourism aims to replace mass tourism
- ❖ Continuum concepts that overcomes the resources degradation and contains the focus and capability principles
- ❖ Movement positions, that represents movement to make mass tourism more sustainable
- ❖ Convergence representing by the idea that all forms of tourism aims to become sustainable

On the other hand, there are authors that argued or find some weak points in the literature and studies of sustainable tourism development. Many authors promote ecotourism or alternative forms of tourism, responsible tourism, soft tourism, low-impact tourism, community tourism as the path of sustainable tourism. But the experiences show that none of these forms means the way forward for a sustainable tourism industry. Also many organizations have researched for ways to set the limit to tourism growth through identifying carrying capacities and indicators of sustainable development, but with the limited success. Many authors also argues that the social and cultural impacts of tourism are primary negative and any tourism-related socio-cultural changes should be avoided.

AIM AND METODOLOGY

The paper focuses on the negative effects of tourism. In the first part it express the tourist activity, in order to find out the stress of tourism on the environment. In the second part it deals with other negative effect of tourism, which is pollution, especially emission of carbon dioxide. The paper aims to evaluate these negative effects of pollution.

Tourist intensity

To express the intensity of tourist activity in the region, there was used Defert function in this paper. The Defert function measures ratio of tourist and residents. It is supposed that there exist a direct dependence between Defert function and irritation index, it means the higher Defert function the higher irritation index. Irritation index represents a grudge between residents and tourist.

Defert function = $A / B * 100$, where

Anumber of beds for tourists

B.....number of residents

Relation between results from Defert function calculation and tourist activity in the region:

Less than 4almost no tourist activity

4 -10not significant tourist activity

10 – 40.....significant but not dominant tourist activity

40 -100mainly tourist destination

100 – 500.....significant touristic destination

Over 500.....hyper tourist destination

Tourist intensity was calculated firstly for the Czech Republic in this paper. After that the authors focuses on the South of Bohemia. There were compared 7 regions within the Southern Bohemia in the period 2004-2007. All date used for calculation comes out from the Czech Statistical Office. To analyze the situation and the stress on the environment from the tourist activity, the calculated date was compared with the research of Czech Ministry of Environment from the year 2001. The research should serve as the base date for the purpose of the law dealing with tourism and environment, focused on the categorization of the settlements according to their stress on the environment. This law proposed also the payments according to the stress on the environment.

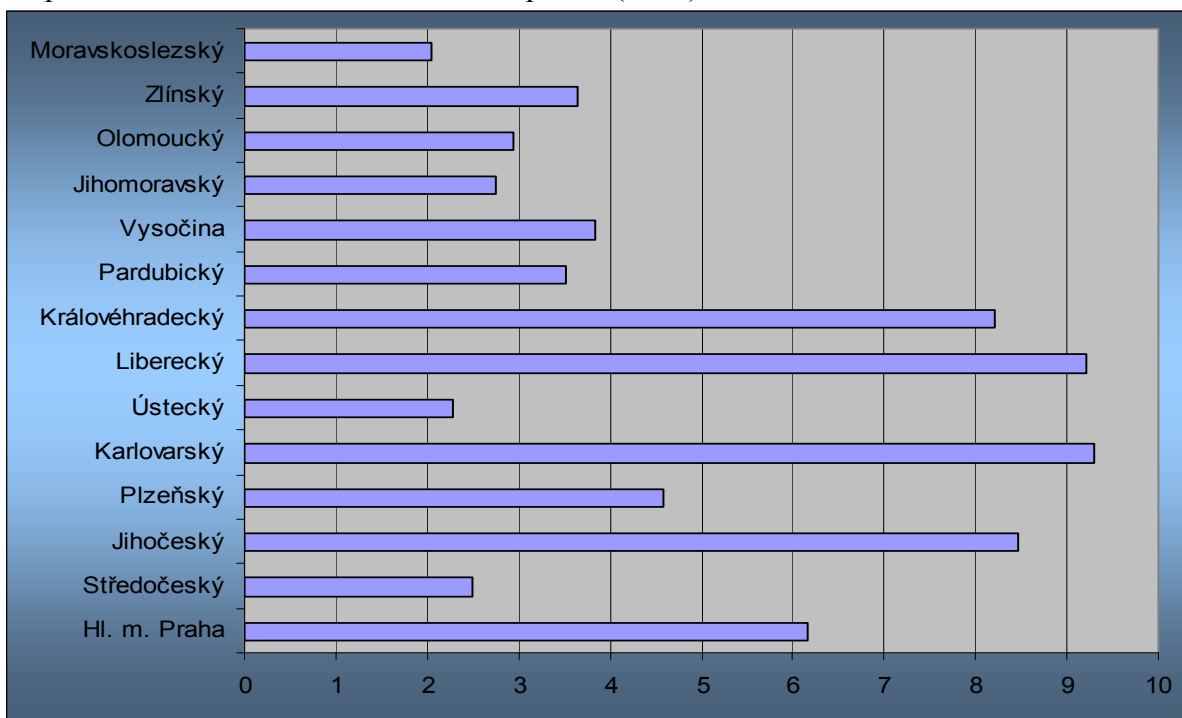
Emission of carbon dioxide

In the main tourist season in the year 2007 there was made a primary research in the region of Southern Bohemia. There was given a questionnaire into several tourist information centers all over the above mentioned region. Through the questionnaire there were investigating several aims, among them also a part of influences of tourism on environment. The tourists were asked which means of transport they used in the region and to estimated number of kilometers of using concrete mean of transport. This information serves to estimate the emissions produced by tourism. This paper deals also with the economic evaluation of these side effects of tourism. It evaluates emission of carbon dioxide by the price of emission permit. As an average emission of carbon dioxide per 1 km were taken the date from Czech Ministry of Environment and Cesmad Bohemia, where emission of carbon dioxide were calculated for car transport as 158 g/km and emission for bus transport as 0,0157 kg/km.

RESULTS

The highest tourist intensity in the Czech Republic in the year 2007 in the regions of Liberec and Karlovy Vary. On the hand the lowest tourist intensity can be recognized in the Moravia-Silesian region and the Central Bohemia. The Southern Bohemia rank the third position in the year 2007, so it belongs to the regions with higher tourist activities. All regions (NUTS III regions) have the index of Defert function about from 2 to 10, that means that in this regions the tourist activity is significant but not dominant.

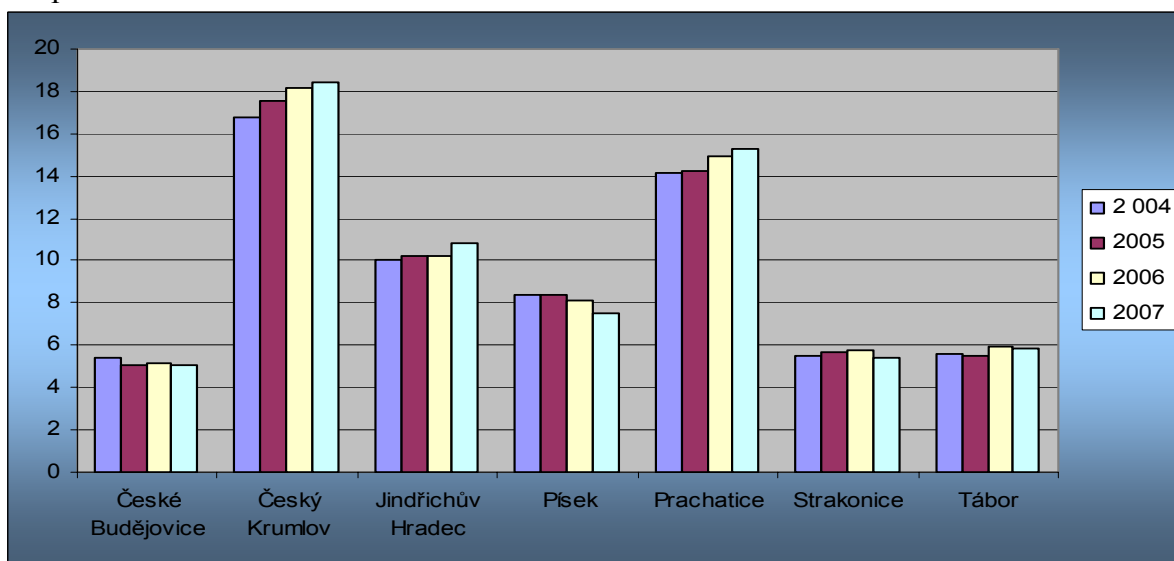
Graph 1: Defert function in the Czech Republic (2007)



Source: Own calculation

According to the research made for the Czech Ministry of Environment, among the hyper tourist destinations belong mainly ski areas such as Pec pod Sněžkou, Špindlerův Mlýn, Říčky v Orlických Horách, also Hřensko or Modrava. The lowest Defert index may be recognized in the places with rural or cultural tourism. The Defert index from 10-40 have places with historical, religious or event tourism. Among significant tourist destination with higher stress on the environment belong destination with winter, spa, natural, recreational tourism.

Graph 2: Defert function in the South of Bohemia



Source: Own calculation

In the South of Bohemia, the highest tourist intensity and the highest stress on the environment can be recognized in the Český Krumlov region, that may be caused also by the fact that Český Krumlov is listed in the UNESCO heritage list, which caused higher number of tourists. There is another tourist place listed in the UNESCO heritage in this region, village Holašovice, situated in the České Budějovice region. This village is not so often visited such as Český Krumlov, that may be caused by worse tourist infrastructure. The development of Defert index in the period of consideration is different in each region. It has increasing tendency in the Český Krumlov, Jindřichův Hradec and Prachatice region. The decreasing tendency may be recognized in the Písek region.

Emission of carbon dioxide

According to the primary research in the Southern Bohemia, the mostly used mean of transport was a car, followed by a bicycle and a bus. As bicycles are environmentally friendly, the analysis focuses only on cars and buses. From the primary research comes out that on average the tourists use the car for 270 km. That represents by the current prices (data from 5th January 2009) of emission permit (15,6 EUR) about 17,5 CZK for a car trip. Number of persons (tourists) traveling with the respondent was considered as irrelevant information, taking into account that the car will produce emission no matter how many people is traveling by the car. In the case of the bus transport, the average kilometrage was 92,5 km during the stay. This amount of kilometers during the stay represents the cost of 289 CZK. All these costs are not a part of a price of tourist trips.

CONCLUSION

Tourism has both positive and negative effects. The positive effects are usually connected with economic growth of destination, foreign investments, and lower unemployment. The negative effects are connected with emissions, erosion, but also with social problems such as irritation, employment only in the tourist season. This article calculates the price of one of the negative effects, which is pollution, especially emission of carbon dioxide. It focuses car and bus transportation. The price stated in the paper does not represent the real expenditures of tourists for their trips in the South Bohemian region. This is the price can be considered only as a price of one of the negative effects of tourism. In the theoretical studies this price should be calculated into the costs for the trip. In the theoretical model of revenues and costs, this price should be a part of costs of the region.

BIBLIOGRAPHY

- [1] Arrow, K., Bolin, B., Costanza, R.: Economic Growth, Carrying Capacities, and the Environment. In: Policy Forum. [online].[cit.5.1.2009].URL:<http://www.precaution.org/lib/06/econ_growth_and_carrying_capacity.pdf>.
- [2] Cracolici, M. F., Cuffaro, M., Nijkamp, P.: Sustainable Tourist Development in Italian Holiday Destinations. [online].[cit.5.1.2009].URL:<<http://ideas.repec.org/p/dgr/vuarem/2006-14.html>>.
- [3] Diamantis, D., Ladkin, A.: The Links Between Sustainable Tourism and Ecotourism: A definitional perspective. In: The Journal of Tourism Studies. Vol 10, No . 2. Australia 1999. ISSN: 1035-4662
- [4] Liu., Z.: Sustainable Tourism Development: A Critique. [online].[cit.5.1.2009].URL:<<http://www.multilingual-matters.net/jost/011/0459/jost0110459.pdf>>.
- [5] Moscaro, G.: Interpretation and Sustainable Tourism: Functions, examples and principles. In: The Journal of Tourism Studies. Vol 9, No 1, May 98. [online]. United Kingdom, 1998.[cit.5.1.2009].URL:<http://www.jcu.edu.au/business/idc/groups/public/documents/journal_article/jcudev_012653.pdf>.

- [6] WORLD TOURISM TRAVEL COUNCIL. Realizing Potential. [online]. UnitedKingdom,2005.[cit.28.11.2009].
URL:<http://www.wttc.org/bin/pdf/original_pdf_file/t4t_call_for_entries_hr_online.pdf>
- [7] WORLD TOURISM TRAVEL COUNCIL. Progress and Prioroties 2008-2009. [online]. UnitedKingdom, 2007. [cit.28.11.2008].
URL:<http://www.wttc.org/bin/pdf/temp/progress_and_priorities_2008.html>.

Ing. Michaela Antoušková, Ing. Zdeňka Kroupová
Czech University of Life Sciences
Kamýcká 129
16521 Praha 6
antouskova@pef.czu.cz

THE IMPACT OF CULTURAL DIFFERENCES IN ADDRESSING SOCIAL PROBLEMS

Daniel M. Balcha

ANNOTATION

This comparative study analyzes the difference between Czech and Ethiopian cultures and its significance in addressing particularly HIV/AIDS problems. It mainly focuses on essential patterns of people's perception in thinking, feeling, and acting towards the problem. It analyzes whether these differences are associated to the differences of the two nations' positions on the Hofstede's scales or if they are primarily associated to other characteristics like nations wealth. Accordingly, the study comes up with the conclusion that both have significant contribution to the differences in perception and acting towards HIV/AIDS problems and its solutions.

KEY WORDS

National culture, social problem, HIV/AIDS, Czech Republic, Ethiopia

INTRODUCTION

*"The world is full of confrontations between people, groups, and nations who think, feel, and act differently. At the same time, these people...are exposed to common problems...AIDS..."*¹One of the things challenging development works today is HIV/AIDS especially in the developing world. Understanding the problem from cultural point of view contributes to its solution. According to Thompson, *"Culture is the total complex pattern of customary human behavior, social norms and material trait embodied in thoughts, speech, action, and artifacts and dependent upon the human capacity for learning and transforming knowledge, and systems of abstract thought. Culture includes also things like beliefs, morals, laws, customs, opinions, religions, superstitions, and art."*²It is true that there exist significant differences between Ethiopia and the Czech Republic in these regards. Even they don't see the problem in equal terms due to high differences in HIV prevalence rate, number of population, wealth, etc. For instance, the UN data for the year 2007 shows that there is significant GDP per capita difference between the two countries, where it is \$16,881 for Czech Republic while it is only \$201 for Ethiopia.³ Having this in mind, the study explores the significant cultural traits, which help to see the perception of the people in the two nations towards the problem of HIV/AIDS.

AIM AND METODOLOGY

The study aims to emphasise the role of cultural differences in addressing HIV/AIDS problems by identifying the strength, weakness, opportunities and threats of national culture using Hofstede's five national cultural dimensions. The essential pattern of thinking, feeling, and acting towards the problem in the two countries is analyzed. Particularly, the study aims (1) to analyze data on how people in Czech Republic and Ethiopia perceive the problems connected to HIV/AIDS and to find out how the nationals of the two countries involved differ in what they think, how they feel and behave in connection to it; (2) to analyze the data with the aim to find out if these differences are associated to the differences of the two nations

¹ Hofstede, G. J. (2005), p. 2

² Thompson, Herb (2001)

³ UN Statistics Division (2009)

positions on the Hofstede's scales or if they are primarily associated to other characteristics like nations wealth etc. It is believed that answering to these questions would contribute to the understanding and solution of the HIV/AIDS problems in different contexts.

It makes use of data obtained from 20 group discussions (FGDs) 10 in each country and interviews with key informants from both countries. All the FGDs were conducted with university students in a class room situation, where students have previous knowledge and/or having thorough presentation on Hofstede's five national cultural dimensions. University students were selected for the study due to two basic reasons. One is to have a representative group of national culture coming from different parts of each country. This was important especially in the case of Ethiopia as there exists significant difference between urban and rural culture. Secondly, the class room environment is preferred because it was the best setting where students can have clear awareness about the dimensions of national culture.

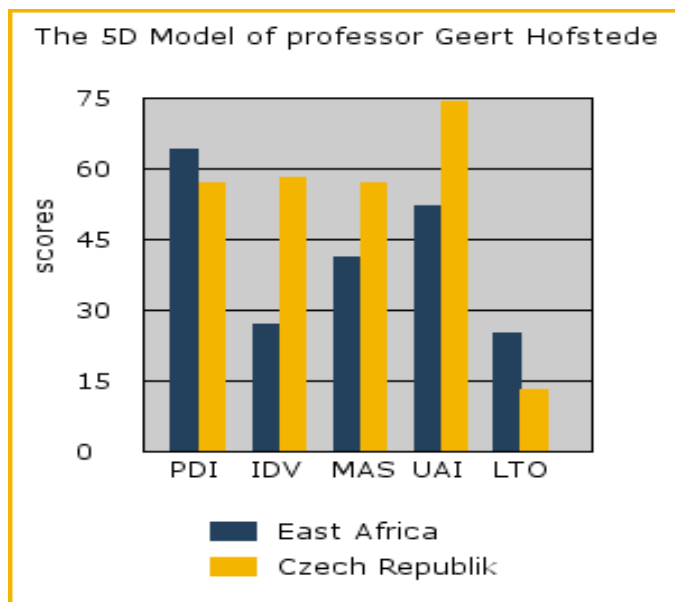
Hofstede's dimensions were used due to the fact that it helps to understand cultural variations in the way people think and behave in more understandable manner. His definition of culture stresses this fact *"the sense of broad patterns of thinking, feeling, and acting, which includes much more than civilization alone."*⁴ He also shows that there exist strong relationships between a national wealth and most of his cultural dimensions. Another fact is the issue of Modernization, in which *"...economic development triggers cultural changes that make individual autonomy, gender equality ..."*⁵ Though Hofstede provided the score for the Czech Republic, there doesn't exist a particular score for Ethiopia. Rather he gave the same score for East Africa (Ethiopia, Kenya, Tanzania, and Zambia). This same score is used for Ethiopia due to the fact that the scores are mainly used as a reference or part of the hypothesis of the research. And the conclusions made are mainly drawn from the data from the field.

RESULTS

The results of the study are presented according to Hofstede's five national cultural dimensions. The following graph and table summarizes Hofstede's scores for the two countries.

Fig.1 Hofstede's Comparison between East African and Czech Culture

Country	PDI	IDV	MAS	UAI	LTO
Czech Republic	57	58	57	74	13
East Africa	64	27	41	52	25



Source: http://www.geert-hofstede.com/hofstede_dimensions.php?culture1=25&culture2=22#compare

⁴ Hofstede, G., Arrindell, W. (1998), p. 5

⁵ Inglehart, R. and Welzel, C. (2005)

Power Distance Index (PDI)

Hofstede defined power distance as *“the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally. Institutions are the basic elements of society, such as the family, the school, and the community...”*⁶ His score for the PDI of the two countries show that most members of the Ethiopian society exhibit a higher (64) power distance than the Czechs (57). In Ethiopia the extent to which the less powerful members accept and expect that power is distributed unequally to a higher extent than in the Czech Republic. The power distance between genders is also significant. *“Women’s contributions are less recognized and they are marginalized in different spectrums of socioeconomic life.”*⁷ On the other hand, most Czechs don’t believe that there exists inequality of power distribution. There exists uniform health care system for all Czechs, which also benefits communities affected by HIV/AIDS. The opportunity to equal access to information and knowledge irrespective of socioeconomic status is emphasized here.

In Ethiopia, it is normal to see significant income differences between top and low employment positions. It is pointed that *“the status matters”* to a great extent. Authority is not challenged. As a result managers, teachers or individuals holding higher position are not expected to consult. Authoritative figures are not expected to consult or ask for advice as it is considered to be shameful act and they would like to be perceived as they know everything and admit no mistakes. One way of communication prevails in most of the teaching learning process, which is mainly authoritative and confirms *“all societies are unequal, but some are more unequal than others”*.⁸

In less power distance culture the majority of the citizens are middle class. Accordingly, *“Members of the middle class demand access to decision-making bodies....Consequently; they do not accept a large power difference between themselves and their superiors.”*⁹ Where as, the more unequally the wealth is distributed within a culture, there will be greater power distance and the culture tends towards hierarchical societal structure.¹⁰ The degree of inequality among people is higher in Ethiopia than in the Czech Republic, where individuals value equality. As a result, Hofstede states that *“In cultures in which people are dependent on in-groups, these people are usually also dependent on power figures. Most extended families have patriarchal structures with the head of the family exercising strong moral authority. In cultures in which people are relatively independent from in-groups, they are usually also less dependent on powerful others.”*¹¹ The World Values Survey correlation analysis also showed that secular-rational versus traditional authority dimension corresponds closely to power distance. In a society in which power distance is large, authority tends to be traditional, sometimes even rooted in religion.¹² Here the data from Ethiopia reveals this fact. Ethiopians are greatly influenced in their daily life by their spiritual belief in God and religious leaders. Religious institutions and leaders provide a good medium of communication to an audience which is generally respectful and receptive to the preachings of such leaders, where as this is not the case in the Czech Republic.¹³ In Ethiopia, people respect elders, particularly

⁶ Hofstede, G. J. (2005), p.46

⁷ Arnett, J. J. (2007), p. 278

⁸ Lane, etal. (2000:91)

⁹ House, R. J. (2004), p. 525

¹⁰ LeBaron, M. and Pillay, V. (2006), p. 46, 47

¹¹ Hofstede, G. J. (2005), pp. 83, 84

¹² Hofstede, G. J. (2005), p. 59

¹³ Cravens, C. S. (2006), p. 23

traditional and religious leaders and accept their message and orders. So, involving these groups in the HIV awareness and protection programs is helpful.

Individualism (IDV)

According to Hofstede, individualistic cultures place emphasis on the achievements, initiative, and goals of the individual, while collectivist cultures subordinate those to group membership and the goals of the group. Here his score shows that Czech Republic (58) is more individualistic than Ethiopia (27), a collectivist society. In most African countries “...*the values of extended family and community significantly influence the behavior of the individual. The behavior of the individual in relation to family and community is one major cultural factor that has implications for sexual behavior and HIV/AIDS prevention and control efforts.*”¹⁴ The degree to which individuals are integrated into groups is reported higher in Ethiopia than in the Czech Republic. One thing is the extended family structure. People are culturally expected to show their commitment of support by devoting time and money more than their individual achievement or goal, whereas, in the Czech Republic everyone is expected to look after him/herself and his/her immediate family. In Ethiopia, people from birth onwards are integrated into strong, interconnected in-groups, often extended families (with uncles, aunts and grandparents) and the widespread pattern of child rearing is authoritarian.¹⁵ But in the Czech Republic children grow to take own opinion and be independent.

Stigma and discrimination is the major issue associated with HIV/AIDS and the individualism collectivism dimension. The data from both countries show that there exists stigma and discrimination in both countries towards people affected by HIV/AIDS, but it tends to be more severe in Ethiopia. As a result, it has a significant influence in addressing the problem of HIV/AIDS. In Ethiopia, the people help and depend on each other than care from health institutions or the state. The extended family structure also helps to care for orphans and vulnerable children. When someone, who is mostly a bread winner, is ill, it is the problem of the whole group or family. Most have agreed that it is quite difficult for affected people to reveal their status and seek care in Ethiopia. As getting infected by HIV is considered to be a curse, shame or losing the family's class in the community. People tend to hide their status and it will be exposed by the time they are on bed. It has also its own contribution to increase the prevalence rate due to the fact that people most likely continue with their sexual behavior.

In Ethiopia, harmony with in the group is important. Also due to religious influence, prejudice, traditional and social values people don't want to reveal their status as it will result in shame, while this was contrasted with guiltiness in the Czech Republic. Though there exist lots of cultural opportunities, to share knowledge about HIV, people are highly ashamed to discuss on their status or the issue as a whole due to the culture of silence. It was also reported that due to the culture of silence, issues related to sex or partnership are not discussed among families, which led the youth to hidden, risky sexual and other behaviors.¹⁶

In the Czech Republic, most agree that due to the interest to protect oneself, ultimately the general public is protected from HIV/AIDS. People are mainly concerned with the member of close/immediate family, whom they can easily name. Few people are interested in the problems of others. Traditions and prejudices are not as such important as in the case in

¹⁴ Airhihenbuwa, C. O., Webster, J. D. (2004)

¹⁵ Arnett, J. J. (2007), p. 280

¹⁶ Packer, Corinne A. A. (2002), p. 44

Ethiopian culture. Rather knowledge is stressed and high level of curiosity to find out new information is reported.

Hofstede found a strong negative correlation between a culture's scores on the power distance index and its scores on the individualism-collectivism index. High PDI cultures tend to be collectivistic, whereas low PDI cultures tend to be individualistic. The more people within the culture, the greater the power distance is likely to be. This is true for Ethiopia and the Czech Republic with a population of 79.1 and 10.4 million respectively.¹⁷ *“The growth of the population did relate to collectivism, but its first correlation was with country wealth-in poor countries families tend to have more children. There are a number of reasons for this, most prominent being the poor education of women and the expectation that children will support their parents in old age. Children in larger families obviously are more likely to acquire collectivist rather than individualist values.”*¹⁸

Masculinity (MAS)

Masculinity-Femininity (*“tough versus tender”*¹⁹) is another dimension Hofstede uses to compare national culture. His scores show that Czechs (57) are more masculine than Ethiopians (41). Where masculinity stands for a society in which men are supposed to be assertive, tough, and focused on material success; women are supposed to be more modest, tender, and concerned with the quality of life. The opposite pole, Femininity, stands for a society in which both men and women are supposed to be modest, tender, and concerned with the quality of life.²⁰ Here the data shows that there is significant expectation from males in the Ethiopian society than in the Czech Republic. The culture assumes that females are dependent on males and they have less say or decision making power in the quality of life, which is not the case in the Czech Republic, where both men and women are relatively concerned with the quality of life. And this shows fair distribution of roles between the genders in the Czech Republic.

For instance, Hofstede’s score for Sweden in particular and the other Scandinavian countries in general show the list score for MAS, 5 and below 10 respectively. In Ethiopia, though the state fails to provide adequate social care which is enjoyed in most other nations, people tend to get some kind of care and support as discussed under collectivism individualism dimension. That is, they are less concerned in external achievements, but more in helping others and sympathy for the unfortunate and find motivation in relationships. As a result, productive citizens lose their time and even their jobs and education when their family members are sick for they grew up in a society in which the culture imposes a responsibility to take care of the family members.

Uncertainty Avoidance Index (UAI)

Hofstede’s score for UAI (*“rigid versus flexible”*²¹) show that there exists significant difference between Czech Republic (74) and Ethiopia (52). High UAI cultures tend to develop many rules to control social behaviors. Low UAI cultures need few rules to control social behaviors.²² That is, Czechs minimize unusual situations by strict laws and rules, safety and security measures. As a result, they tend to say I can’t be affected by HIV. And they don’t

¹⁷ Population Reference Bureau (2008), pp. 7, 10

¹⁸ Hofstede, G. J. (2005), p. 113

¹⁹ Hofstede, G., Arrindell, W. (1998), p. 6

²⁰ Hofstede (1991), pp.261-262

²¹ Hofstede, G., Arrindell, W. (1998), p. 6

²² Lustig, M. W., and Koester, J. (2002), p. 122

take the problem seriously. “Most Czech adolescents have no direct experience with HIV-positive people, so they feel that the probability of their own contraction of this disease is little.”²³ People in Ethiopia are tolerant of opinions different from what they are used to; and they are not even expected to express emotions. Uncertainty on issues related to HIV/AIDS can lead to anxiety in the Czech Republic, while not in Ethiopia, where different views are taken for granted.

Long-Term Orientation (LTO)

Czech Republic and Ethiopia do not show significant difference and are on one side of the scale in LTO, where they have 13 and 25 respectively. People in Ethiopia tend to respect both long and short term values. They have higher expectations from children or their religious beliefs. Consequently, they give birth to large number of children, believing that it is an insurance policy for old age.²⁴ They tend to suffer in fulfilling their daily needs, which also contribute to their short-term values. Children are taken as signs of hope and it is quite difficult to swallow the fact when children are affected by HIV/AIDS. Because it is strongly believed that if a person is HIV positive he/she is hopeless. The high estimate of adult (15-49) HIV prevalence in 2007 shows that Czech Republic has less than 0.1%, where as Ethiopia has 2.2%.²⁵ This also could be another reason for the difference of perception towards HIV/AIDS in line with LTO. The data from the groups in the Czech Republic also shows that people have short-term values, which are reflected in their respect to tradition and fulfilling social obligations.

CONCLUSION

The study has revealed that there are significant cultural differences between the two countries associated to the differences of the two nations’ positions on Hofstede’s scales, wealth, number of population and HIV prevalence rate. Especially, the correlation of wealth with Hofstede’s dimensions makes the difference significant.²⁶ Accordingly, the nationals of the two countries differ in what they think, how they feel and behave in connection to HIV/AIDS. The following table summarizes the results of the analysis to the data on how people in Czech Republic and Ethiopia perceive their cultures’ position on Hofstede’s five dimensions of national culture.

Table 3. Summary of the comparison on cultural differences

Country	PDI	IDV	MAS	UAI	LTO
Czech Republic	Average	High	Average	High	Low
Ethiopia	High	Low	Average	Low	Low

The fact that there exists relatively lower or average power distance in the Czech Republic gave comparatively equal opportunity for all. Especially, women are more equal to men and they are equally educated, which is not the case in Ethiopia, where significant power difference exists. So, empowering women and recognizing their contribution to the quality of

²³ Arnett, J. J. (2007), p.213

²⁴ Packer, Corinne A. A. (2002), p. 25

²⁵ 2008 Report on the global AIDS epidemic, July 2008, UNAIDS

²⁶ Noorderhaven, N. G. and Tidjani, B. (2001)

life and defense against HIV/AIDS is important. In Ethiopia, people respect elders, particularly traditional and religious leaders and accept their messages and orders. So, involving these groups in the HIV awareness and protection programs is helpful.

Researches show that culture is often to be a factor in the various ways that HIV/AIDS has impacted mainly on the African population. As it is stated, *“Culture plays a vital role in determining the level of health of the individual, the family and the community. This is particularly relevant in the context of Africa, where the values of extended family and community significantly influence the behavior of the individual. The behavior of the individual in relation to family and community is one major cultural factor that has implications for sexual behavior and HIV/AIDS prevention and control efforts.”*²⁷ This research has also revealed this fact, where the factors range from beliefs and values to individual practices towards the problem.

People in the Czech Republic exhibit more individualistic values than people in Ethiopia. This contributed to care and support to oneself which in turn leads to safer environment for the general public. Moreover, the higher values associated to uncertainty avoidance contribute to the individual curiosity of information. On the other hand, the most collectivist nature of the Ethiopian society, and dependence on one another has magnified the stigma and discrimination associated to HIV/AIDS and people’s tendency to hide their status.

To conclude, people in different societies see the world differently and have strikingly different values. But these values are gradually changing as they are closely linked with socioeconomic development. Changing values are reshaping religious beliefs, fertility rates, gender roles, and sexual norms.²⁸ Accordingly, in the two countries value or cultural changes have also been exhibited through time and mere scores cannot reflect current realities all the time and do not show variability within each nation as well, the same goes for particular individuals sampled in the study. As a result, it is attempted to validate the findings beyond the scores using other relevant works.²⁹ Consequently, both the position of the two countries on Hofstede’s dimensions and other factors like wealth, number of population, and HIV prevalence rate have significant contribution to the differences in perception and behavior towards HIV/AIDS problems and possible solutions.

BIBLIOGRAPHY

- [1] Airhihenbuwa, C. O., Webster, J. D. (2004). Culture and African contexts of HIV/AIDS prevention, care and support. *Journal of Social Aspects of HIV/AIDS Research Alliance* VOL. 1 NO.
- [2] Arnett, J. J. (2007). *International Encyclopedia of Adolescence: A Historical and Cultural Survey of Young People Around the World*. CRC Press
- [3] Berry, J. W., Poortinga, Y. H., Segall, M. H., & Dasen, P. R. (1996). *Cross-Cultural Psychology: Research and Applications*. Cambridge University Press.
- [4] Cravens, C. S. (2006). *Culture and Customs of the Czech Republic and Slovakia*. Greenwood Publishing Group.
- [5] House, R. J. (2004). *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*. Global Leadership and Organizational Behavior Effectiveness Research Program, Mansour Javidan. SAGE.

²⁷ Airhihenbuwa, C. O., Webster, J. D. (2004), p. 4

²⁸ Inglehart, R. and Welzel, C. (2005), p. 15

²⁹ Noorderhaven, N. G. and Tidjani, B. (2001), p. 32

- [6] Hofstede, G. J. (2005). *Culture and Organizations: Software of the Mind*, McGraw-Hill Professional.
- [7] Hofstede, G. (1991). *Cultures and organizations, software of the mind. Intercultural cooperation and its importance for survival*. London : HarperCollinsBusiness.
- [8] Hofstede, G. (1980a), *Culture's Consequences: International Differences in Work-Related Values*, Beverly Hills, CA: Sage.
- [9] Hofstede, G., Arrindell, W. (1998). *Masculinity and Femininity: The Taboo Dimension of National Cultures*. SAGE
- [10] Inglehart, R. and Welzel, C. (2005). *Modernization, Cultural Change, and Democracy: The Human Development Sequence*. Cambridge University Press.
- [11] Lane, H. W., DiStefano, J. J., & Maznevski, M. L. (2000), *International Management Behavior*. 4th edn., Oxford: Blackwell.
- [12] LeBaron, M. and Pillay, V. (2006). *Conflict Across Cultures: A Unique Experience of Bridging Differences*. Intercultural Press.
- [13] Lustig, M. W., and Koester, J. (2002). *Intercultural Competence: Interpersonal Communication Across Cultures*. Allyn and Bacon.
- [14] Noorderhaven, N. G. and Tidjani, B. (2001) "Culture, Governance, and Economic performance: An explorative study with a special focus on Africa", *Journal of Cross-cultural management*, vol.1, no.1, pp. 31-51
- [15] Packer, Corinne A. A. (2002). *Using Human Rights to Change Tradition: Traditional Practices Harmful to Women's Reproductive Health in sub-Saharan Africa*. School of Human Rights Research Series.
- [16] Population Reference Bureau (2008). 2008 World Population Data Sheet http://www.prb.org/pdf08/08WPDS_Eng.pdf
- [17] Thompson, Herb. (2001). *Culture and Economic Development: Modernization to globalization*. In *Theory and Science*
- [18] UNAIDS (2008). *Report on the global AIDS epidemic, July 2008*, UNAIDS http://data.unaids.org/pub/GlobalReport/2008/GR08_2007_HIVPrevWallMap_GR08_en.jpg
- [19] UN Statistics Division (2009). *UN Data: A world of information* <http://data.un.org/Data.aspx?d=SNAAMA&f=grID%3A101%3BcurrID%3AUSD%3BpcFlag%3A1>
- [20] <http://www.geert-hofstede.com/>

Full name: Mgr. Daniel M. Balcha

Institution: Faculty of Economics and Management, Czech University of Life Sciences Prague

Street: Kamýcká 129

City: 165 21 Praha 6 Suchdol

Email: danielmessele@gmail.com

EUROPEAN SOCIAL FUND MANAGEMENT AND ITS CONTRIBUTION TO REGIONAL DEVELOPMENT

Lenka Brown

ANNOTATION

The main objective of this paper is to analyze and to compare the European Social Fund (ESF) programme implementation in the Czech Republic both in the shortened programming period 2004-2006 and in the new programming period 2007-2013 from the point of view of the application of “partnership” as one of the key principles of the EU structural policy. The main hypothesis of the article is that the inappropriate application of partnership causes less strategic and less consistent focus of the supported operational programmes and that it also makes the administrative procedures related to the European Social Fund programme management more complex and more difficult than they have to be. The analyses presented in this paper, therefore, evaluates the impact of application of partnership at the level of programme management and also evaluates the experience concerning “partnership” gained during the ESF programme implementation in the Czech Republic in the shortened programming period 2004-2006 and the usage of this experience in the implementation of the new ESF programmes prepared in the Czech Republic for the new programming period 2007-2013.

KEY WORDS

Economic and Social Cohesion Policy, European Social Fund, European Union, operational programmes, partnership, programming period

INTRODUCTION

The main objective of this paper is to analyze and to compare the European Social Fund (ESF) programme implementation in the Czech Republic both in the shortened programming period 2004-2006 and in the new programming period 2007-2013 from the point of view of the application of “partnership” as one of the key principles of the EU structural policy.

All the outcomes of the presented analysis were achieved during the realization of the grant project No. 34/08 provided to the author from the Internal Grant Agency of the University of Economics in Prague in 2008.

AIM AND METODOLOGY

This paper presents a comparison of partnership approach application in the European Social Fund programmes realized both in shortened programming period 2004-2006 and new programming period 2007-2013.

A desk research was applied as a basic method of the presented comparative analyses.

RESULTS

Partnership principle is one of the key principles of the EU economic and social cohesion policy. It is implemented at three levels: European level, programme level, and project level [1, 3].

At the European level, the partnership principle implies a close co-operation between national/regional authorities responsible for the programme preparation and management and

the European Commission as the main EU institution responsible for the Structural Funds management at the EU level [5, 6].

At the project level, the partnership approach means a close co-operation between several organizations within the same project. Partnership at the project level can therefore significantly increase the added value of the project because it puts together important partners while solving the same problem (e. g. very often a labor office co-operates with a NGO dealing with the same target group etc.).

At the programme level the partnership principle is to be applied especially during preparation, monitoring and evaluation of the programme. Preparation of the programme means the preparation of the programming documentation and its negotiation with the European Commission representatives. The partnership in preparation usually means in the conditions of the Czech Republic an establishment of the common working groups for the programme document preparation under the responsibility of the managing authority of the programme. The partners invited to participate in these working groups are usually representatives of other ministries, regions, economic and social partners, universities, scientific organization, NGOs etc. [5, 6]. Within the programmes financed by the European Social Fund also the NGOs dealing especially with the equal opportunities between men and women are represented at the working groups [4, 7].

The monitoring of each programme or of the programmes realized in the same region is ensured by the Monitoring Committees established also in accordance with the application of the partnership principle. Therefore, the representatives of other relevant ministries, regional authorities, economic and social partners etc. as in the case of the preparation of the programmes are included in the monitoring committees. The main objective of these committees is to monitor the programme realization at the highest, programme level. The members of the monitoring committees are therefore informed about any key element or aspect of the programme implementation, they actively participate on the decision making e. g. concerning the approval of the selection criteria and appraisal procedures applied during the assessment of the projects, the approval of the implementation reports, both annual and final, the approval of the measures planned to be implemented regarding the publicity of the programme and providing the information to the general public [5, 6].

The partnership in evaluation of the programmes is usually realized not directly through the sessions of the monitoring committee, although this option is also possible, but through the evaluation steering groups focused on evaluation and established under the responsibility of the monitoring committees. This approach concerning the partnership principle application in the area of evaluation has been used not only in the Czech Republic, but also in other member states, e. g. the United Kingdom and its programmes financed from the European Social Fund. A big question appears while discussing the partnership principle applied at the management of the programmes itself. In fact, there is no such an obligation or requirement in *Acquis Communautaire*. However, in the Czech Republic the programmes financed from the European Social Fund are both in the shortened programming period 2004-2006 and in the new programming period 2007-2013 often managed not only by the managing authority itself, but partially also by other public authorities or regions which act in case of programme management under the responsibility of the managing authority as its intermediary body or defined final beneficiary [5, 6]. The delegation and the performance of some responsibilities of the managing authority at the level of intermediary bodies or defined final beneficiaries is crucial not only for the institutions or authorities acting as these bodies but also for the overall programme management. These bodies can not only participate in preparation, monitoring and evaluation of the programmes or its parts (esp. priorities in the programming period 2004-2006 or priority axes in the programming period 2007-2013), but they also can directly influence the selection procedures applied while assessing the project application and

therefore even the list of supported projects. They can also directly manage both individual calls for proposal, the information campaign realized within “their” priorities or priority axes, the payment procedures etc.

The application of the partnership approach also at the level of programme management seems to be the further application of this principle than it is required by the Acquis communautaire. However, very often these roles in the management of the programme itself “tie hands” or lower the independency of the representatives of the intermediary bodies/defined final beneficiaries e. g. in the monitoring committees or the evaluation steering groups because since these representatives (representatives of relevant ministries or regional authorities, in some cases even representatives of the NGOs) become a part of the management of the programme itself, they start to be also fully responsible for the realization of the part of the programme where they had been appointed as the responsible intermediary body/defined final beneficiary.

Although the partnership at the programme management was in case of the European Social Fund programmes of the Czech Republic applied both in the shortened programming period 2004-2006 and in the new programming period 2007-2013, the most evident application of partnership at the programme management level is in case of the Human Resource Development Operational Programme realized in the shortened programming period 2004-2006. Within this programme, there were 3 intermediary bodies and 8 defined final beneficiaries (excluding the role of regions which also acted in some activities in the position of final beneficiaries). Consequently, within this programme there were 19 members of the Monitoring Committee representatives of the implementation bodies of the programme while the total number of the members was 38. Additionally, when we count together both representatives of implementation bodies represented at the Committee together with other representatives of the same organization (however not directly involved in the programme management), we can see that 24 members of the Committee are either directly involved in the programme management or represent the same organization which is directly involved in the programme management. From this analyses we can clearly see that the Monitoring Committee is mainly composed of the bodies directly involved in the programme management, and therefore, they cannot at the same time manage the programme and independently supervise its realization.

What is especially important as for the delegation of the part of the programme management on the intermediary bodies or defined final beneficiaries is that in fact there is no real necessity of doing so, because all the key decisions which are nowadays delegated on these bodies could be taken together in accordance between the managing authority and these bodies through the proper application of the partnership approach in preparation, monitoring and evaluation of the programmes. The real needs of the regions and other relevant ministries could be reflected in the programming documents, the appropriate appraisal procedures could be ensured at the level of the monitoring committees and their steering groups etc.

From this point of view, the further application of the partnership approach including its application on the programme management therefore does not seem to be fully adequate and necessary as for the Acquis communautaire concerning the structural funds management at the level of the member states and it even seems to weaken the transparency and objective outcomes of the partnership approach applied in monitoring and evaluation of the programmes.

Furthermore, the application of partnership in the programme management even culminated in the new programming period 2007-2013 in the Czech Republic when two programmes financed by the European Social Fund have been prepared and are nowadays managed (OP Human Resources and Employment and OP Education for Competitiveness) while the nearly same supported areas were included only in one OP financed from this fund in the

programming period 2004-2006. It is clear that the more complicated structure of the programmes, causes more problems to the member states during management and realization. The member states cannot change the financial allocations of the programmes during its realization, they have further obligations while managing an individual programme than individual priorities or priority axes supported within the same programme etc.

Therefore based on our analyses, we can sum-up that the inappropriate application of partnership causes less strategic and less consistent focus of the supported operational programmes and that it also makes the administrative procedures related to the European Social Fund programme management in the Czech Republic more complex and more difficult than they have to be.

CONCLUSION

The partnership approach is a crucial aspect of the programmes financed from the European Social Fund both in the programming period 2004-2006 and in the new programming period 2007-2013. However, at the level of Acquis Communautaire it is required to be applied at the programme level only within the preparation, monitoring and evaluation. In spite of that, the Czech managing authorities applied the partnership approach both in the shortened programming period 2004-2006 and in the new programming period 2007-2013 also at the management of the programmes. The most evident it was in the case of Human Resource Development Operational Programme supported in the programming period 2004-2006 where three intermediary bodies and eight defined final beneficiaries were appointed.

As for the consequences of the application of this principle within the management, it seems to cause a less strategic and less consistent focus of the supported operational programmes and it also makes the administrative procedures related to the European Social Fund programme management more complex and more difficult than they have to be.

BIBLIOGRAPHY

[1] BROWN, L., FANTOVÁ-ŠUMPÍKOVÁ, M., PĚCHOTOVÁ, B., PĚLUCHA, M., POTLUKA, O.: Doporučení k efektivnímu a průhlednému užívání a čerpání prostředků ze strukturálních fondů. Praha: Transparency International – Česká republika, 2007. ISBN: 978-80-903032-2-5.

[2] BROWN, L., STAROŇOVÁ, L.: Výběrová kritéria a postupy hodnocení projektů financovaných z Evropského sociálního fondu v ČR. Aktuální problémy v ekonomii a v podnikatelské činnosti v kontextu Evropské unie. Bratislava: Bratislavská vysoká škola práva, 2008. ISBN: 978-80-969320-3-0.

[3] BROWN, L.: Partnerství a jeho podpora v programech podporovaných z Evropského sociálního fondu v České republice. Recenzovaný sborník z mezinárodní vědecké konference Veřejná správa a partnerství, Bratislava: Ekonomická univerzita, 2007. ISBN 978-80-225-2425-4.

[4] Nařízení Rady (ES) č. 1081/2006, o ESF (pro programové období 2007-2013)

[5] Nařízení Rady (ES) č. 1083/2006, o obecných ustanoveních k ERDF, ESF a FS (pro programové období 2007-2013)

[6] Nařízení Rady (ES) č. 1260/1999, o obecných ustanoveních o strukturálních fondech (pro programové období 2000-2006)

[7] Nařízení Rady (ES) č. 1784/1999, o Evropském sociálním fondu (pro programové období 2000-2006)

[8] Operační program Lidské zdroje a zaměstnanost ČR

[9] Operační program Praha – Adaptabilita

[10] Operační program Rozvoj lidských zdrojů ČR

- [11] Operační program Vzdělávání pro konkurenceschopnost ČR
- [12] Program Iniciativy Společenství EQUAL
- [13] Sdělení Komise (2003) 840 vymežující pravidla pro druhé kolo Iniciativy Společenství EQUAL
- [14] Společný regionální operační program

Full name: Mgr. Lenka Brown
Institution: University of Economics, Prague
Street: Nám. W. Churchilla 4
City: Prague 3
Email: brownl@vse.cz

THE CONTRIBUTION OF TRANSPORT INFRASTRUCTURE TO REGIONAL DEVELOPMENT. A CASE STUDY OF AN AIRPORT

Sonia Huderek-Glapska

ANNOTATION

Infrastructure beside labour and capital is regarded as one of the productive inputs which influence economic growth. Investment in transport infrastructure can stimulate private sector, act as an engine for regional development. Among variety of methods adopted to measure the impact of transport infrastructure on higher productivity of private production factors the one used in this paper concentrates on airport as an example of point transport infrastructure. Direct and indirect changes in income and employment which are induced by the new opportunities offered by the existence of airport in a region are considered in this paper

KEY WORDS

regional development, transport infrastructure, airport expansion

INTRODUCTION

Transport infrastructure objectives have effects that extend well beyond their fundamental transferring function. The main purpose of transport infrastructure investment is change in generalized transport costs via shorter distance and higher speed which lead to reductions in production costs [9]. Increase in productivity in firms due to lower labour, capital and fuel costs manifest itself in the form of change in value added. Another effect of change in transportation costs is increase in accessibility of locations. Better infrastructure endowment in the region or country gives rise to more equal distribution of services in space. Moreover substitution and complementarity relationship between labour, private capital and infrastructure have effects upon employment. These socio-economic impact that result from infrastructure investment in some cases may be of long duration. Those long-term impact is associated with infrastructure operation. Various categories and types of impact expected to occur in response to transportation system changes. Among benefits there are also costs especially the environmental one of transport infrastructure. However the aim of this study is to concentrate on benefits of air transport facilities and its specific role in a regional economy. Section 2 of this paper provides an overview of the methods adopted to measure the economic impact of transport infrastructure in general and air transport infrastructure in particular. Section 3 presents first results of research conducted in Polish regional airports using the method of long term effect and estimating the economic impact as it is produced (AIIP) [8]. The methodology proposed by U.S. Federal Aviation Administration [6] and developed by the European Region of Airports Council International [1] is adopted in this paper. The last section contains the summary and conclusion.

AIM AND METHODOLOGY

The aim of this study is to evaluate the economic significance of existing or proposed air transport infrastructure or to study the consequences of increased activity at an airport. From the very beginning air transport infrastructure was run and financed by local or central government and treated as public utility goods rather than profitable business entity. Facing the competition for public expenditure governments have underinvested in airports and related infrastructure. Experiencing the deficit in public finance most OECD countries continue to

restrict state investment in the air transport sector which caused bottlenecks. Simultaneously as far as administrative investment allocation is concerned only public sector can invest well ahead of forecast demand. Since the supply infrastructure is likely to generate demand the argument is that only the public sector will stimulate the development benefits that inevitably follow from infrastructure investment [3]. On the other side, change in attitude towards airports is observed from quasi public utility good to commercial enterprises that are able to generate a satisfactory return on the investment [7]. Developing the methods that measure external benefits of air transport is important not only as far as choice of public finance allocation is concerned but also relevant in front of privatization waves that soak the European airports recent years.

In developing a model to measure the socio-economic effect of transport infrastructure many macro and microeconomic approach were considered. The literature on the relationship between transport infrastructure and economic growth has long tradition¹. However there was a lack of literature in measuring the economic impact of air transport infrastructure. Expansion of transport infrastructure might well have temporary and non-temporary effects on the demand side and supply side of the economy [9]. The temporary effects on the demand side relate to the increase in income and employment during the period in which the investment takes place because of activities of construction firms and their suppliers. Non-temporary effects of the expansion of the airport in the demand side consist of the operation and maintenance of the airport facilities. Non-temporary effect in the supply side include the impact on productivity and the location activities for example reduction in generalized costs, increase in region attractiveness². The study of Butler and Kiernan [6] emphasis two main indicators that measure the airport importance to economy: transportation benefit and economic impact. The first effect is related to the cost-benefit analysis and indicate benefits in terms of time savings, cost avoidance, transportation safety etc. [8]. Economic impact is the regional economic activity, employment and payroll that can be attributed directly and indirectly to the operation of local airport [8]. Butler and Kiernan [6] identifies input-output methods as a one way of measuring economic impacts, using Regional Input-Output Modelling System (RIMS II). This Modelling System was one of the first synthesis of alternative methodologies to evaluate the economic impact of airports developed by Federal Aviation Administration (F.A.A.). Multipliers derived from RIMS II can be adopted only to US airports however similar sub-regional input-output model was developed to UK market by Batey et.al. [2].

Economic impact of airport in input-output methodology was classified into three categories: direct, indirect and induced [6]. According to the FAA research methodology direct effect concerns the consequence of economic activities carried out at the airport by airlines, airport management, fixed base operations and other tenants with a direct involvement in aviation. ACI [1] defines the direct impact with the distinction on on/offside activities. In practice there is slight difference between those two approach. Essential data for measuring the direct impact are gathered from airport operator income statements together with detailed

¹ Probably the first studies measuring the increasing returns of public investment were conducted by Dupuit (Dupuit J. *On the measurement of the utility of public works*, in: Readings in Welfare Economics, 1969), who was seeking an economic criterion for the construction of the public works and introduced both the welfare implications of marginal-cost pricing and the use of consumer's surplus as a measure of benefits. Research on impact of transport infrastructure on regional development was conducted since mid-1980's by D.A. Aschauer, D. Biehl, K. Button, P. Nijkamp, P. Rietveld, R.W. Vickerman.

² Compare Stough R.R., Lall S.V., Trice M.P. (1999) Infrastructure and technology in US metropolitan regions, Institute of Public Policy, George Mason University, study that examines the impact of infrastructure availability in a region on the location of high-tech companies.

information on employees, expenses and revenues and from personal interviews with companies located at the airport. Survey with business entities helps to distinguish those activities in the firm that are direct related with airport activities. It is especially important while conducting research of large companies that have many activities apart from aviation or operate in several airports. The next effect – indirect impact, measures the employment and income generated in the economy in the chain of suppliers of goods and services to the direct activities [1]. This approach requires personal survey with hotels, restaurants, travel agencies, leisure activities etc. and from practical point of view it is time consuming and cost generating to measure the total indirect effect. Solution adopted by practitioners³ who measure the economic impact of airports is to estimate passengers expenses. Resident passenger are asked to answer the question concerning the amount of money they spent during their stay in the region and only the off-site expenses of visitors are considered as indirect impact. The third economic effect of airport activity is induced impact defined as employment and income generated by the spending of incomes by the direct and indirect employees [1]. In practice induced impact is the result of the multiplier effect of direct and indirect impact. The difficulty that occur while estimating the induced impact is the choose of proper multiplier which should consider only the regional effect and not the leakages of spending outside the region. The appropriate multiplier factor depends on the degree of economic self sufficiency of the region not on the level of airport activity [6]. The total effect of airport activity in region is the sum of direct indirect and induced impacts.

In this paper similar methodological proposal of measuring the effects of airports activity is considered. Quantitative aspect of airport operation and other activities related with it on output, income and employment is evaluated. Economic impact is estimated as it is produced, avoiding the additional complication of the strict differential approach [8]. The AIIP methodology (measuring the impact as it is produced) does not estimate the economic activity that would not have occurred in the absence of the airport. The generation of new, additional and transferred from other sectors economic activity that has been generated due to the airport business requires additional research.

RESULTS

The study at microanalysis level of main airports in Poland was carried out. Central airport and four out of eleven regional airports were taken into consideration in this research. The study period was 2006-2007. Direct, indirect and induced impact based on the methodology proposed by aviation institution [1;6] was estimated. In measuring the indirect effect passenger survey methodology was adopted. As far as difficulties in choice of regional multipliers are concerned only the data of direct and indirect effect are comparable and only those two impacts are included in this paper. First results of airport economic research are presented below.

Overview of air transport infrastructure in Poland

For the very beginning air transport in Poland was nationalized and the management of airports and air carriers was passed on to the state authorities. Network of airports in Poland consists of one central airport located in capital city – Warsaw and eleven regional airports. The number of served passenger and the ownership character differentiate airports. Until mid-1990's air traffic in Poland was centralized which means that more than 80% of scheduled flights were realized from central Warsaw airport and market was dominated by national

³Study that adopted passenger approach was conducted in Bordeaux Airport, see *L'envol, Special Impact economique, Aeroport de Bordeaux, Edition Speciale, 2003*;

carrier – LOT. The monopolistic position of the flag carrier in airports, high fares and lack of opening new direct connections with other European airports have changed after adapting air regulations to EU standards during Poland accession to the Member States. After 2004 deregulated market started to develop and regional airports reveal their stifled potential. Expansion of airports activity has increased in productivity, employment and investment of the region.

Direct effects of air transport infrastructure

Evaluation of the direct impact of an airport on the regional economy has to take into account the following factors: the number of people employed in on-site enterprises, revenues of these enterprises, their investment outlays, the sum of taxes and social benefits paid to the state and the local government. Figure 1 presents direct activities associated with an airport and employment in Gdansk, Wroclaw and Poznan airports.

Fig.1 Employment in chosen economic entities located in the neighbours of an airport in chosen Polish airports in 2006.

Airport	Number of passenger in 2006 (mln)	Number of economic entities at airport		Employment			
		Business and services	Total	Business and services	Airlines*	Airport operator	Total
Gdansk	1,5	16	53	72	21	172	730
Wroclaw	0,8	15	57	93	17	188	570
Poznan	0,6	13	78	61	25	131	550

* Employment within airlines branch located at the airport

Source: Own research conducted in Polish airports in 2006-2007 supervised by Professor Marek Rekowski from The Poznan University of Economics.

These data can serve as a first estimation of the direct economic impact of airports in Poland. It can be estimated that on average million passengers generate 704 direct work places and this is below the European average which is estimated at the level of 750 direct jobs[1]. The reason is that aviation market in Poland is has just started to develop, air traffic is increasing and regional airports that were underinvested have undertaken expansion plans and created more new job places.

Indirect effects of air transport infrastructure

In order to estimate the indirect effect of an airport passenger survey with question related to their expenses and length of stay at the final destination was run at each airport. The sample of questioned passenger reflect the structure of scheduled air traffic at each airport. In order to avoid double counting the number of scheduled air traffic is divided by two. Only off-site expenses of visitor were consider as indirect impact.

Fig. 2 Indirect income generated to the region through Gdansk, Katowice and Wroclaw airport in 2006.

Airport	Number in 2006 (million)	Percentage of visitor passenger	Average expenditure of visitor passenger	Average length of stay	Indirect income to the region
Gdansk	1,5	63,9%	82 EUR	4,6 day	181million EUR
Wroclaw	0,8	71,3%	109 EUR	3,7 day	115million EUR
Katowice	1,1	56,1%	140 EUR	2,6 day	112million EUR

Source: *Own research conducted in Polish airports in 2006-2007 supervised by Professor Marek Rekowski from The Poznan University of Economics.*

On average, one visitor passenger during his stay and through expenses made in region generates 381 EUR indirect income to the region. Total indirect income generated by a small regional airport (with 0,5-1,5 million passenger per year) is more than a hundred million EUR per year.

CONCLUSION

The paper presents estimation of air transport infrastructure impact on the region based on the methodology proposed by aviation institution [1;6] and adopted to market conditions in Poland. Microanalysis at airport level were conducted in main Polish regional airports. First results reveal that there is a great economic and social impact of airport on regional economy as far as job generation and increasing production effectiveness are concerned. However there is a need for conducting more in depth study. Effects of air transport infrastructure is measured as it is produced. Direct and indirect impact do not estimate the economic activity that would not have occurred in the absence of the airport. Furthermore there is a need to estimate to what extent air passenger demand is driven by an airport and to what extent by the attractiveness of the region in which airport is located. Modeling framework based on extended input-output analysis in which emphasis is placed on regional characteristic like demographic and economic variables are concerned need to be developed in next stage of air transport contribution to regional economy research. Finally, bilateral relation between regional development and investment in transport infrastructure should be investigated.

BIBLIOGRAPHY

- [1] ACI Europe, The Economic Impact Study Kit, Brussels, 1993
- [2] Assessing The Benefits Of Transport, European Commission Of Ministers Of Transport, OECD, 2001
- [3] Banister D., Transport and Urban Development, Taylor and Francis, 1995
- [4] Batey P.W. J., Madden M., Scholefield G., Socio-Economic Impact Assessment Of Large-Scale Projects Using Input-Output Analysis:A Case Study Of An Airport., Regional Studies, Vol.27.3, Pp 179-191
- [5] Biehl, D. The Contribution Of Infrastructure To Regional Development, European Communities, Luxembourg, 1986
- [6] Butler S.E., Kiernan L.J., Estimating the Regional Economics Significance of Airport, U.S. Department of Transportation F.A.A., 1992
- [7] Doganis R., The Airport Business, Routledge, 1992
- [8] Montalvo, Jose G., A Methodological Proposal to Analyze The Economic Impact Of Airports, International Journal Of Transport Economics, 1998, 25(2), 181-203
- [9] Rietveld P., Bruinsma F., Is Transport Infrastructure Effective? Transport Infrastructure And Accessibility: Impacts On The Space Economy, Springer-Verlag, 1998

[10] The Regional Economic Impact of an Airport: The Case of Amsterdam Schiphol Airport, J. Hakfoort, T. Poot, P. Rietveld, *Regional Studies*, Vol.35.7, pp 595-604,2001

Mgr Sonia Huderek-Glaska
The Poznan University of Economics
Niepodleglosci 10
Poznan 61-875
sonia.huderek@ae.poznan.pl

AGENDA 21 AND LOCAL AGENDA 21 IN CZECH REPUBLIC

Libor Lněnička

ANNOTATION

This paper tells about *Sustainable development* and his process in environmental world. The basic document of sustainable development is *Agenda 21*. This document was revealed at the United Nations Conference on Environment and Development (Earth Summit), held in Rio de Janeiro on June 14, 1992, where 179 governments voted to adopt the programme. Agenda 21 is a blueprint on how to make development socially, economically and environmentally sustainable in the 21st century. In this article I would like to show you the most important principles in process of implementation programme Agenda 21 in common life.

KEY WORDS

Sustainable development, Agenda 21, Local agenda 21, Earth summit, European Common Indicators.

INTRODUCTION

Sustainable development is a pattern of resource use that aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but in the indefinite future. The term was used by the Brundtland Commission which coined what has become the most often-quoted definition of sustainable development as development that "meets the needs of the present without compromising the ability of future generations to meet their own needs."¹

Sustainable development ties together concern for the carrying capacity of natural systems with the social challenges facing humanity. As early as the 1970s "sustainability" was employed to describe an economy "in equilibrium with basic ecological support systems"². Ecologists have pointed to the "limits of growth" and presented the alternative of a "steady state economy" in order to address environmental concerns.

For Sustainable development can we use more definitions. For example I would like to show you the most important:

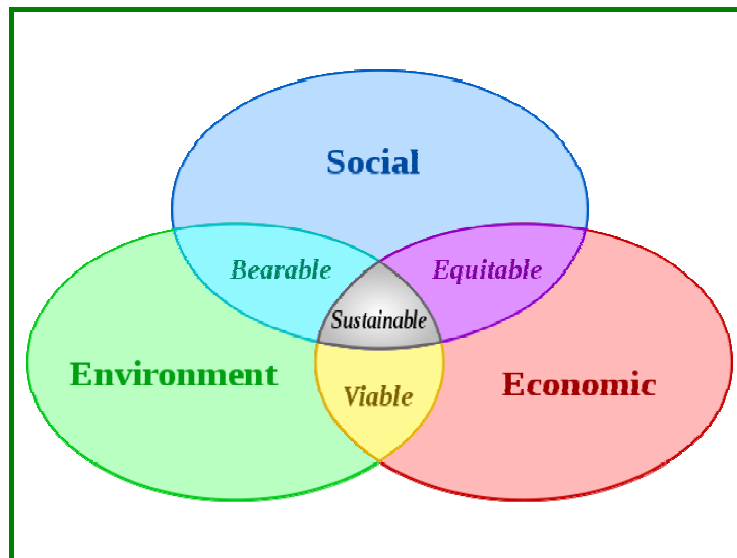
- Means development which satisfies current needs without compromising the opportunities for future generations to fulfil their own needs. (G. H. Brundland, Our Common Future, 1987)
- A complex set of strategies, which make it possible to meet human needs, material, cultural as well as spiritual, through economic means and technology, while fully respecting environmental limits; to make this possible on the global scale of today's world, their social-political institutions and processes need to be re-defined at the local, regional and global levels. (Rynda, 2004)

The field of sustainable development can be conceptually broken into three constituent parts: environmental sustainability, economic sustainability and sociopolitical sustainability.

¹ United Nations. 1987. ["Report of the World Commission on Environment and Development."](#) General Assembly Resolution 42/187, 11 December 1987. Retrieved: 2007-04-12

² Stivers, R. 1976. *The Sustainable Society: Ethics and Economic Growth*. Philadelphia: Westminster Press.

Fig.1 Title Scheme of sustainable development: at the confluence of three constituent parts



Source: http://en.wikipedia.org/wiki/Sustainable_development#cite_note-3, 2008

AIM AND METODOLOGY

The basic aim of this paper is presentation of local development possibilities in specific region in the Czech republic. The discussion about Agenda 21 is from year 1992 very open. We can speak about many activities and possibilities between local authorities and public sector. There are many actors in public sector (officials, public community, people of city, region, deputies of NGO's, etc.). This paper tell about the situation in Czech republic with the accent in South Moravia region.

RESULTS

Agenda 21

Agenda 21 is a program run by the United Nations (UN) related to sustainable development. It is a comprehensive blueprint of action to be taken globally, nationally and locally by organizations of the UN, governments, and major groups in every area in which humans impact on the environment. The number 21 refers to the 21st century. A comprehensive plan of action to be taken globally, nationally and locally by organizations of the United Nations System, Governments, and Major Groups in every area in which human impacts on the environment.

The full text of Agenda 21 was revealed at the United Nations Conference on Environment and Development (Earth Summit), held in Rio de Janeiro on June 14, 1992, where 179 governments voted to adopt the programme. The final text was the result of drafting, consultation and negotiation, beginning in 1989 and culminating at the two-week conference.

The Earth Summit resulted in the following documents:

- *Rio Declaration on Environment and Development*
- *Agenda 21*
- *Convention on Biological Diversity*
- *Forest Principles*
- *Framework Convention on Climate Change*

Agenda 21, the Rio Declaration on Environment and Development, and the Statement of principles for the Sustainable Management of Forests were adopted by more than 178

Governments at the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil, 3 to 14 June 1992.

There are 40 chapters in Agenda 21, divided into four sections. All told the document was over 900 pages:

- ⇒ **Section I: Social and Economic Dimensions** - including combating poverty, changing consumption patterns, population and demographic dynamics, promoting health, promoting sustainable settlement patterns and integrating environment and development into decision-making.
- ⇒ **Section II: Conservation and Management of Resources for Development** - including atmospheric protection, combating deforestation, protecting fragile environments, conservation of biological diversity, and control of pollution.
- ⇒ **Section III: Strengthening the Role of Major Groups** - including the roles of children and youth, women, NGOs, local authorities, business and workers.
- ⇒ **Section IV: Means of Implementation** - including science, technology transfer, education, international institutions and mechanisms and financial mechanisms.

The Commission on Sustainable Development (CSD) was created in December 1992 to ensure effective follow-up of UNCED, to monitor and report on implementation of the agreements at the local, national, regional and international levels. It was agreed that a five year review of Earth Summit progress would be made in 1997 by the United Nations General Assembly meeting in special session.

The full implementation of Agenda 21, the Programme for Further Implementation of Agenda 21 and the Commitments to the Rio principles, were strongly reaffirmed at the World Summit on Sustainable Development (WSSD) held in Johannesburg, South Africa from 26 August to 4 September 2002.

Agenda 21 is a blueprint on how to make development socially, economically and environmentally sustainable in the 21st century. Governments, non-governmental organisations (NGOs), industry and the general public are all encouraged to become involved. Agenda 21 provides a framework for tackling today's social and environmental problems, including air pollution, deforestation, biodiversity loss, health, overpopulation, poverty, energy consumption, waste production and transport issues.

Local Agenda 21

Local Agenda 21 (LA21) is a program that provides a framework for implementing sustainable development at the local level. LA21 aims to build upon existing Local Government strategies and resources (such as Corporate plans, vegetation management plans, and transport strategies) to better integrate environmental, economic and social goals.

To begin the LA21 process it may be helpful to:

- research various approaches and outcomes
- seek political and management commitment
- develop an inventory of existing council strategies and activities
- do a simple assessment of the current state of the area
- tailor the LA21 process to your council requirements
- emphasis that LA21 builds on existing council strategies and resources
- develop a preliminary budget and roles for staff
- provide a report to council on the steps in moving forward

An effective LA21 process should result in:

- a strong partnership between the Local Government and its community
- ongoing community involvement in decision-making.
- integrated decisions which take into account all foreseeable economic, social and environmental considerations.

- a long term sustainability action plan that is successfully implemented and periodically reviewed.
- changes which promote greater sustainability and better environmental outcomes for the community.

Some common initiatives instigated by the LA21 process include increased water and energy efficiency, the control of land clearing and better road and traffic management.

We can work with this document to as a program of particular municipalities, cities, and regions which implements the principles of sustainable development, taking into account local issues. It is designed in cooperation with local residents and organization with the objective of ensuring a high quality of life and the environment in a given location in the long term.

LA21 is a time consuming process which through improving the administration of public matters, allowing for strategic planning (management), involving the public and using the achieved level of knowledge of sustainable development, enhances the quality of life in all respects and heads towards citizens' taking responsibility for their lives as well as for the lives of others.

Many activities and programs leading to a better quality of life and the environment in cities/municipalities/regions could be called LA21. However, individual activities must be part of a long term, clearly defined and publicly accepted sustainable development strategy. Anyone can initiate LA21 (local administration, NGOs, schools, even individuals). The initiating group should engage as many people as possible in the preparation of an action plan, which will subsequently have a need of political backing.

LA21 can be implemented by an action within local administration:

- performance and operation of local administration leading to sustainability,
- inclusion of the principles of sustainable development among the priorities of local self-administrations and in documents,

or performed through other activities within broader communities and units:

- increasing awareness of sustainable development, education,
- advisory, consultancy and information activity,
- engaging the public in decision-making,
- cooperation, partnership,
- creation of a local sustainable development strategy and action plan,
- measuring the efficiency of the LA21 process, informing about and analysis the progress achieved,
- monitoring other specified indicators (e.g. the ECI set of indicators).

CONCLUSION

A prerequisite on the way towards sustainability is the need to measure impacts of urban activities and monitor progress on Local Agenda 21. The European Common Indicators initiative is focused on **monitoring environmental sustainability at the local level**. The ECI initiative was started off in May 1999 with the setting up of a Working Group on Sustainable Indicators (for initiative of and under the supervision of the Expert Group on the Urban Environment and led by the French Environmental Ministry) with the task to develop common (harmonised) indicators for local sustainability, in close collaboration with a wider Group of Local Authorities.

Indicators have been developed according to a bottom up approach since the very beginning of the project, involving local authorities as main actors in the process and improving synergies with existing indicators sets. This shows, on the one hand, to what extent its ethos is actually based upon understanding the real needs of municipalities, and on the other, the

possibilities of achievement of policy objectives from actions that bridge more than one level of governance.

The European Common Indicators are a ready to use, self-contained set of indicators that will help a local authority interested in the quality of its urban environment to begin to monitor progress. Towns and cities can adapt or add to the 10 indicators to suit local circumstances. The focus of the initiative is on helping local authorities monitor their own progress.

Fig.2 European Common Indicators

The European Common Indicators	
1.	Citizens' satisfaction with the local community Headline indicator: Average satisfaction with the local community (overall and mean)
2.	Local contribution to global climate change Headline indicator: CO ₂ emission per capita
3.	Local mobility and passenger transportation Headline indicator: Percentage of trips by motorized private transport
4.	Availability of local public open areas and services Headline indicator: Percentage of citizens living within 300 metres from public open areas >5000 m ²
5.	Quality of the air Headline indicator: Number of PM ₁₀ net overcomings
6.	Children's journeys to and from school Headline indicator: Percentage of children going to school by car
7.	Sustainable management of the local authority and local enterprises Headline indicator: Percentage of environmental certifications on total enterprises
8.	Noise pollution Headline indicator: Percentage of population exposed to L _{night} >55 dB(A)
9.	Sustainable land use Headline indicator: Percentage of protected area
10.	Products promoting sustainability Headline indicator: Percentage of people buying sustainable products

Source: <http://www.timur.cz/en/vysledky-indikatoru-eci.html>, 2008

Indicators chosen by a society to report on it for its own use have surprising power. They reflect shared values and form common decisions. A society which monitors salmon runs in its river or tries to solve the security on its streets will make different choices than a society which only pays attention to the economy growth measured in terms of GDP.

An important group of local indicators of sustainable development is the group of so called programme indicators applied in strategic (planning) processes. These serve as a control instrument for the evaluation of the effectiveness and fruitfulness of the planned measures (for example within the frame of strategic plans of town development). They are elaborated during the planning processes always for a specific purpose.

The endeavour to observe indicators of sustainable development is thrived not only on the local but also on the national and international levels. Apart from the set of European Common Indicators there are several intents on the standardization of unified indicator sets. On the local level there are several examples abroad (Germany, Great Britain, USA, Canada, etc.).

BIBLIOGRAPHY

- [1] Agenda 21 pro udržitelnou výstavbu. editor českého vydání Petr Hájek. - Praha; Rotterdam: České vysoké učení technické CIB, 2001. - 120 s. : graf. ISBN 80-01-02467-990-6363-015-8.
- [2] Agenda 21. vyd. 1. Praha: MŽP 1998. 332 s. ISBN: 80-7212-039-5.
- [3] *Environment in the European Union 1995*, European Environment Agency, ISBN 92-827-5263-1.
- [4] European Common Indicators. Milano: Ambiente Italia Research Institute, 2003
- [5] Johannesburg Summit 2002, Czech republic, country profile, United Nations, 2003
- [6] KRAJŠEK, B. *Úvod k místním Agendám 21 v České republice*. 1. vyd. Praha: MŽP, 1998. 44 s. ISBN: 80-7212-052-2.
- [7] Moldan, Bedřich. *Indikátory trvale udržitelného rozvoje*. 1. vyd. Praha : Ministerstvo životního prostředí ČR, 1996. 87 s. tab. Edice:Phare. ISBN 80-7078-380-X.
- [8] REITSCHMIEDOVÁ, A *Udržitelný rozvoj a Agenda 21*. 1. vyd. Praha: MŽP, ČEÚ, The British Council, 1999. 8 s. Průvodce pro místní Agendy 21, sešit 1.
- [9] Report of the World Summit on Sustainable Development, United Nations. New York, 2002
- [10] SANTER, J.: *AGENDA 21 - THE FIRST 5 YEARS*, Implementation of Agenda 21 in the European Community, 1997
- [11] ŠAFÁŘOVÁ, B.: *Implementace místních Agend 21 v České republice*. 1. vyd. Praha: Universita Karlova, 2003, Institut sociologických studií, Katedra Veřejné a sociální politiky. Diplomová práce - ved. dipl. práce Eva Kružíková. 123 s.

Full name Ing. Mgr. Libor Lněnička
Institution Faculty of Education, Masaryk University
Street Poříčí 7
City 603 00 Brno
Email lnenicka@ped.muni.cz

THE REGIONS' PROGRAMME DOCUMENTS ON TOURISM FROM THE POINT OF VIEW OF STRATEGIC MANAGEMENT

Martin Luštický

ANNOTATION

Elaboration of the conceptual and programme documents is one of the public administration's basic functions. The individual steps leading to determined aims are realised by means of this documents. The sphere of tourism is no an exception. The development documents of regions in tourism must respect the basic principles of strategic management and strategic thought process with respect to increasing competitive pressures and development trends. This is the only way for destinations to achieve the competitive effect and ensure their long-time development.

KEY WORDS

Strategy, tourism, strategic documents, development, analysis

INTRODUCTION

Tourism is ranked among the most important economics branches and its importance for regional development is still increasing. In a number of regions, which have no presumptions for the development of other economic activities, which are structurally involved, or where their natural and cultural-historical landmarks have a high rate of quality and uniqueness, tourism becomes the dominant factor of their development. Tourism has a significant multiplicative effect – e.g. in the case of increasing of an employment - and as such it should be accordingly supported by municipal authorities.

The concrete spheres, which are supported by management of the region, are inscribed in the particular **strategic (programme) documents**. The problem of tourism is inscribed in the appropriate part of the regional development programmes and mainly in specific programme documents, which the sphere of tourism describe in great detail. For example tourism in the South Bohemian Region is accented not only in development programme of the region, but also in the Strategy of Development of Tourism in the South Bohemian Region, which results from the basic region's priorities in tourism and elaborates them in detail.

The strategic documents are fundamental for a continual development of a territory in a long-time perspective because of the fact that only high-quality planning can ensure a fullutilization of its growth potential. Using these documents as an tool of management significantly contributes to a **competitive strength** of the region in all strategic spheres. This fact is most visible in the sphere of tourism, if a quality-elaborated document can ensure a better managerial-marketing management for the particular area, as an object of strategic management, and thereby an opportunity to attain a **higher value of comparative advantage**.

Unfortunately in last ten years an elaboration of the regional's programme documents wasn't combine with modern research in tourism, which can sustain their practical usage. The set of different approaches was applied during their elaboration. This fact has led to their substantial disunity in the case of solution of primary questions, different structure, form, range and quality [9].

AIM AND METHODOLOGY

The main object of this paper is to refer to the possible application of the basic principles and methods of strategic management in the regional specific programme documents in the Czech Republic in the sphere of tourism. The paper is primarily focused on the analytical methods with a view to evaluate the present situation and suggest the application of new more suitable methods.

This draft of the new analytical methods is based on the analysis and synthesis of the information acquired from bibliography, from author's own research of strategic documents and also from the experience acquired during doctoral studies at the Jindřichův Hradec-based Faculty of Management of University of Economics Prague.

THE STRATEGIC DOCUMENTS IN TOURISM

The strategic planning is a complex process of creating and enforcement of the region's unity of interest. **The strategic documents** are a tool of the regional development co-ordination and simultaneously function as an integrating component of the regional policy, which can guarantee a long-time consistency in influencing of the territorial unit's development [10].

The basic strategic thought process principles should be respected during formulation of the strategic documents. These principles can be rank among the most important ones – the principle of permanency creation of the strategy (tourism intensely responds to the changes in society and that's why it is constantly developing branch, this is the reason for continuous updating of the documents and appropriate corrections with regard to their fulfilment), the principle of cross-disciplinarity (tourism influences many branches of human activity) and the principle of global systemic approach (tourism is influenced by many global trends) [8].

One of the most important objects of the strategy in tourism is to help the tourist destination to compete with the other destinations and be successful in its development. **The aim** of the strategy is an acquirement of the **comparative advantage** [3, 7]. It can lie in existence of unique tourist attraction (e.g. monument listed in UNESCO World Heritage List, unique natural landscape, place of famous historic event), in offering the attractive tourist services and in their quality, or in efficiency and way of the destination's management.

The main **function** of the development strategic plan in tourism is to find the answers to the following questions:

- which aims should be achieved by the tourist destination in long-time perspective
- which way should be used to achieve these aims
- which instruments and resources should be used

With regard to fulfilment of these main functions the strategic documents use the document's structure, which is approximately similar to the **strategic planning cycle** [4, 7], i.e. the structuring into the analytical part and the part devoted to suggestions. This is the common content of the documents in detail[9]:

- Introduction and basic information (process of the document's elaboration and its main aims, consequence to the other strategic documents etc.)
- Short characteristic of the territory from the tourism's point of view
- Analysis and evaluation of the tourist offer
- Analysis and evaluation of the tourist demand
- System of organization of tourism in the region

- SWOT analysis
- Part devoted to suggestions (vision, aims, set of problems, consequential arrangements and activities)
- Financial framework, implementation, time schedule

This paper is entirely focused on the analytical part of the strategic documents, which creates the information base for the part devoted to suggestions. For an elaboration and post-realization of the strategies it is necessary to ensure the best possible **information**. The **analytical part** of the strategic documents should deal with the summarization, analysis and interpretation of the information. Main object of the strategic analysis is to detect the most important factors affecting the present and future situation of the region [10]. By means of the analytical part it will be possible to identify the critical future problems for the branch of tourism, development trends of this branch, present position of the destination, its developing possibilities, strength of its main competitors, main resources of the destination in tourism, crucial competences etc. All these elements are necessary to correct determination of the future strategic intentions, which is the content of the documents' part devoted to suggestions.

For fulfilment of the objectives described above it is necessary to eke out the currently used analytical part with another analytical methods modified for the conditions of tourism.

THE EXTERNAL STRATEGIC ANALYSIS

Using of the **PEST model**, which describes the external factors from the political, economic, social and technological sphere [7, 8], seems to be suitable for the **macro-surroundings** strategic analysis. These factors are very important for this type of analysis – correct selection of the particular indicators with respect to their impact on tourism, do not use just statical description of this indicators, but be concerned with their progress in time, and finally differentiate in any way the intensity of their impact on tourism in given destination (e.g. the ETOP method). Several suitable indicators are described in the following figure.

Fig. 1 Example of the PEST model in tourism

<p style="text-align: center;">POLITICAL FACTORS</p> <ul style="list-style-type: none"> • stability of the government • membership of international organizations • legislature (e.g. tax laws) • hygienic and technological regulations • foreign investment support • foreign policy 	<p style="text-align: center;">ECONOMIC FACTORS</p> <ul style="list-style-type: none"> • GDP trend • nominal wages value • inflation • unemployment rate • domestic currency exchange rate development • interest rate
<p style="text-align: center;">SOCIAL FACTORS</p> <ul style="list-style-type: none"> • demographic development of population • regional breakdown of population • consumer activity 	<p style="text-align: center;">TECHNOLOGICAL FACTORS</p> <ul style="list-style-type: none"> • progress of information technology • new web application • development of air and railway transport

Source: Own proposal.

In the case of the **branch analysis** it is suitable to use modified models which are standardly used by entrepreneurial subjects. If the tourist destination means to be successful, it has to

carry out to great extent just like a firm. The aim of the branch analysis is to identify the crucial motive forces and factors, which makes the branch attractive for its participants and customers. It is important to estimate the future development trends of the most important forces and factors [3, 4].

The **analysis of the size and development of the market** should be made not only in a local or national surroundings but also in a global measure. This fact clearly results from the characteristics of tourism. Furthermore it shouldn't miss the **analysis of the developing trends** in tourism. It's main aim is to identify these trends and create corresponding tourist products on their basement. Just these destinations, which are able to react to these trends, can succeed in the competitors fight.

Both analyses can essentially influence the selection of accordant strategy. It is impossible to miss out such facts like:

- increasing number of older tourists due to demographic changes in society
- travellers greater emphasis on healthy living style and ecology
- development of information technology
- development of air, railway and individual automobile transport
- increasing travellers demands on services in tourism because of their experiences

On the basis of previous analysis it is possible to identify the **motive change-created forces of the branch** and try to choose from them 2 – 3 forces with the greatest impact on the development of tourism in the particular destination.

The analysis of competitive forces has a connection to the branch analysis and it examines the principle of competition in the branch [7]. Understanding of the competition is very important for strategic decision-making process, because the competitive forces influence per saltum the competitive position and success of the destination. Systematic searching of the competitors and their strategies can essentially facilitate to obtaining the competitive advantage and fulfilment of the indefinable objectives.

Therefore this part shouldn't be missed out in the developing strategic documents in tourism. The destinations should identify their most important competitors in light of number of visitors, also in light of offered tourist services and appoint herewith their **strategic competitive position** in comparison with their competitors. The study of competition should be primarily focused on the recognition of currently used competitor's strategy, its strongest aspects, the analysis of future intentions of the competitor and estimation of their impacts.

The analysis of the strategic groups, which tries to identify the subjects with the same strategic characteristics or which compete on the same base, can help to identify direct competitors of the destination [7, 8]. Each destination utilize its own specifics in competitive struggle for visitor, thus the competitive pressure varies. The results of this analysis can provide a valuable information about main competitors, competition's denotation within the particular strategic groups, eventually they can become a guide for elaboration of the transmigration's strategy to the other group.

THE INTERNAL STRATEGIC ANALYSIS

Success of the destination depends not only on external conditions, but also on destination's **internal sources**. The internal surroundings analysis should deal with these sources and make an answer to the question of correspondence between sources and surroundings in which the

destination plays on. In the special development documents in tourism the internal analysis is solved by means of basic characteristic of the region and mainly by the analysis of tourist offer, attendance and definition of visitor's profil.

The description of **tourist offer**, which is focused mainly on evaluation of region's nature and cultural-historical determinants for tourism development, dominates to the analytical part of the documents. Whereas the description of main tourist products is very reduced. Other important part represents the **analysis of tourism development** in the destination. It acts as a basic indicator of destination's success in the tourist market [9]. The attendance monitoring shouldn't be concerned only with present or past situation, but it should contain also the development prediction – e.g. with the help of some time series analysis methods. The obtained information should serve to destination as a basis to comparison with the competitors and identification of its own position in the tourist market. On the basis of this information it is possible to monitor the geographical structure of the region's attendance, seasonal fluctuations of the attendance, eventually other characteristics (e.g. average length of stay). **Recognition of typical visitor** of the destination is a crucial process for correct alignment of the future strategy a it shouldn't be missed out. It is monitored by means of assorted sociologic and marketing investigations. Their object is to identify the basic characteristic of the visitors.

It will be useful to eke the strategic documents with the **description and prediction of development** of those characteristics which have significant impact on tourism. It can be the demographic structure of inhabitants, rate of unemployment, structure of the economy, environment, safety etc. It is also useful to eke documents with some **modified analyses** used in the corporate environment (e.g. verification of the destination's sources, the key competences, the analysis of critical factors of success from the visitor's point of view). These methods should enable better identification of crucial internal sources of the destination and main factors, which influence visitors' satisfaction.

THE SWOT ANALYSIS

The SWOT analysis method stands between the analytical part and the part devoted to suggestions of the strategic documents. The SWOT analysis should come after finishing of the external and internal analyses. It identifies from ascertained facts those which are important for the destination's development and those which are insignificant. After then it divides the set of high influence facts according to their character into the Strengths and Weaknesses of the destination, Opportunities and Threats. That is why the SWOT analysis becomes an initial step for identification of the destination's main strategic objects, the set of problems and the arrangements. In the strategic documents in tourism the SWOT analysis unfortunately represents the sole analytic instrument, which substitutes the analyses mentioned in this paper, and so it isn't often evident from which facts its conclusions result.

The indisputable advantage of the SWOT analysis is its simplicity and lucidity. On the other hand it is considerably subjective and it doesn't reflect a development of the ascertained facts (it describes only the current situation). Different standard of the SWOT analyses, which differ not only in their contents but also in the level of punctuality and complexity, is the substantial problem of the strategic documents [5].

It will be suitable to take out the SWOT analyses with description of their processing (so-called methodology of an elaboration¹) and with the tool, which can help to distinguish the importance of the particular indicators for development of the destination. It is possible to use the **confrontation analysis** for better evaluation of the creation of the Strengths and Weaknesses. The individual indicators are divided into the individual components and it is possible to observe the reasons of their creation and their effects in the subsequent matrix.

CONCLUSION

The strategic documents became an effective tool of the destinations for reaching required competitive advantage and thereby for their successful development. Ever-rising travellers and competitive destination's pressure sets the increased demands on quality of the strategic planning and quality of the strategic documents themselves.

The aim of this paper is to point at the fact that the high-quality analytic part of the documents is the essential condition for successful strategy of the destination. In such way the destination can flexibly react to the situation in its macro-surroundings, to the current situation and developing trends of tourism and also to the strategies of the competitors. Definition of the crucial internal sources of the destination, focus on the future and finally the synthesis of information into the high-quality SWOT analysis are the others important factors which influence the success of selected strategy.

BIBLIOGRAPHY

- [1] Bowman, C.: *Strategický management*. 1. vyd., Grada Publishing, Praha 1996, ISBN 80-7169-230-1.
- [2] Kolektiv autorů: *Úvod do regionálních věd a veřejné správy*. Vydavatelství a nakladatelství Aleš Čeněk, s. r. o., Plzeň, 2008, ISBN 978-80-7380-086-4.
- [3] Kovář, F., Krhová H.: *Strategický management*. 1. vyd., Vysoká škola ekonomie a managementu, Praha 2007, ISBN 978-80-86730-29-5.
- [4] Kovář, F., Štrach, P.: *Strategický management*. 1. vyd., Oeconomica, Praha 2003, ISBN 80-245-0504-5.
- [5] Krbová, J., Luštický, M.: *Programové dokumenty v cestovním ruchu a jejich vazby*. Mezinárodní Baťova konference pro doktorandy a mladé vědecké pracovníky, 10. dubna 2008, Zlín, ISBN 978-80-7318-664-7.
- [6] Sedláčková, H.: *Strategická analýza*. 1. vyd., C. H. Beck, Praha 2000, ISBN 80-7179-422-8.
- [7] Veber, J. a kol.: *Management II*. 1. vyd., Vysoká škola ekonomická v Praze, Praha 1998, ISBN 80-7079-406-2.
- [8] Veber, J. a kol.: *Management – základy, prosperita, globalizace*. 1. vyd., Management Press, Praha 2007, ISBN 978-80-7261-029-7.
- [9] Vystoupil, J., Holešinská, A., Kunc, J., Šauer, M.: *Metody pro tvorbu strategických a programových dokumentů cestovního ruchu*. Masarykova univerzita, Brno, 2007, ISBN 978-80-210-4290-2.
- [10] Wokoun, R., Malinovský, J., Tamborský, M., Blažek, J. a kolektiv autorů: *Regionální rozvoj. Východiska regionálního rozvoje, regionální politika, teorie, strategie a programování*. Linde, Praha 2008, ISBN 978-80-7201-699-0.

¹ Methodology of the elaboration has an important informative power. It is possible to get important pieces of knowledge from the methodology – for example whether the SWOT analysis was elaborated by the expert or community way or by combination of these ways; schedule of the elaboration; how the analysis corresponds or will correspond with the programme part of the document (i.e. how it will be linked with the programme part).

Full name: Ing. Martin Luštický

Institution: Faculty of Management of University of Economics Prague in Jindřichův Hradec

Street: Jarošovská 1117/II

City: Jindřichův Hradec

E-mail: Lusticky@seznam.cz

PERCEPTIONS OF LOCAL DEVELOPMENT

Lukáš Nevěděl

ANNOTATION

The issue of rural governance has started to attract growing interest among the scholar community, and it has become an important topic recently. This paper is based mainly on questionnaire surveys conducted with the leaders of rural municipalities, but it also presents the recent views expressed in rural studies literature which focuses on community empowerment, and where local municipalities are argued to be emphasising the importance of „endogenous“ development, defined as an integrated „bottom-up“ approach with local actors and communities (e.g. MacKinnon, 2002; Woods, 2005; Ilbery (ed.), 1998).

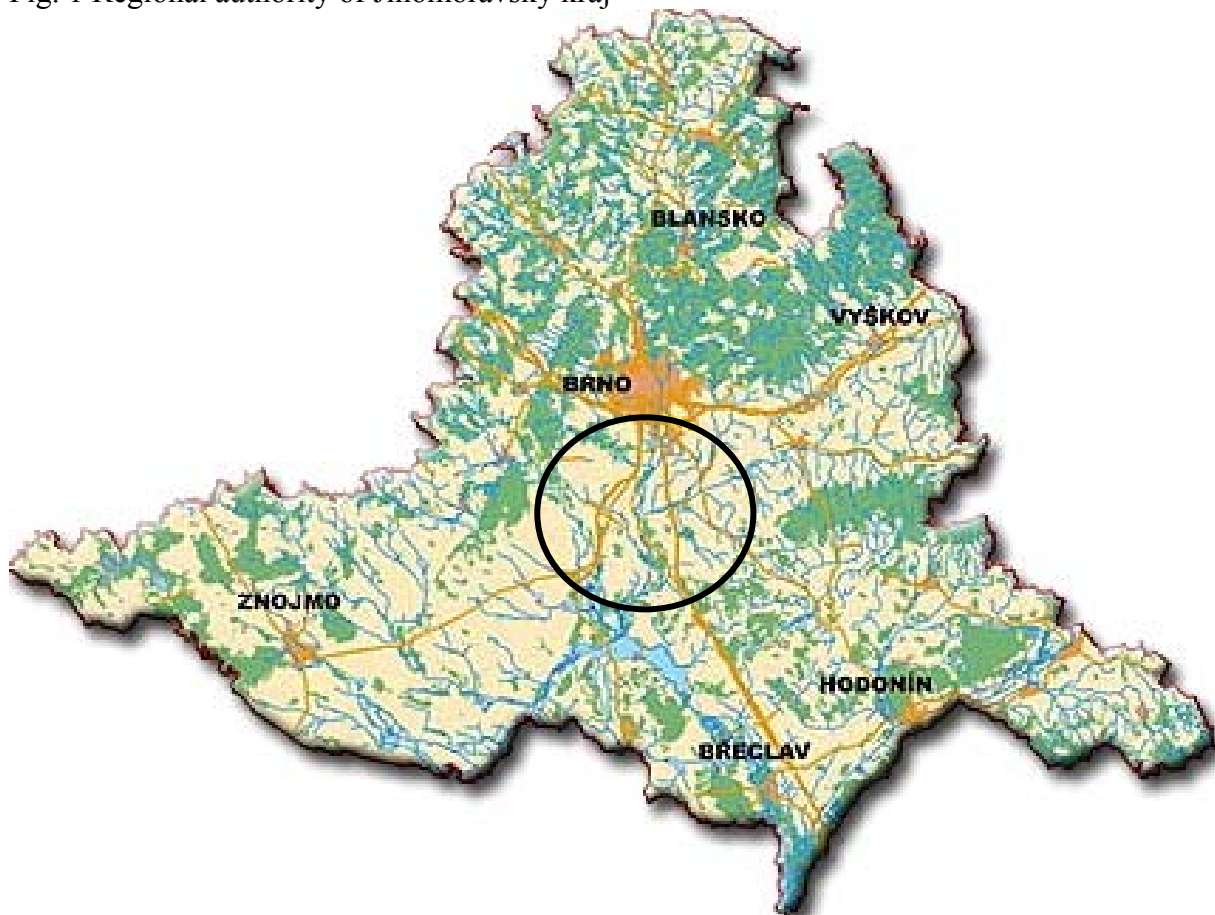
KEY WORDS

rural development, actor, networking, South Moravia

THE ANALYSED AREA

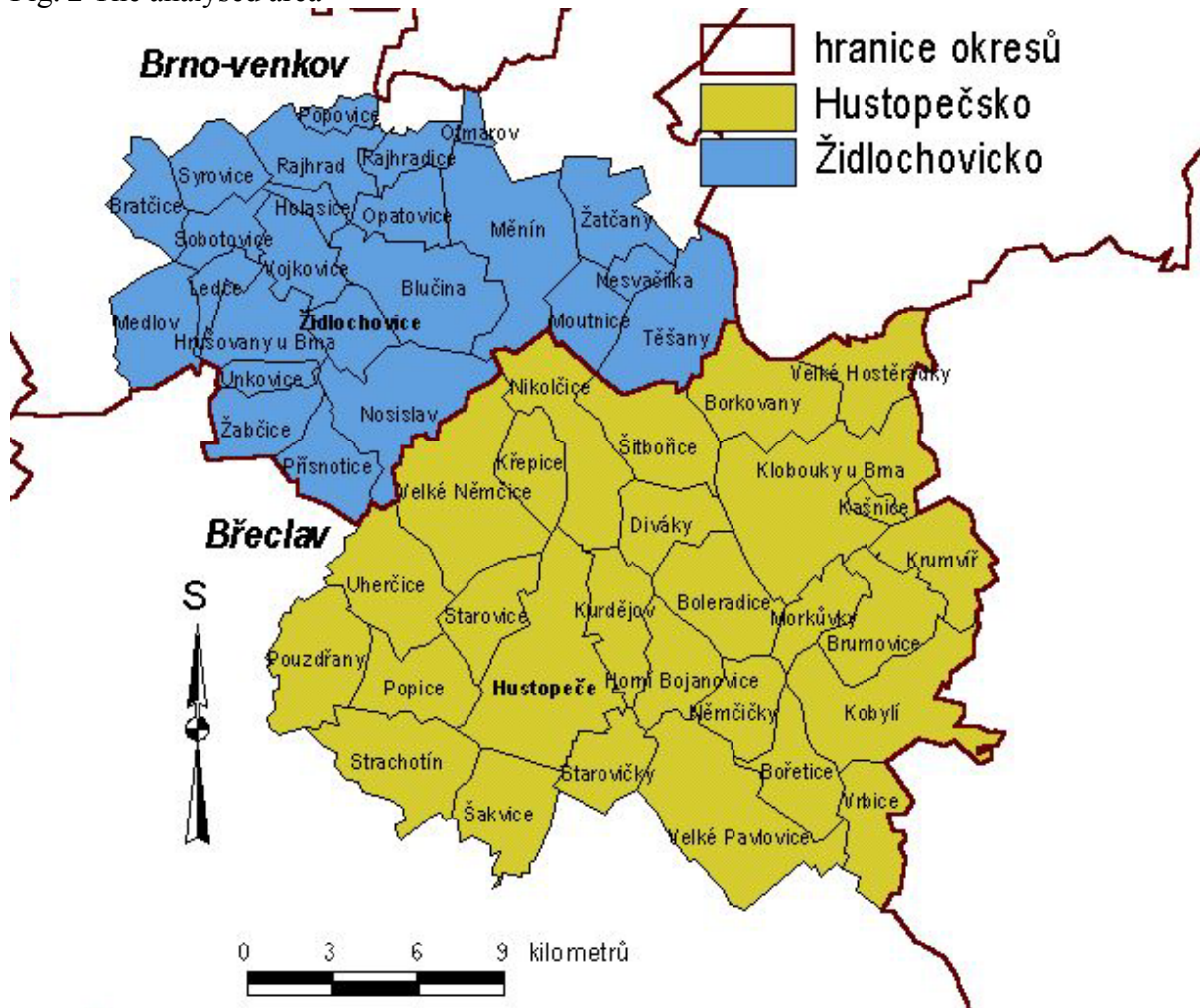
The area analysed in this paper is situated in the interface between the Brno – venkov and Břeclav districts in Southmoravian Region. It composes of 52 cadastral units (the rural communities) of which 24 units belong to ORP – territory (the district of administration) Židlochovice a 28 to ORP Hustopeče (314/2002, and § 64 subparagraph 1, 320/2002).

Fig. 1 Regional authority of Jihomoravský kraj



Source: <http://www.kr-jihomoravsky.cz/> [10.10.2008]

Fig. 2 The analysed area



Source: Regional authority of Jihomoravský kraj, 2004

INTRODUCTION

Any introduction to the paper would be insufficient without a summary of what makes rural places economically, socially, culturally, politically and environmentally healthy, and how European and national policies should be brought together to achieve this. “Healthy rural communities” may be described as having seven key characteristics:

First, they are able to maintain their population i.e. a viable age structure, and a positive rate of net immigration.

Second, their structure of economic base and poverty and unemployment rates show similar characteristics to the same ones found in cities and larger towns.

Third, physical and mental health of rural people is as good as it is elsewhere.

Fourth, healthy rural communities put emphasis on their history, culture and environment; take pride in their identities, and make use of these to enhance the quality of life. The role of education system in supporting the values is essential.

Fifth, healthy rural communities possess widespread property ownership, clear titles, and relatively high rates of local financing. Small enterprise is initiated and supported. Municipalities are part of open and active networks with NGOs, business and public sector, and good links with the “outside” world are established.

Sixth, public agencies work together to achieve common goals which are set through local democratic and participatory process and are based on common values.

Last, the communities cooperate on further development (Bryden, 2003, 1 - 2).

DATA AND SCIENTIFIC METHODS

The majority of the data was acquired by a method of controlled standardized interviews with open-ended questions. Questionnaire survey was conducted with 52 mayors.

The working hypotheses were used in this open-label pilot case study for dissertation thesis *Development capabilities of rural regions after integration Czech Republic with European Union in example of selected regions of Jihomoravský kraj with regard to border regions of Niederösterreich.*

INTERVIEWS WITH MUNICIPALITY MAYORS

The major problems described by most of the municipalities were inadequate legislation with unexplained concept of rural areas; high financial mandatory expenses which have to be devoted to long-lasting operations within a cadastral unit and which result in very limited resources left for local development projects (investment and un-investment ventures). Unemployment and lack of work opportunities, mainly for women, were also mentioned.

Most of the town mayors pointed out that the most serious barriers to rural development since the 1990s have been poor quality of roads, absence of pavements or their present dissatisfactory state, poor infrastructure such as inadequate system of sewers including water treatment, problems with gas delivery and distribution, and heating by coal. Among other difficulties are agricultural brown-fields and their disposal or restoration, waste dumps and their management, lack of experience with leadership of the municipality or problems with local self-government.

The frequently mentioned ways of improving life standards in rural areas include creation of new jobs and services, support for local culture, community interaction and alternative lifestyles, subventing construction of houses instead of apartment blocks, educational services and mainly continuing presence of schools in the municipalities, support for leisure activities and recreation, and effort to make the area attractive for tourists who are interested in wine culture and who can make use of the accommodation capacities of the given municipalities. State support of municipalities in financial terms is also essential, and creating a clear rural areas conception, activating local people and building local networks is considered to be vital in promoting development. Municipalities situated in the north part of the analysed area have mentioned sub-urbanisation as one of their other concerns.

The answers to the question of “What steps do you think need to be taken to revitalize the rural life?” Were: support for young people so that they would not leave the communities i.e. availability of jobs and adequate salaries for educated people who would decide to stay in the rural areas, support for schooling, guaranteeing sufficient care for retired people by providing high-quality social services and housing, and finally trying to support younger generations to take care of the old family members who would stay at home (i.e. advocating restoration of the former model of transferring farms from one generation to the other. Success of this plan is, however, questionable). Promotion of economic, cultural, social, environmental and political stability of rural areas is, according to the interviewees, hindered especially by the unclear concept of sustainable rural development. The quality of rural life may be further enhanced by supporting community involvement in local clubs or associations, supporting cultural activities and/or young people and marginalized groups activities, development of accommodation capacities and increasing the tourist attractiveness of the region, which can be based on wine culture and traditions.

All municipalities declare support for the countryside revitalization, and in many cases this is seen as the most important tasks for the community/municipal partnerships. Problems with division of grants were also widely mentioned, especially because the system does not take into consideration the size of a municipality area and questions of financing the maintenance of municipal rural zones. The town mayors have identified several other

weaknesses such as poor road system in the countryside, minimal forest coverage, lack of water in the landscape caused by very high soil evaporation, which results in insufficient supply of drinking water. These problems are being solved by purchase of the land (in case that it is allowed by the land law, and that there are no duplicate owners), and by establishment of wetland ecosystems and flood-plain forests, flood control, protection of soil from erosion, and vegetation management. A lot of the municipalities experience problems with abandoned pieces of land, mainly the privately-owned ones situated on steeper slopes. What needs to be solved in the Czech Republic is a new concept of agriculture which would promote participation of the private sector in the landscape management in return for financial benefits from the municipalities and other higher-level government bodies; revitalization of the landscape; and eventually introduction of such a legislation which would enable to “use” the unemployed for community services so that there would be guarantees that the work will be done, and the participants in the scheme will get the unemployment benefits.

The recent disputes among the municipalities have been initiated by the issue of wind power plants. There is one municipality where the works have already started, another one which tries to force the development of a wind power plant because it would help to partially solve its indebtedness. In these cases the wind power plants are localized along the cadastral borders of the municipalities which are visually and even acoustically affected.

The cooperation among municipalities is visible mainly on the level of local “clubs” with voluntary participation. These associations are perceived rather positively. A lot of the interviewees have agreed that it is important to have own initiative with endogenous strategy, exogenous impulses and good regional management. Local action groups were also founded. Other important institutions for rural development were also identified.

The municipalities have problems with filling in and handing in petitions including assignation of the project solutions to specialized agencies. Further difficulties are necessity of cooperation among municipalities in order to be able to finance the projects; necessity to invest own money first before being assigned the grants, and municipality indebtedness. The most frequent grants are awarded to “soft projects” concerning culture and tourism. In the Czech Republic it would be advisable to re-think the grant distribution to avoid the top-down attitude, and to bring the system more towards the municipalities (i.e. changing the tax revenue system) thus supporting the bottom-up approach. What needs to be considered further is re-evaluation of the significance of the number of inhabitant living in a cadastral unit, re-evaluation of landscape management procedures, clarification of the concept of rural development i.e. whether to support the current structure of relatively small municipalities or to find a different solution. Initiatives in changes of land distribution and land laws may be expected as well. Political lobby was mentioned as one of the easiest and frequently financial favourable ways of promoting rural development.

The interviewed mayors were in general satisfied with the finance available from the regional resources systems; however, they mentioned that the municipalities having between 1 000 and 1 500 (2 000) inhabitants are discriminated. Rural development programme is considered to be set up relatively well. Another problem is that only one request, which is actually realised, can be handed in during a year.

Cooperation in community may be described as rather problematic, and if there is any, it is usually only in a form of ordinary help. In some municipalities there are visibly negative relations among the council and the locally important employers (mainly from the agricultural field). The actors’ willingness to cooperate is small despite the fact that the people usually know one another well.

DISCUSSION

Northern part of the analysed area is situated on the international, national, regional development axis Brno – Břeclav. It may be characterised by high-level of dependency on Brno. Living conditions in both of the administrative rural regions, namely Hustopeče and Židlochovice districts, are perceived positively. Local inhabitants are content “with the rural way of life”. On the other hand, it needs to be pointed out the citizens use the services and leisure time opportunities provided by Brno. In the northern parts continuing sub-urbanisation escalates the rivalries between newcomers, frequently from middle and higher-income groups who can afford to live in newly developed areas outside Brno and commute to work by cars, and people who have spent all their lives in the rural community and who regard their new neighbours as negative influence since they are seen as bringing urban life style into countryside. Younger inhabitants seem to adapt to new conditions faster and often describe the village way of life as boring.

CONCLUSION

The weakest point of the analysed area as mentioned by the municipalities is the state of the environment. The main priorities are: increasing the areas covered by forests and grass, retention of water in the landscape, regeneration of the mining areas. Agriculture is also perceived as in poor conditions due to the unfavourable economic situation. Natural conditions for agriculture are very good in the analysed area. All the municipalities seem to be aware of the fact that increasing number of inhabitants will result in more difficulties with the services delivery on the different hierarchical levels.

BIBLIOGRAPHY

- [1] BRYDEN, J. M. (2003): Keynote research: Rural Development Situation and Challenges in EU-25. EU Rural Development Conference, 7 pp.
- [2] CLOKE, P. - MILBOURNE, P. (1992): Deprivation and lifestyles in rural Wales II: rurality and the cultural dimension. In: Journal of Rural Studies 8, p. 359 – 371
- [3] FURUSETH, O.: Service provision and social deprivation. In: ILBERY, B. (ed.) (1998): The geography of rural change. Addison Wesley Longman Limited. p. 233 - 256
- [4] ILBERY, B. (1998): The geography of rural change. Addison Wesley Longman, 267 pp.
- [5] MacKINNON, D. (2002): Rural governance and local involvement: assassing state community relations in the Scottish Highlands. Journal of Rural Studies 18, p. 307 - 324
- [6] PERLÍN, R. (2006): The co-operation of rural municipalities - chance or condition of achievement - Spolupráce venkovských obcí - možnost nebo podmínka úspěchu. In: Agriculture economy 52/6. p. 263 – 272
- [7] SPIŠIAK, P. - KOLLÁR, D. (1994): Vzt'ah obyvateľ'stva ku vlastnej obci a ku skúmanému okoliu. Spoločnosť pre trvalo udržateľný život, odbočka Biele Karpaty, 34 pp.
- [8] WOODS, M. (2005): Rural Geography: processes, responses and experiences in rural restructuring. SAGE Publications Ltd. 330 pp.

Mgr. Lukáš Nevěděl
Geografický ústav, Přírodovědecká fakulta, Masarykova Univerzita
Kotlářská 2
611 37 Brno
dodislav@mail.muni.cz

THE SPECIFICS OF FINANCIAL MANAGEMENT OF CITY DISTRICTS IN CORPORATE TOWN BRNO

Irena Opluštilová

ANNOTATION

The aim of this paper is to introduce a way how to finance city districts of corporate towns. City districts of Brno city will be chosen for such analyzes.

The structure of city districts budgets will be compared to the structure of budgets of municipalities in the Czech Republic in general. On the bases of this comparison the main differences will be stated, introduced and explained. The paper will mainly focus on revenues of city districts.

The financial management of city districts is not solved in general at all. Every corporate town solve it itself in its statute. The corporate town Brno gives to its districts a part of its revenues. So the question how to state the amount of revenues and on which principles or criteria distribute the amount to the districts is solved. Of course, this brings also some methodological problems, which will be solved in this paper too.

KEY WORDS

Corporate town Brno, city district, management of municipalities, municipal budget.

INTRODUCTION

The municipal establishment is stated by act no. 128/2000 Coll., on municipalities. This act determines basic barriers for functioning of municipalities, including their management. It also determines basic conditions for functioning of corporate towns and their relationship to their districts, and this act also includes the enumeration of corporate towns. At present, in the Czech Republic exist 23 corporate towns plus capital city Prague (capital city is similar to corporate towns but with different status). Those towns can (but needn't) be internal divided into city districts. Not all Czech corporate towns utilize the possibility to divide themselves. One of the cities that have any city districts, is corporate town Brno, which is divided into 29 districts. This amount is relatively high, and moreover, it is the highest amount among all Czech corporate towns.¹

The management of city districts is of course conformed by the same legal regulations as municipalities (primarily act no. 250/2000 Coll., on budgetary rules of territorial budgets), but the specifics are arranged in each corporate town by own constitution. According to § 130 of the act on municipalities those specifics are:

- the enumeration of individual city districts, the jurisdiction of bodies of the city and of city districts in the fields of independent and devolved authority,
- mutual co-operation between the bodies of the city and bodies of the city areas and city districts,
- sources of monetary revenue of the city districts and forms of expenditure,

¹ Only capital city Prague is reaching higher amount of city districts, but only in term of independent authority. Prague is divided into 57 city districts, but in view of devolved authority, the city is divided into 22 administrative districts.

- the means of discussing proposals for generally binding regulations and decrees of the city with city districts, and the means of publishing such generally binding regulations and decrees in city districts,
- the means of discussing the city's planning and zoning documentation and development plan with city districts, assets of the city which are to be entrusted to city districts, and the extent of city districts' authorisation to dispose of such assets,
- the extent of city areas and city districts' authorisation to found, establish and abolish legal entities and organisational units.

From the legal and economic aspect, the important fact is, that city districts are not self-contained legal entity nor accounting entity. Their budget and accounting are components of city budget and city accounting.

The constitution of corporate town must be published as a generally binding regulation. The constitution of Brno is actually presented in regulation no. 4/2008 and is available on web pages of this city (www.brno.cz).

AIM AND METODOLOGY

The management of city districts is regarded with the viewpoint of budgetary management. An analysis focused on the importance of city districts' budgets compared to the budget of whole city is carried out, also the structure of city budget and city districts' budgets is analyzed. Finally, the structure is compared to the structure of average municipal budget.

For such comparison database ARIS-RARIS of Ministry of finance of the Czech Republic is used. In the case of data about Brno, information available on city web pages (such as budget documents, closing account, etc.) or other materials offered by Brno city authority, are employed. The year of comparison is the fiscal year 2007.

On the bases of ascertained facts, greatest differences are selected, subsequently analyzed and interpreted. The fundamental difference in the budget structure is very high rate of received transfers which is caused by way of financing of city districts. Such those revenues are in the center of interest of another analyzes. Data from fiscal year 2007, but also (mainly) information from accepted budget of corporate town Brno is used for this step.

An important note must be done. Due to distinction of management of corporate town Brno without city districts and management of whole city including the districts, following signification will be implemented:

- corporate town Brno – for the whole city,
- city – for the data of the city without city districts.

RESULTS

In the year 2007, the corporate town Brno managed with budget size

- 10.856,9 mil. CZK of revenues,
- 10.641,0 mil. CZK of expenditures,
- so the outcome of the budgetary management was surplus in height 215,9 mil. CZK.²

² But this doesn't mean, that the management was successful or not. For such evaluation much more information is needed. Moreover, this surplus was for the most part reached by lower expenditures than was planned (especially by postponement of investments).

The results of the city were:

- 9.656,0 mil. CZK of revenues,
- 9.463,5 mil. CZK of expenditures.

And finally, the results of Brno city districts were:

- 2.513,0 mil. CZK of revenues,
- 2.464,4 mil. CZK of expenditures.

The total of revenues of city and of city districts is not equal to the amount of revenues of the corporate city Brno (the same pays for expenditures), the difference is given by the relationship between city and city districts (transfers between city and city districts). Those shifts of finances are deducted from the total, because they present shifts within one organization (within corporate town) and so they do not heighten real sources or expenditures of the whole corporate town.

Following fig. 1 briefly summarizes information on budget structure of Czech municipalities and of Brno city.

Fig 1: Structure of revenues and expenditures of municipal budgets (FY 2007, in %)

	Municipalities of the Czech Republic	The corporate town Brno	The city districts of the corporate town Brno
Tax revenues	56	72	11
Non-tax revenues	10	6	8
Capital revenues	5	3	1
Received transfers	29	19	80
Total revenues	100	100	100
Operating expenditures	70	71	66
Capital expenditures	30	29	34
Total expenditures	100	100	100

Source: database ARIS, closing account of corporate town Brno 2007, author's calculation.

As fig. 1 shows, the structure of Brno city districts budgets is very different in the part of revenues. The ratio of operating and capital expenditure does not show any significant difference from average.

Also the corporate town Brno has different structure of revenues than average municipal budget structure. While on average the tax revenues made up 56 % of total revenues, the ratio of tax revenues in corporate town Brno is 72 %. This was caused by high number of its inhabitants, or more accurately, by system of redistribution of tax yield between municipalities, which gives higher tax revenues per 1 inhabitant for bigger cities.

On the other hand, Brno city districts have very low ratio of tax revenues. All revenues from taxes are revenues of city budget. The legal entity income tax paid by municipality is the only exception. This is tax, which city district pays to themselves. Other tax revenues of city districts are municipal taxes and administrative charges.

Non-tax revenues are made up mainly by revenues from renting of assets and revenues from financial settlement (especially resources from the city).

Capital revenues, which are generally made up by revenues from selling of assets, in Brno city districts almost do not exist. The real property of the corporate town Brno is the asset of

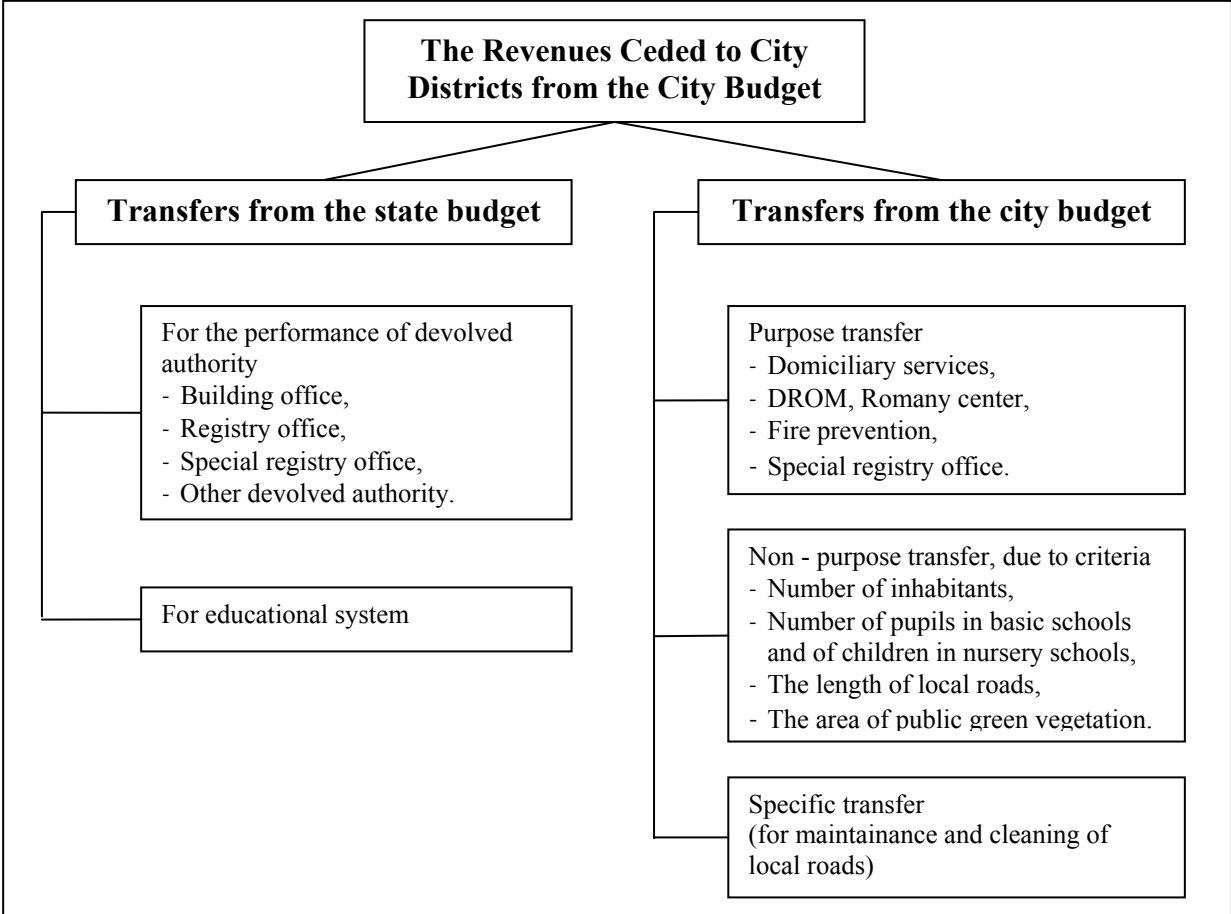
the city, the city district can only administrate it. This means, that the revenues from the selling are revenues of the city. But this does not mean, that city districts do not participate on those revenues. They get a certain part of those revenues in financial settlement, which is included in non-tax revenues, as was mentioned above.

The most important revenues of Brno city districts are received transfers. This is caused by the way of financing of city districts. Next subchapter concerns on this system.

The Revenues Ceded to City Districts from the City Budget

City districts’ own revenues (consisting of tax, non-tax and capital revenues) represent only 20 % of their total revenues. 80 % of revenues are received transfers, their important components are so-called “ceded revenues”, revenues that the city gives from its budget to budget of its districts. The ceded revenues reach nearly 40 % of total revenues. The structure of those ceded revenues is illustrated in following figure.

Fig. 2: Structure of the revenues ceded to city districts budgets



Source: author’s elaboration.

As the picture shows, the ceded revenues can be divided into two types. Transfers from the state budget provided on the bases of the act on state budget, are divided out into budgets of city districts and city budget according to the extent of devolved authority performed by each city district authority and municipal authority. The ratio of those ceded revenues is 16 % of total ceded revenues.

The second type of ceded revenues are transfers from the city budget. They represent a part of tax revenues, that the corporate town gets from the tax yield and are used for financing especially the operation of city districts. The ratio of those ceded revenues is 84 % of total ceded revenues. Those transfers consists of three different types.

Purpose transfers are intended for certain purpose in certain city district. Not all purpose transfers are intended for every district. The ratio of those ceded revenues is 8 % of total ceded revenues.

Non-purpose transfer is divided into all city districts in accordance with five criteria (as mentioned in the figure 2). The amount of the non-purpose transfer is created on bases of last year's amount, while the year-on-year change of tax revenues is taken into account, as well as the participation of city districts on the indebtedness of the corporate town. This transfer is most important revenue of each city district. The ratio of those ceded revenues is 74,5 % of total ceded revenues.

Specific transfer is given only to the Brno-center city district, this resource is designed for covering specific cost of this city district. The ratio of those ceded revenues is 1,5 % of total ceded revenues.

But one last note must be done. Although the city district get those resources, they can finance hardly their operation, they carry out only little investments. Bigger investments must be carried out by the city.

CONCLUSION

The management of city districts is of course conformed by the same legal regulations as municipalities, but the specifics such as for example the revenues of the city districts, are arranged in each corporate town by own constitution.

The specific structure of Brno city districts can cause some methodological problems. Let us look at two of them. City districts of certain corporate town can be compared only other city districts of this town. The comparison with other town's city districts cannot be used for deep analysis, it can only alert on fundamental differences.

The other problem relates to the evaluation of indebtedness. The indicator of debt service can not be used on the level of city districts, or better said, the value of this indicator can not be compared to values of municipalities. The cost of debt service is compared to the sum of tax revenues, non-tax revenues and transfers from the state budget provided on the bases of the act on state budget. In average Czech municipal budget tax revenues present more than half of total revenues, while the ratio of tax revenues of Brno city districts is only slightly over 11 %. This means, that the value of the indicator would be much higher in Brno city district than in average municipality, even if they have similar structure of debt service.

The system of financing of the city districts expresses also in their budget structure. That is why Brno city districts achieve only 20 % of their own revenues, 80 % of revenues are received transfers. About half of those transfers are so-called ceded revenues. Although the city Brno provides from its budget around 1 billion CZK to the city districts as their ceded revenues (but also other transfers and loans during the fiscal year, which are purposefully bounded), they can finance hardly their operation and carry out only little investments.

BIBLIOGRAPHY

- [1] Act no. 128/2000 Coll., on municipalities
- [2] Act no. 250/2000 Coll., on budgetary rules of territorial budgets
- [3] Adopted budget of the corporate town Brno 2009
- [4] Closing account of the corporate town Brno 2007
- [5] Database ARIS-RARIS, available on <<http://www.info.mfcr.cz/aris/>>
- [6] The decree of the Brno municipal assembly from the meeting of the municipal assembly 11.11.2008
- [7] The web pages of the Brno city <<http://www.brno.cz>>
- [8] The web pages of Prague <<http://www.magistrat.praha-mesto.cz>>
- [9] The web pages of online papers Novinky.cz <http://volby.novinky.cz/kv2006_statmesta>

Ing. Irena Opluštiová
Masaryk University, Faculty of Economics and Administration
Lipová 41a
602 00 Brno
oplustii@econ.muni.cz

A COMPARATIVE ANALYSIS OF THE REGIONAL POLICY IN THE CZECH REPUBLIC AND AUSTRIA

Vilém Pařil

ANNOTATION

The subject of submitted thesis „ A comparative analysis of the regional policy in the Czech Republic and Austria” is a comparison and an analysis mainly of the applied instruments and institutional safeguard and the outline of impacts and efficiency of regional policy on the development of regions and countries as entities. The first part deals with the analysis of regional policy in the selected countries; the second one is focused on the comparison of these countries.

KEY WORDS

Regional policy, comparative analysis, economical and social impacts.

INTRODUCTION

Nowadays there is strong emphasis on regional policy in the European context. Before all that is due to fact that the implementation of common policy on regional level is key moment for European Union which is aimed on its sustainable development and on support of mutual regional cooperation and regional interaction.

AIM AND METODOLOGY

The essential objective of this diploma thesis is to build up a synoptic analysis and an evaluation of process of implementation, realization and leverage of European regional policy, or rather to say policy of economic and social cohesion, in the Czech Republic and Austria and its consequential confrontation.

According to purpose of this work there are following methods that have been used: scientific description method to acquire frame view on two geographically different ways of implementation of regional policy, then there is analysis method for evaluation of both separate countries and method of comparative analysis to compare component results and finally there is synthesis method to bring out conclusions.

RESULTS

Results achieved in this diploma thesis rest in following defined areas: historical background of regional policy; scheme of used instruments in both countries concerning institutional view in the mean of administrative structure (institutional indemnity) and created regional development legislation, documents and programmes; next area is financial volume given to individual regions and its accordance to economic performance in each country. All areas were investigated in two periods according to programme period of the European Union; it means the period of 2000 to 2006 and the period of 2007 to 2013.

1. Comparison of Historical Background

The regional policy in the Czech Republic and Austria came from completely different historical situations. In Austria there is long time continuing tradition of modern regional policy (about thirty years) but in Czech Republic there is no long experience of regional policy and first contact with modern regional policy emerge from admission of Czech

Republic to European Union. That is why Czech Republic has less than ten years long experience with implementation of active regional policy.

2. Comparison of Institutional Indemnity

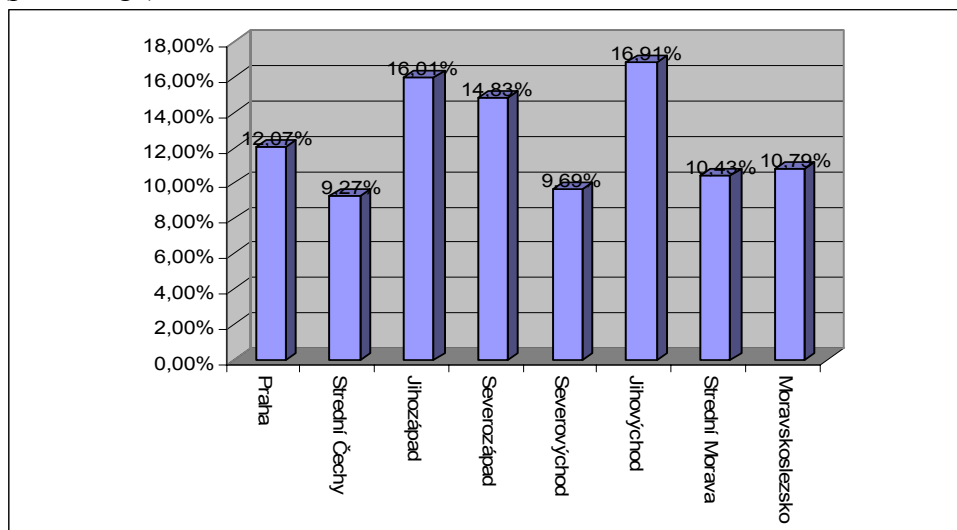
In institutional schemes there are two different ways in both countries. In Czech Republic there is Local Development Ministry (with his integral different bodies for each specific areas of regional policy) as central authority that is responsible for regional policy and for cooperation with all other subjects interested in. The problem rest in the position of this ministry that has an superior role above all another participants of regional policy what opposites one of basic principles of economic and social cohesion principles and it is the subsidiarity principle. In Austria this problem is institutionally (but it is not obvious that also really) resolved through the structure of central regional policy authority what is Austrian Conference for Territorial Development including representative of central government and all other important participants of regional policy.

In the area of programme documentation both systems (Czech and Austrian) are very similar and there are not big differences between them because these systems are in accordance to European approach. Nevertheless there is one little nuance in Austrian regional policy which is more relied with the policy of territorial development and actually regional policy is one of its integral parts.

3. Correspondence of Financial Assistance and Economic Effort in Individual Regions

In the following article there is a body of achieved results. Firstly there is presented the figure with financial subsidiary volumes in Czech Republic in the period after the entrance to the European Union to 2006 (because in this period there was realized the current way of regional policy with the current applied programme structure).

Fig.1 Financial Subsidiary Volumes in Czech Republic in the period of 2004 and 2006 (percentage)



Source: author

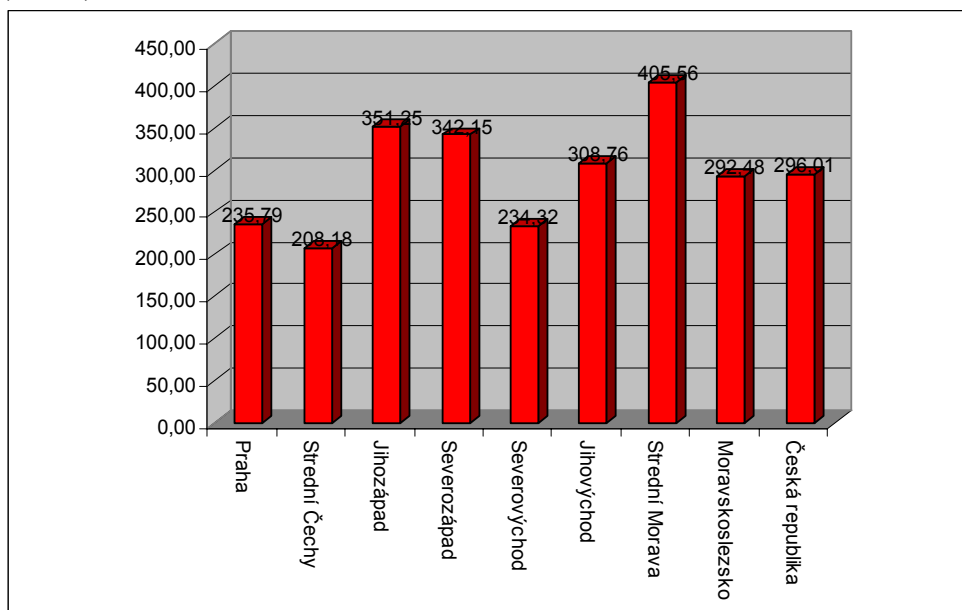
In the figure there can be seen some very controversial facts that could be resume in one question. Why Prague with its paramount economic position is fourth biggest receiver of assistance and two another regions in good economic condition (South-East and South-West)

are on the top instead of problem regions as Moravian-Silesia or Central Moravia (with the exception of North-West and its hopeful third position).

This disproportion can be explicated by three facts. The first one is that there were no specific regional operations programmes in this period. In the period of 2000 to 2006 in Czech Republic there were too different periods which were define by the entrance to the European Union. Before the entrance the financial assistance from European funds was allocated just through the criteria of state borders and there was no regional distinction. After the entrance there was an ambition to distinct among regions but Czech Republic wasn't really ready to achieve this distinction because it was beginner in the application of regional policy. The second factor was a readiness and an ability to gain and use the financial support from European development funds. But this is a real problem, because more developed regions are more prepared to achieve on the financial support than less developed regions. The third one is that all Czech regions except of Prague are belong to the Objective 1 and that's why in the view of European Union it isn't so important, the differences among regions, because it is not really serious in European view.

If the numbers of financial support are recounted per capita results for Czech Republic are more favourable than in former case. But there are still not really corresponding with economic and employment performance of regions.

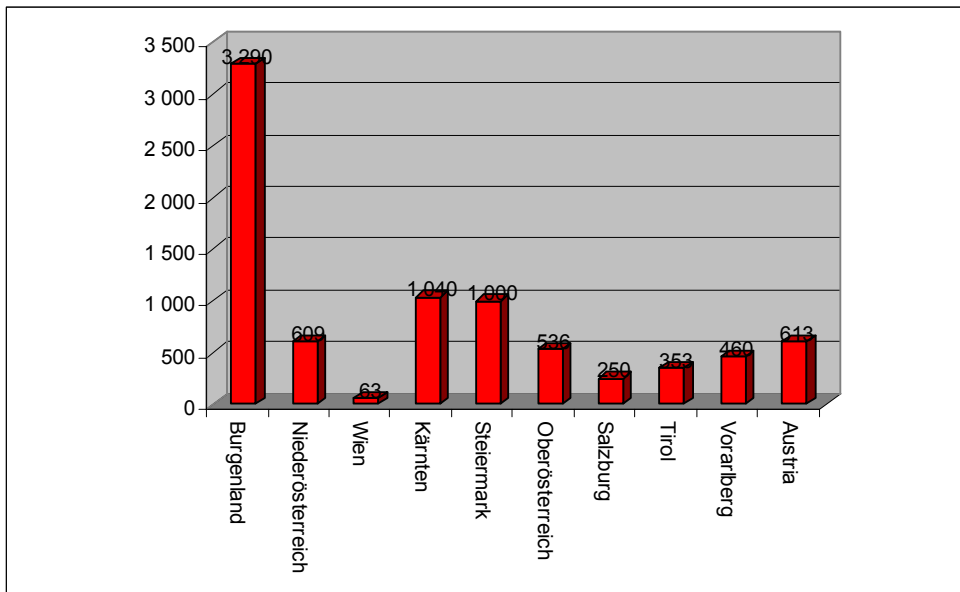
Fig. 2: Regional Financial Support per capita in Czech Republic in the period of 2000 to 2006 (Euros)



Source: author

In opposite the numbers in Austrian regions are more emphasized and the correspondence between financial support and economic and employment performance is more clear except of Vienna where exist a real problem of unemployment (in the opposite way, of course – it means that the most efficient regions are recipients of the smallest financial support). This feature is reflected in next two figures.

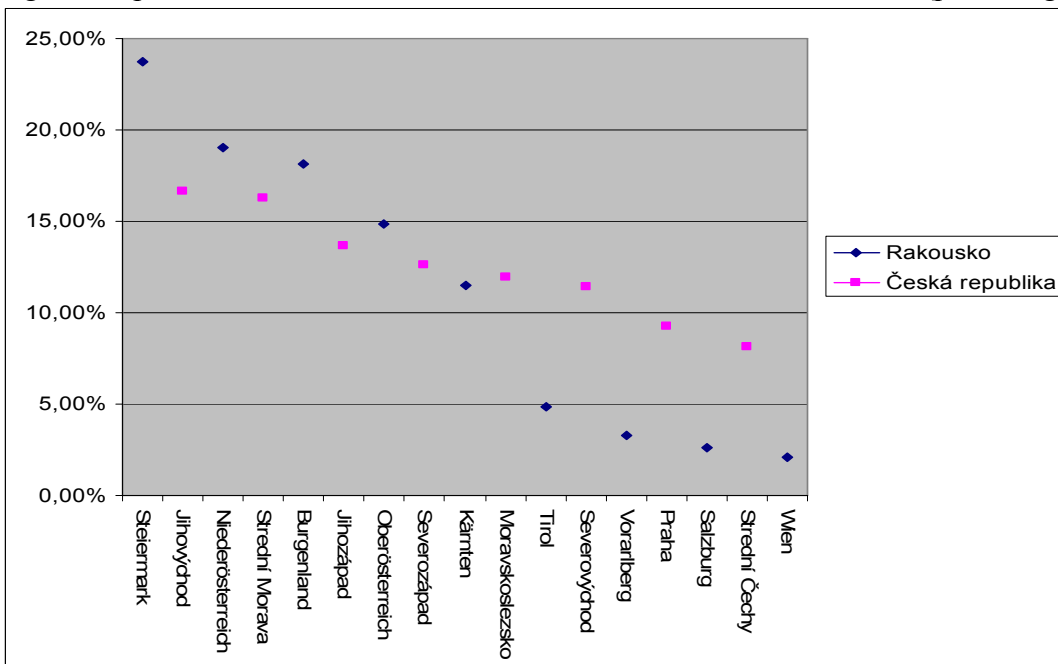
Fig. 3: Regional Financial Support per capita in Austria in the period of 2000 to 2006 (Euros)



Source: author

In the next figure there is comparison of financial subsidiary volumes in individual regions in Czech Republic and Austria in percentage. The substantial aspect that is figured is the compared margin of assistance between the most and least developed regions in both countries (in Austria it makes more than 20 % but in Czech Republic less than 8 %). If we compare these results also with financial support per capita in individual regions we would see yet more considerable differences (about more than three thousand euros per capita in Austria and two hundred euros in Czech Republic).

Fig.4 Comparison of financial assistance in CZ and AT in 2000 to 2006 (percentage)



Source: author

Larger scale of differences among financial support to regions in Austria can be caused by the lack of experience with regional policy in Czech Republic or maybe by lack of courage. But these results reflect the disability of regional policy in the Czech Republic in the prospected period.

If we take a look at the period of 2007 to 2013 we cannot see real results of financial support, but we can see planned financial framework for this period. There is one alarming fact in this period for Czech Republic. This fact is part of financial support which is not aimed on specific regions but only to all regions belonging to Objective 1 because this non-aimed part is about 86, 62 % of whole financial volume. Only 13, 38 % is aimed to the individual regions in planned framework. Due to this fact there is large space for developed regions that they capture almost of financial volumes from non-aimed programme and it can be counterproductive in the mean of regional policy goal that is to support less developed regions in comparison to more developed regions. Only one very positive fact can be seen in this period because the financial support for Prague is significantly lower than to other regions what is closely corresponding with its sovereign position in the Czech Republic.

CONCLUSION

Due to historical background of regional policy in the Czech Republic we cannot see many of its impacts, but in Austria we can see some long-term positive and negative facts.

In the institutional view there is one key conclusion in the case of institutional indemnity. This one can be concluded with following question: “Is it really correct organization structure that realizes implementation of regional policy in Czech Republic through the central authority with superior position above another participants and is that in correspondence with the principle of subsidiarity?” In the area of programme documentation there are no radical recommendations for applied schemes that can accrue from this work.

In the substantial area of this article dealing with correspondence of financial assistance and economic performance there loom ahead following questions. What criteria are determinant for regional assistance if not the economic backwardness? Is it almost regional readiness on the system of subsidies corresponding with its economic performance? Or is this discrepancy, caused due to absence of regional policy in the past or due to European view for those differences among Czech regions, inconsiderable? Other question emerging from comparative part, why differences among least and most developed regions in Czech Republic are nearly negligible? Last question is: “Can be the system of regional policy that, in the mean of its realization, opposites its own goal really effective (if it supports almost developed regions instead of problem regions)?” Many other questions can occur. Is there any control mechanism that works like feedback for objective framework? Why there are only the objectives for partial programmes but there are no objectives of financial volumes in the sum? Corresponding with achieved results it can be note there is no feedback to goals of general financial support volumes and that’s why these volumes depend on ability of regions to gain the financial support however the most developed regions are also ready to gain financial volumes consequently the allocation of financial volumes is counterproductive in the view of the fundamental regional policy goal (to support less developed regions instead of more developed) and in long-term application of this policy by this way it can caused series problems.

What can be recommended to this serious problem? The system of allocation of financial volumes has to begin with general financial objectives in the mean of clear and concrete

amount that each region can achieve in all particular programmes. Not just amount of financial volumes in specific programmes because this is not sufficient. In Austria there is long-term tendency to diminish the economic performance among regions last nearly twenty years (in average it does cut-down of difference between most and least developed regions about 1, 5 % per year). In Czech Republic there is no long-term experience with regional policy so it is not possible to note conclusions about efficiency of regional policy because consequences are not yet known but we can see some real shortage of principal instruments are nowadays obvious.

BIBLIOGRAPHY

- [1] Blažek, J. Uhlíř, D.: Theories of Regional Development, Praha, Karlova univerzita, 2002.
- [2] Dočkal, V.: Regional Policy in the EU as collective arena, Brno, Masarykova univerzita, 2006.
- [3] Ježek, J.: Territorial and Regional Economics, Plzeň, 2002.
- [4] Halánek, P.: Project Cycle in the European Union, Brno, Masaryk University, 2004.
- [5] Matoušková, Z.: Regional and Municipal Economics. Praha, Vysoká škola ekonomická, 2000.
- [6] Viturka, M., Žitek, V., Halánek, P., Klímová, V., Tonev, P.: Theoretical and Methodological Bases of Regional Subsidiary Development Programme Evaluation, Brno, Masaryk University, 2005.
- [7] Wokoun, R.: Czech Regional Policy in the Period of Entrance to the European Union, Praha, 2003.
- [8] Žitek, V.: Regional Economics and Policy. Brno, Masarykova univerzita, 2002.

Web Sites:

- [9] Official internet portal of Local Development Ministry in Czech Republic www.mmr.cz.
- [10] Official internet portal of Finance Ministry in Czech Republic www.mfcr.cz.
- [11] Official internet portal of Ministry for Trade and Industry in Czech Republic www.mpo.cz.
- [12] Official internet portal of State Agricultural Interventional Fund in Czech Republic www.szif.cz.
- [13] Official internet portal of Prague Municipality <http://magistrat.praha-mesto.cz>
- [14] Official internet portal of Austrian Government www.austria.gv.at
- [15] Official internet portal of Austrian Conference for Territorial Arrangement www.oerok.gv.at.
- [16] Official internet portal of European Union www.europa.eu.

Vilém Paril
KRES ESF MU
Lipová
Brno
vilem@mail.muni.cz

REGIONAL DISPARITIES AMONG EU NEW MEMBER STATES

Lenka Pelegrinová

ANNOTATION¹

The paper deals with the impact of economic integration and EU structural policy on bridging the gap among regions in new EU member states. Socio-economic disparities among regions are considered to be eliminated by regional policy, which is both an instrument of financial solidarity and cohesion itself, as well as a driving force for further economic integration. But it is evident that after decades of regional policy operating, there are still significant disparities in regional growth and development. These have been even widened after entrance of 12 Central and Eastern European (CEE) countries. Along geographic remoteness and socio-economic changes, they brought new regional handicaps, which results from their former centrally planned economic systems. CEE countries are trying to overcome social deprivation, poor quality schools, higher unemployment and inadequate infrastructures of their regions.

KEYWORDS

regional policy, new EU member states, economic integration, regional economic typology

INTRODUCTION

Nowadays, the EU consists of 27 member states and of 268 regions. Reducing great economic and social gap between them and consequently increase competitiveness of whole EU was the main reason for establishing European regional policy. In terms of the European regional concept the whole EU territory is divided into classification NUTS (common nomenclature of territorial units for statistics), which implicates an entitlement of European regions to draw financial resources from structural funds. In the period 2007 – 2013 three European funds: the European Fund for Regional Development (EFRD), the European Social Fund (ESF) and the Cohesion Fund provide financial help through various projects to three objectives that are Convergence, Regional Competitiveness and Employment, and European Territorial Cooperation. Actual financial perspective could be a unique challenge for local and regional subjects, which may initiate economic growth of regions trough these financial tools.

All new member states are together with Greece and Portugal eligible to draw from the Cohesion fund as they represent lower GNI (Gross National Income) than 90% of the EU average. Regions in classification NUTS 2 with GDP (Gross Domestic Product) per inhabitant less than 75% of the EU average are eligible for funding under the Convergence objective. Regions (NUTS 1 and NUTS 2) that are not included in first objective can draw financial help under the objective Regional Competitiveness and Employment. European Territorial Cooperation objective is addressed to NUTS 3 level for cross-border, trans-national and interregional cooperation.

New financial perspective for period 2007 – 2013 (the Seventh Framework programme – 7FP) brings some innovations, which are supposed to fit current regional development more

¹ The contribution is worked as a part of solving the VEGA project no.1/0780/08 *Structural policy of Slovak Republic as an instrument of solving regional disparities.*

[Príspevok je spracovaný ako súčasť riešenia projektu VEGA č.1/0780/08 *Štrukturálna politika Slovenskej republiky ako nástroj riešenia regionálnych disparít.*]

than the previous one. The European regional policy leans more to national level, financial management is more flexible, rules for funds drawing are more transparent, not to mention higher budgets for programming. Nevertheless, these innovations still can't eliminate regional disparities, as it still perceives regions and nation only through few macroeconomic indicators as GNI or GDP.

To understand the impact of economic integration on regional structural change we need to analyse economic activities in flourishing and poorer regions. This analysis can stand as a main argument in solving the problem of disparities by finding an accurate composition of regional economic activities, having in mind different predispositions of each region. The critical obstructions of further research are still inaccessible data and relevant information from each region.

AIM AND METHODOLOGY

Main methods employed in this paper are going to be economic analyses and comparison. Thus, the paper will introduce some possibilities of these tendencies by analysing alternative economic factors influencing regional development, including regional specialization, industrial structure and other economic activities, as well as interdependency between geographical position and economic development.

RESULTS

GEOGRAPHICAL POSITION OF EUROPEAN REGIONS

Seeing that all regions in EU have some geographical and economic specifics, European Commission should take them into account in regional policy making.

First we can divide European regions in dependence on their geographical position: regions bordering with non-EU regions (regions bordering with 'developed' countries BDC/ post-socialistic countries BPSC), regions bordering with EU regions (regions bordering with new EU member states BNEU/ old EU member states BOEU), internal regions (IR) and capital regions (CR).

This position may be one of the reasons influencing economic performance of regions. Central metropolitan regions show much higher economic performance and they developed different composition of economic activities than peripheral regions. Thus, structural aid would be more efficient if it makes provision for various regional conditions. Support of European territorial cooperation is only first step towards effective inclusion of all peripheral regions and regions with different economic activities into common market. Though, the key of regional competitiveness doesn't lie in a unification of regional economic activities. With respect to regional specifics offensive structural change needn't to be the best way to improve regional economic performance.

Regional Sectoral Structures

Final report of ESPON project 3.4.2 offers through different indicators simplified view on European regions typology by economic activities. Authors divide European regions into seven types of regional sectoral structures: Nonmarket services, agriculture and light industry; MEGAs advanced services, finances and business; High and medium technological industry; Textile personal market services; Agriculture nonmarket services, trade, hotels and restaurants industry; Market and nonmarket personal services with weak industry; Neutral, central without big cities.

Fig. 1 Economic regional typology with main economic indicators

TYPE	Type 1 Nonmarket services, agriculture & light industry	Type 2 MEGAs Advanced services : Finances & Business	Type 3 High & medium technological industry	Type 4 Textile personal market services	Type 5 Agriculture Nonmarket services Trade Hotels & Restaurants Industry (construction & light)	Type 6 Market & nonmarket personal services Weak in industry	Type 7 Neutral Central without big cities
Proportion of EU GDP (%)	10,7	28,1	17,0	5,0	9,0	8,9	21,1
Proportion of European population (%)	12,9	19,0	16,2	5,3	17,9	10,1	18,6
GDP/cap 2002 (EU=100)	83,1	147,9	105,3	94,5	50,5	88,2	113,5
Evolution of GDP 2002-1995 (°°) compared to average EU evolution	-6,9	2,0	-6,1	-2,2	6,2	0,0	1,6
Activity rate (Active popul. + unemployed)/Total population EU = 100	92,6	104,3	96,9	97,9	101,3	95,4	105,3
Unemployment rate (Unemployed/Active popul.) EU= 7,9	107	78	74	117	141	141	76
Migratory balance 96-99 (%) EU= 1.5	0.6	1.1	1.6	4.5	2.0	0.6	1.7

Source: ESPON

Regions of type 1 had developed light industrial sector, agriculture and nonmarket services with lower growth rates. Metropolitan areas of the type 2 have the most advanced service sector, high level of GDP and low unemployment rates. High and medium industrialized regions (type 3) are responsive to the conjunction of industrial cycles and their economic performance is above or matching EU average. Type 4 is characterized by light industry, agriculture, and services (hotels, bars, restaurants) with lower growth rate than the EU average. Regions of the 5th type are more peripheral regions dominated by tourism sector, light industry and agriculture, but they develop also high technological industries or financial services. Type 5 has higher unemployment rates, but relatively high growth of GDP. Peripheral 6th type is characterized by nonmarket services with growth rate similar to the EU average. Types 7 have globally central location with neutral economic structure close to EU average.

Implications for Regions of EU New Member States

Bulgarian internal regions fall under type 1, while Sofia capital region (CR-BPSC) under type 6 and the rest of the territory (BPSC and BNEU) under type 5. Romanian regions (IR, BNEU and BPSC) belong by this typology into category 5, except Bucharest capital region, which is of the second type. Both of these CEE countries show characteristics of peripheral regions

with dominating tourism and agricultural production, while except Bulgarian internal regions they signify weak industrial base and services. It is questionable, how long should a membership in the EU last to take into account consequential effects. However, very similar economic activities are accumulated in other peripheral regions of EU – 15, namely in Greece, Portugal or Spain.

Latvia, Lithuania and most of regions in Poland that are bordering with post-socialistic and new EU member states belong also as peripheral regions to the type 5. Estonia together with Slovakian regions (BPSC) and few Polish inner regions present exception from this direction as they fall under type 4. These regions with a mixture of industrial, agricultural and tourism sectors are typical for northern and middle Italian regions, as well as for eastern regions of Austria or few Spanish regions.

Czech territory is formed mostly by the type 3, except region bordering with Germany (type 5), region bordering with Poland (type 1) and Prague (type 2). Whole Slovenia and western Hungarian regions (BOEU and BNEU) fall under the same industrial type 3, while the rest of Hungarian territory is type 1. These high and medium industrialized regions are typical also for most of the old EU members as Germany, France, Austria, Italy and Northern countries.

Warszawa, Budapest, Bratislava, Prague or Bucharest belong under type 2 as well as most of the capitals with high growth rates, low unemployment rates and advanced service sectors similar to other European capitals. Poland is the only new member country representing all seven types of regional sectoral structures, which makes it more difficult for decision-making authorities to distribute financial means into specific sectors.

Significant feature is also the dominance of the type 5 in the EU periphery. Regions of CEE countries closer to old European member tend to testify more industrial characters than others and the type 1 often surrounds these industrial regions.

The Commission should examine different combinations of these factors mainly in less developed regions of new member states. However, it is impossible to separate macro-economic development from regional development. Current economic crisis influences all European regions regardless of their former economic performance. Sectoral structure might protect some regions in greater extend than others. That should be even superior argument to focus on development in this area.

CONCLUSION

Programming period for the years 2007 – 2013 had brought few essential changes that will influence the exploitation of operational programmes. These changes concern particularly multiple-rise of the resource allocation into more concretely specified priorities and programmes, as well as fixating on society and its active connection with science and research. Equally important is implementation of new rules for the drawing from structural funds after reorganisation and restructuring of the EU regional policy. Particularly new member states with less developed regions, in the sense of lower growth rates and living standards should carefully monitor the allocation of financial help into specific regions and sectors.

New member states manifest very similar tendencies in structural policies that differ from the approach of older member countries. It includes mainly higher investments into *hard infrastructure* in the means of improving the physical environment for businesses² instead of strengthening *soft infrastructure*, which means improving the commercial environment for

² Hard (or strategic) infrastructure involves investing into projects of building or improving roads, railways, airports, services, industrial and commercial sites and buildings, telecommunication and energy systems, etc.

businesses³. This is associated also with different approach to financial investments into human and social capital, which is quite neglected policy area in most of CEE countries.

However, the conclusion shouldn't indicate "one-size fits all" approach. When we are taking into account the connection between economic development, entrepreneurship and institutions, there are significant differences, or better multiplicity of national and regional packages of these three factors. Thus, regional policy should focus the attention towards this strategic nexus that becomes a vital inquiry area.

And at last, we need to distinguish between the disparities that are coming along national specifics and the real regional disparities. For example, income or employment disparity may be a feature of particular countries or it may appear among regions within the country. One has to admit as well an effect of the whole historical context and initial conditions of the states as of each region. Therefore, we can't expect that regional policy is leading towards economic equity among all member states and European regions.

BIBLIOGRAPHY

- [1] DOČKAL, V. (ed.): Regionální politika EU a naplňování principu partnerství. Případové studie České republiky, Německa, Francie a Slovinska. 1. vyd. Brno: Masarykova univerzita, Mezinárodní politologický ústav, 2006. ISBN 80-210-4012-2
- [2] ESPON project 3.4.2 Economy: "Territorial impacts of EU economic policies and location of economic activities" Final Report October 2006, on-line <http://www.espon.eu/mmp/online/website/content/projects/260/722/file_2218/fr-3.4.2_Dec.2006-full.pdf>, ku dnu 3. 1. 2009. ISBN 2-9600467-1-4
- [3] GEPPERT, K. – HAPPICH, M. – STEPHAN, A., 2005. *Regional Disparities in the European Union: Convergence and Agglomeration*. German Institute for Economic Research, Discussion Papers of DIW Berlin, on-line <<http://www.diw.de/documents/publikationen/73/43804/dp525.pdf>>, ku dnu 23. 11. 2008.
- [4] IVANIČKOVÁ, A.: *Inovované programovanie regionálnej politiky Európskej únie v programovacom období 2007 – 2013*. 1. vyd. Bratislava: Vydavateľstvo EKONÓM, 2007. 154 s. ISBN 978-80-225-2309-7
- [5] KALLIORAS, D. – PETRAKOS, G. – FOTOPOULOS, G., 2005. *Economic integration, regional structural change and cohesion in the EU new member-states*. ERSA Conference Papers, on-line <<http://www.ersa.org/ersaconfs/ersa05/papers/383.pdf>>, ku dnu 23. 11. 2008.
- [6] MAREK, D. – KANTOR, T.: *Příprava a řízení projektů strukturálních fondů Evropské unie*. 1. vyd. Brno: Společnost pro odbornou literaturu – Barrister & Principal, 2007. 210 s. ISBN 978-80-87029-13-8
- [7] *Seventh Research Framework Programme*, on-line <http://cordis.europa.eu/fp7/home_en.html>, ku dnu 20. 11. 2008.
- [8] WOKOUN, R. – MALINOVSKÝ, J. – DAMBORSKÝ, M. – BLAŽEK, J. a kol.: *Regionální rozvoj (Východiska regionálního rozvoje, regionální politika, teorie, strategie a programování)*. 1. vyd. Praha: Linde Praha, a.s., 2008. 475 s. ISBN 978-80-7201-699-0

³ Soft infrastructure involves investing into projects of providing increased business focused education and access to education, supporting research and development, social inclusion strategies, improving delivery of local government services to businesses, supporting the development of business and trade associations, improving institutional structure and social capital, etc.

Mgr. Lenka Pelegrinová
The University of Economics in Bratislava
The Faculty of Business Economics with seat in Košice
Department of Economics
Tajovského 13
Košice
lenka.pelegrinova@euke.sk

INNOVATIONS IN REGIONS OF EASTERN SLOVAKIA

Petra Pešáková, Patrycja Pudło

ANNOTATION

The main goal all the world is situated to the nature of the excellent company. The global business is orientated to increase the quality of product, to decrease the costs in the company, to raise productivity, to reduce times between order and delivery etc. Every company can obtain those conditions by new trends on business. The implementation of the modern trends brings a lot advantages for the company that the company becomes competitiveable on the global business. Innovation approach goes out from understanding of innovations as application of knowledge on creation and realization of new products, services, technologies, organization and management, which lead to overstayng of the renovation in the closed ring. This innovation approach respects existence of changes and the growth of their intensity. It supposes possibility to predict and to analyze these changes and respond to them through the new products and technologies. Very important factor of this approach is the existence of the driving forces of innovations. In spite of its obvious importance, innovation has not always received the scholarly attention it deserves. An innovation strategy has in the future to serve also as a base for pumping of EU resources for the concrete development activities. Their result is an increase of an innovation amount in region, an enhancement of qualified labour force, region competitiveness and a decrease of unemployment. Competitiveness of region and companies performed wherein direct depends on that to which rate is able to exploit results of the science and research in practice. Science and research have direct effect on the innovations development and innovation processes in the economics of each region. Slovakia prepares on the input of EU resources assigned also at the area of science and research development and practical utilization of its results. These issues will have in the final result an impact on the employment and its defensibility as an economics development in region. More and more perceive many of us an importance and coverage of innovations and capability to implement results of science and technology for the development of company's competitiveness.

KEY WORDS

Innovation, Regional Development, Research and Development, Competitiveness, Innovation Strategy and Projects

INTRODUCTION

Existing support should strive to utilize the advantages that small and medium-sized enterprises have: flexibility and potential of growth dynamics as results of innovativeness. One of the convenient tools for increase of access to the sources represents orientation on the new funding tools, for example through the risk capital. This example can be an effective tool of the development of innovation companies, but is limited in some details, mainly in consequence of capital market malfunction. For the support for small and medium-sized enterprises in Slovakia, there are several organisations. The most important among them are¹:

¹ ŤAPÁK, P. and coll., 2008. *Regional Innovation Strategy of Košice Autonomous Region*. [online]. Texinfo ed. 1. [Košice]: Košice Autonomous Region, 2008. ISBN: 80-969559-X-X, 114 s. [cited 2008-10-28]. Available on internet:

<http://www.vucke.sk/APIR/sk/Pre_Podnikatelov/phsr/regionalnainovacnastrategia/Stranky/default.aspx>

1. NADSME - National Agency for Development of Small and Medium-sized Enterprises,
 - a) BIC - Business Innovation Centres,
 - b) RAIC - The Regional Advisory and Innovation Centre,
2. FCC - First Contact Centres,
3. RDA - Regional Development Agencies,
4. SCCI - The Slovak Chamber of Commerce and Industry,
5. Organizations for the Support of Regional Development, Innovations and Research,
6. Innovation Centres.

NADSME serves as universal information centre for domestic and foreign entrepreneurs, as an organizer of educational and advisory programmes and as a disseminator for wide spectrum of the supporting financial programmes for small and medium-sized enterprises. Very important and inseparable parts of its activity are supporting programs, which are realized with the finance support from national budget and also from the EU funds. The main mission of BIC is to accelerate the economic development of regions through the support from companies and public sector, to help to starting entrepreneurs, to assist in obtaining financial help for enterprise activities. The goal of RAIC is to support economic and social development of regions by the complex development support of enterprise activities, mainly small and medium enterprises. Mission of FCC is to contribute to the improvement of enterprise climate by given services, to support creation of new job opportunities, to raise competitiveness of target groups, to support collaboration within the framework of EU and to promote the regions. There are 29 agencies established in Slovakia in different towns. Activity of RDA is specialized to preparation and realization of projects supported the regional development as well as on the creation of business intents on the basis of entrepreneur's requirements. These agencies focus their activity on creation of financial plans, consulting in economics, processing of marketing plans for beginning entrepreneurs, consulting in tourist trade and grant at the foundation of new companies. SCCI provides an addresses and information from the company databases and catalogues, domestic and foreign, as information about potential business partners. It also organizes many seminars and events focused on increase of its members and other business publicity awareness. Agencies noticed in the fifth point contribute to more effective and dynamic steady sustainable growth of Slovak regions by creation conditions and mechanisms in region that allow to solve preferred problems and to realize goals of the accredited developing documents. Business incubators are very important element of the supporting infrastructure for small and medium enterprises. The mission of business incubators is to provide convenient conditions for beginning entrepreneurs for operation of their company in about three years. This kind of incubators provides also business places include secretarial infrastructure, complex services or starting capital. Generally oriented incubators provide places for new companies. The goal of these incubators is to increase prospect of the growth and survival rate of companies by providing business places with common infrastructure and consulting services. The main accent is putted on the local development and creation of working places. Technological incubators support technological specialized companies with the accent of technology transfer.

AIM AND METODOLOGY

The objective of this paper was to provide a view of the Eastern Slovakia regions in term of innovation development and regional strategy. We were working with information from the papers of Regional Innovation Strategy projects of Eastern Regions. In the following part of this paper you can find results of our research and confirmation of Košice and Prešov Region. Transfer of technologies, innovations and know-how is the main tool of innovation development due to the insufficient production of new technologies in the regions. Data

shows that the regions have benefited from innovation that comes from foreign multinational companies operating in the region rather than from local companies, universities and research institutions. Thus, in case that the companies choose to move their operations elsewhere, their innovation will depart with them. It is under question whether the culture of innovation will remain and sustain in the region and for how long time without insufficient financial support.

RESULTS

Eastern Slovakia is categorized as a border region of Slovakia. Internal administrative division of Slovak territory allows specifying two sub-regions of Eastern Slovakia region: Košice Region and Prešov Region. In European classification NUTS, the Eastern Slovakia sub-regions were classified in NUTS II. Main characteristics of Eastern Slovakia region are presented in Figure 1.

Fig.1 Main characteristics of Eastern Slovakia sub-regions (census 2005)

Categories	Eastern Slovakia region	
	Prešov	Košice
Area	8 975	6 752
Population	798 596	771 947
Population density	88,70	114,10
Unemployment rate	21,50	24,70
GDP	129103	179077
GDP/per capita	161844	232206
Urban development	49,13	56,17

Source: data excerpted by authors from ²

It is necessary to add that some of the indicators have changed in 2008. Very positive change was observed in the level of unemployment. In mid-2008 the unemployment rate was 11,96 % in Prešov Region and 13,15 % in Košice Region³. This change can be caused by increasing of number of foreign investors in area of Eastern Slovakia region. Also since 2005, the increase of numbers of companies has been noticed. Decrease of the unemployment rate can be also related with increasing of people migrations. The Prešov Region is located in the north-eastern part of Slovakia. With around 800,000 inhabitants, it is the most populated region in Slovakia, and the largest in terms of geographical coverage. It borders Poland, Hungary and the Ukraine. Administratively, the region is divided into 13 districts which form micro-regions. The regional economy is dominated by tourism, manufacturing and processing industries and agriculture. Manufacturing and processing industries are the biggest employer, occupying 34 % of the workforce, followed by education (19 %), health care (13 %) and agriculture (9 %). Manufacturing industry is diverse, without a major orientation on a particular industry. The following manufacturing industries prevail: food production, chemical and pharmaceutical industries, manufacture of metal products, machinery, equipment, and transport vehicles, clothes, textile, and leather industries, electrical industry, wood-processing industry, and paper and printing industries.⁴ The Košice Region covers 6,752 km² (14 % of the territory of Slovakia) in the south-eastern part of Slovakia and has a population of 772,000 inhabitants. The region is situated at the centre of Western and Eastern

² Available on internet: <<http://portal.statistics.sk/showdoc.do?docid=20>>, <http://portal.statistics.sk/files/Sekcie/sek_300/330/rev_hdp/reg_rev_hdp_1995_2005.pdf>

³ Available on internet: <<http://www.e-katalog.sk/spravodajstvo/4894/>>

⁴ [cited 2008-11-05]. Available on internet: <http://www.innovating-regions.org/network/whoswho/regions_search.cfm?region_id=281>

Europe, Košice is an important transit territory for the transport of oil and natural gas. Forest vegetation and mountains form a large part of the geography of the region, which explains the scale of the wood processing industry and its importance for the regional economy. Other industries with a long tradition in Košice are the chemical, mining, metallurgical, electro-technical, machine production, textile, and food industries. Emerging economic activities with growth potential are information and communication technologies, mechatronics, biotechnology, the plastics industry, and tourism.⁵ With the collaboration of Ministry of Economy and Ministry of Education, a support system of the Regional Innovation Centres (RIC) were created and put to practice to support innovations in the regions. Thanks to higher quality of technological infrastructure (technological parks, centres and centres of excellence), interconnection of subjects in the area of industry and services improves. Results are in faster R&D, faster development of industry competitiveness and in the economic growth of regions in general. The Košice and Prešov Regions have at the present time very high quality potential of specialists in technical and scientific areas, widely developed college and university education networks. There is favourable situation for R&D, production of new systems, technologies and methods. Elementary condition of the increase region's competitiveness of the Eastern Slovak region is to improve links between education, research and industry oriented on the economic growth, employment and social cohesion.⁶ Both regions, Košice and Prešov, have their own visions of regional innovation strategies (RIS). The project implemented by the Prešov self-governing region (PSGR) is aimed to the acceleration of economic growth of this underdeveloped region and its gradual transformation into a developed region on the basis of technology investments acquisition and knowledge based economy development. This project defines four target areas⁷:

1. Development of knowledge based economy.
2. Creation of qualified work positions.
3. Human resources development.
4. Implementation of innovations and technology transfers in traditional sectors of manufacturing and services.

As we can find in publication Regional Innovation Strategy of Košice Autonomous Region (NORRIS – North Hungary and Košice Bilateral Regional Innovation Strategy Project), transition of the Slovak economics to the economics based on knowledge doesn't work without optimally structured and targeted research and development, innovations and of course without educated human capital. Any lag in this area can have negative impact on the quality of life in both regions. The Košice region is becoming internationally competitive thanks to the educational qualifications of its workforce (80.7 % of workers hold a secondary school or third-level qualification), the offer of tax allowances by the Slovak State, and the provision of grants to companies that create new jobs. The Košice Self-Governing region is involved in the creation of a technology park to host high-tech companies ('Hi-tech Park Technicom'), in the creation of three incubators (Moldava nad Bodvou, Gelnica, and Spišská Nová Ves), and it has also been active in the development of several projects aiming to establish number of clusters in the region. The Košice region and the region of North Hungary

⁵ [cited 2008-11-05]. Available on internet: <http://www.innovating-regions.org/network/whoswho/regions_search.cfm?region_id=281>

⁶ ĽAPÁK, P. and coll., 2008. *Regional Innovation Strategy of Košice Autonomous Region*. [online]. Texinfo ed. 1. [Košice]: Košice Autonomous Region, 2008. ISBN: 80-969559-X-X [cited 2008-10-28]. Available on internet: <http://www.vucke.sk/APIR/sk/Pre_Podnikatelov/phsr/regionalnainovacnastrategia/Stranky/default.aspx>

⁷ TAKÁČ, J. and coll., 2008. *Regional Innovation Strategy of Prešov Autonomous Region*. [online]. Texinfo ed. 1. [Prešov]: Prešov Autonomous Region, 2008. [cited 2008-10-28]. Available on internet: <<http://www.vucpo.sk/ganet/vuc/po/portal.nsf/pages/47C52E45F6F36DA8C125713E0031DB06>>

co-operated successfully in the NORRIS project which resulted in a bilateral innovation strategy. The aim of the strategy is to strengthen the regional and economic cohesion and competitiveness of the two regions and increase the economic significance of the Košice-Miskolc (an important educational and scientific centre in the region of North Hungary) axis.⁸ Transfer of technologies, innovations and know-how is the main tool of innovation development due to the insufficient production of new technologies in the regions. The more intensive and extensive technology transfer and successive implementation of new technologies and innovations, the faster the overall economic development of the region is to be. The BISS project within the CIP programme (Competitiveness and Innovation Programme) enabled to create a technology transfer centre in Prešov. The centre will accelerate technology transfer into the region. Increasing attractiveness and competitive position of Eastern Slovakia region is possible by innovations and investing into R&D actions. Decreasing barriers of investing into R&D can be possible by using financial help of government and getting money from EU funds. Also we can not forget that mentioned region is a bordered area that is why increasing attractiveness this area is possible by developing cooperation with bordered countries (Poland, Ukraine) by using transregional funds.

Fig.2 The structure of current expenditures in Slovakia and in the Prešov and Košice

Area	Year	Current expenditures on research and development		
		Basic research	Applied research	Experimental development
SR in total	2002	1 645 359	2 746 682	1 412 563
	2003	2 329 139	2 790 165	1 119 821
	2004	2 784 042	2 250 776	1 188 278
	2005	3 109 960	2 129 392	1 465 460
	2006	3 431 901	2 224 221	1 571 346
Prešov Region	2002	22 096	81 570	70 499
	2003	32 541	72 681	62 772
	2004	41 287	38 776	117 137
	2005	45 169	43 421	112 028
	2006	52 544	38 817	76 487
Košice Region	2002	245 072	61 219	205 796
	2003	283 958	75 603	172 496
	2004	324 187	107 232	148 259
	2005	350 243	136 310	96 965
	2006	472 791	194 893	122 286

Source: Own work

Figure 2 shows very positive tendency, which started since year 2002. Data in years shows that the highest increase of R&D expenditures (more than 40 %) was noted in 2006. In the Košice Region, capital expenditures increased very rapidly since 2003, in contrast to the Prešov Region where increasing tendency dramatically changed in 2005; and presently, the trend is still decreasing. It is necessary to note that total expenditures in the Košice Region were fourteen times higher in 2006 than in the Prešov Region. Fig. 2 shows that in 2006 almost 50 % of all current expenditures were spent on the basic research. Nevertheless situation in individual sectors was different. In the Prešov Region only about 31 % of all current expenditures were spent on the basic research in 2006, moreover more than 45 % of

⁸ [cited 2008-11-05]. Available on internet: <http://www.innovating-regions.org/network/whoswho/regions_search.cfm?region_id=281>

mentioned expenditures were spent on the experimental research. The opposite situation was observed in the Košice Region where on the basic research was spent almost 60 % from current expenditures and on the experimental research about 15 %. It is necessary to note that the Košice Region spent almost nine times more money on the basic research than the Prešov Region in 2006. The assumption is that about 30 R&D organizations exist in Slovakia in the industry sector. These organizations are concentrated on the development, production, service activities; they prepare expertises, project activities or services. The demand for R&D outputs is very weak. Slovak companies are not so much interested on new progressive products or technologies. This situation can be connected with small participation of products which bring new extra value in the structure of total production in Slovakia. Moreover, the most of Slovak exporters run business in the markets with small competition; and usually, they are using minimal price strategy as an advantage⁹. We also have to take into consideration the sources of financing R&D activities. The main sources of financing R&D activities were classified into five main categories: government, business enterprise, higher education, private non-profit organizations, and from abroad. In all of these categories, the majority of expenditures were financed from enterprise sources. This tendency is observed in both sub-regions. The second most important source of financing R&D activities is government and next is public sector. Comparing these two categories in a time scale, we observe increase of using financial sources from government sector. Comparing both sub-regions in time, we study that the government help to R&D activities in the Prešov Region was about 23 % in 2002 compare to about 44 % in 2006. This positive change was observed also in the Košice Region where financial sources from government were on the level of about 52 % in 2002 and this percentage increased to about 66 % in 2006. This situation can be connected with increasing company's experience with usage of programmes and projects financed by government. Improving communication between companies and government in this area and activity of agencies (which are helping to companies in finding proper programmes or project for R&D activity financing) may cause increasing of government financial sources usage, too. It is interesting that since 2002 we observed increasing of foreign sources on R&D activities. This tendency is very strongly visible - more in the Košice Region than in the Prešov Region. The third category of sources is higher education. Fig. 2 shows in very legible way that source "high education" is used much more often in the Košice Region than in the Prešov Region. This situation can be connected with quantity of universities and projects which were realized on individual higher schools. In the Košice Region was observed increasing of researches, engineers and equivalent personal working in full time on R&D. In 2007 the Košice Region had more than 5 times more R&D researchers working full time in R&D sector than the Prešov Region¹⁰. Comparing quantity of R&D workers in time scale, we see that the most engineers were employed in mentioned sector in 2004 and 2005 year. Presently we are observing falling tendency. This situation may be connected with emigration of high-educated experts who are working in Western Europe countries and the USA.

CONCLUSION

Innovation activities and increase of competitive position of regions is stated as the most important issue of strategic plans of individual regions in Slovakia in general and also specifically for Eastern Slovak Regions. The status as a low-cost labour base is getting to be weakened due to significant economic growth, emigration of labour power and subsequently due to the stronger demand for higher wages. These are the main reasons why innovation in all its forms (new business models, management techniques, products, and services) is vital to

⁹ Regionálna inovačná stratégia Košického Samosprávneho Kraja Bilaterálny projekt župy BAZ a KSK, Košický Samosprávny Kraj, ISBN 80-969559-X-X

¹⁰ Available on internet: <<http://px-web.statistics.sk/PXWebSlovak/index.htm>>

the continued economic growth and success of the Prešov and Košice regions. We have to note that demand for R&D outputs is very weak in the region. Eastern Slovak companies are not so much interested in creation of new progressive products or technologies. This situation can be connected with small share of products that brings new extra value in the structure of total production in Slovakia. Moreover, the most of Slovak exporters run their businesses on the markets where competition is small; and they use low price strategy usually. Migration of skilled R&D professionals due to low salaries is the reason why many innovative skills and ideas are lost for the region. Political environment in total share of expenditures on R&D from the State Budget and business environment with reduction of expenditures on R&D give the only mentioned chance to go for personal success. Lack of innovative ideas makes no positive pressure to encourage entrepreneurship in the region what creates a vicious circle: developed region – skilled professionals in R&D – more innovative ideas – higher level of entrepreneurship.

BIBLIOGRAPHY

- [1] Regionálna inovačná stratégia Košického Samosprávneho Kraja - Bilaterálny projekt župy BAZ a KSK, Košický Samosprávny Kraj, ISBN 80-969559-X-X.
- [2] TAKÁČ, J. and coll., 2008. Regional Innovation Strategy of Prešov Autonomous Region. [online]. Texinfo ed. 1. [Prešov]: Prešov Autonomous Region, 2008, 121 s.
- [3] ŤAPÁK, P. and coll., 2008. Regional Innovation Strategy of Košice Autonomous Region. [online]. Texinfo ed. 1. [Košice]: Košice Autonomous Region, 2008. ISBN: 80-969559-X-X, 114 s.
- [4] <http://portal.statistics.sk>
- [5] <http://www.e-katalog.sk>
- [6] <http://www.innovating-regions.org>
- [7] <http://www.vucke.sk>
- [8] <http://www.vucpo.sk>
- [9] <http://px-web.statistics.sk>

Ing. Petra Pešáková

Mgr. Patrycja Pudło

University of Economics in Bratislava, Faculty of Business Economics

Tajovského 13, 041 30

Košice, Slovakia

petra.pesakova@gmail.com

patrynia5@buziaczek.pl

ALTERNATIVE APPROACH TO HUMAN DEVELOPMENT MEASUREMENT AT REGIONAL LEVEL: THE CASE OF THE CZECH REPUBLIC

Ondřej Petr, Petr Tonev

ANNOTATION

Main target of this study is to evaluate regional differences in standard of living in case of the Czech Republic, what is based on creating Alternative human development measure (Alt-HDI). Alt-HDI is a composite index, which consists of six components and twenty-one variables. The purpose is to incorporate more aspects of human development into the measurement. Employability of Alt-HDI is checked at NUTS3 level first. Then it is applied at LAU1 level (77 districts) in order to make deeper regional analysis. According to the results, the most developed regions are Hl. m. Praha with surroundings and Brno–město. The least developed are Moravskoslezský kraj and Ústecký kraj, which consists with general perception and results of other studies.

KEY WORDS

Czech Republic, regional analysis, human development, composite indicator, variable, quality of life, comparison, measurement, evaluation.

INTRODUCTION

The hunger for complex indicators of quality of life and human development increases in last few decades, according to Morse (2003, p. 184). This trend mainly rises from the criticism of standard economic indicators such as GDP or GNP. These measures are not suitable to express well-being, because they say nothing about the distribution, character or quality of economic growth. They don't include activities, which are not priced – e.g. housework or unpaid services. Moreover, these measures are one-dimensional. They don't care about cultural, social, political and other dimensions of life (Agostini; Richardson 1997, p. 17). Dowrick (2003, p. 502) further highlights, that in the indicators such as GDP or GNP environmental issues and externalities are not implied. All of these arguments led to looking for a better human development measure, which would include more dimensions of quality life, than only the economic growth, expressed by GDP per capita.

That's why the concept of human development has formed on the ground of United Nations Development Programme (UNDP). The main effort of this approach is based on inclusion of different, non-economic aspects of quality of life, but it is not based on rejection of conventional economic theories. It is a complex approach, which concerns about wider connections of human life. It considers three opportunities to be a basic life options – the opportunity to live long and healthy life, the opportunity of education and the opportunity of access to enough resources to have a decent standard of living. It also emphasizes other dimensions, especially social, cultural and political area. Very important condition of development is inherence of freedom, which determines successful progression in all areas mentioned above. The human development approach has a huge potential for political usage. It can be used to analyze the situation and politics at a variety of regional division levels. Growing popularity of human development evaluation goes hand in hand with the possibility of its political usage by policymakers. Such a usage assumes the level of human development to be measurable. Hence it is necessary to create a synthetic indicator, which is able to take into account the situation in all observed fields and merge it all into one result.

Probably most popular composite indicator of human development is Human Development Index (HDI), evolved on the ground of UNDP. HDI was created predominantly to express cross-national differences in the level of human development better than traditionally used economic indicators.

There exist some other indicators, which were developed under the roof of UNDP too. First example can be Human Poverty Index (HPI), which exists in two variations (HPI-1 for developing countries and HPI-2 for OECD countries). Its target is to express the imperfections in basic dimensions of human development. The second is Gender-related Development Index (GDI), which includes the inequalities in relationship between men and women to human development measurement. The third is Gender Empowerment Measure (GEM) as a measure of inequalities between men's and women's opportunities in a country. It combines inequalities in three areas: political participation and decision making, economic participation and decision making, and power over economic resources. However, the most frequently used indicator is HDI. Although it was developed primarily for UN member countries cross-national comparison, sometimes it is applied at subnational level too. However, this is mainly the case of large countries with significant regional disparities. Similar application has no sense in case of such a small and homogenous country as the Czech Republic. Since the possibility of applying most frequently used indicators is very low, this study suggests creating a new composite indicator of human development, which overcomes weaknesses of HDI and is able to discover regional differentiation in the level of human development within the Czech Republic with sufficient sensitivity and precision.

AIM AND METHODOLOGY

Main target of this research is to evaluate regional differentiation of human development in the Czech Republic, based on creating the Alternative human development measure (Alt-HDI). According to Booysen (2002, str. 115-151), most important steps, when creating composite indicator, are selection of variables, scaling, weighting, aggregation and evaluation. Selection can be based on theory, empirical analysis, pragmatism or intuition, often is influenced by political interests. The nature of selection often depends on the aim of actual analysis, on the extent and character of investigated area, and is often limited by data availability. Scaling lies in transformation of values of variables to a certain scale, what is based on usage of reference points to express relative distance of values. The next step can be explicit weighting. Common practice is, however, not to employ explicit weighting, but to use only equal aggregation based on simple arithmetic average usage. Evaluation represents important feedback for further improving and development of indicators.

There is quite a lot of composite indices of development. Majority of them is typical for their ad hoc selection, linear scaling and equal aggregation. The indicators are mostly multidimensional, quantitative and cardinal. They can be aimed on variables, which represent means of development, variables embodying development goals or combination of both possibilities.

HDI can be described as a composite indicator which consist of three components and four variables overall. Employed method of selection is ad hoc selection. Scaling lies in traditional linear scaling, which means transformation of values of variables into the linear scale (range from 0 to 100) with utilization of defined reference points. HDI value is a simple average of components, just in case of educational component explicit weighting of two relevant variables is employed.

Values of variables are transformed to linear scale from 0 to 1 on the basis of minimum and maximum values of variables (reference points), which are declared by the UN as a goalposts. Values of reference points are:

- life expectancy at birth – 25 years and 85 years
- adult literacy rate – 0 % and 100 %
- combined gross enrolment ratio for primary, secondary and tertiary schooling – 0 % and 100 %
- GDP per capita in PPP – 100 USD and 40 000 USD

Standardization is based on usage of this formula:

standardised value of variable = (actual value – minimum value) / (maximum value – minimum value)

In case of GDP per capita there is a difference. Since it is assumed, that from certain level of GDP per capita its further growth is not as crucial, logarithmic values of GDP per capita are used in the same formula written above. This approach is suitable in case of cross-national comparison of countries with huge differences in GDP per capita. The result is, that from certain level of GDP per capita its continuing growth has decreasing importance.

HDI value is then a simple average of three basic components. In case of educational component, which consist of two variables, explicit weighting is employed. Two-thirds weight is given to adult literacy and one-third weight to combined gross enrolment.

HDI values moves in range from 0 to 1. The higher the value, the higher is the level of human development. Three categories of countries are defined according to HDI values:

- High level of human development (HDI greater than 0,8)
- Medium level of human development (HDI between 0,5 and 0,8)
- Low level of human development (HDI lower than 0,5)

The application of HDI on the NUTS 3 level in case of the Czech Republic (14 NUTS 3 regions overall) showed some imperfections. Czech Republic is presented as highly homogenous country, with exception of very strong capital Prague. Other 13 regions achieved almost identical results. HDI value of the worst NUTS 3 region (Karlovarský kraj) is on the level of 96,65 % of HDI value for the second-best NUTS 3 region (Jihomoravský kraj). This homogeneity arises from methodology of HDI calculation. The main purpose of HDI existence is comparison of high number of countries on different level of human development from the worst countries to the best. HDI in its original form is then not suitable for human development measurement at subnational level of relatively small and homogenous state. Main problem can be seen in usage of UN's defined reference points, which has no sense in specific case of concrete country.

However, modification of reference points is not a sufficient solution of the problem. There are more weaknesses of original HDI, such as logarithmic calculation of GDP per capita. This proceeding refines regional differences in economic performance, what is unreasonable and undesirable in case of Czech Republic. Inclusion of literacy (value of 99 % across the Czech Republic) has homogenizing effects too. Limited number of variables cannot ensure complex analysis, containing more aspects of human development. The need to find an alternative approach to discover the nature of human development regional differentiation in Czech Republic is obvious.

Construction of Alternative measure of human development (Alt-HDI)

Alt-HDI is based on the same methodology as standard HDI by using the same standardization formula for all variables:

$I_{xi} = (X_i - X_{i-min}) / (X_{i-max} - X_{i-min})$, where the higher value of variable X_i increases quality of life
 $I_{xi} = (X_{i-max} - X_i) / (X_{i-max} - X_{i-min})$, where the lower value of variable X_i decreases quality of life

I_{xi} – indexed value (standardized value) of variable i

X_i – actual value of variable i

X_{i-max} – maximum value of variable i

X_{i-min} – minimum value of variable i

This standardization transforms values of all variables to interval $<0, 1>$. It is refrained from logarithmic calculation of GDP per capita, because this step is unreasonable in case of small and quite homogenous state. Reference points X_{i-max} and X_{i-min} are taken straight from data set of each variable. It should ensure true distribution of values for all regions within an interval $<0, 1>$. Alt-HDI is quantitative composite indicator of cardinal nature. It is quite complex, multidimensional indicator, which includes more aspects of human development. Alt-HDI is based on ad hoc selection inspired with previous research activities and influenced by intuition. Selection is naturally conditional on data availability. Alt-HDI consists of variables, which are means of development as well as variables embodying development goals. Explicit weighting is not employed. Components and final Alt-HDI are calculated as a simple arithmetic average of its parts. Weighting is employed only in case of educational index calculation.

Categorization of human development is based on Jenks natural breaks method. The Jenks' natural breaks classification scheme determines the best arrangement of values into classes by iteratively comparing sums of the squared difference between observed values within each class and class means. The "best" classification identifies breaks in the ordered distribution of values that minimizes within-class sum of squared differences. Jenks method is suitable for classification of statistic sets with abnormal, multi-peak distribution. It is often used when working with socioeconomic data. The method is implemented in ArcView application, which was used for creating cartograms.

Final Alt-HDI consist of six components and twenty-one variables overall. Components are aimed on three basic dimensions of human development concept (health, education and economic performance) and three more dimensions (demographic background, social background and environment). The structure of Alt-HDI is presented in Figure 1.

Fig.1 Structure of Alt-HDI

Components of Alt-HDI	Variables
Demographic background component	Age index
	Natural population growth indicator (live births / deaths)
	Migration indicator (immigrants / emigrants)
Health component	Average percentage of incapacity for work
	Infant mortality (‰)
	Population per physician
	Life expectancy - women
	Life expectancy - men
Component of Education	Educational index
Economic background component	Completed dwellings per 10 000 population
	Average monthly gross wage per employee (CZK)
	Entrepreneurial intensity {(employers + self-employed) / Econ. active population}
Social background component	Registered unemployment rate (%)
	Aborts per 100 births
	Average monthly amounts of pensions (CZK)
	Ascertained offences per 1000 population
	Average living space area per capita (m ²)
	Suicides per 100 000 population
Component of environment	Emission of main air pollutants (tons/km ²)
	Ecological stability of landscape
	Percentage of cleaned sewage

Source: own proposal

Educational index (EI) is calculated according to formula, which gives different weights to particular level of finished education:

$$EI = \frac{1 \times PE + 2,5 \times HS \text{ without graduation} + 3 \times \text{full HS} + 3,5 \times \text{EHS or college} + 6 \times \text{University}}{\text{population over 15}}$$

PE – primary education

HS – high school

EHS – high school with extension (extended HS)

„Emission of main air pollutants“ indicator is calculated as an average of indicators for each kind of pollutants, which are solid emission, SO₂, NO_x and CO emission.

Indicator of ecological stability of landscape¹ confronts total area of minimally influenced land with total area of strongly and constantly influenced land.

¹ Indicator of ecological stability of landscape = (total area of forests, gardens, vineyards, hop-gardens, meadows and grassland and water surface) / (total area of arable land, built-up areas, other areas, e.g. for traffic, mining). Methodology was taken from the study „Evaluation of regional differentiation inside South-Moravian NUTS 3 region, placed on the web of ČSÚ: <<http://www.czso.cz/xb/edicniplan.nsf/p/13-6235-07>>

All the data were taken from database of Czech Statistical Office (ČSÚ). Due to data availability restrictions it wasn't possible to fully harmonize time period, when data were obtained. In case of Age index, Natural population growth indicator, Average percentage of incapacity for work, Registered unemployment rate, Aborts per 100 birth, Average monthly amounts of pensions, Ascertained offences per 1000 population and Ecological stability of landscape, data were obtained in the year 2006. Data for the indicators Population per physician, Average monthly gross wage per employee and Emission of main air pollutants were obtained in the year 2005. In case of Migration indicator and Completed dwellings per 10 000 population, an average of years 2005 and 2006 was used in order to eliminate time-fluctuations. The same reason led to use an average of years 2004-2006 in case of Infant mortality and Suicides per 100 000 population. In case of Percentage of cleaned sewage indicator there was no other possibility except taking the data for the year 2002. Latest available data for Average living space area per capita and Educational index comes from Population and Housing Census 2001.

RESULTS

Application of Alt-HDI at NUTS 3 level regions of the Czech Republic

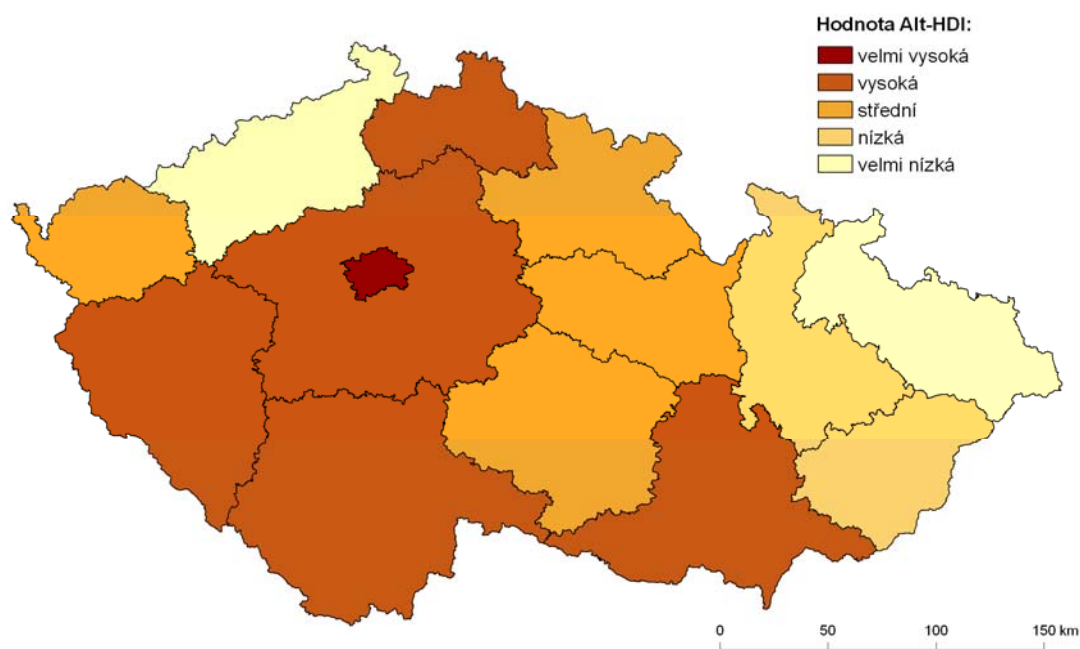
Main purpose of application of Alt-HDI at NUTS 3 level is to compare its results with original HDI results and with results of Regional human development index, originated by Potůček (2003), and then to consider its contribution for human development research at regional level. Creating Alt-HDI should solve forenamed shortcomings of HDI application on subnational level. Alt-HDI should enable deeper regional analysis of human development.

Achieved results open the way to human development analysis on the NUTS 3 level. According to UNDP categorization, none of czech NUTS 3 regions would achieve high level of human development. ($HDI > 0,8$). Only three regions - Praha, Středočeský kraj a Liberecký kraj – would find themselves on the medium level of human development (HDI from 0,5 to 0,8). Other eleven regions would fall to low human development level. Since character of Alt-HDI is completely different from original HDI, there has to be employed different system of categorization of the results. In this case, Jenks natural breaks method was chosen. On the grounds of this approach, five categories of human development were defined:

- Very high level of human development – Alt-HDI values higher than 0,564
- High level of human development – Alt-HDI values from 0,454 to 0,564
- Medium level of human development – Alt-HDI values from 0,394 to 0,453
- Low level of human development – Alt-HDI values from 0,289 to 0,393
- Very low level of human development – Alt-HDI values lower than 0,289

Only the czech capital Praha (Alt-HDI = 0,741) is at very high level of human development. Group of high level of human development contains five regions, namely Středočeský kraj (0,564), Liberecký kraj (0,508), Jihočeský kraj (0,494), Jihomoravský kraj (0,486) and Plzeňský kraj (0,480). Medium level group consist of Vysočina (0,453), Královéhradecký kraj (0,446), Pardubický kraj (0,436) and Karlovarský kraj (0,420). Low level category has two members, Olomoucký kraj (0,393) and Zlínský kraj (0,392). At very low level of human development there are Moravskoslezský kraj (0,288) and Ústecký kraj (0,239). Situation is illustrated on the Figure 2.

Fig.2 Alt-HDI at NUTS 3 level



Source: Czech Statistical Office and own calculations

The comparison of Alt-HDI with Region human development index (Potůček, 2003) shows, that Alt-HDI can express regional differences in human development much more strongly (can be seen in Figure 3). Regional human development index is based on traditional HDI. The essence of human development paradigm is preserved by concentrating on three main dimensions of human development – possibilities to live long and healthy life, to achieve appropriate level of education and to achieve decent standard of living. Internal structure of these dimensions is however modified according to statistical research requirements in the Czech Republic. According to Potůček (2003, str. 84-85), Czech Republic is one of the most homogenous european countries.

Fig.3 Comparison of Alt-HDI with Regional human development index

Rank	Alt-HDI		% of national average	Rank	Reg. HDI - Potůček	
	NUTS 3 region	Alt-HDI value			NUTS 3 region	% of national average
1.	Hl. m. Praha	0,741	164 %	1.	Hl. m. Praha	122 %
2.	Středočeský	0,564	125 %	2.	Jihočeský	107 %
3.	Liberecký	0,508	112 %	3.	Královéhradecký	105 %
4.	Jihočeský	0,494	109 %	4.	Středočeský	105 %
5.	Jihomoravský	0,486	107 %	5.	Plzeňský	104 %
6.	Plzeňský	0,480	106 %	6.	Liberecký	101 %
7.	Vysočina	0,453	100 %	7.	Pardubický	100 %
8.	Královéhradecký	0,446	98 %	8.	Vysočina	99 %
9.	Pardubický	0,436	96 %	9.	Jihomoravský	98 %
10.	Karlovarský	0,420	93 %	10.	Olomoucký	96 %
11.	Olomoucký	0,393	87 %	11.	Zlínský	96 %
12.	Zlínský	0,392	87 %	12.	Karlovarský	94 %
13.	Moravskoslezský	0,288	64 %	13.	Ústecký	86 %
14.	Ústecký	0,239	53 %	14.	Moravskoslezský	81 %

Source: Potůček 2003 and own calculations

For the evaluation of Alt-HDI, there is a possibility of using a comparison with original HDI results. While standard HDI is unable to show differences between regions, the ability of Alt-HDI to express differentiation is sufficient. Fourteen regions are in the range of five decimals, what is, with respect to maximum range of Alt-HDI from 0 to 1, favourable enough. The worst region, Ústecký kraj, achieves 32 % of level of the first region, Praha. If we leave out Praha, the worst Ústecký kraj achieves 42 % of level of the second-best region, Středočeský kraj. Czech Republic is therefore not as homogenous as presented by HDI. Certain homogeneity however can be seen in case of regions ranked from second to tenth place. Tenth region, Karlovarský kraj, achieves 74,5 % of level of the second region, Středočeský kraj. Comparison of results is contained in Figure 4.

Fig.4 Comparison of HDI and Alt-HDI

Nuts3 region	Hlavní město Praha	Středočeský	Jihočeský	Plzeňský	Karlovarský	Ústecký	Liberecký	Královéhradecký	Pardubický	Vysočina	Jihomoravský	Olomoucký	Zlínský	Moravskoslezský
HDI	0,931	0,851	0,864	0,859	0,837	0,840	0,853	0,865	0,856	0,860	0,866	0,851	0,857	0,853
Rank	1.	11.-12.	4.	6.	14.	13.	9.-10.	3.	8.	5.	2.	11.-12.	7.	9.-10.
Alt-HDI	0,741	0,564	0,494	0,480	0,420	0,239	0,508	0,446	0,436	0,453	0,486	0,393	0,392	0,288
Rank	1.	2.	4.	6.	10.	14.	3.	8.	9.	7.	5.	11.	12.	13.

Source: Czech Statistical Office and own calculations

Application of Alt-HDI at LAU 1 level regions of the Czech Republic

In previous section the utility of Alt-HDI as an instrument for application at subnational level was checked. On the basis of comparison with commonly used HDI, Alt-HDI was chosen as a better indicator for human development research at subnational level in case of the Czech Republic than HDI, standard HDI was found as unsuitable for this purpose. The goal of this section is deeper analysis of regional differentiation of human development in the Czech Republic. Achievement of this goal is based on application of Alt-HDI at LAU 1 level of regional division, represented by 77 districts.

The structure of Alt-HDI remains unchanged, the only change is different time period in case of Life expectancy. Due to restricted data availability at LAU 1 level the average of years 2001-2005 was employed. Since indicator of Life expectancy evolves fluently, with no rapid changes, the influence of time period change should be irrelevant.

According to the results of Alt-HDI calculation, five categories of human development were defined²:

- Very high level of human development – Alt-HDI values higher than 0,561 (4 districts)
- High level of human development – Alt-HDI values from 0,487 to 0,561 (13 districts)
- Medium level of human development – Alt-HDI values from 0,424 to 0,486 (31 districts)
- Low level of human development – Alt-HDI values from 0,368 to 0,423 (21 districts)
- Very low level of human development – Alt-HDI values lower than 0,368 (8 districts)

The rank of all districts with demarkation of boundaries between different levels of human development is contained in Figure 5.

² For creation of intervals and definition of categories Jenks natural breaks method was employed again.

Fig.5 Rank of Lau 1 regions according to Alt-HDI value

Rank	LAU 1 region	Alt-HDI	Rank	LAU 1 region	Alt-HDI	Rank	LAU 1 region	Alt-HDI
1.	Praha - západ	0,725	27.	Žďár nad Sázavou	0,465	53.	Česká Lípa	0,413
2.	Hl.m. Praha	0,687	28.	Náchod	0,465	54.	Nový Jičín	0,412
3.	Praha - východ	0,667	29.	Příbram	0,463	55.	Kroměříž	0,412
4.	Brno - město	0,604	30.	Cheb	0,462	56.	Šumperk	0,409
5.	České Budějovice	0,561	31.	Frydek - Místek	0,459	57.	Břeclav	0,407
6.	Mladá Boleslav	0,550	32.	Jindřichův Hradec	0,458	58.	Uherské Hradiště	0,401
7.	Pardubice	0,544	33.	Vsetín	0,457	59.	Opava	0,399
8.	Hradec Králové	0,533	34.	Havlíčkův Brod	0,454	60.	Strakonice	0,398
9.	Plzeň - město	0,529	35.	Písek	0,451	61.	Znojmo	0,398
10.	Liberec	0,528	36.	Klatovy	0,451	62.	Sokolov	0,394
11.	Beroun	0,519	37.	Blansko	0,449	63.	Chrudim	0,394
12.	Zlín	0,507	38.	Plzeň - jih	0,444	64.	Děčín	0,388
13.	Brno - venkov	0,501	39.	Ústí nad Labem	0,443	65.	Domažlice	0,387
14.	Jablonec n. Nisou	0,501	40.	Trutnov	0,439	66.	Rokycany	0,382
15.	Olomouc	0,500	41.	Kladno	0,436	67.	Jeseník	0,380
16.	Český Krumlov	0,496	42.	Třebíč	0,434	68.	Přerov	0,379
17.	Jihlava	0,494	43.	Karlovy Vary	0,432	69.	Bruntál	0,375
18.	Kolín	0,486	44.	Svitavy	0,432	70.	Hodonín	0,367
19.	Semily	0,480	45.	Plzeň - sever	0,431	71.	Ostrava - město	0,363
20.	Nymburk	0,479	46.	Prostějov	0,431	72.	Litoměřice	0,357
21.	Mělník	0,474	47.	Jičín	0,430	73.	Louny	0,345
22.	Ústí nad Orlicí	0,473	48.	Pelhřimov	0,430	74.	Chomutov	0,343
23.	Rychnov nad Kněžnou	0,472	49.	Rakovník	0,423	75.	Teplice	0,334
24.	Benešov	0,472	50.	Vyškov	0,423	76.	Karviná	0,313
25.	Tábor	0,469	51.	Tachov	0,423	77.	Most	0,310
26.	Kutná Hora	0,467	52.	Prachatice	0,419			

Source: Czech Statistical Office and own calculations

The gap between the first and the last district is 4,15 decimals, which is still wide enough. First 17 districts lies in the range of 2,31 decimals, other 60 districts is crowded in the range of 1,76 decimals. The reason is namely domination of first three „prague districts“.

The category of very high level of human development contains three „prague districts“ and Brno-město district. First place is occupied by Praha-západ district (Alt-HDI = 0,725), while district of hl. m. Praha (0,687) is second. The biggest advantages of Praha-západ district are especially high value of Demographic background component, but also good economic and social background. It holds its leading position in case of six variables - Natural population growth indicator, Migration indicator, Completed dwellings per 10 000 population, Average living space area per capita, Registered unemployment rate and Entrepreneurial intensity. Extremely strong position in case of Age index, Aborts per 100 birth and Suicides per 100 000 population are the reason of Praha-západ ranking too. It is possible to say, that in this district is high concentration of young, succesfull, economically active people, who have opportunities to realize their dreams, who can afford high-quality housing and who establish families. They don't have to solve their problems as drastically as by abortions or suicides. What is negative in case of Praha-západ district, is two indicators – Population per physician and Percentage of cleaned sewage. The position of the district is on the periphery of the Czech

Capital Prague. It's attractiveness began to rise relatively later, that's why certain infrastructure is not as developed yet. Another reason for absence of certain services is the role of the Capital's background and emphasis on its housing function. Services are then in district of capital city Praha available. The most significant shortcoming rests in indicator of Ecological stability of landscape. Considering the nature of this indicator and the fact, that Praha-západ is the part of the capital city, this shortcoming can't be surprising.

Previous conclusions can be confirmed also in terms of district of hl. m. Praha (Alt-HDI = 0,687) analysis. Low value of demographic background component and low value of Completed dwellings per 10 000 population signalize, that more and more people leave the center of Praha and move to its background. In district of hl. m. Praha stay older people, who are unwilling to travel everyday, need better infrastructure, wider health services. Lower birth rate is characteristic too. High density of build-up area and negative influences on the environment are significant limits of new build-up. Average living space area per capita is logically smaller than in case of districts of Praha-západ and Praha-východ.

District of Praha-východ (Alt-HDI = 0,667) looks like combination of other two „prague“ districts in certain aspects. Demographic background component and indicators of Completed dwellings per 10 000 population and Average living space area per capita are reaching lower values, than in case of Praha-západ. Values for Population per physician, Ascertained offences per 1000 population and Percentage of cleaned sewage are on the other hand higher in case of Praha-východ.

The most interesting within the higher category can be comparison of „prague“ districts and district of Brno-město (Alt-HDI = 0,604). The situation of Brna-město is most similar to district of hl. m. Praha. These districts are quite near in case of components of demographic background, health, education and environment. The most significant differences can be found within components of economic and social background. Brno-město is higher ranked in case of indicators of Ascertained offences per 1000 population and Suicides per 100 000 population, Economic background component is much better for district of hl. m. Praha.

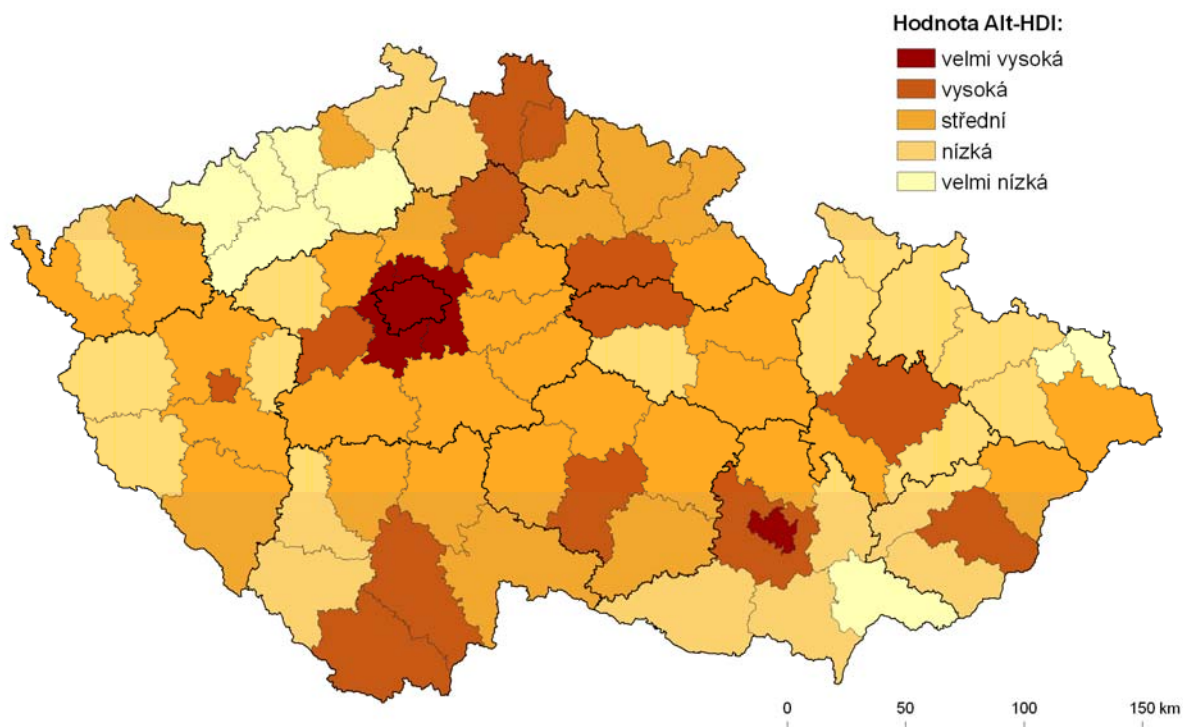
The category of high level of human development contains 13 districts (LAU 1 regions) from 10 different NUTS 3 regions. Majority of these districts are regions of significant centers of NUTS 3 regions.

At medium level of human development is 31 districts. Seven of them belong to NUTS 3 region Středočeský kraj. Four representatives in this category has NUTS 3 regions Vysočina and Královéhradecký kraj and three representatives NUTS 3 regions Plzeňský kraj and Jihočeský kraj.

The category of low level of human development consist of 21 districts. The highest number of representatives in this category has NUTS 3 regions Plzeňský kraj, Jihomoravský kraj, Olomoucký kraj and Moravskoslezský kraj. Each of these regions contributes to this category by three districts.

The category of very low level of human development contains 8 districts. One of them is part of NUTS 3 region Jihomoravský kraj, two of them belong to NUTS 3 region Moravskoslezský kraj. Five districts of NUTS 3 region Ústecký kraj are found here. The situation is demonstrated by Figure 6.

Fig.6 Alt-HDI at LAU 1 level (for districts)



Source: Czech Statistical Office and own calculations

Based on human development research at LAU 1 level, differences in level of human development within the Czech Republic seems to be quite significant. However, results are strongly influenced by appearance of extremes, namely domination of the Capital city Praha or Brno as the second strongest czech city. Second extreme is decadence of several areas, especially districts of NUTS 3 regions Ústecký kraj and Moravskoslezský kraj. The weakest district Most achieves 42,8 % of value for the strongest district Praha-západ. Situation changes rapidly with leaving out categories of very high and very low level of human development. In this case, the worst district would achieve 66,8 % of value for the best district. Then it is possible to say, that the rest of the Czech Republic is to a large extent homogenous.

Within NUTS 3 regions, the most homogenous are Vysočina, Karlovarský kraj and Královéhradecký kraj. In these three cases, the worst district (LAU 1 region) achieves more than 80 % of level of the best district. Least homogenous NUTS 3 regions are Moravskoslezský kraj (the worst district achieves only 68,2 % of level of the best district), Jihomoravský kraj (60,8 %) and Středočeský kraj (58,3 %). Since the reason in the first case is quite good ranking of Frýdek-Místek district and decadence of Karviná district, in other two cases domination of Praha and Brno appears to be the reason.

The Figure 7 contains a chart of best and worst ten districts in case of each particular component.

Fig.7 Best and worst ten districts in each component

Rank	Demographic background component		Health component		Component of education		Economic background component		Social background component		Component of environment	
1.	Praha - západ	0,980	Hl.m. Praha	0,922	Hl.m. Praha	1,000	Praha - západ	0,852	Praha - západ	0,881	Jablonec n. Nisou	0,931
2.	Praha - východ	0,810	Plzeň - město	0,857	Brno - město	0,917	Hl.m. Praha	0,729	Praha - východ	0,760	Děčín	0,886
3.	Český Krumlov	0,688	Hradec Králové	0,827	Plzeň - město	0,674	Praha - východ	0,705	Plzeň - jih	0,751	Český Krumlov	0,817
4.	Tachov	0,612	Brno - město	0,816	Pardubice	0,653	Beroun	0,425	Brno - venkov	0,731	Sokolov	0,812
5.	Ústí nad Labem	0,563	Pardubice	0,801	Hradec Králové	0,559	Plzeň - město	0,421	Rychnov nad Kněžnou	0,709	Vsetín	0,798
6.	Beroun	0,546	České Budějovice	0,770	Praha - západ	0,541	Brno - město	0,419	Pardubice	0,691	Jeseník	0,788
7.	Česká Lípa	0,542	Jihlava	0,767	České Budějovice	0,514	České Budějovice	0,403	Pelhřimov	0,679	Trutnov	0,784
8.	Liberec	0,527	Mladá Boleslav	0,762	Praha - východ	0,502	Mladá Boleslav	0,400	Žďár nad Sázavou	0,675	Cheb	0,771
9.	Mladá Boleslav	0,522	Semily	0,749	Olomouc	0,484	Benešov	0,365	Písek	0,668	Frydek - Mistek	0,766
10.	Cheb	0,507	Zlín	0,744	Ostrava - město	0,431	Pardubice	0,358	Beroun	0,667	Šumperk	0,762
68.	Kroměříž	0,262	Tachov	0,434	Bruntál	0,142	Jeseník	0,162	Znojmo	0,418	Litoměřice	0,447
69.	Tábor	0,261	Prachatice	0,412	Louny	0,135	Hodonín	0,160	Sokolov	0,415	Rokycany	0,446
70.	Hradec Králové	0,242	Rokycany	0,399	Břeclav	0,129	Most	0,159	Bruntál	0,414	Pardubice	0,436
71.	Zlín	0,239	Česká Lípa	0,386	Znojmo	0,119	Šumperk	0,158	Ústí nad Labem	0,410	Domažlice	0,435
72.	Hodonín	0,222	Karviná	0,377	Teplice	0,097	Svitavy	0,156	Karviná	0,391	Jičín	0,433
73.	Rokycany	0,207	Děčín	0,366	Most	0,094	Chomutov	0,156	Jeseník	0,362	Chrudim	0,420
74.	Písek	0,203	Most	0,362	Děčín	0,085	Bruntál	0,148	Chomutov	0,361	Vyškov	0,401
75.	Hl.m. Praha	0,202	Louny	0,343	Tachov	0,075	Sokolov	0,147	Děčín	0,325	Prerov	0,377
76.	Brno - město	0,176	Chomutov	0,336	Chomutov	0,026	Louny	0,146	Most	0,322	Opava	0,364
77.	Plzeň - město	0,150	Teplice	0,322	Sokolov	0,000	Karviná	0,056	Teplice	0,291	Ostrava - město	0,226

Source: Czech Statistical Office and own calculations

Among the first ten districts appears most frequently (in case of four components) districts of Praha-západ, Praha-východ and Pardubice. Districts of hl. m. Praha, Beroun, Brno-město, Plzeň-město, Mladá Boleslav and České Budějovice can be seen here very often too (in case of three components). Components of health and education are dominated by districts of strong and large cities.

The most frequently ranked districts in the last ten are four times represented districts of Most and Chomutov. In case of three components districts of Rokycany, Karviná, Bruntál, Děčín, Louny, Teplice a Sokolov can be found in the last ten.

All previous results discover areas of the highest and lowest level of human development. The LAU 1 regions with best conditions for living seems to be all three „prague“ districts, both Brno-město and Brno-venkov districts and districts of České Budějovice, Mladá Boleslav, Pardubice, Hradec Králové, Plzeň-město, Liberec, Beroun, Zlín, Jablonec nad Nisou, Olomouc, Český Krumlov and Jihlava. Mostly we can talk about districts of the biggest cities of Czech NUTS 3 regions, where a cumulation of high-standard infrastructure, services, education and economic prosperity appears. At the same time, these conditions embody good grounds for social background cultivation.

The worst situation can be found in districts of NUTS 3 regions Ústecký kraj and Moravskoslezský kraj, but in Hodonín district as well. Major part of these areas suffer from their past one-sided orientation on heavy industry, which falls out, or agriculture, which is not able to secure sufficient economic resources or performance by itself. The lack of job opportunities, inadequate supply of workforce, high unemployment and low incomes – each of this factors represents, often in combination with damaged environment, serious problem. What is more, these facts determines negative evolution of other areas, such as migration, build-up, health and social background. It is very hard to get out of this vicious circle.

CONCLUSION

Main target of this study was the evaluation of regional differentiation in standard of living across the Czech Republic. While worldwide most frequently used indicators were not suitable, the study assumed construction of new composite indicator of human development, which would be able to eliminate shortcomings of HDI and adequately describe the nature of regional differentiation of the Czech Republic. Alternative measure of human development (Alt-HDI) is built-up on similar methodology as HDI. It employs ad hoc selection of variables as well, scaling is based on the same standardization formula as HDI, but reference points for each variable are taken straight from particular data sets. Components and final Alt-HDI as well are calculated as a simple arithmetic average of its elements. Weighting is used only in calculation of one variable - educational index. Alt-HDI contains more variables than HDI. It consists of six components and twenty-one variables overall. Alt-HDI was first applied at NUTS 3 level first. In terms of comparison of its results with results of HDI and Regional human development index (presented by Potůček, 2003) as well, Alt-HDI was found as an appropriate instrument of regional human development analysis. Using Alt-HDI, values for all NUTS 3 regions were spread in range of five decimals. When taken into account the maximum range of Alt-HDI values from 0 to 1, these results are sufficient. To categorize results into five intervals the Jenks natural breaks method was employed. At very high level of human development appears only Praha NUTS 3 region (Alt-HDI = 0,741). At high level of human development are NUTS 3 regions Středočeský kraj (0,564), Liberecký kraj (0,508), Jihočeský kraj (0,494), Jihomoravský kraj (0,486) and Plzeňský kraj (0,480). The category of medium level of human development contains NUTS 3 regions Vysočina (0,453), Královéhradecký kraj (0,446), Pardubický kraj (0,436) and Karlovarský kraj (0,420). At low level of human development rank NUTS 3 regions Olomoucký kraj (0,393) and Zlínský kraj (0,392). The category of very low level of human development consists of NUTS 3 regions Moravskoslezský kraj (0,288) and especially Ústecký kraj (0,239). The Czech Republic is not as homogenous as presented by HDI or Regional human development index. This results are however to a large extent the consequence of extremely developing Prague in contrast to decadent Moravskoslezský and Ústecký NUTS 3 region, where disadvantages of economic transformation appear.

Alt-HDI was then applied at LAU 1 (districts) level in order to make deeper regional analysis. The gap between first and last district is 4,15 decimals, which is still sufficient. The category of very high level of human development contains 4 districts – three „prague“ districts, supplemented by Brno-město district. The group of high level of human development consists of 13 districts. At medium level of human development can be found 31 districts. The category of low level of human development contains 21 districts. The last category of very low level of human development consist of 8 districts, where five of them belongs to NUTS 3 level Ústecký kraj. In terms of Alt-HDI application at LAU 1 level, disparities in human development across the Czech Republic seems to be significant. The main reason is presence of highly developed (especially prague) districts on the one hand and existence of totally depressed districts on the other hand. The weakest Most district achieves only 42,8 % of value for the strongest Praha-západ district.

The best conditions for living can be found in three „prague“ districts, districts of Brno-město, Brno-venkov, České Budějovice, Mladá Boleslav, Pardubice, Hradec Králové, Plzeň – město, Liberec, Beroun, Zlín, Jablonec nad Nisou, Olomouc, Český Krumlov and Jihlava. Districts, which belong to NUTS 3 regions Ústecký kraj and Moravskoslezský kraj, and Hodonín district were found as areas with lowest quality of life. These facts consist with general perception and results of other studies.

BIBLIOGRAPHY

- [1] Agostini, SJ; Richardson, SJ. A human development index for US cities: Methodological issues and preliminary findings. REAL ESTATE ECONOMICS. 1997, 25 (1): 13-41.
- [2] Booyesen, F. An overview and evaluation of composite indices of development. SOCIAL INDICATORS RESEARCH. 2002, 59 (2): 115-151.
- [3] Dowrick, S; Dunlop, Y; Quiggin, J. Social indicators and comparisons of living standards. JOURNAL OF DEVELOPMENT ECONOMICS. 2003, 70 (2): 501-529.
- [4] Lind, N. Values reflected in the Human Development Index. SOCIAL INDICATORS RESEARCH. 2004, 66 (3): 283-293.
- [5] Marchante AJ, Ortega B. Quality of life and economic convergence across Spanish regions, 1980-2001. REGIONAL STUDIES. 2006, 40 (5): 471-483.
- [6] Morse, S. Greening the United Nations' Human Development Index? SUSTAINABLE DEVELOPMENT. 2003, 11 (4): 183-198.
- [7] Paul, S. A modified human development index and international comparison. APPLIED ECONOMICS LETTERS. 1997, 3 (10): 677-682.
- [8] POTŮČEK, M. et al. Odkud přicházíme, co jsme, kam jdeme : Zpráva o lidském rozvoji : Česká republika 2003. 1. vyd. Praha : MJF, 2003. 123 s.
- [9] Minář, M. Bakalářská práce: Mapová aplikace pro zobrazování epidemiologických dat na webu. 2008, str. 21. [online, cit. 2008-5-1] Dostupné z WWW: <http://is.muni.cz/th/143200/fi_b/xminar1-bc_prace.pdf>
- [10] National human development reports.
Available at <http://origin-hdr.undp.org/en/reports/nationalreports>

Main Data sources:

Publications of Czech Statistical Office, available at <http://www.czso.cz>

Ing. Ondřej Petr

The Faculty of Economics and Administration of Masaryk University

Lipová 41a

Brno 602 00

99592@mail.muni.cz

Mgr. Petr Tonev

The Faculty of Economics and Administration of Masaryk University

Lipová 41a

Brno 602 00

tonev@econ.muni.cz

EASTERN SLOVAKIA - NEW SPHERE OF INTEREST OF FOREIGN INVESTORS OR A PART OF SLOVAKIA CONDEMNED TO PERMANENT BACKWARD AND IMMIGRATION OF LABOUR FORCES. THE ROLE OF MANAGEMENT IN THIS TIME.

Daniel Rušin

KEY WORDS

Business opportunities, job opportunities, new production, incentive factors, labour forces

INTRODUCTION

Eastern Slovakia is a part of Slovakia, which was always on the end of economic development. In the time of the first Czechoslovak republic was it the poorest corn of the country.

Many people moved to abroad searching there their bread. Agricultural character was changing to the industrial in time of communism, but there were built huge plants for metallurgy, machinery or textile industry to supply our big brother from Soviet Union. After communism crash it brought empty buildings of production halls, very bad environment and immigration of labour forces.

The economic situation has been changed in last years. Number of investors coming here to search new business opportunities. It should be bring new job opportunities for people too. This is very good message as well as the fact at last. The reality is motivating, many old factories are re-opened, new plants being built here recently, many newly built shopping centres. To see this reality more in details is aim of my thesis.

AIM AND METODOLOGY

Aim of this thesis is searching the answer, which hypothesis from title of the paper is more probable, which course of development will be here continue.

The statistic analyse of migration of labour forces in last three years says - the rate of unemployment decreased from 21,5 per cent in 2004 to 13,8 per cent in 2007 and 11,4 per cent till June 2008. It's very nice, but analyses of the labour exchange affirm - one of the three factors influencing the unemployment is high mobility of qualified labour to abroad.

Only in the year 2007 more than 52.000 people from the Prešov region worked abroad. This number covers 30 per cent of the whole Slovakia. Second important factor of employment decrease is active politics of labour market, national and international projects of European social fund. This is very important with regard to fact, that 77 per cent of free labour forces in our region are people with basic or lower education.

This two facts are actually determining in evolution of this part of Slovakia:

- 1. high mobility of qualified labour forces**
- 2. lower education of worker staying home**

1. The first contention I have verified on the questionnaire about planning future of students, research sample was created by 88 respondent on Faculty of management in Prešov and 65 respondent on Gymnasium J.Raymana in Prešov.

Most interesting answers were following:

- 68 per cent of respondents planning their long-time future in Slovakia, but
- 78 per cent of respondents will for short time / till 3 years/ working in abroad
- 90 per cent do not believe to find their job adequate their education !!

According to European commission was year 2008 first on decreasing rate in moving east European workers to west Europe countries. So today's financial crisis maybe return many people back home, especially skilful technical specialist.

2. New investors know exactly what they can find here and their new job opportunities are aimed in this way. A lot of new companies searching easy assembly production that can people understand and learn in few weeks. They need reduce their costs of production in comparison with the western Europe, even with western Slovakia.

On the other hand the employees here expect increasing their incomes, when they working in new foreign companies. This fact is very often sources of tension in relationship in companies. But people with basic education do not have many possibilities to change their position.

RESULTS

Let we see what **kind of production or services** are coming here.

At first are the companies connected with car industry - assembly of cables and accessories for cars give job only in Prešov city for more then 1.500 people. Most often line of business is electrical industry, metal products, and other part of finished products. Many cities are preparing new industry parks for potential investors and hope in arrival 1 or 2 main investor, like Whirlpool in Poprad, or Embraco in Spišská Nová Ves, which have helped recently with high unemployment in region. It is very positive for people in region, when there is a big plant with more then thousand employees. More questionable is it today, in the time of financial and economic depression. Maybe can government support help inland companies too. I am convicted that number of small growing companies are for economics of Slovakia minimal so important as foreign big companies.

Generally we can see here all sort of production by new investors, but they do not need many people with higher education especially with university qualification. However the shortage of skilful technical engineer is problem in many companies.

The role of manager in this situation

In the time of higher unemployment was the role of management easier then nowadays. It was big success to open new company. Buildings, technical equipment or labour forces - it was not very difficult to obtain, orders are coming from foreign investor together with technical support. Role of manager was - be responsible for correct and timely output.

Searching for good workers - no problem. People living here were happy, when they can find some job and they accepted all the conditions in companies. Behaviour to the employees was not very important feature of manager's role.

In last few years has got the role of management substantial changed. The shortage of skilful workers, number of newly opened plants, opening European labour market and high mobility of qualified labour forces - they all are the factors, that have significant influence to the change attitude of managers.

I am only on begin my research about manager personality and incentive factors of management, but first results confirm - personality of manager is most important factor of successful business. Only this personality, which could unite all the intellectual capacity of all employees, can manage the company in today's changed situation (Stýblo J. 1993, p.77)

The methodology is established on questionnaire research in 100 production companies and offices of public administration, minimal 30 per cent of managers were woman manager. In the first part of questionnaire there are the question about personality of manager -they must evaluate their personal quality according to offered characteristic. In the second one managers answer which incentive factors are used, to hold their employees in companies for longer time and how are the incentive factors changed in last three years.

The results will evaluate under factor analysis. This is not finished yet but I can make a particular solution:

Manager in eastern Slovakia are: (independent of age)

- very often / more then 60 % / the branch specialist or working long time in branch
- know detail technical their job and well technical educated
- very hard - working, responsible and self - confident
- too proud for their position in companies

but they do not have enough time

- for further self - education and manager education
- for meeting and working with their employees
- for strategic decision and planing
- for their family, sport and relax

In searching of incentive factors which are used in their companies, managers could choose from 8 instruments in questionnaire, there was a possibility give more instruments.

To find out the level of manager's education, there is a question about difference between motivation, as internal soul state of people and stimulation, as impulse, which evoke change in people behaviour.

Incentive instruments offered to evaluate:

1. financial allowance - wage, bonus, premium
2. unfinancial allowance - staff share, company car, flat
3. work contents - self-realisation, pride, satisfaction
4. encouragement - casual valuation
5. team atmosphere - emulation between workgroups, vertical and horizontal relationship
6. work conditions - permanent improvement
7. job identification - my work, my company as a part of my personality
8. external incentive instruments - image of company

From broad palette of incentive instruments in today's literature (Bedrnová, Nový, 1998, p.270) and praxis, they know and use only few, most used is financial allowance and what I see as bed and insufficient - **they are not changed in last years.**

CONCLUSION

My research need some time to finish completely my thesis about position of Eastern Slovakia economics. To estimate the secular trend in development today it will be hard process. What was clearly yesterday is not easy to definite in time of financial and economics crisis. Neither mathematics a statistics analysis, factors analysis, nor very well question in best questionnaire do not give correct answer what bring the future for the country and people.

It is true that Eastern Slovakia is in focus of foreign investors because of cheap labour force, but for young and educated generation will be very hard to find in this territory job adequate their qualification and education. Maybe immigration wave culminated last year according to the official statistics, maybe it will be better with looking for skilful worker.

I believe that Eastern Slovakia will advance when new generation of educated managers will assume the responsibility for the economy of region, will build new competitive companies with satisfied employees.

BIBLIOGRAPHY

1. Stýblo, J.: Personální manažment, Praha, Grada Publishing, 1993
2. Bedrnová, Nový,: Psychológia a sociológia riadenia, 1998
3. Letovancová, E.: Psychológia v manažmente, Bratislava , 2002
4. Molčanová, A.: Vývoj na trhu práce, Prešov, 2008
5. Mikuláščík, M.: Manažérska psychológia, Praha 2007

Ing. Daniel Rušin
University of Prešov
Faculty of management
Konštantínova 1, Prešov
SLOVAKIA
e-mail: danyrusin@mail.t-com.sk

THE POLITICS OF REGIONAL DEVELOPMENT

Ylldeze Sokoli, Enida Pulaj

ANNOTATION

Regional politics are not the only incentives about capital and labor forces which help the country's growth, but there are a lot of instruments of regional politics helping the politics makers to reach their goals.

The participant states of European Union use some politic instruments to stimulate economic development of poor regions.

In fact, as poor a country is, so much the less is able to afford a regional development politic which attempt the growth the poorest regions.

Obviously, we can say , rare resources and rare production factors have to be used with efficiency and efficacy. Regional politics have to be strong and powerful to influence hard the inequality of regional incomes.

These regional income is the natural result of emigration of capital and labor force toward the places which offer the high returns.

Practically, regional development politics offer:

- ✓ An integrated trade, large and more attractive than other fragmented, divided trade. This is the way to eliminate the problems of small trades.
- ✓ The reduction of commercial barriers creates a competitive environment. This competition helps to allocate with efficacy the recourses and makes more attractive this country or this region.
- ✓ The reforms, in context of regional integration, increase the politic credibility and reduce the risk of investments. It is important fact because we live in a complex, changeable and risk full environment. Albania's improvements in economic and politic fields arouse the investitures interest to invest in this country.

Albania offers a lot of opportunities. Summarily the strengths of this country are:

- The low cost of labor force and the flexibility of labor trade.
- The possession of natural reserves.
- A favorite geographic position.
- A prelude or an entrance for an attractive local trade.

KEY WORDS

regional politics, development, foreign investments, reforms, community development, regional integration, development factors

INTRODUCTION

The evident inequality in the economical development between regions may bring unlikable consequences and it is a powerful argument for the governmental intervention. That's why the governments have the responsibility to accelerate the growth of revenues in the regions with low revenues. The supporters of regional politics go further. They argument that the convergence of regional revenues is far from being inevitable and that exist many powerful divergent processes in the functionality that create obstacles between the zones with low revenues and those with high revenues causing stability in the inequality of the revenues. There are considerable indices that support this insistence especially in the developed economies. India is an excellent example of the fact that the inequality of the revenues has been increasing during decades. A similar scene appears also for China that has seen an increasing ditch of the revenues between coastal regions and inner regions.

AIM AND METODOLOGY

The principal aim of this work is to make an evaluation about “THE POLITICS OF REGIONAL DEVELOPMENT”.

In this work we will treat the types of politics that might help the undeveloped regions to ameliorate their economical situation.

The determination of the factors that make a short analysis an evaluation of regional politics and its evolution.

The review of the used arguments to support the idea of having a regional politics and if it is applied like it should it is capable to give positive results.

The determination of key politics and instruments that help politics compilers to reach their objectives.

As considerations for general possible directions we will mention:

- The politics about regional development. The pros and cons of regional politics of development.
- Methods and instruments of regional development politics.
- Regional development of South-East Europe.
- The community's initiatives in region development.
- The regional development through direct foreign investments.

The used methodology intend to be in function of the goals placed for the study about regional development.

In the compilation of the methodology of work, the attention is concentrated among others, by orientating to realize the level and scale of fulfillment of the mission, the functions and roles that have to play those politics in the regional development. The work is oriented to the adapted politics, initiated reforms, regional integration, foreign direct investments as a main index for the regional development, to fulfill the engagements in the international plan.

The research consists in combination of both methods qualitative and quantitative.

The quantities method intend to realize an evaluation and identifies the future tendency.

The qualitative method is used to make an explanation of data. This method is used to make a reasoning about the stability of regional development politics.

RESULTS

The politics of regional development. The arguments pro and against the politics of regional development

The arguments pro the regional politics

The first argument pro the regional politic is that the stable and important inequalities in the revenues are inadmissible in democratic societies. This is an extension of the principles of inter-personal inequalities. The sensibility towards this inequalities is higher if they coincide with the cultural or ethnic differences between regions as it happens in many developed economies.

The principal economical justification for the regional politics is that the creation of places of work in zones with high unemployment, will incise the national output. The profits of this growth of output will directly influence the unemployed via the growth of revenues and taxpayers in the form of the reduction of the transferring payments. According to the long-lasting economical forecasts of the zones with high unemployment, these zones will ameliorate if unemployment will be reduced as high unemployment is linked with the low educational level, reduced skills and the absence of competition.

The reduction of unemployment in the zones where unemployment is high, there are many social profits. The unemployment not only impoverishes, but also demoralizes so it may have harmful effects in the health of those who are unemployed for long periods of time. The geographic concentration of unemployment can also impose serious costs to all the habitants

of the zones with high unemployment thanks to the positive effect in the norms of crime and the low quality of life.

The existence of a cumulative mechanism may enforce the regional inequality of the revenues. The emigration of the working people from the zones with high revenues to those with low revenues may not have the expected balancing effects from the economical theory, and this thanks to the selective fluxes of emigration. The new talented employers are more flexible which shows that the net fluxes of emigration result in diminution of the level of capacities of regions with low revenues, meanwhile the level of capacities in regions with high revenues has been gradually ameliorating. This may act as an inhibitor of internal investors and as an obstructive of home-brew development. The selection of emigration may have different consequences in the economical development of the regions with low revenues in a long-lasting period throughout the heritage of skills from a generation to another.

The internal emigration towards regions that are growing quickly may result with high economical costs thanks to negative externalities. The internal emigration in a large scale towards the regions that are growing quickly like for example in principal urban centers, in relatively short-lasting periods may result in heavy pressure in the fixed infrastructure. The traditional answer against the high pressure in the fixed infrastructure like transporting lines is its facilitation by increasing the capacity, but the facilitation is often short life as “the excessive offer creates its own demand”, by driving to a constant spiral of the extended demand.

The extension of profits from the economical development in all regions, is necessary if the purpose of the government is to be politically cohesive. The influence of the great regional inequalities in the standard of life is evident and may cause non satisfactions because of the presence of the injustice that create these inequalities. This is more evident in the European Union, where regional inequalities of revenues seem to be a potential source of the resistance to the further integration. The unlikable access of the economies in transition of the Eastern Europe has driven to the strengthening of the political arguments for an effective regional politics for the European Union as a whole. Governments have been convinced that exists a powerful economical argument pro the regional politics.

In the years 1980 where the norms of unemployment in Europe reached record values, the regional politics has been seen as a “game where the result is zero” where the profit of a region was the loss of another one. The most neophyte version of this point of view is that in the working places created in the non developed zones simply dispatches the working places from the developed zones. The only profit of the regional politics in this case is that it acquires a balanced equilibrium of the opportunities for work places, but there is no efficient profit for the economy in the totality.

A more positive point of view of the profits of the regional politics appeared in the years 1990, especially as a result of the strengthening of the regional politics of the European Union throughout the creation of structural Funds in 1989 in answer of the preoccupation of the effects of the economical and monetary union in the regional inequality of revenues. It is now know that the poorest regions may give a principal contribution in the competition of a country. The regional politics is refocused in the economical profits that are expected to result more than the support in the social and political profits.

The arguments against the regional politics

According to the neoclassic thoughts, regional inequalities of revenues will disappear as the time passes by. The convergence of the regional revenues is a natural result of the emigration of the capital and the power of work to those regions that offer high norms of return. Unexpected traumas may cause regional divergences of revenues, but the process of convergence will automatically be fixed so the intervention of the government via the regional politics is unnecessary.

In fact the intervention of the government may be even harmful at the point to discourage the enterprises to get placed in zone that normally they won't prefer.

According to this point of view the regional politics is another way where the intervention of the government results less efficient.

If inequalities in the regional revenues will automatically disappear in a long-lasting period, the speed with which will happen this convergence is still an opened question and subject of many empiric tests and debates.

There exist indices of the convergences of the region revenues inside some developed economies, even though it has been proved that the speed of this convergence has been quite low. For more, it seems that the process of convergence has been sensibly slowed in the last decade, independently from the continuous growth in the flux of goods and factors. In fact the convergence of revenues is far from being universal. There are few marks of convergences like for example in India or China and the process of convergences seems that is stopping in many European countries.

Great fluxes of emigration from the region with low revenues to those with high revenues may be undesirable because they can influence the geographic balance of the population. In other words there can be high invisible costs that are the result of the high geographic concentration of the population in regions that are growing up quickly for example in the capital.

The critics of the regional politics might ask in a reasonable way why it has failed the process of diminution of regional inequalities in the revenues in countries with such stable politics like United Kingdom and Italy.

There are two explanations for this absence of correlation between convergent currencies and the longevity of regional politics:

First: the regional politics has to be very powerful to have an evident effect in the inequalities or regional revenues. Germany consists an excellent example that the Gross Domestic Product per person in non developed regions may augment as a result of an adequate politic. The massive transfer of revenues and investments in a large scale from both of sectors; that public and private have helped in the reduction of differences between West Germany and East Germany.

Second, the inequality of regional revenues it seems to get influenced more from the macroeconomic performance than from the regional politics. The reason is evident. The regions get specialized in the production of specific merchandise and the augmentation in the global demand for these goods will influence in the performance of regional economy.

For this reason we have to come to the conclusion that the long-lasting tendencies in the convergence of the revenues do not assure information for the effective of regional politic. It is possible for example that the regional revenues diverge even though the regional politic has been very effective in the achievement of the objectives. If the regional politics will be correctly evaluated, it is crucial to start with the measurement of the direct and indirect influences of individual politics in different periods of time. There have been done many efforts for the development of an adequate frame for the evaluation of regional politics and there are these techniques that assure information for those political instruments that have been successful and those who have not.

Methods and instruments of politics of regional development

The evaluation of the successes and failures of regional politics is not an easy mission. One of the sharpest problems is that professions and revenues are influenced from many other factors despite regional politics. Also it has to be added that regional politics often uses different instruments and it is not always easy to divide the effects of specific instruments.

The methods

There do exist three different methods for the reduction of the inequalities of regional revenues: the method based on the market, the interfering method, the method of fiscal transfers.

The method based on the market focuses in the correction of failures in the market of employment thanks to the absence of flexibility of salaries, the immobility of working power and the restriction of the capital.

The interfering method is based in the aims of the government to stimulate the investments in the non developed regions.

The method of fiscal transfers is based on automatic stabilizers (like for example profits from unemployment), grants, selective expenses of government. The focus here is done to the governmental actions to increase the investments in the non developed regions as this is directly linked with the regional politic. This does not mean that the method based on the market and the interfering method are unimportant methods to decrease inequalities but it also gives us the opportunity to focus more directly in the traditional instruments of the regional politics.

In fact fiscal transfers are very important mechanisms of the redistribution for the decrease of inequalities in federal states, but they are also based in the consideration of equality, meanwhile the instruments of regional politics are projected to reach a higher economical efficiency.

The interfering method arguments that the politics must reach a more optimal distribution of the economical activity. The low revenues and the high unemployment are explained with the absence of the competition as it exists a low productivity compared to the concurrent in other regions or countries.

The regional politics must aim the amelioration of the competition in the non developed regions by encouraging the new investments in the human and physic capital.

Three types of investments are required:

First, the investment in the physic capital encourages enterprises to invest in non developed regions not only by internal investments (home-brew or foreign) but also via the stimulation of the growth inside the region itself. Possible politics include local controls, stimulation of investments and the assurance of consultancies for small and medium enterprises.

Second, the ability of a region to attract investments will depend from the quality of the public infrastructure. The purpose of the investing in the public infrastructure is to dislodge those characteristics that detain potential investors such as non developed circuits of transport, the absence of adequate zones for the enlargement and in general the low quality of infrastructure. Other less evident factors that retard potential investors include the absence of an efficient sector of services, high norms of criminality, difficult conditions of life and the absence of cultural and creative activities.

Third, the competition of the region depends a lot from the quality of the working power. Is largely showed up that the educational and qualification level is a great power in the determination of the competition of a region. This is showed from the big negative correlation between the norm of unemployment of a region and the percentage of qualified employers.

The augmentation of the educative and qualifying level maybe of a great importance in the determination of long-lasting forecasts of growth of all economies, independently if they are local, regional, or national or from the scale of development where they are actually.

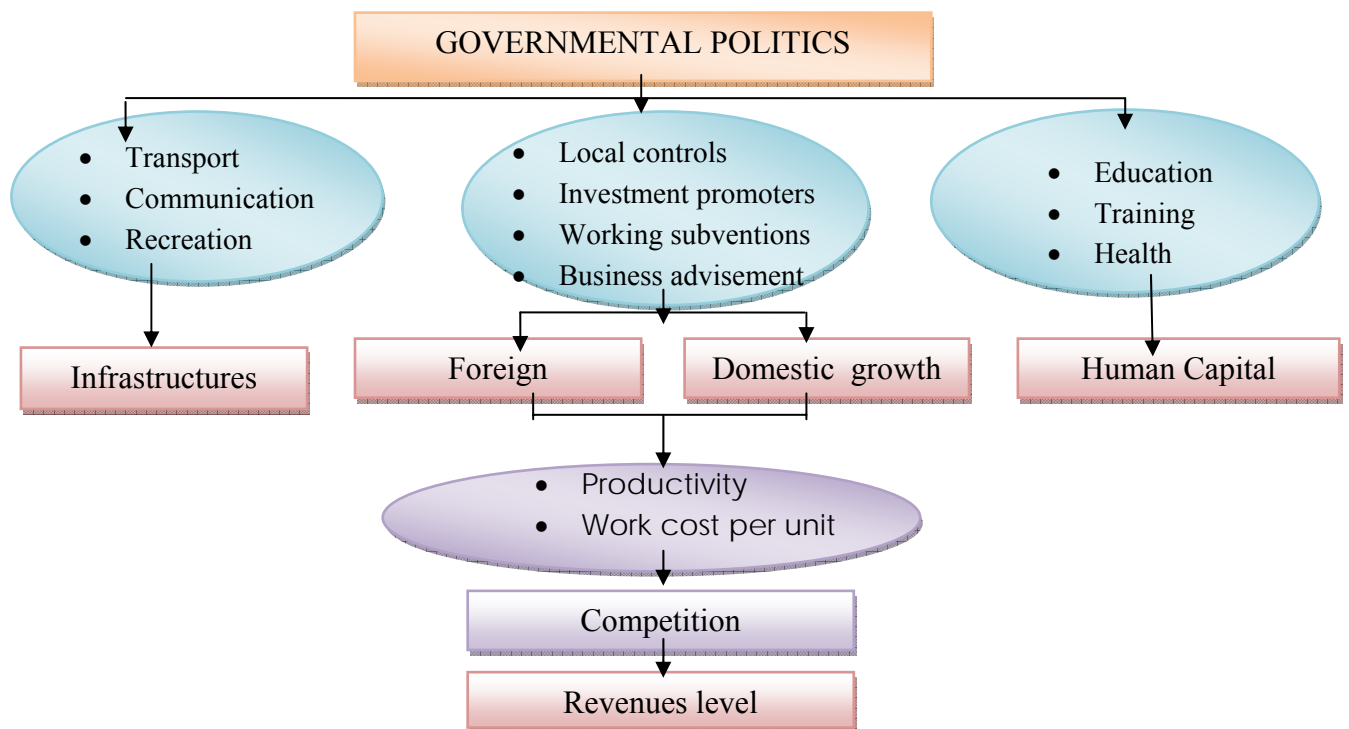


Fig. 1 : Governmental Politics

The mostly used political instruments are:

1 Local controls

Many empirical studies have proved that local controls have been very effective in the transfer of investments to the zones less developed. These controls have efficiency in the cost, as the only expense caused from the government is the administration of the politics. Local controls still exist in the form of planning of the use of the lands but these are linked with the residential issue and the environmental issue and not with the regional development.

2 The promoters of investments

The promoters of investments have been and are the first instrument of regional politics. In different moments those promoters have had three purposes:

- a) The encouragement of enterprises (mainly productive ones) to move from developed zones to those non developed.
- b) The encouragement of home-brew enterprises that invest in zones not really developed
- c) The encouragement of the enterprise placed on the non developed zones, to enlarge.

3 Direct foreign investments

By watching the increasing importance of the foreign investments like a source of investments even the governments of many countries have seen it as an important source of investments, not only to stimulate the growth of the national economy, but also to ameliorate the competition of the non developed competition. The politics of internal investments are a significant component of regional politics in many countries and a considerable number of politics have been used to attract foreign enterprises to the non developed regions. Those politics include the fiscal promoters, subventions for investments and the creation of internal investment agencies that compete with each other for mobile investments. The financial promoters are only one of the many influencers in the decisions of placement of investments, including the viability of the working power (the cost of work), the access to the market and the presence of enterprises in a zone, though these promoters have played in important role.

We can say that the seaside zones are very favored for many reasons:

- a) The appropriate position in relation with the international market circuit
- b) The geographic concentration of employers in seaside cities

- c) Working power specialized in productive sector
- d) The privilege of seaside zones from the government in the amelioration of the infrastructure etc.

The inequalities in the levels of revenues and the employment opportunities between seaside regions and inner regions have brought to the immigration of the working power from inner zones to seaside zones where are concentrated foreign direct investments. To make these inequalities disappear there are urgently needed politics that attract investments in the poor regions of the country. This asks from the government an amelioration of the transporting system and investments in the economical infrastructure of these remote zones.

4 –Regional national development

Regional traditional politics is based in the geographical redistribution of the industry from developed zones to the non developed ones. The economical crises brings to the retract of many big enterprises by creating few opportunities to stimulate enterprises to go to non developed regions. The politics' compilers must encourage the national growth of non developed regions, by encouraging enterprises to move from the developed zones to the non developed ones.

The poor the country is, the less it is capable of affording a regional developing politics that aims the poor regions. Inequalities of regional revenues are often crucial and stable. Despite of the actual level of revenues, those who live in the poorest regions have a tendency to reduce the ditch between them and the richer regions. Private investors will be attracted from the non developed regions if they believe that the projected zones to get developed will assure to them the necessary inputs so that their business will be profitable.

More is to be done to reduce regional inequalities. Especially, a convincing argument may be the reduction of inequalities in efficient bases as the existence of non developed zones bolds that resources are not used. A way of amelioration of the economical wealth is the placement of these unused resources in a productive use. Inequalities are inevitable results of the change of economical conditions and they will always exist, even if it is not in the same form or scale. If the regional politics is judged as successful, it will be considered as a temporary part of governmental politics instruments.

The regional politics administrated from a multi-national authority (EU), principal government, regional or local will go on existing in the future in the same way that we expect to exist the monetary and fiscal politics. The government should thing in terms of long-lasting investment's profits of public funds in the human and physic infrastructure of the regions with low revenues. This is not a simple objective hereupon there are choices to be done.

The regional development of Southeastern Europe

The process of transition in Central and Eastern Europe has been accompanied with big regional inequalities. Analysis on Polony, Hungary, Rumania, Bulgaria have drawn out many similarities, but also many significant differences between these countries. In countries that have a common frontier with the EU and that have a short distance from the heart of Europe, regulations have advantaged more the metropolitans and western regions. The countries of Southeastern Europe since the beginning of the years 1990 have payed a special attention to the regional economical integration. This fact confirms the point of view that the international economical integration is a likable strategy for small and medium countries. The economical politics can add a regulating mechanism to the sub optimal and imperfect situation of the market.

It is time to conclude that is logic to pretend that the cooperation of the Southeastern Europe countries with the EU is possible only via a deep cooperation between the different parts named Balkans. But this matter seems to be quite complicated because geographic and historic factors do not progress at the same time. The reason is evident. Balkans have never

been politically integrated because of political and historical issues. It is logic to say that geographic proximity brings to the creation of marketing relations, but history proves the contrary.

Part of the regional development is the regional integration. The Western Balkans have some specific characteristics that make it appropriate for the regional integration. First, Western Balkans include mostly small economies that would not profit from an individual participation in a great regional market like the EU. Second, a number of geographic and cultural factors like common or similar languages, common ethnic minorities and geographic proximity augments the interdependence between these countries. Third, as most of those countries have been part of a common national economy before, then there can be assured big economical profits from the reintegration of the parts of the old regional system, by operating grids and existing transport systems. Fourth, all countries of the Western Balkans aspire the entrance in the EU.

We can still notice political and ethnical dissention in the region. The Balkans still suffer from conflicts of frontiers matters. Bigger problems in region include administrative bureaucracy, corruptive practices, an amount of strict frontier controls and the absence of cooperation between authorities.

These challenges must be exceeded via the economical integration and political arrangements. The profits from the integration are important. They come from the main objective of the creation of a common economical zone that will offer high competition and enlargement of the market.

Fig. 1: General indexes of Balkan countries in transition

	GDP per person (in €)	GDP growth (in %)	Annual Inflation (in %)	Annual norm of unemployment (in %)
Albania	1,891	5.5	2.0	14.2
Bosnia -Herzegovina	2,095	7.4	4.1	31.2
Croatia	6,972	4.3	3.3	12.7
Macedonia	2,277	4.1	0.5	37.3
Monte Negro	2,638	4.1	1.9	17.0
Serbia	2,730	6.5	17.7	21.6

Source: *SEE Investment Guide, sixth edition, 2007*

Actually, the countries of Western Balkans have a similar economical structure so the annual results are approximate between them. They are a growth of economy with more than 4% and an inflation norm under 5%. The fiscal politics are ameliorating. The budgeter deficit stays up to 5% of GDP. From the data the deficit from the current account is about 8% in the countries of Western Balkans, while the market deficit is about 28% of GDP. However, the real GDP is much more lower compared to other countries of EU, hereupon it is necessary to initiate structural reforms to stimulate the economical growth.

The regional integration is a complex and dynamic process. It consists in the harmonization of the regulative frame and the coordination of reforms with other countries of the region. The dynamic of this process influences all sectors of economy: transports, telecommunication, energy, financial services etc.

- The regional development and foreign direct investments in the region of Southeastern Europe

The foreign direct investments are a main factor of the economical growth and development despite the primary impact which is the growth of employment. The idea is that the foreign investments have important effects in the economy of a country and they take a special importance for the countries in transition. The foreign direct investments are considered as the fastest way of transfer of the cultural economy of the market. Between foreign enterprises a transfer of the most efficient methods of industrial organization and the management of a business is achieved. Foreign investors have technological, financial and managing advantages that realize an efficient allocation of resources also in the macro economical plan, restructuration towards sectors with higher profits.

The biggest problem of the countries of Southeastern Europe has to do with the creeping of the process of privatization, precisely in the case of big governmental enterprises etc. The governments of the countries of Southeastern Europe recognize the fact that the foreign direct investments are very important and have created a favorable legal frame to attract the foreign direct investments.

Talking about the region the foreign direct investments had an important growth only in the year 2003 and in two years according also to the important privatizations they tripled by reaching in 2004 about 11 billion \$. Bulgaria and Rumania are countries that have absorbed more that 70% of the fluxes of the foreign direct investments of the region for the year 2004. Only Rumania in the year 2004 has attracted the foreign direct investments from five other countries of the region altogether more than 5 billion \$.

The initiatives based on the economical development of the community

The latest instrument of the regional politics is the development of the community. These initiatives are not new. They have been used as part of the urban politics and they have been combined with the regional politics for the first time in 1995.

The economical development of the community aims the localities that suffer from the big economical backwardness like long-lasting unemployment, great dependence from national profits and low educational levels. Those characteristics are very correlated with social-demographic factors like minorities, families with only one parent, high norms of crime and low standards of life. The principal objective is the inclusion of the people who live in these zones in the amelioration of the standards of life via some initiatives taken from the inhabitants of these zones themselves. The key of the success of the schemes for the development of the community is the direct participation of the local community in the economical development. The primary aim is the brought of those economical excluded zones in the economy like a whole one so that these localities become more economically healthy and more capable to support themselves by becoming more appropriate zones for working and living.

The initiatives of the economical development of the community come along in different forms and dimensions. They include directed schemes from the local, regional authorities, the national government and the European Union (EU). The idea is to adapt the existing instruments so that they can adapt the needs of those schemes. These include the traditional politics like investment, renovating grants for small enterprises, training schemes for new employers, subventions given to enterprises that employee long-lasting unemployed as well as the fiscal promoters.

A specific property of the schemes of the development of the community is that they are trended to finance several sources. Local organizations acquire funds from different donators as combinations of local, national government, EU and enterprises placed in the region. Less conventional politics are used, including the creation of employing marketing that aim to

create a foot path from the long-lasting unemployed to the formal market of work. These schemes create the opportunity to learn new workmanships via work schemes projected to help local communities. There are many people that have lost the contacts with the employment market because of the disengagement to grow up the children or to be temporary unemployed or they do not have the ability and the adequate knowledge to come back again in the employment market. The aim is to include those people in the market of work via a step by step approach by achieving basic knowledge in a non threatening atmosphere. Other interesting renovations include the forecast of the financial help in communal volunteer organizations; and new paying systems have been presented like for example the accreditation of the hours of work.

But have these schemes been successful? The answer is that it is too early to give an appropriate judgment. There are too many reasons for this:

- First, these schemes are expected to have a primary influence in the competition of the undeveloped zones. Those are long-lasting politics that are expected to change the basic socio-cultural structure of the localities.
- Second, there have been done a few economical evaluations of the schemes of the communal development, as they are still relatively recent.
- Third, many of the results of these schemes are qualitative hereupon difficult to measure like for example the amelioration in the collective spirit and a general feeling in the localities that a better place to live and work is being built.
- Forth, it might be difficult to express with values the results even though they can be measured quantitatively. An amelioration of the wealth for the old people by assuring to them greater carefulness thanks to the multiple contacts with the local authorities, can not be easily converted in monetary values nay even when the profits are radical.

Despite these difficulties, there have been factors that suggest positive effects of the schemes of the communal development like the augmentation of the output and the places of work. Over 50% of the businesses helped from these schemes declare that the assistance was decisive or that the plans of the enlargement were suspended in the absence of the schemes of the economical development of the community. In the negative side it has been found that the businesses helped by these schemes are dependent from the local demand and do not enlarge in new markets. They also lean on local funds. A great number of the places of work are occupied from employers outsiders to the community. Another problem is also the absence of an expertise to initiate new business enterprises in non developed zones. The help of the experts and the outsider survey towards those localities are very necessary.

The only conclusion that comes out in this period is that those schemes offer interesting opportunities but their efficiency still isn't proved. They are interesting because they are rooted in the locality where they exist and their success depends on the participation of the local inhabitants. These schemes aim mainly in the efficient use of the human capital in the non developed zones via the link with the economy in general.

The regional development of the country via the stimulation of the foreign direct investments

The foreign investments have an extraordinary importance for the economy of ex communist countries especially of a non developed country like Albania. Their importance is observed not only in the diminution of unemployment, the internal financial generation, but also in the fact that this is the way of comportment of advanced technology in those branches with long-lasting perspective, that will make possible the real integration of Albanian economy in the European economy. The foreign direct investments bring a profit to the national economy, by contributing via the invested capitals to the growth of the brut internal production, in the balance of payments and diminution of unemployment.

Albania is in the realization of the process of many changes in the economical sector. The changes that are happening in the world economy , have as a primary objective the attraction of the foreign direct investments with objective the diversification of economy, the transfer of technology. Radical evolutions have been taken to transform the economical structure of our country in a structure oriented to the foreign direct investments and to the economical liberalization. Though the several competitive advantages of Albania like: geographic position, the low cost of working power, the low level of the foreign direct investments has come as a result of the problems with property, corruption, the weak judiciary system and the political risk. The economy has opened the doors to the foreign capitals after 1990, and still we do not have satisfying levels compared to other Balkan's countries. During the years 1998-1999 the foreign direct investments consisted only 1% of the GDP. Their level has sensibly increased the last years. In the year 2000 the level of the foreign direct investments was 143 million \$, three times more than in the year in 1999. In the year 2002 their level reached 180 million \$, and in the year 2004 in 341 million \$, or 92% more compared to the year 2003. However the fluxes of foreign investments in Albania have been in constant augmentation, they are still in low levels compared to the Region. The foreign direct investments during the last years have had an important growth especially in the year 2004 as a result of the privatization of the Bank of Savings.

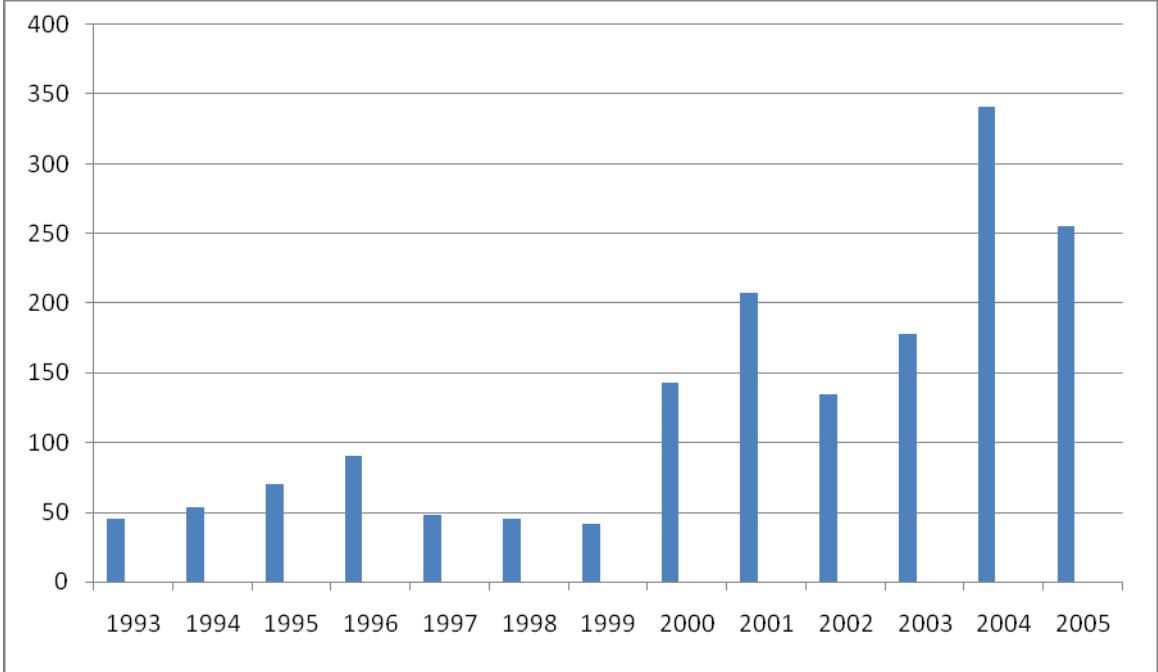


Fig.3 : The flux of foreign direct investment (in millions USD)

Source: Bank of Albania

The flux of the foreign direct investments for this year reached 341 million \$. In the year 2005 the foreign direct investments descended to 255 million \$ because of the absence of privatizations.

The Italian and Greek capital keep a dominating position in the foreign direct investments in Albania. From the total of common companies in Albania 51% of the direct investment are with the participation of the Italian foreign capital and 24% with Greek foreign capital, the other part is composed from 4% Turkish capital, 3% American, French, German, Britannic etc. But it is also noticed an opening towards the Middle East, associated with the growth of the flux of the capital from those countries. The domination of the Italian and Greek capital shows that the foreign direct investments have a proximity character. The Italian capital is specially concentrated in the western region, while the Greek capital is more concentrated in

the southern and east southern regions. The northern regions are less preferred. From the economical point of view of the activities, the principal part of the foreign direct investments in Albania is concentrated in tourism and in the feathery industry. The foreign companies have operated more in the sector of marketing and in that of industry. In the sector of agriculture and construction the foreign companies are less in number.

The factors that have influenced the foreign direct investments in Albania are:

- a) The geographic position and conditions are a main factor that has attracted the foreign direct investments
 - Infrastructure in evolution
 - Development of tourism
- b) The war against corruption
- c) The norm of inflation
- d) The governmental stimulation that includes the fiscal reform and the political reform
- e) Low cost of working power, flexibility and professional abilities
- f) The privatization of national companies

The economy in evolution of Albania is getting oriented toward the absorption of the foreign direct investments as the most effective way to know an important hitch to a stable economical growth. In the first years there have been several factors that have influenced in the low levels of the foreign direct investments like the absence of political stability, institutional corruption, problems with the law of property, the absence of respect towards the laws etc. but we have left behind the past and considerable reforms have been taken to reduce and eliminate different barriers with which foreigner businesses but also national businesses had to confront to like the double taxation, the creation of a welcoming investing environment and the promotion of the foreign direct investments. The reduction of the norm of the tax of the corporate from 20% to 10% from 2008, new laws about concessions and public procurations, reforms in the administration of taxes, the creation of organizations for the final resolution of the problem of the property of the land and privatizations, the protection of investors, many investments in the infrastructure give a clear panorama of the vocation of the national economy.

The geographic position of Albania is known as strategic from the regional point of view. Market mariner relations are opened in the entire Mediterranean, while the position of Albania in the center of the Balkans peninsula turns it into a ground knuckle-joint between the countries of the Southeastern Europe. So, the regional market is easily reachable as a possible enlargement starting from the Albanian market.

An element that completely changes the ambiance of the business is that of the regional integration so the formation of a bigger market where marketing barriers are eliminated. Practically what offers the regional integration with the attraction of the foreign direct investments?

- A larger integrated market that will be more attractive than national fragmented markets, by eliminating the problem of small markets for each country
- As a result of the elimination of the market barriers is created a more competitive environment that would bring to a more efficient allocation of sources, fact that would make the region more attractive
- Reforms included in the context of integration augment the politic credibility so they incline the risk of investments in the country

Albania is in the phase of important privatizations. Albania offers free and educated working power. The low costs of working power are still continuously an advantage of our country. The working power is relatively mobile which means that it can move from a sector to another in research of a better salary. Albania offers free capitals. Our country is close to

Western European countries by offering to investors the opportunity of penetration in these markets with a low cost.

We can say that Albania is in a very key moment, as it is that of the progress in the regional integration and the growth of the foreign direct investments is expected to be of the principal impacts. But it should also be kept in mind that the integration is a very complex process itself and so are its impact for consequence. The growth or not of the foreign direct investments in Albania will depend in our ability as a country in the accomplishments of the expected changes.

CONCLUSION

- The problems of the regional inequalities in the revenues are inevitable as a result of the changes of economical conditions, they will always exist.
- It has to be aimed that undeveloped regions to get less dependent. This asks not only transfers of revenues, but also investments in the physic and human capital, so these regions will effectively compete in global markets.
- The problems of undeveloped countries and the ability to ensure internal growth.
- Regional development politics on geographic distribution of industries from developed areas toward undeveloped areas.
- The foreign direct investments have become an important component of the regional politics because of the phenomenal growth in the international fluxes of the direct investments till the end of the year 1980.
- The large influence of regional politics in allocation of direct foreign investment.
- Unequal economic development between regions is an incentive for government intervention.
- The reasonability of government to accelerate the incomes growth of non developed places.
- The regional and local inclusion in projects and applications of regional economic development strategies.
- An important element of the development of the regional politics is the initiative of the economical development of the community. These initiatives reflect the need of a “based more on the humans” method to calm down the poverty.
- The politics of regional development aim basically the growth of productive capacity of the non developed regions by encouraging the investments of the private sector.
- Public investments are needed not only in the physic infrastructure of the region, but also in the human capital via the investment in the education and training.

BIBLIOGRAPHY

- [1] Western Europe 2007, “Surveys of the world” 9 edition
- [2] Carriere Edizioni, “Fattori di sviluppo: il credito e la finanza per l’innovazione” 2007
- [3] Franco Agneli, “Teoria e politica dell’aiuto allo sviluppo” 2006
- [4] Franco Agneli, “Internalizzazione e sviluppo regionale” 2008
- [5] Balkan Trade Bulletin – Permanent secretarial of the Balkan Regional Center for trade promoting, year 2005 no11
- [6] Balkan Trade Bulletin – BTB, BCTB, year 2005 no 12
- [7] Ivana Bozic-Miljkovic, Western Balkans in the process of Euro integration
- [8] Western Balkan Integration and the EU, Chapters 3 and 4
- [9] Genc Ruli, Country Report Albania (Draft), may 2002
- [10] G. Hunya & M. Schwarzappel, Database on Foreign Direct Investment in Central, East and Southeast Europe : Shift to the East, Vienna, (2007)

Full name : Ylldeze Sokoli

Institution : University Ismail Qemali Of Vlora

Street : University Ismail Qemali of Vlora, Fakulteti i Ekonomise dhe Drejtesise,
Departamenti i Biznesit, Sheshi i Pavaresise, Skele, Vlore, Albania

City : Vlore

Email: ysokoli@univlora.edu.al

Full name : Enida Pulaj

Institution : University Ismail Qemali Of Vlora

Street : University Ismail Qemali of Vlora, Fakulteti i Ekonomise dhe Drejtesise,
Departamenti i Biznesit, Sheshi i Pavaresise, Skele, Vlore, Albania

City : Vlore

Email : epulaj@univlora.edu.al

DEVELOPMENT OF RURAL REGIONS – ON EXAMPLE OF HROTOVICKO MICROREGION

Hana Svobodová

ANNOTATION

Development of rural regions is actual topic in the long term period, which is caused mainly by their extension within the Czech Republic (80 %). Research project of Ministry of Agriculture of the Czech Republic QH 82249 “SYNERGY in accession to rural areas development” also deals with aspects of rural regions development. The main goal of this project is achieving of synergic action by application of chosen procedures and tools to support higher quality of life in rural areas, development of possibilities of entrepreneurship in agrarian sector and elimination of negative impacts of business on countryside. One of the first activities was realisation of questionnaire survey in the Hrotovicko microregion where activities of involved people and tools of regional development were checked.

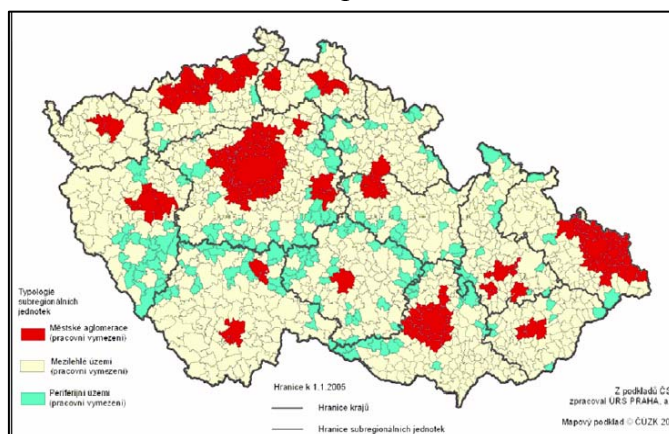
KEY WORDS

Rural region, Rural Development Programme, Actor of development, Hrotovicko microregion

INTRODUCTION

Many Czech and foreign authors and institutions are engaged in problems of rural areas and in their delimitation, no matter if from theoretical-research or practical causes (e.g. delimitation of rural areas for needs of public administration and local government for aiming of development programmes). Views on rural areas delimitation differ, with regard on different perception of rural areas in various countries or regions. To difficulties by rural areas delimitation contributes also overlapping of conception of “rural” region (space, area) with conceptions as “peripheral” (marginal, border) or “agrarian” region.

Fig. 1. Typology of rural areas in the Czech Republic



Source: Rural Development Programme, 2007

Rural areas are generally qualified as free un-built countryside and rural settlement which is possible to allocate as complex of rural seats, agricultural and water areas, forests, local routes and other areas in this space. Rural areas are usually characteristic by lower density of population, smaller municipalities, higher unemployment but higher employment in agriculture (forestry, fishing), co-existence of local inhabitants with nature and countryside,

specific architectonic style and character of house-building, certain way of life which often differs from urban. However, some of these typical signs of rural areas could be markedly suppressed nowadays. Rural seats themselves can be of different character as well. Hamlets, small colonies and also quite large villages, which sometimes have more inhabitants than small towns, could be found. Special cases are municipalities in hinterland of bigger towns which have (thanks to suburbanisation) many signs typical mainly to urban areas. Since typical characteristics of rural and urban areas are often not fulfilled, explicit delimitation of rural and urban seats is very problematic (translated from *Rozvoj venkova v kraji Vysočina*, 2008: 7).

AIM AND METODOLOGY

In principle, it is possible to express that there is not single definition of rural area; there is also not only one rural area but several rural areas which are characteristic by various elements. However, definition of rural areas is not the aim of this article. The main contribution should be in setting of participants and tools of rural areas development and checking of their competences in model region. Theoretical part of the article is entering part of project “Synergy”; materials for case study were obtained on base of questionnaire survey with sixteen mayors of municipalities in Hrotovicko microregion.

Actuality of problems of rural areas development confirms also number of publications and scientific articles, such as Hrabánková et. col (1994) who was one of the first of Czech authors engaged in regional policy in agriculture and rural regions, Perlín (1998) worked up one of the typologies of Czech rural areas, Slepíčka (2006) or Binek et. col. (2007) gave attention to possibilities of use and revitalisation of rural areas; from foreign authors deal with agriculture e.g. Spišiak (2002), Ilbery (1998) or Woods (2005).

RESULTS

Actors of Development

It is not easy to appoint all participants of rural development. However, it is possible to divide them into three basic hierarchical levels – national, regional and local/municipal. Rural areas development on national level is by jurisdiction not entrusted to any resort, it is disintegrated mainly between Ministry of Agriculture¹ and Ministry for Regional Development², influence have also Ministry of Environment and other ministries; special position has Ministry of Labour and Social Affairs that controls European Social Fund. On regional level decide about rural areas development mainly sections of regional development or section of agriculture (it depends on organisation structure of each regional office); problems of rural areas development are often equated to development of agriculture. On local level could be

¹ The Ministry of Agriculture is a central authority of state administration for agriculture excepting preservation of agricultural land fund, for water management excepting preservation of natural water accumulation, preservation of water sources and preservation of water quality, and for food industry. It is also a central state authority administrating forests, hunting and gamekeeping and fisheries outside territory of national parks. More detailed delimitation of agency is set in Act No. 252/1997, about agriculture. This act entrust activities in area “settings of conditions for running Common Agricultural Policy and Rural Development Policy of the EU” to resort of agriculture.

² The Ministry for Regional Development was established on November 1st, 1996 by the Law No. 272/1996. This Law specified the scope of powers of the Ministry as the central body of the State Administration of the Czech Republic in following areas: regional policy, housing policy, development of housing resources, leasing of residential and non-residential facilities, zoning, building regulations, investment policies and tourism. The Ministry for Regional Development also provides information and methodology for counties, cities and municipalities and their associations and supervises the activities associated with the process of integrating regions into European regional structures.

considered as main participant of development mayors of municipalities (see later) but various social groups which live in rural areas as well (denizens, newly moved in people, cottagers, holidaymakers, farmers etc. – see Slepíčka, 2006).

For economical point of view, participants of development could be dividend into public, private and non-profit sphere. According to Galvasová et. col (2007) could be other division based on relation of participant to solved problem or prepared project to:

- Shareholders – subjects who are deeply engaged into process of preparing or solving (e.g. cooperating municipalities and entrepreneurs).
- Stakeholders – subjects influenced by certain activity (e.g. inhabitants and their unions, visitors etc.).
- Placeholders – in spatial principle, subjects in whose interest areas is activity realised (e.g. Regional authority, Protected landscape area administration, ministry).

Split of subjects into mentioned groups is not absolute; it depends on topic or situation. There can be also diffusion of these positions. Types and positions of participants relates with possibilities of support of regional development. Form this view could be divided following basic types of support:

- Direct support – direct support through participant's sources – human, financial, material sources.
- Role of coordinator – active access to coordination of specific participants' activities.
- Initiatory role – stimulation of activities of specific participants including support.

Instruments of Rural Development

Development of rural areas in the Czech Republic is laid in strategic document “National Strategic Rural Development Plan of the Czech Republic for the period 2007–2013” and is realised by programme document “Rural Development Programme for the period 2007–2013”. However, nor this Programme clearly defines rural areas.

Rural development policy on European level for period 2007–2013 defines four main axes, whereas rural development is concerned mainly in third and fourth axis:

- I. Improving the competitiveness of the agricultural and forestry sector
- II. Improving the environment and the countryside through land management
- III. Improving the quality of life in rural areas and encouraging diversification of economic activity (values for rural areas)
- IV. LEADER

The third axis helps to develop local infrastructure and human sources in rural areas with the main goal to improve conditions to economic growth and set up of new working places in all branches and for diversification of economical activities. Finances set to diversification of rural economy and quality of life in rural areas should contribute to main priority which is to set up new working opportunities. Measures available in axis 3 should be used mainly for support of capacities building, gaining of skills and organisation of local development strategies, also for maintaining of rural fineness for next generations. By supporting professional preparation, knowledge and entrepreneurship is necessary to be aware of special needs of women and young people.

Method LEADER brings into rural development possibilities of innovation leading through local based approach from down to up (local action group, LAG). Financial support set for LEADER should support to priorities of axes 1 and 2 and mainly 3 but also could be

important for priority “improvement of operating and releasing of endogenous potential for rural development.”

Except from support from Rural Development Programme, it is possible to use finances from seven Regional operational programmes (ROP) or eight thematic operational programmes (OP). Global aim of operational programmes is acceleration of development and reduction of disparities among regions in the Czech Republic. Specific goals of ROP concern priorities of smaller town and rural areas, e.g. support of local products, raising of value of natural heritage, tourism and attractiveness of territory, support of small-scale farming, protection of landscape etc. On regional level should be rural development defined in Regional programme of development, on local level in local strategies of development.

Case Study – Hrotovicko microregion

Hrotovicko microregion consists of sixteen municipalities which are located on north-east side of the Třebíč district. Total 7 119 inhabitants lived on this territory on January 1, 2007.

Management of municipalities in the microregion is very limited – there are only building and agricultural committees, committees for public affairs, culture, youths, sport and school are missing, which is closely connected with limited comprehension of development. Only solving of problems with technical infrastructure (“hard projects”) is considered as development. Mayor of municipality has very important position – he/she suggests topic of projects at the most cases, he also prepares projects and cares about their realisation.

A great deal of municipalities of the microregion haven’t applied for any project, more used are grants of Vysocina region. Five municipalities applied for support from any dotation programme which was interesting and financially available even though it has not corresponded with priorities of the municipality. It means that strategy of municipality development is development tool but it is usually adjusted according to recent needs.

In the most cases municipalities cooperate with unions as an important endogenous activity which empowers local rurality. However, usually only sport and cultural actions are held. Municipalities also often cooperate on organisation base with local entrepreneurs (help with improvement of municipalities’ appearance – mainly farmers). External firms ensure pick-up of garbage, commerce, transport, green maintaining, applying for grants, social services.

Municipalities are members of available optional unions which are located in the region. The main contributions of membership in the union could be: better change to obtain any subsidy, important aspect is also exchange of experience, better access and transfer of information for municipality and its inhabitants, building-up of tracks for bikes, support of innovation (broadband internet), possibilities of marketing, propagation of microregion as an unit etc. Nevertheless, there is still one question – whether the membership in unions is active or if it is only formal.

CONCLUSION

Possibilities of rural development are limited by many factors, from real dispositions of people, territory to administrative barriers. Unclear delimitation of rural areas and indefinite settings of competences of rural development participants will not contribute to rural development. Limited management of municipalities could be considered as a next barrier; better integrated are municipalities with full time mayor who has rich experience and wide social network.

Mainly investments into infrastructure are considered as development, whereas, according to mayors, human relations in municipalities became markedly worse. In principle, local community degrades from the inside, which means deformation or even liquidation of local communities and their transformation and approach to urban settings.

As it was already noted above, financial budget of municipalities in microregion enable only formal survivance of local administration. It is necessary to obtain subsidies for any projects, even for those which could be hardly defined as development ones. Endowment policy is highly un-transparent and disintegrated. This process has to be formalised, it has to be transparent and project has to be well understandable for more effective administration (translated from Holeček et col., 2008).

Cooperation of local subjects and also among regional subjects is in recent time mainly formal and it is not really active. Cooperation of municipalities and synergy of participant of and effective use of tools of development are not be only possibilities but necessary condition of successful development.

BIBLIOGRAPHY

- [1] BINEK, J. et col.: Venkovský prostor a jeho oživení. Brno: Georgetown, 2007.
- [2] GALVASOVÁ, I. a kol.: Spolupráce obcí jako faktor rozvoje. Brno: Georgetown, 2007.
- [3] HOLEČEK, J., SVOBODOVÁ, H., GALVASOVÁ, I. Komparace venkovských regionů Boskovicko a Hrotovicko z pohledu jejich aktérů – obcí a zemědělských subjektů. In. Mezinárodní rok planety Země. Brno: ESF MU, 2008. (in print).
- [4] HRABÁNKOVÁ, M., NĚMEC, J., MARKOVÁ, C. Regionální politika v zemědělství. Praha: Výzkumný ústav zemědělské ekonomiky, 1994. 55 s.
- [5] ILBERY, B. The geography of rural change. Essex: Longman, 1998. 267 s.
- [6] PERLÍN, R.: Typologie českého venkova. In. Zemědělská ekonomika, 44, č. 8, 1998. s. 349–358.
- [7] Poziční dokument menších měst a venkova. MEPCO. Available on-line at <http://leader.isu.cz/download.asp?id=162> [2008-09-27]
- [8] Program rozvoje venkova ČR na období 2007 – 2013, Praha: MZe ČR, VÚZE Praha, 2007.
- [9] Rozvoj venkova v kraji Vysočina v letech 2000 až 2006. Jihlava: Český statistický úřad, 2008. Available on-line at www.jihlava.czso.cz [2008-09-26]
- [10] SLEPIČKA, A.: Nové trendy ve využívání venkovského prostoru v ČR a v jiných středoevropských zemích. In: MAJEROVÁ, V. (ed.): Venkov je náš svět. Sborník příspěvků. Praha: ČZU PEF, 2006. s. 515 - 524. ISBN 80-231-1539-3
- [11] SPIŠIAK, P. Obnova dediny na Slovensku. In: Geografické informácie, č. 7, Nitra : Univerzita KF, 2002. s. 203-211.
- [12] WOODS, M. Rural geography: processes, responses and experiences in rural restructuring. London: Sage Publications, 2005. 330 s.

Mgr. Hana Svobodová
Department of Geography, Faculty of Science, Masaryk University
Kotlářská 2
611 37 Brno
67632@mail.muni.cz

DEVELOPMENT OF PUBLIC SECTOR – THEORY AND PRACTICE

PROCESS OF STRATEGIC PROGRAMME DOCUMENTS CREATION AND PROGRAMME OF ECONOMIC AND SOCIAL DEVELOPMENT OF TOWN PREŠOV

Viktória Ali Taha, Jaroslav Dodecký

ABSTRACT

The aim of submitted article is to offer the view over the process of strategic programme documents creation with emphasis on creation of the Programmes of economic and social development. This Programme is medium term and open document and contains the survey of potential of the territory, projection of the opportunities, identification of advancement directions and specification of its goals. Its part is also assignation of the tasks and needs in regional development and draft of financial and administrative provision. Particular attention is given to regional planning which is important part of the regional development management. The last section of this contribution focuses on analysis of Programme of economic and social development of town Prešov.

KEY WORDS

regional development, regional planning, programme documents, Programme of the economic and social development, strategic vision.

INTRODUCTION

European regional policy is designed to bring about concrete results, furthering economic and social cohesion to reduce the disparities between the development levels of the various regions. The regional policy helps to finance concrete projects for regions, towns and their inhabitants. The idea is to create potential so that the regions can fully contribute to achieving bigger growth and competitiveness and to exchange ideas and best practices.

Recently, in Slovakia the attention given to the regional development has been increased due to the request to provide balanced economic and social development of the Slovakia and to reduce development disparities between the regions. Regional development is financed from the public funds – national budget, self-governing region budgets and municipalities budgets, from the natural and legal persons coffers and also from the European union funds.

The NR SR Act legislative No. 503/2001 Z. z. about regional development support adjusts the support conditions of the regional development as well as the sphere of actions of the governmental agencies, self-government regions and municipalities. This act defines regional development as the sustained growth of the economic potential and social potential of the region, which increases its economic level, efficiency, competitiveness and living standard of its inhabitants.

REGIONAL PLANNING

Except private sector is strategic planning process used also in public sector. Planning of development is inevitable element of systematic management of the regional development, which facilitates the economic growth of the regions, cities and municipalities and the increasing living standard of its inhabitants.

Ipsa iure the § 3 NR SR Act No. 416/2001 Z. z. about transfer of some of governmental agencies scopes to the self-governing regions – into the sphere of action of the self-governments belongs regional development area, specifically :

- running of a regional development strategy
- coordination of tasks associated with the provision of the economic development and social development of the area
- coordination of conception pursuant of the self-governing region development
- provision of information, numeric data, analysis and reports to governmental agencies and municipalities pursuant to their requests.

Well prepared planning process can bring advantages and benefits for the municipality and self-governments. By setting coherent priorities the municipalities and self-governing regions are able to implement the long-term development based on strategy. Regional development strategy offers a strategic and long-term perspective on the future development of the region.

It has been prepared in close consultation with the community and seeks to define an agreed vision for the region and to frame an agenda which will lead to its achievement. The regional development strategy has a strong influence over where development is placed or should be placed in future to have maximum economic and social benefit.

PROGRAMME OF THE ECONOMIC AND SOCIAL DEVELOPMENT

One of the substantial instruments exploited in execution of the regional development support are Programmes of the economic development and social development. In accordance with the NR SR Act No. 503/2001 Z. z. and 351/2004 Z. z. about the support of the regional development the principal programme document of the new planning system is the Programme of the economic development and social development (PESD). These programme documents of the regional development are elaborated on the self-government level and municipality level.

In accordance with § 9 of this Act the Programme of the economic development and social development of the self-governing region is medium-term programme document, which contains :

- a) analysis of economic development, social development, environmental development and development of the culture in self-governing region area, main advancement directions and specification its goals and overriding needs
- b) determination of the districts and communes, which have need of aid and subvention owing to assurance of the balanced development of the self-governing region
- c) tasks and first-rate needs in the development of technical infrastructure, social infrastructure, in preservation of environment, of education, of culture and in other fields
- d) draft of financial and administrative provision

Programme of the economic development and social development of the self-governing region is principal programme document of the implementation phase in support of regional development in the area. It implies dominant trends of development of the area as well as the targeted actions taken for stimulation of the economic and social development in the area. It is medium-term document generally elaborated for the period 7 – 10 years.

PESD of the self-governing region is conceptually oriented as comprehensive economic and social programme of the self-governing region territory, which includes areas and missions of financial character development. It also clearly defines availability of financial resources – including EU coffers as well as non-financial character tasks as are policies, instruments, political support, references for central public authorities etc.

The PESD consists of three parts – analytical, strategic and implementing. Creation proceeding of this Programme materializes on regional and local level in the same way.

According to Coplák¹ each strategic plan and consequently Programme of the economic and social development of the self-government or municipality has to primarily answers the questions :

- Where is our region or town now?
- Where our region or town want to be?
- How can our region or town get there?

These essential question indicate the process of elaboration of the PESD, which materializes in the following way :

1. At first is important to execute the exhaustive analysis of the situation in the region which implies description of the present state and information about crucial fields of living in the region. Furthermore is needful the analysis of the external environment. One of the most convenient and exploited methods is SWOT analysis which presents integrated view of situation in the area (region, township).
2. On the strength of analysis is elaborated Strategy of development of the region or town. Considerable step is creating of strategic vision – that is certain idea of how the area (region, town) should look like in the future. Likewise is intended the routing of the further development in the area. From the vision are derived particular strategic objectives.
3. Consequently, pursuant to elaborated strategy are designated respective operational plans. The aim of these plans is transformation strategic objectives into respective steps. Besides description of the project the operational plans contain clarifying the importance and benefit of the project for the territory, execution date, subjects responsible for its pursuance as well as the financing manner (financial plan). Eventual output of this phase is the project intention.

After conduct of development program is important to specify the responsibility for realization of demarcated objectives – that means to designate the working team which is in charge of implementation, monitoring and control of performing of the objectives and tasks, amending and updating of the document.

Essential philosophy of the document consists in concentration on priority development fields and preferred regional challenges in these fields. PESD respects the subsidiarity principle. This document is conceived as open document, thus implies proposal for preparation mechanism of its implementation as well as proposal of process of its monitoring, evaluation and running up-dating.

Summarily we can say that the mission of the PESD is to map the potential of the territory, to create strategic document of development of the area, project opportunities, mechanism for implementation and updating of this strategic document. Part of PESD are objectives, measures and project intentions which are formulated for purpose of making partnerships and participation of inhabitants, investors and other local subjects.

At creating Programmes of the economic development and social development of the self-governing regions is necessary to respect fundamental principles of the regional policy of European Union which are :

- *principle of concentration* – necessity of routing of the efforts and coffers on the most significant problems of the regional policy and on the support of development of the regions with the lowest economic efficiency and living standard of population
- *principle of partnership* – necessity of close cooperation and active involvement of competent authorities on all levels id est European, national, regional and local in

¹ <http://www.ecocity.szm.sk/pro/postup.html> [2]

preparation and realization of development documents and projects and in monitoring of their accomplishments.

- *principle of programming* – necessity of conceptual approach in securing of development of the area, it means the obligation to prepare regional development documents
- *principle of complementarity (additionality)* – observance of principle that state (or EU) coffers are only complementary resource for support of activities in the region
- *principle of subsidiarity* - provision of functional dividing of competences on central, regional and local level; responsibility for effective exploitation EU funding moves along at the closest to administrators of proposed project
- *principle of monitoring and evaluation* – it means the continuous monitoring and evaluation of practised arrangements, of implementation of concrete projects and checking of over-all efficiency of expended funds exploitation.

Programmes of economic and social development of the self-governing regions and of the municipalities (towns) situated in the region are interconnected one another. In accordance with the NR SR Act No. 503/2001 Z. z. about the support of the regional development the PESD of the towns and cities situated in the region are basis of elaboration of PESD of the self-governing region. According to §17 of this Act every municipality ought to contribute participation in developing and implementation of PESD of the region where these municipalities belong to.

Next part of this article is focused on the analysis of development strategies and priority development areas which are part of PESD of town Prešov for the next period 2008-2015.

ANALYSIS OF PROGRAMME OF ECONOMIC AND SOCIAL DEVELOPMENT OF PREŠOV

Development programme is a new strategy of social and economic development of county processed in 2001-2002. Due to time gap, it was necessary for this development document to revalue and formulate new elaborate, plausible and achievable measures, which can enable town better to make up with running changes of extrinsic surroundings. Predicated PESD of town Prešov for 2008-2013 replaces Strategic plan of economic development of town Prešov.

Within the scope of analytical phase, there was in the form document of county town called, The profile of town Prešov, processed the brief socio-economic analysis.

This material contains measurable data and objective identifiable facts and it relates to profile of town from 2001. The aim of processing profile of town was to provide facts for decision-making about the direction of development document, to describe local characteristics features and tendencies in context of national and regional development and to determine singularities which can serve a source of comparative advantages or vice as a of jeopardy. The stance of the most important employing subjects from industrial sector from the sector of trade and services towards the town and their plans to the future in are analysed in the Survey of business surroundings, at which the members oh commission personally participated in the forms of interviews.

There were except of workers of Town Council contributing into the processing of this document through form of participated planning, also other authorities of trade, financial, industrial, academic and cultural sphere who created so called Commission for processing PESD.

Based on the analyses of realised survey of business surroundings in Prešov and discussion of Commission for processing PESD, were chosen three independent but mutually connected topics as prior areas of town development.

- A. Economic development and competitiveness
- B. Human resources and education
- C. The quality of life and renewable resources

They are included equally into the Programme of economic and social development of town and they make its core. Infrastructure is covered implicitly in these topics as a horizontal intersection theme which has the specific characteristics based on the fact whether it is business infrastructure, infrastructure for human resources development or infrastructure of the quality of life. Similarly, horizontally, the issue of marginalized and endangered groups is inserted into the all prior fields of development without highlighting this aspect.

There were discussed the analysis SWOT, strategic vision and global aim at meetings in 2007, which were then processed and offered to members of commission for commenting. The members of commission and other people involved formulated specific aims, measures and activities for improvement of condition in the fields stated. PESD of the town Prešov contains 10 specific aims and 41 regulations in total.

The aim of this initiative was not only the processing of development programme but also the provision of generally better conditions for development and growth of town, mobilization of intrinsic potential and deepening the cooperation between self-government and community. To create the formal document is not the purpose of this process but it is mostly realization of planned activities.

STRATEGIC VISION

Prešov will be important European regional centre effectively using human, natural and energy sources. It will be the centre of progressive education and attractive location for competitive plants developing innovations and production with higher surplus value. Fusion of healthy environment offer, quality housing and many opportunities for spending free time will make Prešov into attractive place for valuable life.

To fulfil its strategic vision, town Prešov concentrate its effort on fulfilling global aims:

❖ ECONOMIC DEVELOPMENT AND COMPETITIVENESS

To create in Prešov favourable surroundings for development of existing and creation of new competitive business subjects creating new vacancies, the development of which will be founded on innovations and production with higher surplus value.

❖ HUMAN RESOURCES AND EDUCATION

To strengthen Prešov as a centre of education with balanced offer of progressive fields of study and specializations focused on the needs of practice.

❖ THE QUALITY OF LIFE AND RENEWABLE RESOURCES

To create in Prešov such an offer of housing, social background and spending free time which together with quality environment will contribute to attraction of town for citizens. To use progressive vintage technologies and know-how in the areas of effective usage of natural and energy resources which will contribute to permanent development of town and region.

REALIZATION OF PESD

Between the creation of programme of economic and social development and its realization is an important difference. Preparation of plan is creative process, which requires participation of the widest sphere of citizens with vital knowledge, experience and with different looks on the future of town. On the other hand, assurance of plan realization is management task, which requires detailed surveillance over the activities of many individuals, private and public organizations. For these purposes is necessary to choose smaller group of well-prepared individuals, who are willing to assert and provide the realization of programme.

AINova and Berman Group - creators recommend to town Prešov that the above mentioned group was actually Commission for management of realization PESD. This commission should be of such a size so to be operative enough and there should be representatives of public and private sector, who participated to creation of PESD.

For successful realization is recommended:

1. Assignment of Town councillors so the Mayor of town would create the Commission for management of realization, to which the responsibility for management and control will be handed over. This commission will realize the regular surveillance over the fulfilment of regulations in particular key fields of development and will suggest changes in case of conditions change and some regulations will not be current or will not be able to be fulfilled,
2. To realize particular tasks of programme through common methods and procedures of Town Council and other institutions involved, while crucial for success will be monitoring and coordination of these tasks realized by assigned department of Town Council or other persons involved,
3. It is recommended to make the widest public familiarize with the PESD including the explanation that a consensus of representatives of public and private sectors in town was achieved. By publishing the crucial part of Programme of economic and social development of town Prešov (specific aims, regulations) in the daily press and by creation of internet presentation, the development document will gain a support and possibility of participation of other citizens, institutions and plants in town.

CONCLUSION

The main idea of regional development is to utilize the potential conditions and so the region could fully contribute to achieving bigger growth and competitiveness and to exchange ideas and best practices. The first step of regional development of the Prešov was creation of the strategic programme document – Programme of economic and social development of town Prešov. Only the future exposes if this strategic document will be implemented and successfully apply into practice.

BIBLIOGRAPHY

1. BLAŽEK, J. - UHLÍŘ, D. 2002. *Teorie regionálního rozvoje – nástin, kritika, klasifikace*. Praha: Karolinum, 2002. ISBN 80-246-1384-5
2. COPLÁK, J. *Postup a proces tvorby programu rozvoja obce*. [online]. [cit. 13.11.2008]. Dostupné na internete: <<http://www.ecocity.szm.sk/pro/postup.html>>
3. COPLÁK, J. *Strategic development plans for local communities*. [online]. [cit. 15.11.2008]. Dostupné na internete: <<http://www.financnik.sk/financie.php?did=243&article=76>>
4. Program hospodárskeho a sociálneho rozvoja mesta Prešov 2008-2013
5. Zákon NR SR č. 503/2001 Z. z. o podpore regionálneho rozvoja
6. Zákon NR SR č. 351/2004 Z. z. ktorým sa mení a dopĺňa zákon č 503/2001 Z. z. o podpore regionálneho rozvoja a o zmene a doplnení niektorých zákonov
7. Zákon NR SR č. 302/2001 Z. z. o samospráve vyšších územných celkov
8. Zákon NR SR č. 416/2001 Z. z. o prechode niektorých pôsobností z orgánov štátnej správy na obce a vyššie územné celky

Contact

Ing. Viktória ALI TAHA

University of Prešov in Prešov - Faculty of management

Street Konštantínova 16, 080 01 Prešov, Slovakia

phone : 00421-51-757 03 53

e-mail : alitaha@unipo.sk

Ing. Jaroslav DODECKÝ

University of Prešov in Prešov - Faculty of management

Street Konštantínova 16, 080 01 Prešov, Slovakia

phone : 00421-51-757 03 53

e-mail : dodecky@unipo.sk

VOUCHER SCHEMES - THREAT OR OPPORTUNITY FOR THE CZECH HEALTHCARE SECTOR

Zuzana Darmopilová, Marek Pavlík

ANNOTATION

Introduction:

Healthcare markets are traditionally perceived as an arena characteristic by the “rationalized” state regulations which aim mostly to fulfil four key goals of healthcare systems: equity, efficiency, effectiveness and patient satisfactions. Typically, for doing so, both the supply and the demand sides can be regulated. Vouchers schemes can be seen as those instruments stimulating the demand side; it means that the purchase power is transferred to the client. The aim of the contribution is to find out whether vouchers schemes could be beneficial to the Czech healthcare system.

The first part of the contribution presents the theoretical framework for the vouchers schemes implementation in the healthcare sector. The specificity of the Czech healthcare system is crucial for the evaluation of the potential vouchers implementation. The possible vouchers benefits are studied from the quality, equity and efficiency point of view. At the same time the authors are determining the type of healthcare services for which the vouchers schemes could be used in the Czech Republic. Another issue discussed in the paper is the question if the vouchers are or are not some kind of fiscal illusion which could influence the real performance of the healthcare system. The last part of the contribution summarises the threats and opportunities related to the potential vouchers introduction to the Czech healthcare system.

Methods:

The main method used for the analysis is based on relevant literature review. Foreign experiences are applied to the specific condition of the Czech Republic. The health care system is divided into several categories according to the type of the healthcare services (primary, secondary; standard care, etc.). For each of determined categories, the authors are searching the potential eligibility for the vouchers scheme – for doing so the qualitative methods are used. Final conclusions are based on aggregation of the partial results; in this part the simple tools based on SWOT analysis are used.

Results and conclusions:

The results of the contribution are still in progress. Even if the use of vouchers in the healthcare system presents an appropriate tool while regulating the demand side on the healthcare markets; the authors presume that vouchers implementation in the Czech healthcare system represents more threats than opportunities. There is a risk of fiscal illusion which could cause the implementation deficit too.

JEL classification: H44, I11, I18

KEY WORDS

Healthcare system, vouchers schemes, healthcare markets

INTRODUCTION

Healthcare markets are traditionally perceived as an arena characteristic by the “rationalized” state regulations which aim mostly to fulfil four key goals of healthcare systems: equity, efficiency, effectiveness and patient satisfactions. Typically, for doing so, both the supply and the demand sides can be regulated. Vouchers schemes can be seen as those instruments stimulating the demand side; it means that the purchase power is transferred to the client. The aim of the contribution is to find out whether vouchers schemes could be beneficial to the Czech healthcare system.

The first part of the contribution presents the theoretical framework for the vouchers schemes implementation in the healthcare sector. The specificity of the Czech healthcare system is crucial for the evaluation of the potential vouchers implementation. The possible vouchers benefits are studied from the quality, equity and efficiency point of view. At the same time the authors are determining the type of healthcare services for which the vouchers schemes could be used in the Czech Republic. Another issue discussed in the paper is the question if the vouchers are or are not some kind of fiscal illusion which could influence the real performance of the healthcare system. The last part of the contribution summarises the threats and opportunities related to the potential vouchers introduction to the Czech healthcare system.

THEORETICAL FRAMEWORK

Vouchers are typically used in education or social systems. Let's start by explaining the voucher scheme principle in education sector. One of the earliest suggestions for government use of vouchers was put forward by M. Friedman in 1962 as a way to fund education, without excessive government intervention in the schooling market (Friedman, 1962). Vouchers typically transfer purchasing power to the client. Rather than supplying tax income directly to public schools tax is channelled to households as a voucher, roughly equivalent to the cost of a child-year of education. The aim is to empower the household to pick the school (public or private) that best suits parental preferences and the child's needs and to allow low-income families access to private schools. It therefore places the onus on the school to provide quality education, and to attract the household's voucher. The result is that schools perceived as ‘high quality’ attract more students, receive many vouchers, and prosper. Inferior schools, avoided by parents, are stimulated to increase their quality or must close down (West, 1996). Experiences in many US cities have indeed demonstrated that this strategy forces schools to be cognizant of customer perceptions, and satisfy customer needs (e.g. special classes, foreign language training etc.) (Shaw, 1999)¹.

The vouchers schemes aim to improve the public resources utilization control. As the increasing cost in the healthcare sectors is one of the most problematic issues all around the world, it is worth studying whether the voucher scheme could be used in the healthcare sector as well. Since in the healthcare sector (such as in the education), government intervention takes often the form of supply-side subsidies, there is generally little control over what care (service) is provided and to whom. Voucher, in opposite, means that the government subsidy is directly provided to the service user, so the public resources become more direct and are purpose related. Moreover, the service user is aware of the service price.

The voucher scheme principle seems to be very elegant and easy. However, in the healthcare sector, there is at least one fundamental difference that makes the health vouchers scheme utilisation more difficult than in the education sector. The basic vouchers idea in education is based on the belief that the service users are able to recognize the quality of the offered service. The healthcare user is, due to the information asymmetry, less capable to judge the

¹ Gorter A., Sandiford P., Rojas Z., Salvetto M. (2003)

objective quality of the healthcare service. This fact complicates the vouchers introduction in the healthcare sector but does not imply the impossibility to implement them.

In the following part of the paper, the authors present some of the theoretical health vouchers consequences. These consequences are studied in the Czech healthcare system from the quality, equity and efficiency point of view; in fact quality, equity, effectiveness and efficiency are often regarded as main goals of the health policies in general and Czech Republic is not an exception. The authors focus on the competition issue mainly which is a tool how to increase the efficiency of the healthcare sector.

The health vouchers schemes can introduce/influence following issues (Gorter A., Sandiford P., Rojas Z., Salvetto M., 2003):

- the introduction of competition for public subsidies;
- separation of purchaser and provider roles with the introduction of contracting;
- targeting subsidies to the poor and/or high risk/vulnerable groups;
- remuneration of provider in accordance with production;
- increasing choice of provider for patients;
- quality accreditation of providers;
- the introduction of public-private partnerships;
- restricting funding to cost-effective evidenced based best practices;
- event-based program monitoring and evaluation.

THE INTRODUCTION OF COMPETITION FOR PUBLIC SUBSIDIES

Competition can be introduced into vouchers schemes in at least two ways. The first one is to select only some providers who would be eligible to receive vouchers, the second one is to let providers to compete to attract the vouchers bearers. For both mentioned possibilities, it is necessary to know the quality of the healthcare service the providers are offering and to have reliable methods how to compare the quality of services provided. The quality measuring is a very complex issue; moreover the objective (medical) and subjective (felt by the patient) quality could differ².

In the case of Czech Republic there is a tendency to increase the competition among providers and also among payers. It is possible to claim that the competition introduction is one of the main goals in the last reform strategy. If the Czech health policy makers choose to use the vouchers scheme³ in order to increase the competition in the healthcare sector, there are many problematic decisions to make. How to choose the providers for the voucher scheme; how many providers to choose for the voucher scheme; who would choose them and/or how to motivate them to integrate the voucher scheme? The main question is for which kind of service we would use the vouchers⁴?

From the discussion in the literature, it flows that the voucher scheme is mainly used for hospital care providers. Let's accept this assumption. In the Czech Republic there are different hospital founders⁵. If the aim of the health policy is to increase the competition in the whole system via voucher scheme, there is a probability that the voucher scheme should be created at the national level. But in the Czech reality, it is possible to observe different strategies for every hospital founder. Thus, who should decide which hospital is going to be integrated to the voucher net? If the Ministry (founder of the biggest number of hospital beds) introduces the voucher scheme in its hospital, this decision can create some kind of inequality for the

² For more details, see Gorter A., Sandiford P., Rojas Z., Salvetto M. (2003)

³ The reform strategy does not intend to use the voucher scheme.

⁴ Will be studied in the independent part of the paper

⁵ Ministry of Health, Ministry of Defence, regions, municipalities, etc

whole system which is very negatively accepted in the Czech mentality. If the Ministry makes the decisions for the whole hospital net in the Czech Republic, the other founders will be dissatisfied because the central level would take them some part of their autonomy. If every founder has the possibility to choose whether or not to introduce the voucher schemes, the voucher nets would be rather small. Will it still be beneficial for the efficiency of the system? Other issues related with this choice problem are administrative costs of those voucher schemes. The authors believe that the management of the voucher scheme (in any of the above mentioned form) will be relatively costly. The above mentioned arguments constitute a very important impediment for the voucher scheme introduction in the Czech Republic.

There is another very important problem; this is how to motivate the hospitals to integrate the voucher scheme. Their motivation is related to the benefit they can reach from the voucher scheme. Obviously the benefit should be financial but in some cases there are several non-material benefits (such as publicity, reputation, etc.).

There is also the “quality measuring” problem. We do believe that payers in the Czech Republic dispose of relevant data, so it would be possible to choose providers for the voucher scheme according to the quality of their services. As these data start to be published, healthcare users could consult them. Thus, it would be totally imaginable (and desirable) that Czech patients become more able to judge the quality of different hospitals, it would help them to bring the voucher (money) in the right health establishments. From this point of view, the voucher introduction (respectively the competition increase) could really be beneficial for the system.

Another tool serving to increase the competition in the health system is i.e. selective contracting, which is already introduced in the Czech Republic. For this reason, the authors claim that even if the voucher introduction can increase the efficiency of the system via competition, it is not an appropriate form for the Czech Republic, it is better to use other instruments aiming to increase the competition (selective contracting, i.e.).

SEPARATION OF PURCHASER AND PROVIDER ROLES WITH THE INTRODUCTION OF CONTRACTING

The role of provider and purchaser are separated. The purchaser decides what services are needed. The provider “sells” the service and is negotiating the price with the purchaser. This kind of contracting and separation could lead to more rational allocation of resources, so this tool is one more related to the efficiency and effectiveness aims of health policy.

As already stated above, the selective contracting is a tool which is already used in the Czech Republic. Voucher scheme is one option how to introduce the selective contracting which is not used (or chosen) in the Czech Republic.

TARGETING SUBSIDIES TO THE POOR AND/OR HIGH RISK/VULNERABLE GROUPS

Vouchers enable to focus public subsidies to selected groups in the population (i.e. poor, people in higher need). This is related to the solidarity and equity increase in the healthcare system. It is very important to know how to select the disadvantaged groups to which the vouchers are going to be redistributed. Even if the group is well targeted, there is still the question whether those vouchers will be really used or whether they will be used in the way the government expected.

This issue is a very complex one which demands a detailed analysis. It is not discussed in this paper; it is the subject of independent future research.

REMUNERATION OF PROVIDER IN ACCORDANCE WITH PRODUCTION

The healthcare providers are remunerated according to the number of vouchers patients. This is the real demand-side subsidy, it is expected that the government subsidies will support only the providers chosen by vouchers bearers (because of their quality) so the technical efficiency is strengthened.

In the Czech Republic it is the payer who is judging the providers quality and in accordance to their quality the payer negotiates with the provider the price of their services. So, theoretically the Czech provider net depends crucially on the quality of care.

The shift of the decision to patient (who will decide whether or not to bring money in different hospitals) is possible. In the last reform proposal, we plan to introduce the individual health insurance plans (negotiated between the patient and the payer). The patient would present his/her requirements to the payer (which provider he/she is willing to use) in accordance to the quality of care in different hospitals. As in the case of selective contracting, the voucher scheme is an option how to give more autonomy and more responsibility to the patient (client) which was not used in the Czech Republic.

INCREASING CHOICE OF PROVIDER FOR PATIENTS

Competitive vouchers introduction can be understood as tool serving to increase the choice of providers for patients. Vouchers bearers can choose more health establishments; there are smaller cost barriers. This means that the providers compete for the vouchers bearers so they are motivated to increase the quality of their services.

In the Czech Republic citizens have the free choice of provider. Nevertheless, the choice could be strengthened, for doing so we are planning to use the individual health plans. The vouchers schemes remain an alternative for the health policy makers.

In the next part of the paper, the authors study for which kind of the healthcare services could be used in the Czech Republic.

THE ANALYSIS OF VOUCHERS SUITABILITY UNDER SPECIFICITY OF THE CZECH HEALTH CARE SYSTEM⁶

As we mentioned above the vouchers are doubtless useful tools; however only under specific conditions. If we want to discuss the vouchers suitability we should answer following question:

- Who is eligible for vouchers (how is determined target group)?
- Who (and how) should distribute the vouchers to the target group
- Which services or care is suitable for vouchers?
- What is impact of vouchers implementation?

There are two main categories of possible recipient of vouchers: whole population, selected (vulnerable group). Gorter A., Sandiford P., Rojas Z., Salvetto M.(2003) and other studies often introduce cases from countries where part of population have limited access to the basic health care services; generally due to lack of financial resources. E.g. Emanuel, Fuchs (2005) consider universal vouchers system as a tool of how to resolve current problems in US health care system. In the system of public insurance, vouchers are usually used as a stimulus for purchasing additional services (included prevention). Vouchers also seem to be tool for

⁶ Note: Authors assumed that readers have common knowledge about the Czech health care system. Due to limited extend of the paper, it is impossible to introduce facts about Czech health system.

increasing involvement of patients on their health. The Czech Republic has public insurance system with nine Health insurance companies which offer benefits programs⁷

Considering the vouchers as prospective reimbursement method we necessary need to discuss of who should distribute the vouchers. We take into account the government, local municipalities, Health insurance companies, NGOs, charity organizations and also employers⁸.

All determined categories according previous questions are presented in following table 1 which shows possible advantages and disadvantages of vouchers scheme with respecting of four main principles of health care⁹.

The third question of suitability of services is analyzed through following categories: ambulatory care (GP¹⁰, specialist), dentists, hospital care and other services (i.e. spa, plastic surgery, fitness programs etc.). Results of analyses are presented in the table 2.

If we discuss the impact of vouchers; we should take into account two possible outcomes:

- Positive effects (negative effect) – i.e. improving quality of services, improving health status indicators, etc.
- Positive fiscal illusion (negative fiscal illusion) – change of patients' (providers', payers') behaviour as a result of "administrative change".

The real effect is not more important than the perceived one. If the vouchers should stimulus some groups of patients to the desirable behaviour – without real change of allocation mechanism – than the vouchers should be considered as a potentially prospective method. Malý (2006) showed that fiscal illusions are rather growing phenomenon than is expected. The fiscal illusion is sometimes understand as more negative phenomenon, however if the illusion leads "players" on health market to the effective behaviour, the potentials of such illusion should be discussed at least. In short, fiscal illusions have to be considered as a part of vouchers scheme and apparently should be analyzed deeper in future paper.

⁷ The health reform increasing competition environment among Health insurance companies and providers could be considered as postponed, therefore nowadays HIC's benefit programs have only limited space for competition.

⁸ Employer especially in the US have strong role in the health care system. The analysis of the Czech health system will abstract form this category

⁹ equity, efficiency, effectiveness and patients' satisfaction

¹⁰ General practitioner

Table 1: Suitability of vouchers scheme – respecting equity, efficiency, effectiveness and patients’ satisfaction

Target group	Possible provider of vouchers	Government (central	Local Municipalities	Health Insurance companies	NGO, charity
Whole population	Represent systematic change; necessary to create and implement system rules and vouchers delivery system - expensive implementation + stimulation for responsibility of patients			+ possible as kind of benefit + stimulation to the responsibility and prevention + technically possible for elected services ¹ - expensive implementation	- technically impossible
Low income families, Social excluded groups	- no equity (not for the whole population) + equity (the same in every region, health facility, etc.) + effort to solidarity + removing barriers (healthy population is potentially more productive – i.e. cost of vouchers may be returned by the taxes - expensive implementation - choice of the right group is difficult, no efficiency at the national level		- no equity (possible differences in regions or health facilities) + principle of subsidiarity, the choice of the right group less difficult - expensive implementation	- lack of knowledge - no equity – can differ in every HIC +patient motivation to behave as a client (what HIC to choose in accordance to their voucher offer)=>better HIC quality + better control of healthcare services used by vulnerable group	+ knowledge of environment + direct stimulus to the patients (fiscal illusion) - no real connection to the healthcare system, lack of knowledge - impossible only for selected cases (impossible standardized implementation) + direct targeting
Pensioners²	- no equity (not for the whole population) + equity (the same in every region, health facility, etc.) + solidarity + possible utilization of existing distribution system + Enabling entrance to the basic health care		- no equity (possible differences in regions or health facilities)	+patient motivation to behave as a client (what HIC to choose in accordance to their voucher offer)=>better HIC quality +better control of healthcare services used by pensioners	- no real connection to the healthcare system, lack of knowledge - possible only for specific services (e.g. hospices ³)
Illegal immigrants	There are more social reasons for vouchers than economic				

¹ However the function should have a benefit programs for insurers

² higher demand on health services

³ In fact, demand for hospices is higher than supply, therefore the vouchers wouldn’t have any impact on quality of services

Previous table showed advantages and disadvantages of the vouchers implementation but there is a question of which kind of health service is more suitable for vouchers than the other ones. Anyway we have to consider the two types of care – prevention and treatment. Following table 2 presents results for both types.

Table 2: Suitability of vouchers according the kind of health service

Kind of health care service	Level of patients' co-payments	Target group	Possible benefits	Possible risks
Ambulatory – GP, specialist	Low	Vulnerable groups	Removing cost barriers Stimulation to prevention Better control over the used services	Difficult motivation of the GP's to integrate the voucher net Administrative costs More bureaucracy
Dentists	High	Vulnerable groups; theoretically whole population	Removing cost barriers Stimulation to prevention Better control over the used services	Difficult motivation of the specialists' to integrate the voucher net Administrative costs More bureaucracy
Hospital care	Low	Vulnerable groups	Removing cost barriers Elimination of bad quality facilities Challenge to better reimbursement system, i.e. in combination with DRG Hospital network adjustment	Choice of the right group Administrative costs
Other services (spa, plastic surgery, ect.)	High	Whole population	Removing cost barriers Stimulation to healthy life style	Expensive

CONCLUSION

We conclude that vouchers under specificity of the Czech Republic have very limited potential to use. There is no definition of standard services (covered by the public insurance) and above standard services (paid by the patient). Therefore theoretically is each “necessary” service available for each patient. The patient has a right of free choice of specialist as well as facility. Because of that we could expect that patient choice of provider would be same with or without vouchers. Vouchers have no impact of waiting list or other capacity problem.

Vouchers seem to be suitable in three cases:

1. Vouchers for “above standard” and “prevention” care, as a direct patients' stimulation to responsible behaviour. However the same function should fulfil “the benefit system” provided by the Health insurance companies
2. Vouchers for social excluded groups – distributed by the NGO's in the paper form should be more simulative than usual “benefit programs”. However this possibility represents some kind of fiscal illusion.
3. Voucher for illegal immigrant – distributed by the NGO's (supported by the government) represent tool for support to the excluded vulnerable group

It is obvious that deeper analysis needs more space and work; however this paper was conducted as a part of wider project which analyzes the possibility of vouchers scheme utilization across all parts of public sector.

BIBLIOGRAPHY

- Emanuel, E.J, Fuchs, V.R (2005): *Health Care Vouchers — A Proposal for Universal Coverage*. The new england journal of medicine. [online] <http://www.robert-h-frank.com/PDFs/Emanuel-Fuchs.NEJM.3-24-05.pdf>
- Friedman M. (1962): *Capitalism and Freedom* (Chapter 6). Chicago: University of Chicago Press.
- Gorter A., Sandiford P., Rojas Z., Salvetto M.(2003): *Competitive Voucher Schemes for Health Background Paper*. Instituto CentroAmericano de la Salud ICAS.
- Malý, I. (2006): *Sedm závoju paternalismu aneb nové fiskální iluze*. In Česká ekonomika v procesu globalizace SUPPLEMENTUM. Brno : Masarykova univerzita, 2006. od s. 7-15, 9 s. ISBN 80-210-4175-7
- Shaw R Paul. (1999): *New Trends in Public Sector Management in Health*. Paper for the World Bank Institute's Flagship on Health Sector Reform and Sustainable Financing, Washington, DC

AUTHORS

Darmopilová Zuzana, Ing.; Masaryk Univerzity, Faculty of Economic and Administration;
zuzanad@econ.muni.cz

Marek Pavlik, Ing; Masaryk Univerzity, Faculty of Economic and Administration;
pavlik@econ.muni.cz

PATIENTS' EXPECTATIONS TOWARDS HEALTH-CARE WORKFORCE

Anita Morze

ANNOTATION

On one hand, the healthcare centers aim at providing the cutting-edge and optimum treatment methods but on the other hand, they are dependent on the economic factors (the financing level incongruent with the incurred costs). Therefore, one should bear in mind that in the era of self-financing in case of both public and non-public healthcare centers a loyal patient is a source of income for these units.

KEY WORDS

Health care, market research, marketing.

INTRODUCTION

The reform of the health care system in Poland made public health-care institutions to become independent centers operating under the rules of free market. As a result a phenomenon of competition and striving for patient has occurred. It became clear that all in sudden a numerous number of loyal patients possessed an impressive bargaining power as the new economic situation depended on them. In order to meet new challenges hospitals ought to become patient-oriented and focus on medical personnel-patient relations and more importantly doctor-patient relations. As far as those arguments are concerned, health care services marketing seems to be crucial.

AIM AND METODOLOGY

The main objective of this article is to indentify patients' expectations towards clinical workforce. In order to do that both secondary and primary sources of information have been used. Primary data is based on the research carried out in the Specialist Hospital in Cracow from January to November 2008. The diagnostic opinion poll was used as a tool to solve the research problem with the use of questionnaire survey. The target group constituted randomly selected patients according to date of discharge from hospital.

Approximately 1300 correctly filled out questionnaires have been returned. As the survey was conducted around 20 separate wards, the fact of hospitalization fundamentally influenced the opinions. Moreover it enabled patients to asses all the raised issues as a whole.

RESULTS

The study of patients' opinions concerning their expectations provides an opportunity to recognize their needs and the service satisfaction level they are at as far as the service provided by the inpatient healthcare unit they are in is concerned. The research did not focus entirely on the satisfaction as it is the resultant of the patient's initial expectations and the perception of the provided service. The research concentrated on components of the frame of mind, psychophysical condition, satisfaction or its lack in case of the healthcare. The subjective assessment of the medical service components was examined: medical personnel qualifications, the course of treatment, the feeling of full or partial recovery.

In the research tool, namely the questionnaire, there were three sets of questions concerning three issues: patient’s general satisfaction, concentration on the patient’s needs, treatment conditions – surroundings.

Figure 1. contains a set of questions and answers devoted to the patient’s general satisfaction. The results are given as percentages of 1306 properly filled-in questionnaires. The general quality assessment concerning this set of questions is a very high appraisal: almost 94% of the researched evaluated the hospital positively; decisively negative opinions were shared only by 1.6% of all subjects.

Fig. 1 The list of questions and answers devoted to the patient’s general satisfaction.

Questions:	Definitely No [%]	Rather No [%]	Rather Yes [%]	Definitely Yes [%]
In case of such a need I would go back to this hospital	2	5	31	62
The way I was treated here suits me	1	3	31	65
I would recommend this hospital to my closest	3	4	30	63
I think that in this hospital there are bigger opportunities of getting real help compared with other medical centers	2	5	29	64
Given the chance, I think patients would like to be treated in this hospital	1	5	35	59
Generally speaking I am satisfied with the overall stay and treatment in this hospital	1	4	27	68
I come to be treated here willingly	1	6	30	63

Source: Own study.

Figure 2. contains a set of questions and answers concerning the Concentration on the patient’s needs. The results are given as percentages of 1306 properly filled-in questionnaires. The general quality assessment concerning this set of questions is a very high: 92.7% of the researched patients expressed their satisfaction concerning the health care provided in the researched unit, the staff professionalism was positively assessed, yet 2.6% of the surveyed patients had a negative opinion concerning the way the personnel addressed their needs. Nonetheless, one should pinpoint that the patients (87%) are more concerned with the physicians’ expertise and competence than with the attentions and pleasantries.

Fig. 2 The list of questions and answers concerning the Concentration on the patient's needs.

Questions:	Definitely No [%]	Rather No [%]	Rather Yes [%]	Definitely Yes [%]
Staying in this hospital makes me feel lonely and helpless	54	31	9	6
I sense hurry whenever I contact the physician	56	32	7	5
I am being approached here as an ailing person, not like a broken object	5	7	28	60
Anytime I have such a need I can turn to the nurse or a physician	1	2	27	70
In difficult moments I would gladly talk to the physician	1	3	32	63
It seems the staff treating me here is interested in my health condition	2	3	27	68
If I feel bad I need the closeness of benevolent personnel members who understand me	3	7	29	61
I think that the treatment and medical procedures are carried out professionally	1	3	30	66
I think that my physician is a benevolent person	1	1	23	75
The physician takes into account my opinion as far as my treatment is concerned	1	4	35	60
Talking to an understanding and caring physician makes me feel well	1	3	27	69
Information concerning my illness are kept confidential	0	2	3	67
I think that the treatment applied is helping me	1	3	35	61
What matters to me more is the physician's professional competence rather than his/her proper behavior	4	9	33	54
The physician has got a sufficient amount of time he/she can devote to me	2	5	35	58

Source: Own study.

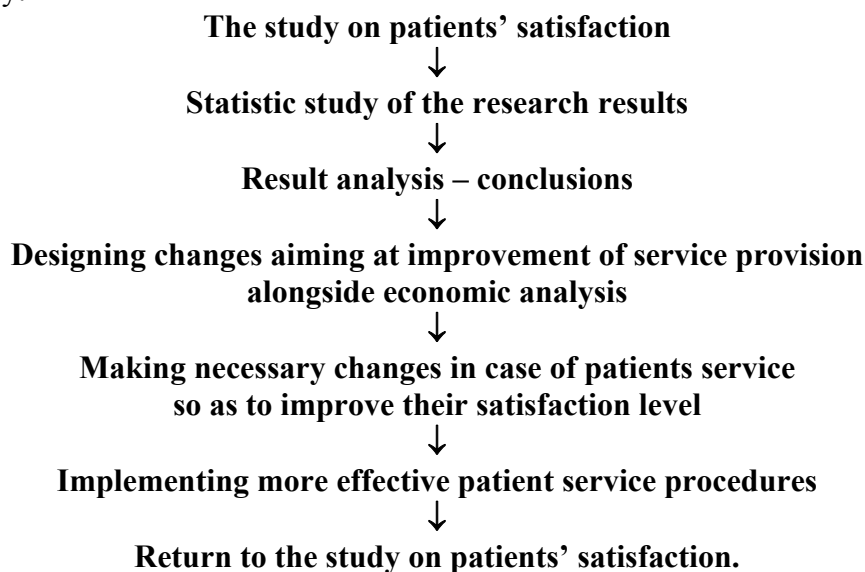
Figure 3. contains a set of questions and answers concerning treatment conditions – surroundings. The results are given as percentages of 1306 properly filled-in questionnaires. The general quality assessment concerning this set of questions is a very high: 91.9% of the researched patients positively appraised the conditions in which they were treated; decisively negative opinion was shared by 2.3%. Analyzing the questions concerning the treatment conditions, especially the hospital rooms, one may conclude that reason for such assessment may be the obsolete hospital infrastructure.

Fig. 3 The list of questions and answers concerning treatment conditions – surroundings.

Questions:	Definitely No [%]	Rather No [%]	Rather Yes [%]	Definitely Yes [%]
The atmosphere in this hospital is unconstraint and pleasant	1	2	39	58
The hospital rooms are clean and pleasant	4	5	33	58
I think that the climate here is pleasant and it facilitates my recovery	2	2	33	63
The nurses do their jobs in a professional manner	1	3	37	59
The patients are treated here in modern conditions	5	21	53	21
The nurses are understanding and caring	2	5	46	47
The hospital rooms are comfortable	4	10	54	32
The patients in his hospital get professional medical care	1	4	56	39
Other members of the personnel are benevolent and friendly	2	5	42	51
I can find peace here as well as experience kindness from other people	2	5	49	44
The nurses are benevolent	2	4	39	55
Other staff members do their job well	2	3	41	54

Source: Own study.

Basing on the research, one can conclude which directions of change to choose in order to arrive at improvement i.e. enhancement of the patients' satisfaction. The medical care market obliges to provide high quality services as a dissatisfied patient would not lodge a complaint but would rather turn to a competition. In order to gain a client and retain one, one needs information concerning the patients' preferences and satisfaction. To avoid mistake of the isolated research the results and conclusions of which are not put into practice or carried out in a chaotic or hardly effective manner, the research should be carried out continuously in the following way:



CONCLUSION

Transformations on the healthcare market, resulting both from the medical care service financing changes and the organizational and legislative ones related to the management, service quality or human resources formation – have got a significant influence on the way in which patients form their expectations as far as the expectations towards healthcare centers are concerned.

The phenomenon of gaining independence by the public medical centers and the change in their management has brought about fiercer competition. Therefore, more and more medical centers undertake entrepreneurial activities (restructuring, organizational changes, outsourcing) as they take into account the patient's expectations to the biggest extent and thus putting the emphasis on the patient's satisfaction.

On one hand, the healthcare centers aim at providing the cutting-edge and optimum treatment methods but on the other hand, they are dependent on the economic factors (the financing level incongruent with the incurred costs). Therefore, one should bear in mind that in the era of self-financing in case of both public and non-public healthcare centers a loyal patient is a source of income for these units.

In this context, the matter of patients' expectations towards a healthcare center is of utmost importance. Especially, when one takes into account the fact that actual operation undertaken in Polish medical care units aims at adjusting to the new conditions in which they operate.

BIBLIOGRAPHY

1. Rudawska: *Marketing w nowoczesnej opiece zdrowotnej – wybrane aspekty*. Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin 2005.
2. G. Rogala-Pawelczyk: *Zadania pielęgniarki środowiskowo-rodzinnej wobec pacjenta objętego opieką zespołu lekarza rodzinnego w opinii członków zespołu lekarza rodzinnego*. Wiadomości lekarskie, tom LV, 2002.
3. Rozporządzenie Ministra Zdrowia z dnia 21 grudnia 2004 r. w sprawie kwalifikacji członków zespołu kontroli zakażeń zakładowych (Dz. U. Nr 285, poz. 2869).
4. R. Haffer: *Systemy zarządzania jakością w budowaniu przewag konkurencyjnych przedsiębiorstw*. Wydawnictwo Uniwersytetu Mikołaja Kopernika, Toruń 2002.
5. M. Wojtowicz, M.A Kornatowski (eds.): *Zakład opieki zdrowotnej w Unii Europejskiej*. Verlag Dashöfer, Warszawa 2006.
6. M. Dobska, P. Dobski: *Marketing usług medycznych*. Wydawnictwo INFOR, Warszawa 2000.
7. I. Rudawska: *Ekonomizacja relacji pacjent – usługodawca w opiece zdrowotnej*. Wydawnictwo Naukowe Uniwersytetu Szczecińskiego, Szczecin 2006 r.
8. Materiały usług profesjonalnych, materiały konferencyjne tom 1, Marketing Usług Profesjonalnych, Konferencja Poznań 22-23.05.2000 r.
9. *Zakład opieki zdrowotnej w Unii Europejskiej*, eds.: M. Wojtowicza, M.A. Kornatowskiego, Verlag Dashöfer, Warszawa 2006 r.

*** This article is updated continuation and review deeper to the article " Oczekiwania pacjentów wobec pracowników opieki zdrowotnej w lecznictwie zamkniętym" that was presented but **WAS NOT PUBLISHED** on conference in Poznan "Economy. Technology. Society" (June 2008).

Mgr Anita Morze

Karol Adamiecki University of Economics in Katowice

1-go Maja 50, pokój 13, budynek „E”

40-287, Katowice, Poland

a.morze@wp.pl

OUTSOURCING IN STATE-OWNED HOSPITALS AS A SOLUTION FOR EFFECTIVE COST MANAGEMENT AND BUDGETING

Stanislawa Morze

ANNOTATION

All the circumstances which determine outsourcing of services as well as facilities bring about many positive results such as: lower costs, higher-quality service, concentration on key competences, smoother job organization and last but certainly not least significant improvement in patient care and employee conditions. As a result competitive advantage is obtained.

KEY WORDS

Health care, cost management, budgeting, outsourcing.

INTRODUCTION

The study concerns Polish health care system, particularly hospitals. The achievement of success by a hospital in the market economy conditions depends mainly on the apt cost and budget policy. The management process requires the application of tools supporting sound cost policy and maximizing the income at all levels of the medical and auxiliary hospital operations. In the circumstances of the necessity of cost cutting in hospital accompanied by shortage of financial resources needed for renovation and replacement of exploited equipment and apparatuses it is of great assistance to outsource auxiliary operations. Thus, the hospital need not organize its own departments, invest in equipment and people. Providing outsourcing services in healthcare is gaining in popularity. Currently, outsourcing is the most commonly applied restructuring method in the sector. Healthcare centers outsource tasks which are not related to basic medical treatments as a result of several basic considerations: they wish to make use of their resources and potential carrying out basic healthcare functions, prefer to outsource remaining operations to specialist companies as they care about cost effective realization of their auxiliary services within the scope of laboratory diagnostics, sanitation, catering or reception services characterized by the best relation of the service quality to its cost.

AIM AND METODOLOGY

The main objective of this article is to pinpoint **possible outsourcing application with its particular focus on effective cost management and budgeting**. The paper covers analysis of decision-making process in the sphere of logistics based upon interviews and observations carried out in the Region Lung Diseases Hospital in Jaroszwiec and in the Specialist Hospital in Cracow between 2005 and 2008.

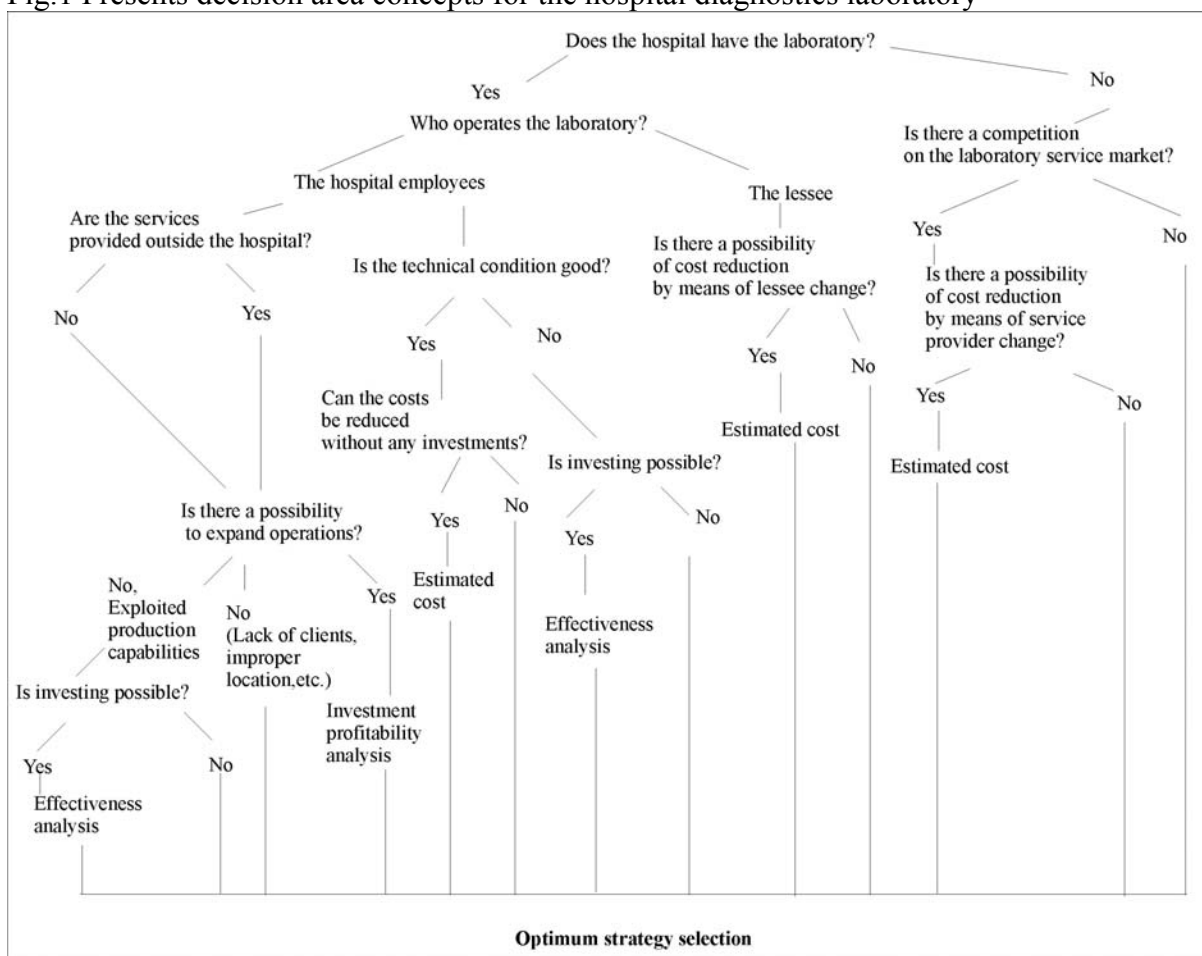
RESULTS

In healthcare, logistics is, above all, identified with the hospital auxiliary operations. The holistic analysis of functional, instrumental and structural system features as well as their interaction effects seem of most crucial importance in the process of logistic systems (processes) identification and characterization. According to this, logistic system may be presented as a set of logistic elements the relations of which are specified by means of proper transformation processes. Among these elements, having specific properties, there are tight connections also in the organizational sense. It means that the logistic system structure

is constituted only by these logistic processes which in the systematic manner are subordinated to appropriate organizational solutions. A complex approach within the concept of logistics makes the identification of relations among particular elements gain in importance. In practice, it means a transformation towards the operational approach focused on logistic activities steering in the direction of logistically-oriented management system concept.

The following are the outsourced auxiliary services: laundry, catering, sanitation and cleaning, laboratory diagnostics, imaging diagnostics, transportation, financial and accounting (invoicing, payment and insurance services). Outsourcing is also applied in the below listed areas of healthcare operation: waste management, heating system, IT systems optimization/ infrastructure adaptation/ leasing, human resources management/ employee leasing/ HR and remuneration services, designing internal logistic systems and storages, creation of supply chain strategy, security services.

Fig.1 Presents decision area concepts for the hospital diagnostics laboratory



Source: Own study.

Analysis of the decision area in the particular hospital logistic spheres was conducted on the example of laboratory diagnostics services. Fig. 1. presents decision area concepts for the hospital diagnostics laboratory. It is of assistance in case of optimum decision making. In case where there is a possibility in investment, it is required to assess its effectiveness prior to its execution. In the first stage, it is necessary to determine a long-range aim we wish to achieve for example cost cutting, quality improvement, possible income from service outsourcing. Next, one need define possible variants of the solution and carry out calculation as far as their economic effectiveness is concerned. The calculation process is done for each alternative

project: prospective total investment expenditure and the amount of expected financial surplus or cost cutting. In this case, one may make use of the following techniques: return on investment expenditure period, current net value of financial surplus, investment profitability rate, and return on investment expenditure rate. It is necessary to pinpoint strong and weak sides of the owned laboratory, taking into account replacement of exploited apparatuses and equipment, survey the matter of new technology purchase, undertake actions to rationalize and adapt space as well as the laboratory diagnostics to meet existing regulations in force, restructure the lab personnel, survey the possibility to outsource laboratory services, lease the rooms and the equipment and transfer employees to the external company or look for other cost cutting methods.

If the hospital does not have its own laboratory one should carry out an in-depth and thorough analysis of alternative investment projects as well as discern demand for this sort of services. From the point of view of process improvement possibilities in the diagnostic laboratory, the costs in the particular approach encompass: fixed assets elements depreciation costs, remuneration costs alongside surcharges, reagent and other medical material costs, diagnostic material transportation costs, storage costs and personnel training costs. In case of investment one need carry out the process of the most profitable project selection.

Depending on the current situation the following decisions concerning the diagnostic laboratory can be made which are presented on Fig.2.

Fig.2 Decisions concerning the diagnostic laboratory.

The hospital doesn't have the laboratory	The hospital has the laboratory	
	Operated by the hospital employees	Operated by the lessee
The decision		
Contract termination and service provider change	Lease: a) Former employees take the laboratory over b) Selection of external contractor	Contract termination and lessee change
Investment: Organization of hospital laboratory	We leave the laboratory: a) employment restructuring b) equipment modernization c) operation expansion d) providing services outside	Contract termination and take the laboratory over
	Liquidating and adapting the hospital structure to make use of the external company	Contract termination and liquidation and adapting the hospital structure to make use of the external company

Source: Own study.

The researched unit, due to the character of provided medical services, cannot close down the laboratory. The possibilities of letting the laboratory to an external contracting party are looked into. Such a party will take over the costs and duties coming from the laboratory operation including taking on all laboratory personnel in accordance with favorable working conditions with full financial and legal responsibility.

Fig.3 Analysis laboratory costs.

Monthly laboratory costs	
direct laboratory costs	84 764,48
costs of laboratory services provided by external units	2 455,27
indirect costs + board cost surcharge	24 581,70
Total	111 801,45
The number of tests carried out per month in the Hospital	
The number of tests carried out in the Hospital	10 539
The number of tests carried out per month done by external units	
The number of tests carried out done by external units	111
Laboratory tests valuation in accordance with the general market commercial laboratory price list (September 2008)	
according to average amount of monthly carried out and bought laboratory tests in hospital	113 518,50

Required outlays – location covering 270 square meters in the current building location	
construction works excluding the building structure and roof renovation	1 028 660,00
equipment	70 000,00
medical equipment and apparatuses	200 000,00
Total	1 298 660,00

Required outlays – location covering 73 square meters in the alternative building location	
construction project	30 000,00
construction works	154 799,34
equipment	70 000,00
medical equipment and apparatuses	200 000,00
Total	454 799,34

Source: Own study.

Monthly direct laboratory costs amount to circa PLN 85 thousand, indirect costs as well as the board cost surcharge amount to PLN 24.5 thousand (including 2.5 thousand spent on diagnostic tests carried out by external parties in case of tests which are not executed by the hospital laboratory). The total average monthly cost is PLN 190.5 thousand. In the laboratory until September 2008 there were carried out circa 10 500 tests on monthly basis.

The possible options were investigated.

The foreseeable modernization works in the rooms occupied currently by the laboratory were valued with the minimum level at over one million zlotys. The removal of the laboratory operation to a significantly smaller space (about 75 square meters). The foreseeable construction works and adaptation works of this location alongside with the project were priced at over 180 thousand zlotys, medical equipment and apparatuses at 220 thousand zlotys. Adapting these rooms in order to meet sanitary and hygienic requirements will consume enormous financial resources as well as organizational and technical ones. Expenditure related to the above mentioned is estimated at 400 thousand zlotys and will

excess the Hospital financial capabilities as it is a state-owned hospital and the price paid by the National Health Fund for the medical services provided by the Hospital does not include the sum allocated for the restoration of equity resources used during such processes. The required costly modernization of the laboratory rooms as well as the necessary replacement of the old and obsolete equipment and apparatus forms a financial barrier for the Hospital impossible to overcome for the next several years.

Taking into account the fact that the amount of the tests carried out in the laboratory is not that significant and the fact that due to the hospital specifics the lab is obliged to execute tests 24 ours a day in order to secure the optimum application of the lab resources: employees, equipment, laboratory reagents therefore in order to ensure rational test unit price it was decided to outsource diagnostic tests to a company which will also renovate the laboratory space, install new apparatus and will operate the laboratory in accordance with the hospital needs. Pursuant to the projected contract the outsourced service provider will take over the costs and duties resulting from the laboratory operation and 18 laboratory employees, the contractor will let the space and equipment owned by the Hospital and will adapt it to the sanitary and hygienic requirements as well as the technical ones.

There will be a modern laboratory enabling the execution of tests according to highest standards in the area of laboratory diagnostics with the application of cutting-edge technology and expertise of the company specializing in this field.

Liquidation of the laboratory as the organization unit of the hospital will not bring about the stoppage in providing laboratory diagnostics – the external company will ensure non-stop service also during renovation works. Separation of this function from the hospital structure is a result of well-thought strategy: it creates a possibility of cost-cutting relating to its functioning but also due to outsourcing it is expected to gain access to stat-of-the-art diagnostic solutions and technology therefore, what is of utmost importance, to improve the quality of services provided by the hospital, to enhance the work organization and as a consequence to guarantee stability and improve the situation not only of the organization but also patients and hospital employees; the possibility of concentration on the key competences will contribute to the Hospital competitiveness increase on the domestic healthcare market.

CONCLUSION

In order to improve financial profitability one needs to maintain costs on the optimum level. To reach this goal appropriate cost-accounting ought to be applied. As a result management staff receives proper feedback and takes right decisions related to amount of resources and the way those resources are allocated in the process of health service creation.

Searching for cost optimization or better structural solutions hospital managers often decide to outsource the biggest cost-generators, which makes a hospital much more competitive.

Systematic data gathering constitutes a starting point when it comes down to analysis and assessment of various development possibilities. It enables hospital managers to make binding decisions regarding possible development scenarios, concrete strategy and planning things step by step to make it.

All the circumstances which determine outsourcing of services as well as facilities bring about many positive results such as: lower costs, higher-quality service, concentration on key competences, smoother job organization and last but certainly not least significant improvement in patient care and employee conditions. As a result competitive advantage is obtained.

The outsourced companies create and provide complementary services which complete the service package in all areas mostly related to secondary hospital activity. The application of outsourcing is perceived as a remedy to cost optimization, flexibility boost and constant pursuit for competitive advantage.

BIBLIOGRAPHY

1. Getzen. E. T., *Ekonomika zdrowia. Teoria i praktyka*, Wydawnictwo Naukowe PWN, Warszawa 2000.
2. Drury C., *Rachunek kosztów. Wprowadzenie*, Wydawnictwo PWN, Warszawa 1996.
3. Kautsch M., Whifield M., Klich J.(eds.), *Zarządzanie w opiece zdrowotnej (polsko – brytyjskie spojrzenie na zagadnienia zarządzania w ochronie zdrowia w nowym stuleciu)*, Wydawnictwo Uniwersytetu Jagiellońskiego, Kraków 2001.
4. Lisiecka K., *Zarządzanie jakością usług zdrowotnych*, Instytut Przedsiębiorczości i Samorządności, Warszawa 2003.
5. Nita B., *Rachunkowość w zarządzaniu strategicznym przedsiębiorstwem*, Wolters Kluwer Polska, Kraków 2008.
6. Obłój K., Ciszewska M., Kuśmierz A., *Strategia szpitali w warunkach reform*, Wydawnictwo Wyższej Szkoły Przedsiębiorczości i Zarządzania im. Leona Koźmińskiego w Warszawie, Warszawa 2004.
7. Węgrzyn M., Wasilewski D. (eds.), *Komercjalizacja i prywatyzacja ZOZ. Kluczowe warunki osiągnięcia sukcesu*, Wydawnictwo AE we Wrocławiu, Wrocław 2006.

*** This article is updated continuation and review deeper to the article "Outsourcing w publicznych szpitalach – rozwiązanie wpływające na skuteczne zarządzanie kosztami" that was presented but **WAS NOT PUBLISHED** on conference in Poznan "Economy. Technology. Society" (June 2008).

Mgr Stanisława Morze
Karol Adamiecki University of Economics in Katowice
1-go Maja 50, pokój 13, budynek „E”
40-287, Katowice
Poland
st.morze@wp.pl

CORRUPTION, VOTING AND EMPLOYMENT STATUS. EVIDENCE FROM RUSSIAN PARLIAMENTARY ELECTIONS

Olga Popova

ANNOTATION

This paper investigates the effect of corruption on the voting behavior of people with different employment status. While measuring the support for or against political parties, traditional economic research accounts for such variables as the number of the unemployed and employed in private and state sectors, and various regional characteristics. Since high level of corruption perceptions is a prominent feature for most transition economies in general and in Russia in particular, in this paper I argue that corruption also has to be analyzed as a factor which influences voting behavior and voting results. Using the data from Russian Parliamentary (State Duma) Elections 2003, I develop and estimate an econometric model which takes into account the specific features of the Russian electoral system and includes not only traditional variables but also a corruption measure. The paper finds that the corruption indeed changes the voting behavior of people with different employment status.

KEY WORDS

corruption, voting, employment status, Russia

INTRODUCTION

While measuring the support for or against political parties, traditional economic research (for instance, Rodrik, 1995; Fidrmuc, 1998; Jackson et al., 2003) takes into account such economic factors as unemployment, the number of workers employed in private and state sectors, and various regional characteristics which can affect support for or opposition to particular parties. Various studies also confirm the negative impact of corruption on economic development and on voting results. Since high level of corruption perceptions is a prominent feature for most transition economies in general and in Russia in particular (according, for example, to the Corruption Perception and Bribe Payers Indices of Transparency International), this paper argues that corruption also has to be analyzed as a factor which influences voting behavior and voting results.

In this research I use the data from Russian Parliamentary (State Duma) Elections 2003 to address the following question: does the voting behavior of people with different employment status depend on the level of corruption? I distinguish between four groups of voters by their employment status: the unemployed, privately employed, state employed (as it was traditionally done in the literature on economic voting), and those out of labor force (to my knowledge, these voters have not been included into the analysis in previous research). I would like to find out whether corruption in regions changes the voting behavior of people with different employment status. Such an analysis would help to better understand the factors influencing voting outcomes in transition countries and take these factors into account while implementing reforms. For the purpose of this research I modify the SUR framework as proposed by Tomz et al.(2002) and extended by Jackson (2002). My approach also includes the analysis of the rate of participation in elections and accounts for a specific feature of the Russian electoral system, namely the option to vote “against all” candidates.

This research uses the aggregate data on Russian regions from Russian Statistical office and the data on the results of Russian Parliamentary (State Duma) Elections 2003 from Russian

Election Commission. Two measures of corruption are used. The first one is traditional subjective perceptions about corruption, for instance, Corruption Perception Index of Transparency International. This index is measured for Russian regions. The second one is the state capture index which has been recently proposed by Slinko et al. (2005) and Yakovlev and Zhuravskaya (2006). State capture is defined by the authors as legal privileges given by regional government to largest firms in a region, which take various forms of soft budget constraints and give political power to these firms. Firms with high political power would seek the reelection of the current government and, could therefore, possibly influence the voting choice of workers.

The paper finds that even controlling for corruption people with different employment status vote differently. Moreover, the corruption indeed changes the voting behavior of people with different employment status. Using two different measures of corruption gives slightly different results although the main findings persist.

AIM AND METHODOLOGY

The purpose of this research is to develop and estimate an econometric model which will take into account the specific features of the Russian electoral system and include not only traditional variables, such as the number of the unemployed and employed in enterprises with different ownership, but also a corruption measure, and then derive policy recommendations.

I analyze the return to the parties which during the parliamentary election 2003 either were elected to the Parliament (received more than 5%) or were close to this share. In total 23 political parties have participated in the election, but only four of them have been elected to the Parliament (see Table 1 for the detailed results of elections). The option “against all” received almost enough votes to be “elected” to the Parliament: “against all” received 4.7%, while a party is required to receive 5% of all votes to be elected.

Table 1. Results of Russian Parliamentary Elections 2003

Political Party	Votes Received (in per cent)
United Russia	37.56
Communist Party of the Russian Federation (CPRF)	12.61
Liberal Democratic Party of Russia (LDPR)	11.45
National-Patriotic Union "Motherland" ("Rodina")	9.02
Russian Democratic Party "Apple" ("Yabloko")	4.30
The Union of Right Forces	3.97
Agrarian Party of Russia	3.63
Votes for Other Parties	12.76
Votes against All Parties	4.70
TOTAL	100

Source: the Central Election Commission of Russian Federation

In a model for the analysis of voting outcomes I have to account for two electoral data features. First, each voting share falls within the interval between zero and one, and, second, all voting shares sum up to one (Katz and King, 1999). It means that voting shares of parties are dependent on each other. This is important for the choice of estimation method. Tomz, Tucker, and Wittenberg (2002) based on seemingly unrelated (SUR) method propose a statistical model which is intended to explain and predict the outcome of multiparty elections.

The SUR method jointly estimates equations for all parties participating in elections and links equations only by their disturbances. For the purpose of this research I modify the SUR framework as proposed by Tomz et al.(2002) and extended by Jackson (2002).

To convert observed voting shares from the unit interval to an unbounded scale, I apply the multivariate logistic (MNL) transformation of dependent variable which is the each party's voting share:

$Y_i = [\ln(V_{i1}/V_{ib}), \ln(V_{i2}/V_{ib}), \dots, \ln(V_{i(j-1)}/V_{ib})]$, where i regions, $i = 1, 2, \dots, I$; j parties, $j = 1, 2, \dots, J$; $Y_i \sim N(\mu_i, \Sigma)$. $V_{im} = \text{Prob}(\text{voters in region } i \text{ choose party } m)$, it is the voting share that party m receives during the election. $V_{im} = \exp(Y_{im}) / \sum_j^k \exp(Y_{ik})$. V_{ib} is the voting share that base party receives during the election.

I have nine categories to estimate: seven major parties, category "other" and the number of votes "against all". The category "other" which stands for the sum of all voting shares of other parties participated in the election has been chosen as a base party and used as a benchmark. After the transformation, I construct the SUR system of linear regression equations and estimate it using the feasible generalized least squares (FGLS) technique. The system has 8 equations to account for major parties and "against all" option.

$$Y_{i1} = \ln(V_{i1}/V_{ib}) = f(\text{Corr}_i, \text{State}_i, \text{Private}_i, \text{Unem}_i, \text{Out}_i, \text{Interact}_i, X_{i1}, \varepsilon_{i1})$$

$$Y_{i2} = \ln(V_{i2}/V_{ib}) = f(\text{Corr}_i, \text{State}_i, \text{Private}_i, \text{Unem}_i, \text{Out}_i, \text{Interact}_i, X_{i2}, \varepsilon_{i2})$$

...

$$Y_{i8} = \ln(V_{i9}/V_{ib}) = f(\text{Corr}_i, \text{State}_i, \text{Private}_i, \text{Unem}_i, \text{Out}_i, \text{Interact}_i, X_{i9}, \varepsilon_{i9}), \text{ where}$$

V_{ij} is the voting share that party j receives in the region i ; Corr_i is the level of corruption in region i ; State_i is the number of workers employed in state sector in region i ; Private_i is the number of workers employed in private sector in region i ; Unem_i is the number of the unemployed in region i ; Out_i is the number of people out of labor force in region i ; Interact_i is the set of interaction terms between Corr_i and $\text{State}_i, \text{Private}_i, \text{Unem}_i$, and Out_i ; X_{ij} is the set of regional characteristics that may influence the votes for particular parties, such as, the real income growth, the number of students and pensioners in the region, the share of urban population, gross regional product per capita, and the size of population in region; and ε_{ij} is the error term.

RESULTS

Main estimation results are presented in Table 2. In this section I comment on several findings.

Corruption and Voting Results

It is found that state capture significantly positively influences the voting results of United Russia and Communist Party which are the parties (along with the Liberal-Democratic Party and the party "Motherland") that were elected to the Parliament in 2003. For Communist Party this is an expected result: if corruption is associated with the activity of current parliament (pro-reform party "United Russia"), people are likely to vote for opposition (Communist Party) during the elections. However, with increase in corruption current pro-reform party ("United Russia") also gets support and is reelected. Corruption perception index also is found to be significantly influencing the voting results of "Against All" option: when the corruption rises, people are less likely to vote against all parties. This result is intuitive: if corruption is increasing voters are likely to think that they can change the situation by voting for some party instead of voting against all parties.

Corruption, Employment Status, and Voting results

While controlling for corruption I find that the voting behavior of people with different employment status is different. I do not find a lot of statistical evidence to explain the support for or opposition to the party of power. Although somewhat surprising results are that privately employed oppose “United Russia” and the main supporters of the ‘pro-reform party’ “United Russia” are people who are out of labor force. It is in contrast with the findings in the literature that the privately employed are likely to support the pro-reform party (Rodrik, 1995; Fidrmuc, 1998; Jackson et al., 2003). However it should be pointed out that in previous literature corruption has not been taken into account during the analysis of the voting behavior of privately employed. The voting behavior of people who are out of labor force also have not been analyzed in the literature on economic voting yet.

Corruption indeed influences the voting behavior of people with different employment status, although in the same way: for the most categories, privately, the unemployed, and out of labor force, I find that because of corruption they are likely to support less the party which they have supported. For the state employed workers I find no changes in voting behavior because of corruption.

Table 2. SUR Estimation Results

	United Russia		Communist Party		LDPR		NPU "Motherland" ("Rodina")		RDP "Apple" ("Yabloko")		URF		Agrarian Party		Against All	
	State Capture	Integral CPI	State Capture	Integral CPI	State Capture	Integral CPI	State Capture	Integral CPI	State Capture	Integral CPI	State Capture	Integral CPI	State Capture	Integral CPI	State Capture	Integral CPI
Corruption	3.932** (0.047)	1.246 (0.757)	2.293* (0.098)	-3.564 (0.209)	-1.775 (0.356)	-2.708 (0.288)	1.242 (0.537)	-2.564 (0.552)	-1.800 (0.168)	1.847 (0.542)	1.812 (0.330)	4.778 (0.186)	-5.150** (0.022)	-7.248** (0.038)	-1.014 (0.471)	-5.733*** (0.006)
Privately Employed	-1.513** (0.043)	1.029 (0.391)	0.623 (0.234)	-0.021 (0.980)	1.272* (0.080)	0.279 (0.713)	0.478 (0.530)	1.705 (0.184)	0.756 (0.125)	-0.431 (0.633)	-1.471 (0.530)	-1.028 (0.339)	0.622 (0.464)	-0.029 (0.978)	0.195 (0.714)	0.095 (0.878)
State Employed	-0.234 (0.610)	0.045 (0.954)	-0.514* (0.100)	-0.867 (0.113)	-0.542 (0.225)	-0.366 (0.456)	-0.372 (0.426)	1.691** (0.041)	-0.492* (0.100)	0.446 (0.444)	-0.105 (0.808)	0.866 (0.213)	-1.330** (0.011)	-1.115* (0.097)	-0.421 (0.198)	-0.371 (0.353)
Unemployed	-0.070 (0.857)	1.287 (0.194)	0.007 (0.979)	1.126* (0.100)	0.323 (0.391)	1.230** (0.050)	0.111 (0.777)	0.483 (0.649)	0.291 (0.255)	0.241 (0.747)	0.086 (0.812)	0.351 (0.693)	0.023 (0.958)	1.053 (0.220)	0.348 (0.205)	0.785 (0.125)
Out of Labor Force	4.396*** (0.001)	1.930 (0.299)	1.518* (0.100)	1.587 (0.226)	-3.18** (0.014)	-1.317 (0.263)	1.261 (0.353)	-0.180 (0.928)	-2.149** (0.015)	0.323 (0.817)	-0.465 (0.711)	1.161 (0.487)	-3.600** (0.018)	-1.897 (0.239)	-0.418 (0.659)	0.626 (0.514)
Corruption * Privately Employed	2.280 (0.161)	-2.670 (0.205)	-0.308 (0.787)	1.590 (0.286)	-3.26** (0.040)	0.156 (0.907)	-0.448 (0.787)	-2.666 (0.238)	-2.831*** (0.008)	-0.315 (0.843)	-0.660 (0.666)	2.795 (0.140)	-0.881 (0.634)	1.518 (0.407)	-0.910 (0.432)	-0.306 (0.779)
Corruption * State Employed	0.250 (0.835)	-0.393 (0.765)	0.975 (0.246)	1.437 (0.122)	0.088 (0.940)	0.137 (0.869)	0.920 (0.451)	-2.77** (0.050)	1.047 (0.186)	-0.601 (0.544)	-0.089 (0.937)	-1.138 (0.335)	1.616 (0.236)	0.814 (0.476)	0.992 (0.245)	1.076 (0.113)
Corruption * Unemployed	0.526 (0.597)	-1.609 (0.301)	0.263 (0.706)	-1.563 (0.155)	-0.668 (0.489)	-1.787* (0.070)	-0.359 (0.723)	-1.134 (0.497)	-1.127* (0.086)	-0.367 (0.754)	-0.872 (0.351)	-0.346 (0.805)	-0.887 (0.432)	-2.399* (0.076)	-0.954 (0.177)	-1.052 (0.191)
Corruption * Out of Labor Force	-3.183** (0.044)	3.580 (0.160)	-0.955 (0.389)	-0.949 (0.598)	3.669** (0.017)	1.334 (0.409)	-0.341 (0.832)	5.549** (0.042)	2.817*** (0.007)	0.782 (0.684)	0.929 (0.532)	-1.985 (0.386)	0.947 (0.599)	0.539 (0.807)	0.836 (0.457)	0.999 (0.448)
Real Income Growth	-0.037*** (0.002)	-0.04** (0.020)	0.003 (0.735)	-0.005 (0.643)	0.011 (0.340)	-0.014 (0.144)	-0.019 (0.124)	-0.029* (0.088)	0.008 (0.290)	0.002 (0.838)	0.006 (0.593)	0.000 (0.992)	0.003 (0.798)	-0.027** (0.049)	-0.012 (0.144)	-0.032*** (0.000)
Students	0.360 (0.139)	0.084 (0.699)	0.092 (0.589)	0.203 (0.189)	0.142 (0.550)	0.158 (0.253)	0.031 (0.902)	-0.031 (0.896)	0.134 (0.405)	-0.030 (0.854)	0.196 (0.392)	-0.146 (0.458)	-0.114 (0.681)	0.309* (0.100)	0.183 (0.292)	0.199* (0.077)
Pensioners	-0.158 (0.791)	0.633 (0.525)	-0.251 (0.546)	-0.820 (0.244)	1.049* (0.069)	-1.696*** (0.007)	1.314** (0.030)	0.910 (0.394)	0.144 (0.713)	-0.116 (0.877)	-0.580 (0.299)	0.867 (0.333)	0.470 (0.486)	-1.788** (0.039)	0.934** (0.027)	-0.255 (0.620)
Urban Population	0.019** (0.011)	0.018* (0.094)	-0.004 (0.461)	0.000 (0.996)	-0.007 (0.356)	0.007 (0.280)	0.011 (0.143)	0.008 (0.472)	0.010** (0.049)	0.023*** (0.006)	0.007 (0.322)	0.025*** (0.010)			0.005 (0.319)	0.014** (0.013)
Rural Population													0.045*** (0.000)	0.019** (0.049)		
GRP per capita	0.052 (0.777)	0.162 (0.591)	-0.136 (0.292)	-0.435** (0.041)	0.209 (0.243)	-0.457** (0.017)	0.356* (0.057)	-0.127 (0.694)	0.116 (0.340)	0.069 (0.759)	0.145 (0.403)	0.240 (0.375)	-0.140 (0.504)	-0.854*** (0.001)	0.220* (0.093)	-0.156 (0.316)
Population in Region	-2.861* (0.066)	-4.25** (0.021)	-1.557 (0.153)	-1.595 (0.221)	0.847 (0.576)	1.649 (0.159)	-2.827* (0.074)	-3.91** (0.048)	1.318 (0.199)	-0.181 (0.897)	1.610 (0.271)	-1.501 (0.365)	3.791** (0.032)	3.036* (0.058)	-0.892 (0.420)	-1.528* (0.100)
Constant	1.487 (0.495)	0.655 (0.881)	3.233** (0.034)	9.965*** (0.001)	-0.401 (0.850)	5.916** (0.032)	-1.658 (0.455)	4.806 (0.304)	-3.448** (0.017)	-4.518 (0.169)	-6.520*** (0.001)	-7.316* (0.062)	-4.591* (0.092)	9.600** (0.022)	-1.104 (0.476)	6.057*** (0.007)

Source: author's calculations. Note. Two measures of corruption are used: state capture and integral corruption perceptions index (integral CPI). Columns present the results for a particular party for each of two measures of corruption. Explanatory variables are given in rows. P-values are in parentheses. *, **, and *** stand for 10%, 5%, and 1% significance levels, respectively. Since Rural Population is more likely to vote for Agrarian party, variable Rural Population has been used as one of explanatory variables for Agrarian Party instead of Urban Population. Number of observations = 72 in case when state capture is used, and 40 when integral CPI is used.

CONCLUSION

In the line with the previous research I have found that the people with different employment status, namely the privately, state employed, the unemployed workers, and the people who are out of labor force, tend to vote differently, even when I control for corruption. I find a little statistical evidence to explain the support for or opposition to the party of power. Although somewhat surprising results are that privately employed oppose “United Russia’ and the main supporters of the ‘pro-reform party’ “United Russia” are people who are out of labor force. It is found that the corruption itself does not in general have a lot of significant effects on the voting results in Russia. However, one of the results is that when corruption (state capture) increases, United Russia and Communist Party which are the parties that were elected to the Parliament in 2003 are likely to receive more votes than other parties. The paper finds that it is true for almost all the groups of workers (the privately employed, the unemployed workers, and the people who are out of labor force) that because of the corruption they change their voting behavior, i.e. because of the corruption those who support a particular party tend to support it less and give more votes to the parties that were previously opposed. Using two different measures of corruption gives slightly different results although the main findings persist.

BIBLIOGRAPHY

- [1] Fidrmuc, J. (1998). Political Sustainability of Economic Reforms: Dynamics and Analysis of Regional Economic Factors. *The Journal of Policy Reform*, 3, 139-156.
- [2] Jackson, J. (2002). A Seemingly Unrelated Regression Model for Analyzing Multiparty Electons. *Political Analysis*, 10, 49-65.
- [3] Jackson, J. (2003). A Computational Political Economy Model of Transition. In *Political Economy of Transition and Development: Institutions, Politics, and Policies*, Fidrmuc, J., Campos, N. (eds.), Kluwer Academic Publishers.
- [4] Katz, J., King, G. (1999). A Statistical Model for Multiparty Electoral Data. *The American Political Science Review*, 93, 15-32.
- [5] Rodrik, D. (1995). The Dynamics of Political Support for Reforms in Economies in Transition. *The Journal of Japanese and International Economics*, 9, 403-425.
- [6] Slinko, I., Yakovlev, E., Zhuravskaya, E. (2005). Laws for Sale: Evidence from Russia. *The American Law and Economics Review*, 7(1), 284-318.
- [7] Tomz, M., Tucker, J., Wittenberg, J. (2002). A Convenient Statistical Model for Multiparty Electoral Data. *Political Analysis*, 10, 66-83.
- [8] Yakovlev, E., Zhuravskaya, E. (2006). *State Capture: From Yeltsin to Putin*, CEFIR Working Paper #94.

Olga Popova, M.A.

CERGE-EI, a joint workplace of the Center for Economic Research and Graduate Education, Charles University, Prague, and the Economics Institute of the Academy of Sciences of the Czech Republic.

Address: CERGE-EI, P.O. Box 882, Politických veznu 7, Prague 1, 111 21, Czech Republic.

E-mail: Olga.Popova@cerge-ei.cz

DEMAND FOR PUBLIC SERVICES: IMPACT ON THE METHODS OF PROVISION AND FINANCING

Markéta Řežuchová

ABSTRACT

Citizens' preferences and determination of public service demand play the key role in the process of choice of public service providing and financing methods. The aim of this paper is to evaluate the influence of demand elasticity on the private financing of public services. Author verifies the hypothesis, that private financing of public services is possible, when public services are provided for fee and elasticity of public service demand is sufficiently low. The first part of the paper determines and discusses the influence of public service demand on public service providing and financing methods based on the relevant literature review. In the second part, the influence of selected criteria, demand elasticity and fees, is being analyzed for different types of public services. Author designs a scheme which determines optimal financing methods for particular public services. This scheme is tested in the context of the Czech system of public services provision with respect to foreign experience.

KEY WORDS

Demand for public services, elasticity of demand, public and private financing public service providing.

INTRODUCTION

Public sector (subjects of public sector) guarantees a wide spectrum of public goods and services as a result of public choice. Pure public goods present only a minority part. Many of such guaranteed public goods could be, because of their economic attributes, provided through the market mechanism. Education, health care, various types of social services, refuse collection, facility building are good examples of public services, which are guaranteed by the public subject, but they are equally well provided by private sector in many countries.

“The trend is unmistakably away from government and toward the other institutions – in a word, privatization... It is the act of reducing the role of government or increasing the role of the other institutions of society in producing goods and services and in owning property. In general, both the public and private sectors play important roles, and it is increasingly common to refer to “public-private partnerships,” a less contentious term than “privatization.” (Savas, 2000, str. 3)

Even Czech government decided to use PPP concept as the public service providing standard method. There are many pros and cons of this concept. Many countries use this public service providing method because of better public service quality, faster facility building, risk sharing, etc. In other words, by reason of “better value for money”. All at once, the PPP could add private finance to the limited public resources intended for public service providing. It is quite difficult for public subject to get the “better value for money” and decide when (for which public services) PPP could be used. It is possible only through professional decision-making process of public service providing. According to the results of many researches on this field (Ochrana (2007), Beblavý (2007)), public sector (especially municipalities) lag behind in this area.

AIM AND METHODOLOGY

Author assumes the public service demand playing the key role in this instance. Author verifies the hypothesis, that private financing of public services is feasible, when public services are being provided for fee and the price elasticity of public service demand is sufficiently low.

The aim of this paper is to evaluate the influence of demand elasticity on the private financing of public services. Author designs a scheme which determines optimal financing methods for particular public services. This scheme is further tested in the context of the Czech system of public services provision with respect to foreign experience.

PUBLIC SERVICE DEMAND AS A VALID CRITERION FOR PRIVATE FINANCING

Each worthy good (publicly financed public service) can be provided by private subject. The different situation is in case of financing public service providing.

Private (co)financing of the public service providing is realized through some types of PPP (for example DBFO – design-build-finance-operate, BOOT – build-own-operate-transfer or concession). In case of concession the fees for public service consumption generate the main concession income. Licensee shares the demand risk. Demand risk, also known as an ‘attendance risk’, is typical for infrastructural projects, mainly for new transport infrastructure. The wrong estimation of demand for the public service (which is the subject of concession) leads to additional costs, private subject’s disability to pay for financial undertaking, resignation from contract, overcharged service, etc. Consequently, public subject has to look for different way of service providing. Public service demand is not only criterion for private providing and financing of public services. Of course, public subject must assess economic character of public service; competition of providers, public service providing costs and many others. However, foreign experience shows that the public service demand and fee for public service consumption could be a probable cause of wrecked PPP projects. The following box shows the experience (warning example) of the wrong demand estimate.

Highway M1/M15 Hungary

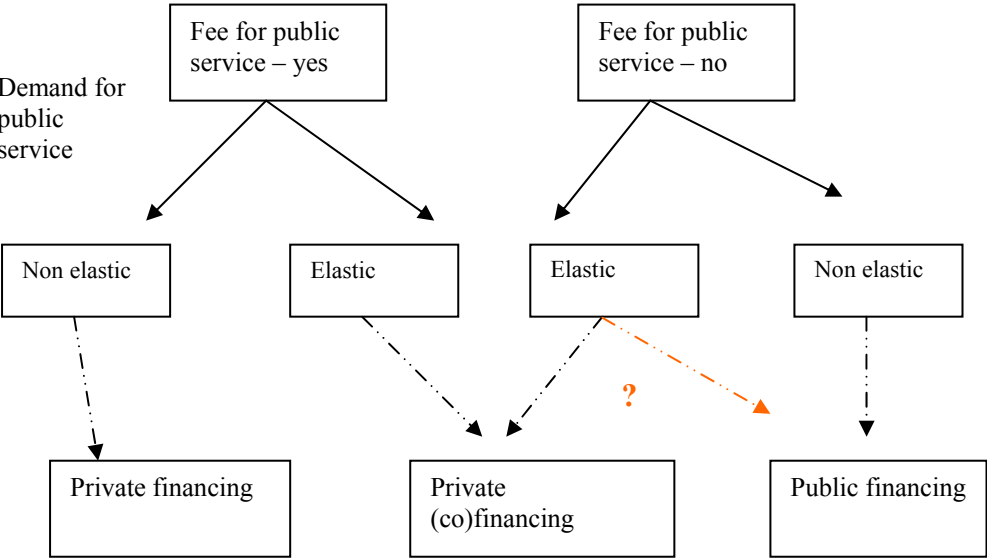
The subject of project was building and maintaining of 57 km of highway. This highway connects three metropolises (Budapest, Wienne and Bratislava). The customer (Hungarian government) used PPP, concretely BOT (Type of PPP, build- own-transfer. The private sector builds finances and operates 57 km of highway.) The contract was concluded for thirty three years with the possibility of prolongation of private operating and owning for next seventeen years. The costs of this project, 280 mil Euros, were covered by the private subject. The private subject shared construction, financial, marketing and demand risks. (Operating is financed by the fee for service, which is collected as a toll.) After finishing the part of highway and imposing the fees, the public demand for this service plunged. The intensity of transfer (number of vehicles) hasn’t achieved the opening estimate during the following two years (after opening the part of highway). In fact, this caused licensee’s disability to pay for long-term loan. The part of the highway was transferred to Hungarian government ownership long before the contract term and public sector had to find an alternative way of providing this service.

Translation, Bernátková, 2007.

For this reason the public subject must correctly answer following questions: Is the public demand for specific public service elastic or non-elastic? Is it possible to impose a fee for service consumption? This decision process could be represented by the following scheme. It

is not the one right way of decision-making process but recommended. Every PPP can be characterized by its individuality. Therefore public sector subject should discuss private (co)financing of extra public services.

Figure 1: Dependence of the demand elasticity and fee on the financing of public service



Source: Author

As it can be seen the demand elasticity and possibility of imposing the fees are main decision-making criteria for private producing and financing the public services. Different model situations are evident from the following table.

Table 1: Public demand and user fee impact

Public service demand User fees	Elasticity (high)	Non-elasticity (low elasticity)
Existent	(A) High elasticity of public service demand and user fee for public service - transfer infrastructure (There exists a substitute for concrete high way or road), sport centre.	(B) Low elasticity of public service demand and user fee for public service - transport infrastructure - refuse system , - funeral services, - water supply
Nonexistent	(C) High elasticity of public service demand and no user fee for public service - municipal children playground - city park	(D) Low (weak) elasticity of public service demand and no user fee for public service - public electricity, communal roads and green area maintenance

Source: Author

COMMENTARY

(A) In case of services presented in column A, the public service demand is highly elastic and the public subject collects the fees for service. Under these conditions the private subject is able to produce these public services. However, the problem emerges with private financing. Since public service demand is highly elastic, the private subject wouldn't probably be able to finance such public service. Higher demand elasticity and charged consumption of public service is evident in case of new part of highway and new road. The problem of private financing could be evident in case of foreign experience. (See box 1)

The sport centre could be the illustration. Siemens Arena, Vilnius, Litva (opened in 2004) is a multi-functional hall (basketball hall, concert hall, ice hockey hall and theatre). There are luxury restaurants, five bars and ten fast foods in the complex. This hall is owned by the private sector (Rubicon Group). Building costs have been covered by the private subject. The municipality has given free the building site and participated in covering the operating costs (other sources show that municipality has 10 % share of Rubicon Eventus (company operating the facility and sharing the operating risk)).(www.ponava.cz)

(B) Elasticity of public service demand is low and there is no user fee for public service consumption. For example funeral services and refuse collection represent charged public services. We can suppose that charged service influence the consumption and the public demand for this service only weakly. Households will neither accumulate waste because of heavy odour nor place a black refuse site in because of penalizing. Therefore the private subjects could manage financing the public service providing through the user fees. Either a new toll bridge over the river or going into toll road tunnel could be a good example too. Refuse collection is typical public service provided through the PPP in many foreign countries as well as in some Czech municipalities.

(C) Elasticity of public service demand is quite high and public service consumption is not charged. Because of not charged consumption the private financing public service is significantly limited. Private financing of public service is possible in isolated instance. Generally private subject co finances the public service (share public service costs). The instance could be the municipal children playground. If the private subject was licensed to use free the public area for commercial activities (what enables realizing the profit), it would be able to share the cost of public service providing. If there is no such possibility for commercial activities, the public services providing will be probably fully publicly financed (because of no charged public service).

If there are no fees for public services and demand for these services is relatively high, it will be (according to Ochrana, 2007) causing ineffectiveness because of over-consumption. This case was typical for free health care services during the communist system. (Ochrana, 2007) Therefore such public services should be charged. The question of charged public services is relatively problematic to deal with in this article.

(D) Low elasticity of public demand for this kind of public services. Consumption of these services is not charged. This kind of public services could be represented by the public electricity, communal roads and green area maintenance. These services can be privately produced and publicly financed.

Transferred public electricity maintenance and operating is the Czech largest project of its kind. Prague municipal council has concluded the negotiated contract for operating and

maintenance of public electricity with ELTODO company. The contract has been closed for fourteen years (1999-2003). The infrastructure has put at public ownership. The public sector controls the utility and pays yearly payments to the private company for public service operation and maintenance. As a result of this project, the public service quality is higher and the intensity of light and availability of this public service is 99, 4 %. (www.eltodo.cz, www.praha.eu).

CONCLUSION

As arises from above presented model situations, when given service is being charged by the user fee, exists the possibility of private financing. Whether it is only the case of private co-financing or the service-related costs are fully covered by the private sector and the user fees, it depends on the price elasticity of the demand for the particular public service.

1) When the elasticity is low and public service is charged, there exists the possibility of covering costs solely by the private sources (i.e. on basis of the concession).

When the elasticity is low and public service is not charged, the public service providing will be probably publicly financed (from public budgets). But there is a possibility of public service providing by the private subject (i.e. public procurement).

2) When the elasticity is high, the public contribution to the costs covering is desirable (i.e. shadow toll, etc.).

When the service is not charged and elasticity of demand is high, the possibility of the private (co)financing is very limited. It is not a “mission impossible”, but only in those rare cases, when the private subject is allowed to engage into some ancillary (profitable) activities; however, it's again necessary to respect the demand elasticity of those activities. The incentives for participation of the private sector will be probably only negligible. So, in such a case, we can expect the public financing, or consider the presence of the private co-funder. Purely private financing is (probably) unthinkable.

BIBLIOGRAPHY

- [1] Beblavý, M., Sičáková-Beblavá, E.: Inštitucionálne dilemy při zabezpečení verejných služieb, Transparency International Slovensko, Bratislava 2006, ISBN 80-89244-10-6
- [2] Grimsey, D., Lewis, M.K.: Public Private Partnerships, The Worldwide Revolution in Infrastructure Provision and Project Finance, USA, 2004. ISBN 1 84064 711 6.
- [3] Ochrana, F.: Veřejné služby. Jejich poskytování, zadávání a hodnocení. Ekopress, Praha. 2007, 1. vyd. ISBN 978-80-86929-31-6
- [4] Savas, E.S.: Privatization and public-private partnerships, New York: Seven Bridges Press, 2000. ISBN 1-56643-073-9
- [5] Bernátková, A.: Analýza rizik PPP projektů, ESF MU, 2007.
- [6] Burnham, J.: Local public-private partnerships in France: Rarely disputed, scarcely competitive, weakly regulated. Public Policy and Administration, 2001. str. 47-60. 16/4/47. Sage Publications. <http://ppa.sagepub.com/cgi/content/abstract>.
- [7] Projekt Ponava, Analýza mezinárodní praxe a možnosti využití PPP, available at <http://www.ponava.cz/cz/vystupy-poradce>
- [8] Pavel, J.: PPP projekty v České republice-šance nebo riziko?, Transparency International, Praha, 2007. available at http://www.transparency.cz/pdf/vz_analyza_ppp_implementace.pdf
- [9] www.eltodo.cz

[10] www.praha.eu

Markéta Řežuchová
Faculty of Economics and Administration, Masaryk University
Lipová 41a
Brno
marketa.rezuchova@econ.muni.cz

CROSS-CULTURAL COMMUNICATION IN PUBLIC ADMINISTRATION

Klára Šimonová

ANNOTATION

The paper with the help of structured analysis compares two European cultures and shows that Czech and Danish cultures are considerably different, and focuses on state and public administration.

KEY WORDS

culture, cross-cultural communication, public administration, state, Czech Republic, Denmark

INTRODUCTION

The paper attempts to provide reader with an idea of how diverse and different can be two European cultures. Cross-cultural communication is not an issue of various ends of the world, but of united Europe as well. Being a member of the European Union, we are very likely to communicate with other members more often, and it would be convenient to realise that some basic knowledge on our partners helps to make our communication easier and more efficient. The paper will compare Czech and Danish cultures with focus on public administration and will provide some practical examples that may lead to certain misunderstanding while dealing with our foreign partner.

Most people believe that when meeting members of other cultures, they can naturally understand the spirit of the particular culture, or that reciprocal understanding will appear automatically without effort. However, this is not right. Mutual contact without some basic knowledge on social behaviour or values of other culture usually leads to confusion and reinforcement in the identity of one's own culture.

AIM AND METHODOLOGY

The aim of the paper is to compare main differences in Czech and Danish national cultures and to examine them regarding public administration processes. We will do so in order to avoid unpleasant misunderstandings while dealing with Danish partners. Moreover, realising main features of Czech culture will help us simplify communication with every other culture. The methodology of this paper is a comparative analysis because we will examine Czech and Danish culture in relation to each other. The analysis is structured according to Hofstede's five-dimensional model of national cultures.

RESULTS

This paper is based on the structure of Hofstede's five-dimensional model. Each dimension is using a scale from 0 to 100 (118 respectively¹). Positions of countries are not absolute but are relative to each other, hence this comparative analysis is pointing out only differences between the two examined countries and does not show convergence in cultures.

Power Distance

“Power distance can be defined as the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally.” [3] The Czech Republic scored considerably differently in perceived inequality in the society. The indices of 57 for the CR versus 18 for Denmark place them at opposite sides

¹ Replication studies and Long-term orientation dimension that was added later as the last one

of the scale and that means that citizens' perception of power, authority, and state is almost contrary.

For the public administration this means differences in stable and predictable environment. While there is a regularly changing government from right to left wing parties, the Czech public servants can expect different rules, laws, and working conditions almost after every election no matter if general or local. Denmark with strong center parties is less likely to go through such changes. Their tax system is agreed on by all, and no government so far has cut taxes, not even the parties that go a bit to the right. The Czech Rep. is from time to time raising or cutting income tax as well as other payments that should fill the state budget.

Their own scandals are usually laughed at by Czech politicians and it is not likely that any of them would resign. Scandal in Denmark would more likely lead to an end of political career. Corruption does not practically exist in Denmark, while CR keeps struggling with bribing, lobbying, corrupting. [7]

Example: When coming to Denmark, a Czech should not be surprised by not being driven by car but using public transportation. First, Danes insist on equality for all (and do not appreciate status symbols), and second, trains are popular, reliable, and in Copenhagen faster than cars.

Individualism and collectivism

“Individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Collectivism as its opposite pertains to societies in which people from birth onward are integrated into strong, cohesive in-groups, which throughout people's lifetimes continue to protect them in exchange for unquestioning loyalty.” [3] Both countries are placed in the individualistic dimension. However, Denmark is still slightly more individualistic than the Czech Rep. with scores 74 resp. 58.

Denmark is somehow specific in their behaviour within this dimension, because regarding values connected to family it is individualistic, but what regards state and issues related to state, it is collectivist. The role of state in the economic system is not restrained but dominant, and ideology of equality prevails over ideology of individual freedom. The “Janteloven” is in a nutshell a call for equality and is so deeply fixed in their souls that it must amaze almost every foreigner. (“You must not believe that you are anybody. You must not believe you are cleverer than us.” etc. [2])

Masculinity and femininity

“A society is called masculine when emotional gender roles are clearly distinct: men are supposed to be assertive, tough, and focused on material success, whereas women are supposed to be more modest, tender, and concerned with the quality of life. A society is called feminine when emotional gender roles overlap: both men and women are supposed to be modest, tender, and concerned with the quality of life.” [3] The Czech Republic placed itself on the opposite side of masculinity-femininity dimension with the score of 57 compared to the score of 16 for Denmark that is the fourth top feminine country of the world.

This is reflected in results of elections to the parliament. The Czech Rep. has strong parties in the left and right wing, but parties in the center are weak, and always finally form a coalition with the winner. Governing parties always fight with opposition and do not seek consensus. Denmark has strong center parties and weak pole parties. It does not matter who won or lost this election, in few years it can be reversed. And deputies are more likely to discuss issues and search for consensus. They look into the future, so that everyone is happy and so that there is no need to make harsh reforms each electoral period.

Denmark is famous for its welfare social system. High taxes and absence of total poverty reflect the feminine soul of Danish society. Even under pressure by the European Union Denmark decided to keep their system of redistribution of income. The Czech Republic after last election on the contrary lowered tax burden for the rich. Recently there were debates in both in the Czech Republic and in Denmark on the issue of declining population growth and consequent troubles with financing pension funds in the future. The solutions compared are the products of masculine and feminine countries: the CR rose the age for lodging claim to the old-age pension, and advised people to save money in private pension funds; Denmark suggested to accept more immigrants (who usually have more children as well).

Handling immigrants is another great difference. Assimilation, i.e. aim to completely fit into new environment and forgetting about old culture, is masculine, and integration, i.e. keeping both old culture and rules of host country, is feminine. Assimilation of minorities used to be the objective of the communist regime in our country concerning the Romanies, and in the past twenty years nothing has really changed. We can see for ourselves that assimilation is not always the right solution. Denmark with its integration policy has been quite successful, except worldwide waves of protests against the famous caricatures there were no real problems with their large Muslim community, and moreover, Denmark was never the subject of world TV news or newspaper regarding problems with minorities or immigrants. The Czech Republic is being discussed very often not only in Canadian or British press but also in worldwide TV channels.

If we take a look at the state budget, we will find another proof of difference in this dimension: the Czech Republic spends more money on armaments compared to Denmark that donors more money on international help.

Example: A common Dane is not bragging. If we admire something they had done, they are not likely to admit their superiority or well-done job, on the contrary, they are likely to address the success either to the group or to circumstances. If we talk about Dane's abilities and skills, we should multiply them by two and only after that compare to a Czech.

Uncertainty avoidance

“Uncertainty avoidance can be defined as the extent to which the members of a culture feel threatened by ambiguous or unknown situations.” [3] Again, the Czech Republic in relation to Denmark scored significantly differently. The CR with the index of 74 ranks among countries that prefer avoiding uncertainty while Denmark with index of 23 falls in uncertainty accepting cultures.

This difference can be best seen in the attitude of citizens toward authorities and state. Citizens in the Czech Republic are not very interested in politics except of complaining when with friends, but unlikely to go and try to change something. They simply think they lack any power. People do not believe their politicians, not even on the local level. Civil servants are perceived as enemies who are there to put a spoke in one's wheel, and vice versa, it is not very attractive or high status job to work as a civil servant. Moreover, not even the civil servants consider politicians and political processes as trustworthy or helping. Danes trust their politicians, the legal system, and civil servants. However, Danish political system has delegated far more rights and obligations to local authorities compared to the CR, and this is one of the main reasons why people feel as useful members of the society. Danes believe that protests bring results and improvement. If they bring their problem to the court, they can expect fast judicial proceedings and sound judgement.

Civic society is just a ridiculous word for most Czechs. Even the President has only sneering, taunting words for that. The Czechs prefer to spend their leisure time entertaining themselves and not coming at meetings of voluntary associations. The Danes, on the contrary, are members of various voluntary associations, and no matter what is their hobby or point of

interest, they can be sure there is always a group of people willing to start an association, most likely with the aim to help others or exchange information or improve their environment.

Detailed rules and thick codes of law are natural in the Czech Republic as it mirrors our need for predictability. There are laws, ministry public notices, rules, etc. for every sphere of one's life. Moreover, once a new law comes in effect, very soon it is being reviewed and reworked. The Danes do not have so much detailed rules, but they keep them.

Xenophobia and racism are the most striking examples of differences in uncertainty avoidance. The Czechs think that what is different is dangerous, while the Danes think that what is different is curious. The Czech Republic from time to time experiences demonstrations of extreme right-wing parties against the Romanians, immigrants, Jews, and other minorities. These demonstrations are always monitored by the police, ready to fight if necessary. Recently even the majority population supported one neo-nazi protest in Janov. On the contrary, Denmark is an extremely tolerant country and has many different minorities. Citizens from former soviet bloc are one group of old immigrants, descendants of WW2 immigrants are another group, and the largest group of new immigrants are the Muslims from various countries of the world but especially from Turkey. A common Dane does not really understand what happened with the caricatures of Prophet Muhammad in Arab countries. There are various programmes aimed to help new immigrants integrate into new environment, there are meetings of organizations ready to help Muslim women with new requirements of the society that are usually contrary to their old home country, and help them balance their work with private life. There is no such extensive helping net for new immigrants in the CR, neither there are developed programmes focused on certain group of immigrants that would help them with their integration.

Example: A Czech could be surprised at the very beginning of his/her stay by a situation when meeting a group of people. The Czech would expect his/her Danish colleague to introduce him/her to the group and will wait until introduced. However, in Denmark this would mean he/she does not want to be bothered by others; everyone is expected to take the effort and introduce oneself.

Long-term and short-term orientation

“Long-term orientation (LTO) stands for the fostering of virtues oriented toward future rewards – in particular, perseverance and thrift. Its opposite pole, short-term orientation, stands for the fostering of virtues related to the past and present – in particular, respect for tradition, preservation of “face,” and fulfilling social obligations.” [3] The Czech Republic scored as the second most short-term oriented society with the index of 13, while Denmark with index of 46 is the twelfth long-term oriented society of the world.

The Czech Republic prefers short-term investments (usually mutual funds) and immediate profit. This year's profit is perceived as more important than virtual profit in ten years' time. Marginal propensity to consumption is considerably higher than marginal propensity to savings, and because of that investments are usually funded by loans. Remunerations at work tend to reflect achieved successes or are calculated as employees' share on profit of the company.

Denmark on the other hand prefers savings. Investments are financed by both own resources and bank loans, the preferred investments are those with longer life span e.g. immovable property or pension funds. Remunerations to employees are more likely to reflect social peace and social sympathy.

Regarding political ideology and economic measures, the Czech politicians prefer only short-time solutions that bring immediate effects, usually within the same electoral period. Reforms and measures that bring results in the long run are popular neither among politicians nor

people. Danish changes tend to be slower but persistent, and as agreed on throughout the whole political spectrum, they are not likely to be changed again in the next electoral period. Example: When Czechs are meeting new people, the vast majority of new acquaintances only go through their lives for a short period of time, or certain period during we keep exchanging information, services, mutual help, no matter if it is a business relation or a friendship. The Danes, on the other hand, enter a new relationship with the idea that it will last forever if nothing goes wrong. It is reflected in their work or business contracts and in their approach to people they meet as well. "Becoming close friends with a Dane is something that requires both time and patience. ... Once you become friends with a Dane you really do have a friend for life." [5]

CONCLUSION

The paper has show that even two European cultures can be far different. Values of a culture are reflected in its political system, public administration, and common daily life as well. If we get to know these differences in advance, we would more carefully adopt foreign ideas into our environment and, of course, we will be able to communicate with our foreign partners more easily.

BIBLIOGRAPHY

- [1] BERRY, J.W. et al. Cross-cultural Psychology. Research and Applications. Cambridge University Press Cambridge, 2007. ISBN 0-521-64617-0.
- [2] DYRBYE, H.; HARRIS, S.; GOLZEN, T. The Xenophobe's guide to the Danes. Oval Books London, 2007. ISBN 978-1-902825-24-3.
- [3] HOFSTEDE, G.; HOFSTEDE, G. J. Cultures and Organizations. Software of the Mind. McGraw-Hill New York, 2005. ISBN 0-07-143959-5.
- [4] KOLMAN, L. Komunikace mezi kulturami. Psychologie interkulturních rozdílů. ČZU Praha, 2005. ISBN 80-213-0735-8.
- [5] SALMON, M. Culture Smart! Denmark. Kuperard London, 2006. ISBN 1 85733 325 X.
- [6] SAM, D.L.; BERRY, J.W. Acculturation Psychology. Cambridge University Press Cambridge, 2007. ISBN 0-512-61406-6.
- [7] TRANSPARENCY INTERNATIONAL. Corruption Perception Index. Online at : http://www.transparency.cz/doc/cpi2008_tabulka.xls [acc. 2008-12-29]

Ing. Klára Šimonová
Česká zemědělská univerzita v Praze, Provozně ekonomická fakulta, Katedra psychologie
Kamýcká 129
165 21 Praha 6 - Suchbátův
Email: simonova@pef.czu.cz

INTERACTION BETWEEN LEADER BEHAVIOR AND PERSON-ORGANIZATION VALUE FIT ON EMPLOYEE PARTICIPATION AND TRUST

Kusuma Wijesinghe, Josef Hurta

ANNOTATION

Leadership behavior and person-organization value fit are the critical factors in today's management in enhancing employee performance in organizations. As a strategic business tool, person -organization value fit plays an important role in human resource functions [HR] in organizations. Companies with strongly, formally articulated values that are focused on the needs of their constituencies have an important advantage over those without such values. Many of the past studies have shown that person-organization value fit affect on employee commitment, job satisfaction, involvement, communication, cooperation, and profit gains in organizations. As in the literature, leadership behavior is another important factor affects on employee performance. However research investigated on interaction effect of these criterions is absent in Sri Lanka and also very rarely empirically tested in every other parts of the world. Hence this study examined the interactive effect of leader behavior and person-organization value fit on employee participation for group decision making and trust in their leaders in plantation sector organizations in Sri Lanka. A questionnaire survey was undertaken to evaluate employees' ratings on these variables. Cronbach's alpha was above the sufficient level of reliability for all items in the questionnaire. Hypotheses testing were done by using Analysis of Covariates. Results supported the hypotheses. Theoretical and practical implications of these results and directions for future research are discussed

KEY WORDS

Leader behavior; person-organization value fit; Employee participation and trust

INTRODUCTION

The differential role demand placed on leaders may vary according to demographic composition of organizations, organization culture, national culture, regional political systems, or the strategic requirements of the leader's in organizations (House et al., 2004). Leader effectiveness has also been analyzed on the basis of the style adopted by the leader towards subordinates. Distinguishing between leaders adopting an autocratic, democratic or laissez-faire style of leadership and it had been concluded that democratic leadership was preferable from both productivity and behavioral perspective (Hedges, 1995). Other situational leadership models suggest that leaders should change in their own behaviors in order to be truly effective. Among these are House's path-goal model (1971), Hersey and Blanchard's situational leadership model (1977) and Vroom and Yetton's decision making model (1974) are prominent. The importance of taking into account the difference between people in different nations when studying management and leadership in any context is "because of management deals with the integration of people in a common venture and it is deeply embedded in culture (Hedges, 1995). Drucker, 1988 has written "what managers do is exactly the same but how they do it may be quite different" (referred by Hedges, 1995). Successful organizations today must have leaders or managers who motivate and inspire their employees. A major question addressed by GLOBE study is, in the extent to which specific leader characteristics and actions are universally endorsed as contributing to effective leadership, and the extent to which these qualities and actions are linked to cultural characteristics. They have identified six global leadership characters which are culturally

endorsed such as, charismatic or value-based leadership, team-oriented leadership, participative leadership, human-oriented leadership, autonomous leadership and self protective leadership (House et al., 2004, p.42-48). According to the results of these findings and Sri Lankan cultural values researcher can conclude that team-oriented behavior with administrative competencies is the most suitable leadership style for Sri Lanka.

Person-organization value fit is another important issue in management. Even many authors have studied this issue in many years (e.g. Alstine, 2005; Levesque, 2005; Li, 2006; McCulloch and Turban, 2007; Parks and Bochner, 2001; Wang, 2004; Wolf, 2007). Also past research has suggested that person-organization value fit affects job satisfaction, involvement, cooperation, communication, commitment of the employees and profit gain in companies (Chatman, 1989; McCulloch and Turban, 2007; Silverhart and Hinchliffe, 1996; Wolf, 2007). Previous research also suggests that person-organization value fit is related to socialization and work outcomes (McCulloch and Turban, 2007), positive effect on communication between leaders and their subordinates (assuming that leaders share the values of their organization) (Silverhart and Hinchliffe, 1996). Another scholar has mentioned that if managers really want to create a successful, productive workplace, the secret is simply to build trust, a sense of purpose and strong human relationships (Amble, 2007). The greater communication is likely to result in to greater understanding and trust between leader and his or her subordinates that create higher person-organization value fit (Li, 2006). Literature says though person-organization value fit is so important phenomenon in organizational management, an organization has to keep those employees whose values do not fit its organizational culture, because of labor shortage or because of the need to remain creative and innovative human resources (Li, 2006). However only few studies so far have been tested on interaction effect between leader behavior and person-organization value fit in relation to employees' performance. It is worthwhile to study whether leader can enhance person-organization value fit in organizations in order to enhance employee performance even under low person-organization value fit. Hence this study investigate the direct effect and interactive effect of leader behavior and person-organization value fit on employee participation in group decision making and trust in their leaders in Sri Lankan organizations. Based on these following hypotheses were formulated:

Hypothesis 1: Team-oriented leader behavior will have positive correlation with person-organization value fit.

Direct effect of leader behavior and person-organization value fit

Hypothesis 2:a Team-oriented leader behavior can enhance employee participation for group decision making, and trust in their leaders

Hypothesis 2:b Person-organization value fit can enhance employee participation for group decision making, and trust in their leaders.

Interactive effect of leader behavior and person-organization value fit

Hypothesis 3: There is an interaction effect between team-oriented leader behavior and person-organization value fit on employees' participation for group decision making and trust in their leaders.

METHODS

The researcher adopted a questionnaire survey methodology for data collection. Questionnaires were distributed among 250 employees in six organizations in the plantation sector in Sri Lanka. Respondents were middle managers, junior managers, and clerical staff. 202 complete questionnaires were subjected to analysis.

Team-oriented leader behavior was measured by six items. The scale included questions such as “there is a team spirit around here, and people at my level work well together. The scale showed satisfactory reliability (Cronbach’s alpha ranging from 0.90-0.91). The items for measuring employee trust in their leaders also were adapted from GLOBE project study and Li, 2006 study. Items for measuring employee participation in group decision making were self constructed. All the items were above the sufficient level of reliability (Cronbach’s alpha). All questions were rated in 7 point Likert scale.

Questions under person-organization value fit, asked employees about the extent to which they feel their values and organizational values are fit together. There were 19 pairs of items (38 questions) selected from an instrument developed by House and his team in GLOBE project (House et al., 2004). Respondents rated the all items on a 7- point reversed scale other than gender egalitarianism. But the scales of gender egalitarianism were vice versa. The scale showed satisfactory reliability (Cronbach’s alpha ranging 0.83 - 0.98) (House et al., 2004).

Past research has suggested that demographic attributes may moderate the effect of leader behavior and person-organization value fit (Chatman, 1991; Li, 2006). As a result age, gender, work experience of the current job and total work experience were considered as control variables.

RESULTS AND DISCUSSION

Table 1: *Dependent Variable = Employee Participation*

Participation = TL+PO+ PO*TL+Sex+ Age+ Co. Tenure+Total Ex.

Variable	F value	P value
Team-oriented leader (TL)	89.96	<.0001***
Person-organization value f it (PO)	11.64	.0008***
TL*PO fit	19.23	<.0001***
Sex	0.28	0.5977
Age	0.46	0.4986
Company tenure	0.25	0.62
Total work experience	0.92	0.3379

Notes: * p<.05, ** p<.01, *** p<.001

Table 2: *Dependent Variable= Employee Trust in Their Leaders*
 Trust in Leaders= PO+TL+PO*TL+Sex+Age+Com. Tenure+Total Ex.

Variable	F value	P value
Team-oriented leader	171.1	<.0001***
Person-organization value fit	10.02	.0018***
TL*PO fit	1.12	0.29
Sex	0.22	0.64
Age	3.05	0.08
Company tenure	1.63	0.20
Total work experience	0.53	0.47

Notes: * p<.05, ** p<.01, *** p<.001

Descriptive statistics explained the correlation coefficient between team-oriented leader behavior and employee participation for group decision making and trust in their leaders (Table omitted). They were positively significant. Correlation coefficient between team-oriented leader behavior and person-organization value fit was negatively significant ($r = -.52$, $p < 0.01$ in 2-tailed). But the scale testing person-organization value fit was actually the difference between personal values and the perceived organizational values. The smaller the number, the higher the level of person-organization value fit. Therefore, negative correlation showed positive effects of the leader behavior on person-organization value fit. According to these findings, hypotheses 1 (H1) can be supported.

To test other hypotheses, Analysis of Covariates (ANCOVA) was conducted. Effect of team-oriented leader behavior and person-organization value fit was tested with relation to their employees' participation for group decision making and trust in their leaders. In table 1, the last column shows (P value) probability values of 0.0008 and 0.0001 corresponding to PO fit and TL factors and both are less than 0.001 probability. Hence the main effects of PO fit and TL are highly significant on employee participation for group decision making. The last column (p value) in table 2 shows the values of 0.0018 and 0.0001 corresponding to PO fit and TL factors. Both of these values are significant in 0.001 probability. Hence the main effect of human-oriented leader behavior is highly significant even on employee trust in their leaders. Finding of table 1 and 2 provide the answers for hypotheses 2a, and 2b. Two way interactions between team-oriented leader behavior and person-organization value fit on participation for group decision making is highly significant. But two-way interaction is not significant on employee trust in leaders at 0.05 probability. These findings supported for first part of the hypothesis 3.

Demographic variable such as age, sex, company tenure and total work experience did not show any significant effect on employee participation for group decision making and trust in their leaders other than moderate effect of age on employee trust in their leaders. Effects of these unevenly distributed demographic factors were treated by covariate analysis.

CONCLUSION

According to the findings of this study, researcher can conclude that administratively competent team-oriented leader behavior can enhance the employee participation for group decision making, and trust in their leaders. Also person-organization value fit can enhance employee participation for group decision making, and trust in their leaders. Hence both

leader behavior and person-organization value fit are powerful predictors for improving employees' participation and trust in their leaders in the work place. An interaction term between leader behavior and person-organization value fit was highly significant on employee participation for group decision making. It provides a clue that leader behavior and person-organization value fit make some interactive influence in deciding employee participation in decision making. When there is an interaction effect between these factors the main effect can be suppressed in some way. As a result both leader behavior and person-organization value fit are critical factors in human resource management in organizations. But employee trust in their leaders mainly depends on the style adapted by the leader only.

BIBLIOGRAPHY

- [1] Alstine, D. V. (2005). Looking for fit or fit to lead? Canadian HR Reporter, 18(15):18-19
- [2] Amble, B. (2007). The key to commitment, Filed under: Engagement & Motivation. www.management-issues.com/build (accessed on 05 August 2008).
- [3] Chatman, J. (1989). 'Improving Interactional Organizational Research: A model of person-organization fit'. *Academy of management review*, 14, No. 3, p. 333-349.
- [4] Hedges, P.M. Leadership and culture: International perception of organizational leadership. *Master's Thesis*, School of Management and Marketing, Curtin University of Technology, Perth, 1995, CRICOS Provider Code 02637B
- [5] House, R. J., Hanges, P.J., Javidan, M., Dorfman, P.W. and Gupta, V. (2004). 'Culture Leadership and Organizations', The GLOBE study of 62 Societies, USA, SAGE Publication, Pgs 918, ISBN 0-7619-2401-9
- [6] Levesque, L.L. (2005). 'Opportunistic hiring and employee fit'. *Human resource management*, Vol. 44, No. 3, pp. 301-317
- [7] Li, J. (2006). 'The interactions between person-organization fit and leadership styles in Asian firms, an empirical testing'. *International journal of Human Resource Management*: 17:10 October, 1689-1706, ISSN 0958-5192.
- [8] McCulloch, M. C. and Turban, D. B. (2007). Using person-organization value fit to select employees for high-turnover jobs, *International Journal of Selection and Assessment*, LIMRA International, USA, Vol. 15, no. 1
- [9] Parkes, L. P., Bochner, S. and Chneider, S. (2001). Person-organization fit across cultures: An empirical Investigation of Individualism and Collectivism, *Applied psychology: An international review*, 50 (1), 81-108.
- [10] Silverhart, Todd, A., Hinchcliffe and Raymond, H. (1996). New selection tool assesses candidate/ agency fit, *LIMRA'S Market Facts*, Hartford, Vol. 15, Iss 3. P. 4, 3 pgs.
- [11] Wang.Y.Y. (2004). Observations on the organizational commitment of Chinese employees: comparative studies of state-owned enterprises and foreign-invested enterprises, *International journal of human resource management*, 15: 649
- [12] Wolfe, I.S. (2007). Welcome to the July 25, 2007 issue of the total view published by successperformance.www.supersolutions.com/EmployeeorganizationFitGeneratesBigGains (5 August 2008).

Full name: A.G. Kusuma Wijesinghe
Institution: Tomas Bata University, Zlin
Street: Mostny street, 5139
City: Zlin
Email: kusum_wijesinghe06@yahoo.com

**ECONOMIC THEORY, ECONOMIC POLICY AND
ECONOMIC HISTORY**

BUSINESS CYCLE ANALYSIS OF THE EMU COUNTRIES

Petra Černíková

ANNOTATION

The article deals with business cycles of selected European countries. The group of analyzed countries is represented by the member states of the Economic and Monetary Union. The analyzed group of countries contains both members sharing the single common currency euro and selected countries that are members of the EMU but with temporary exception from adopting the euro (e.g. the Czech Republic). The article examines development of business cycles during a long period of time. This will be done by the Hodrick-Prescott approach to a detrending of time series. Symmetries in business cycles are finally analysed by comparing the business cycles of the EMU member states. Then its possible to analyze whether there is any core and periphery within the EMU according to the business cycles or not.

KEY WORDS

Business Cycle, Correlation, European Economics and Monetary Union, Eurozone, Hodrick – Prescott filter

INTRODUCTION

Creation of monetary integration was quite a long-term process in Europe. Eventually it is one of the most successful processes of the European integration. There were many attempts to deepen cooperation in the field of monetary policy from the very beginning of the integration process in Europe. Its was obvious that the project of single european currency couldn't be realized without apparent political support. As a historical moment we consider the year 1989 when the European Council decided to create a monetary union in three stages. The decision was made on the basis of the Delors Report. The creation of the single currency euro became an integral part of the EU legal system when the Maastricht Treaty went into force, after difficulties in Denmark, in 1993.

The Economic and Monetary Union was created in three folowing stages. As a turning point we consider the last third stage, when the exchange rates were irrevocably fixed¹ and the euro was introduced in a noncash payment system. Right three countries (the United Kingdom, Denmark and Sweden) refused to join the third stage and these three EU member states still use their national currency today. The UK and Denmark negotiated opt-out clause and they are not obliged to adopt the euro anymore. Sweden has not yet started to participate in ERM II mechanism and hence does not fulfill the convergence criteria for entering the eurozone. Special case is Greece. This country wanted to join the third stage of the EMU but did not fulfil the necessary criteria. Greece fulfilled the criteria subsequently and join the other countries.² Since 2002 when the twelve national currencies already ceased to exist, three other member states of the EU adopted the euro. Slovenia was the 13th country that adopted the single currency (2007) and was followed by Cyprus and Malta in 2008. The next enlargement of the eurozone happens in January 2009 when Slovakia swaps its currency for the euro.

¹ The conversion rates between national currencies and the euro were established.

² Later was proved that there were some data manipulation to fit the convergence criteria in Greece.

This paper deals with the business cycle analysis of the EMU member countries. All member countries of the European Union are member countries of the Economic and Monetary Union as well. However some of them have got permanent or provisional exceptions from the euro adoption and for that reason are not members of the eurozone. This analysis focuses mainly on the eurozone member countries.

AIM AND METHODOLOGY

The main aim of the paper is to analyze if there is a core and a periphery within the EMU members according to the business cycles or not. This potential core can be characterized by a higher correlation of business cycles within countries that form such core. The existence of such core is important regarding realization of common monetary policy, that could be oriented more on the development of the core (assuming that the core countries are key european economies). In addition we assume that potential economic disturbances would affect these core countries more symetrically than prospective periphery countries. As the Czech Republic will join the eurozone in future, we also focus on an analysis of the Czech business cycle and its correlation to the EMU member countries. Used methodology is specified hereinafter.

RESULTS

The following chapter is divided into three partial chapters. The first one deals with the business cycle analysis over a long time period – i.e. from 70's of the 20th century until nowadays. Then we focus on a detailed business cycle analysis during and after the creation of the eurozone. The last subchapter assesses a correlation of business cycles of non-mebers of the eurozone.

Long-term business cycle analysis

A correlation analysis is a frequently used technique for an assessment of a business cycle likeness. Business cycles will be analysed by the Hodrick-Prescott approach to a detrending of given time series. This technique allows us to make a decomposition of time series and separate trend from cycle in such series. Thus when we use a data for a real GDP (at constant prices) we get detrended output, which we are able to compare. Even it is a common to analyse GDP on quaterly data, because of data availability for all countries, we are forced to work with just annual data. In order to find a possible core among the EMU members we will analyse time series for the twelve original eurozone member countries.³ As a benchmark, allowing us to compare our results with rest of the world, the United States of America were chosen. Results of the analysis are shown in the Figure 1.

³ Regarding relatively recent entrance of Slovenia, Cyprus and Malta to the eurozone, we dont work with time series for these countries.

Figure 1: The business cycle correlation during 1970 – 2007
(detrended by the HP filter for $\lambda = 100$)

	AT	BEL	FIN	FRA	GER	GRE	IRL	ITL	LX	NL	PT	ES	USA
AT													
BEL	0,77												
FIN	0,14	0,45											
FRA	0,74	0,88	0,50										
GER	0,82	0,70	-0,06	0,67									
GRE	0,50	0,53	0,13	0,57	0,62								
IRL	0,33	0,41	0,42	0,54	0,33	0,38							
ITL	0,56	0,82	0,47	0,82	0,64	0,43	0,45						
LX	0,67	0,75	0,32	0,79	0,66	0,39	0,14	0,65					
NL	0,71	0,80	0,40	0,75	0,65	0,43	0,57	0,73	0,67				
PT	0,73	0,82	0,46	0,89	0,68	0,55	0,54	0,76	0,67	0,66			
ES	0,65	0,82	0,47	0,83	0,48	0,44	0,31	0,64	0,81	0,73	0,71		
USA	0,24	0,36	0,44	0,43	0,30	0,48	0,34	0,44	0,42	0,56	0,33	0,34	

Note: author's calculation.

Source: United Nations Statistics Division.

On the basis of our analysis we can conclude an existence of the core within the EMU countries. Austria, Belgium, France and Germany form this core, as their business cycles are highly cross-correlated (see the Figure 1). Moreover, business cycles of these core countries are quite lowly correlated to the American business cycle, what could hypothetically imply an existence of so called European business cycle.

There was a little divergence of business cycles among the core countries during 80's of the 20th century. Belgium was an exception as its correlation to other core countries was becoming higher even in that period of time. The nineties were on the contrary characterized by a higher correlation of the core countries business cycles.

On the other hand we can also define a group of periphery countries. Results of our long-term analysis place among this periphery Finland, Greece and Ireland. The lowest correlation to other countries and to the core as well was founded out for Finland.⁴ If we suppose an influence of the EU membership on a level of business cycles correlation then we are able to explain these results. Finland is (together with Austria) a member country of the EU "just" since 1995 and since that time there is a clear convergence to business cycles of the core EMU countries. From a long-term point of view, a correlation between the Finnish and the American business cycles becomes higher. Business cycles of Ireland and Finland were the highest correlated to the American business cycle from the whole analysed group of countries during the nineties. A convergence of the Irish business cycle to analyzed countries grows over time, mainly during the nineties, when especially the correlation with the core became higher. There was also interesting development of the Irish – German business cycle correlation. During the 70's and the 80's the correlation was growing, but during the 90's there was obvious divergence. Quite low correlation to the most of the EMU countries is a characteristic of Greece. On the contrary, the highest values of its correlation coefficient achieved the country with the core countries. There is also obvious convergence to all

⁴ However, the correlation between the Finnish and French business cycles is high.

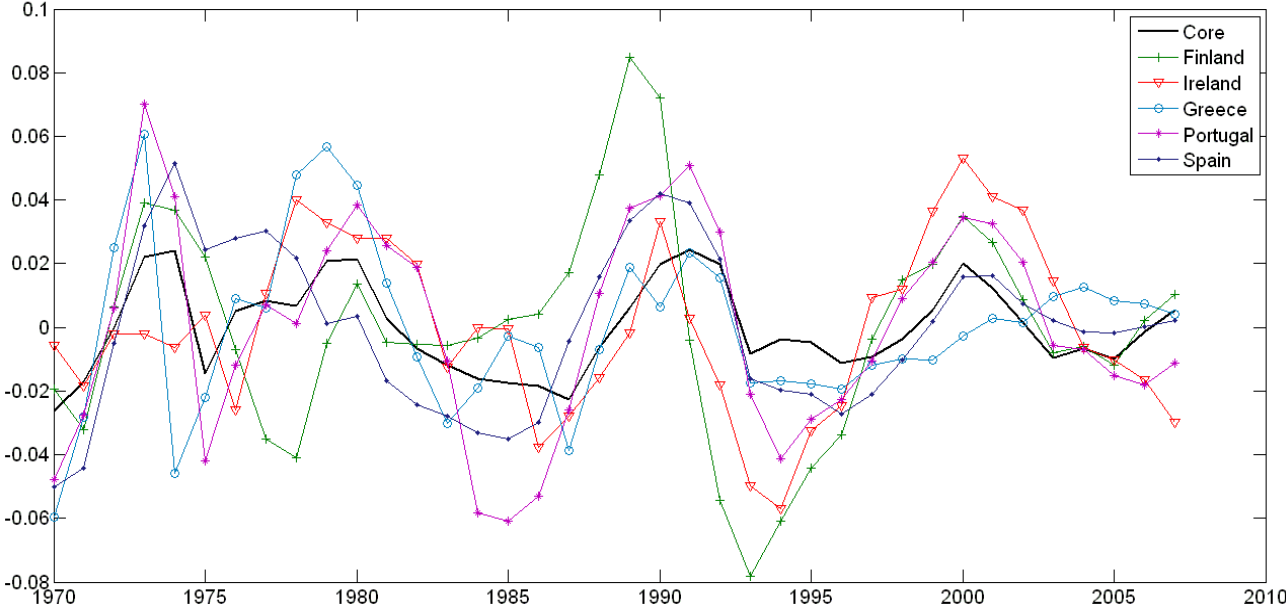
analysed countries, mainly to the core countries, in Greece. The strong correlation to the American business cycle measured for the 70's, changed over time to almost non-correlation.

Let's have a look at the business cycle correlation within this periphery. The business cycle of Finland is quite lowly correlated to the Irish and Greek business cycles. From a detailed business cycle analysis we found out that there was a significant convergence between the Finish and Irish business cycles since the 70's.⁵ A convergence between Finland and Greece was quite low during the analysed period. There was almost no convergence between the Irish and Greece business cycles.

Spain and Portugal are often considered to be a periphery in the European Union, but according to our analysis they are not. The Spanish business cycle is a highly correlated to the core countries, except for Germany. A long-lasting convergence of the Spanish business cycle to the Germany one was obvious mainly during the 90's of the 20th century. The Portugese business cycle is correlated both to the core countries and the periphery. We must add that these high values of correlation to the periphery are result of a convergence process during the 90's. From a long-term point of view the business cycle correlation with the USA decreases.

The business cycles of the periphery countries and the core are shown in the next Figure 2. The core was defined as an arithmetic mean of detrended outputs of the countries that form the core.⁶ Detrended cycles were also figured both for Portugal and Spain, even we don't consider these countries as a part of the periphery.

Figure 2: The cyclical component of GDP for selected countries and the EMU periphery during 1970 – 2007 (detrended by the HP filter for $\lambda = 100$)



Note: author's calculation.
Source: United Nations Statistics Division

⁵ The correlation coefficient of their business cycles was -0,27 during the 70's, but its value rose to 0,9 in the 90's what implies strong converge process.
⁶ Austria, Belgium, France and Germany.

Detailed business cycle analysis from 1995 up to now

Let's focus our attention on a same analysis but from 1995 up to now, using quarterly data on a real GDP (at constant prices and seasonally adjusted). This period is specific for the integration process in Europe, as in that time the Economic and Monetary Union was realized. We use again the Hodrick-Prescott approach to a detrending of given time series and to get detrended output. We are interested in finding out whether countries that form the core of the EMU are the same or not and how is the development of the periphery countries. In order to find out a potential influence of the EMU on the business cycle correlation of the EMU members, we decided to divide the analysed period into two. As a turning point we consider the year 1999, when the euro was introduced in a noncash payment system.

We defined Austria, Belgium, France and Germany as the countries that form the core of the EMU in the previous chapter. The countries are confirmed as the core by the detailed analysis of data from 1995 up to now. Data presented in the Figure 3 imply a convergence process among the core countries during the two analysed periods. Countries that are not part of the core have proved increasing convergence of business cycles to the core countries. This convergence can be caused by deepening of the integration process in Europe during the 90's.

Luxembourg's business cycle was highly correlated both to the eurozone as a whole and the core during both analysed periods. However its cyclical component of GDP is quite fluctuating around a trend that was identified by the HP filter (see the Figure 4).

Figure 3: The business cycle correlation since 1995 (detrended by the HP filter for $\lambda = 1600$)

	AT	BEL	FIN	FRA	GER	GRE	IRL	ITL	LX	NL	PT	ES	EUR
1995-1998													
AT		0,54	0,51	0,91	0,53	X	-0,12	0,41	0,78	0,60	0,46	0,89	0,85
BEL	0,89		0,46	0,53	0,59	X	0,42	0,61	0,53	0,67	0,07	0,68	0,77
FIN	0,86	0,89		0,39	0,20	X	0,18	0,22	0,28	0,52	0,43	0,36	0,40
FRA	0,85	0,91	0,88		0,46	X	0,14	0,56	0,77	0,49	0,43	0,92	0,87
GE						X	0,67	0,35	0,25	0,79	-0,08	0,54	0,78
R	0,65	0,67	0,73	0,75									
GR							X	X	X	X	X	X	X
E	-0,27	-0,08	-0,03	-0,09	-0,30								
IRL	0,57	0,61	0,60	0,58	0,44	0,06		0,71	0,14	0,28	-0,34	0,09	0,66
ITL	0,55	0,70	0,71	0,79	0,80	-0,03	0,53		0,56	0,27	-0,21	0,47	0,68
LX	0,75	0,67	0,72	0,69	0,59	-0,12	0,62	0,55		0,35	0,39	0,74	0,69
NL	0,87	0,81	0,85	0,86	0,83	-0,28	0,41	0,62	0,65		0,34	0,59	0,73
PT	0,73	0,61	0,66	0,70	0,71	-0,30	0,38	0,59	0,72	0,82		0,45	0,20
ES	0,83	0,79	0,82	0,89	0,74	-0,04	0,64	0,76	0,69	0,80	0,67		0,89
EUR	0,80	0,85	0,88	0,92	0,93	-0,17	0,59	0,89	0,70	0,88	0,76	0,89	
1999-2008													

Note: author's calculation . Data on Ireland are available since 1997. Data on Greece are available since 2000. Data for the period of 1999 – 2008 are marked grey.

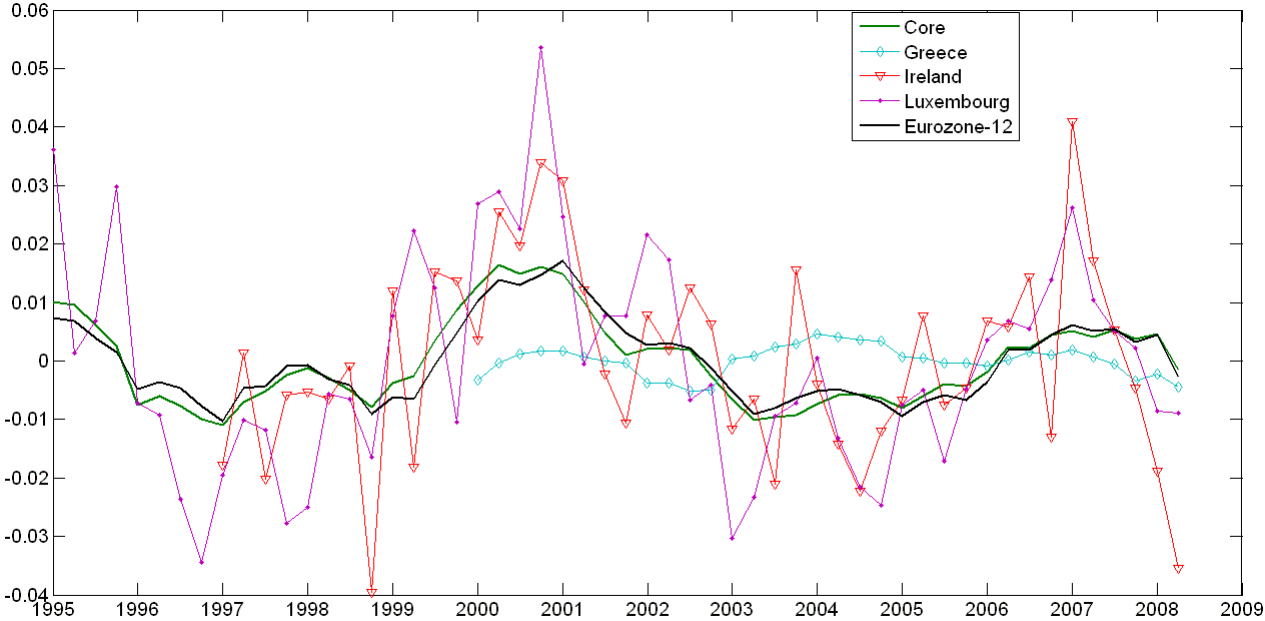
Source: Statistical Data Warehouse, ECB.

Let's look at the countries that we classified as the EMU periphery. Quarterly data on the GDP of Greece are available just since 2000, so we are not able to assess a convergence process in the country. The Greek business cycle correlation has reached the lowest values from all

analysed countries. We can conclude that this country undergoes a divergent process in comparison with the eurozone since 2000 (see the Figure 4). The highest value of correlation reached Greece to other periphery country – Ireland. Even though the correlation coefficient of Ireland to the eurozone was higher than the ones of Finland and Portugal during 1995 - 1998, a correlation of these two countries to the eurozone has since that time grown significantly. The Irish one almost hasn't changed. The previous analysis included Finland to the periphery, but the country doesn't belong there now. Between 1995 and 1998 there was a low correlation of business cycles to the eurozone countries in Ireland, except for Germany and Italy. However since 1999 there is a obvious convergence process to the eurozone, again with one exception for Germany as the correlation to the German business cycle has decreased.

A cyclical component of GDP for selected countries is presented by the Figure 4. These selected countries are the two that are considered to be the EMU periphery – Greece and Ireland and the country with high fluctuation of its cyclical component of GDP – Luxembourg. We calculated the European business cycle (Eurozone – 12)⁷ from the data on a real GDP of the eurozone and we use this business cycle as a benchmark for comparison. This European business cycle is very similar to the core EMU countries business cycle.

Figure 4: The cyclical component of GDP for selected countries and the EMU periphery since 1995 (detrended by the HP filter for $\lambda = 1600$)



Note: author's calculation . Data on Ireland are available since 1997.

Data on Greece are available since 2000.

Source: Statistical Data Warehouse, ECB.

We can summarize that a correlation of business cycles within the almost whole eurozone (Eurozone – 12) was higher in the second analysed period (since the realization of the EMU) than in the first one. The analysed period of time is quite short to draw any conclusion about

⁷ Regarding relatively recent entrance of Slovenia, Cyprus and Malta to the eurozone, we dont work with time series for these countries.

the influence of the EMU on the higher business cycle correlation of its members. In addition we have to take into account a possible influence of deepening of the integration process in Europe (completion of the single European market) during the 90's on the higher business cycle correlation.

The EMU members with their national currencies

Denmark, Sweden and the United Kingdom decided not to join the third stage of the EMU and they still use national currencies. Let's focus on their correlation to the eurozone as a whole and to the core and periphery as well. There is again clear evidence of a higher correlation of business cycles after since 1999 (see the Figure 5). Founded results for the United Kingdom imply a strong correlation of its business cycle to the eurozone already throughout the period of 1995 – 1998. During the following years a correlation has risen to Germany above all, but also to the periphery country - Greece. The British business cycle is more correlated to the eurozone than to the USA. Obvious convergence process to both the eurozone and the core was achieved in Denmark, in spite of almost no correlation during 1995 and 1998. The last one of this trio is Sweden. Sweden is the only country whose business cycle correlation has decreased throughout the last years in comparison with prior analysed period. In addition to that, its correlation to the USA is higher than the one to the eurozone. In spite of these facts, we must say that the Swedish business cycle correlation to the core and the eurozone as a whole is still high.

The abovementioned findings confirm the hypothesis that the higher correlation among the EMU countries is caused rather by completion of the single market of the European Union than by the single common currency euro.

Figure 5: The business cycle correlation since 1995 (detrended by the HP filter for $\lambda = 1600$)

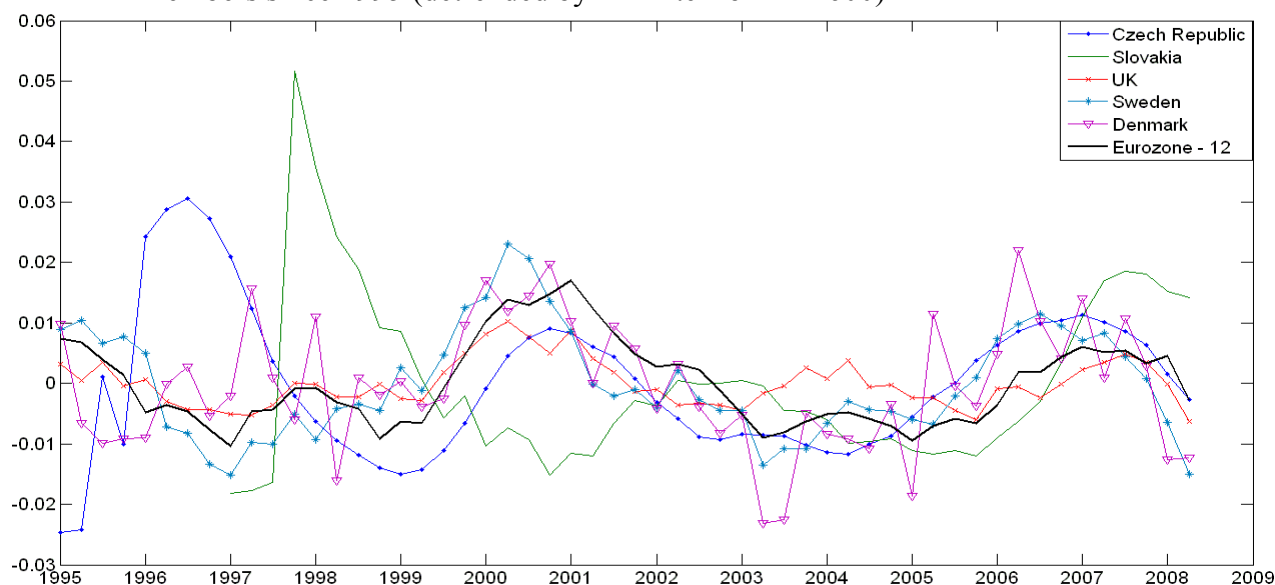
	CZE	DEN	SVK	SWE	UK		CZE	DEN	SVK	SWE	UK
	1995 - 1998						1999 - 2008				
GER	-0,32	0,15	0,46	0,34	0,33		0,57	0,50	0,22	0,52	0,60
FRA	-0,65	-0,20	0,66	0,95	0,83		0,59	0,72	-0,22	0,77	0,76
GRE	X	X	X	X	X		-0,04	-0,03	-0,37	0,03	0,27
IRL	0,14	0,24	0,25	0,05	-0,22		0,42	0,64	-0,14	0,64	0,55
EUR	-0,61	-0,01	0,68	0,80	0,73		0,66	0,68	0,01	0,70	0,72
USA	-0,23	0,64	-0,26	-0,42	-0,12		0,51	0,67	-0,29	0,81	0,56

Note: author's calculation . Data on Greece are available since 2000. Data on Slovakia are available since 1997.

Source: Statistical Data Warehouse, ECB; Statistical Database DSI, IMF.

Finally we examine business cycle correlation of two countries that will adopt the euro in a future. Slovakia is going to adopt the euro in a January 2009, while the Czech Republic has not fixed the term for euro adoption yet. A correlation of the Slovak business cycle to the eurozone was higher during the first period (see the Figure 5) than in the following one. Unfortunately this could be influenced by data availability just since 1997. Since 1999 the Slovak business cycle became significantly more correlated to both the eurozone as a whole and its economies. As we can see from the Figure 5 the correlation of Slovakia to the eurozone is almost none during the last years.

Figure 6: The cyclical component of GDP for selected countries and the non eurozone members since 1995 (detrended by HP filter for $\lambda = 1600$)



Note: author's calculation . Data on Greece are available since 2000.

Source: Statistical Data Warehouse, ECB; Statistical Database DSI, IMF.

The Czech Republic has not decided when to adopt the euro yet. Since the 1999 there is a clear evidence of the business cycle correlation to the eurozone. The Czech business cycle developed reversely in comparison to the eurozone during 1995 and 1998. The Czech business cycle was mainly during 1996 and 1997 was, in comparison to the eurozone, markedly above its trend identified by the HP filter (see the Figure 6). As we can see on our data, the last years were characterized by obvious cyclical convergence to the eurozone.

CONCLUSION

We can confirm an existence of the EMU core on the basis of our analyses. This core can be characterized by a higher correlation of business cycles within countries that form such core. Austria, Belgium, France and Germany form the core of the Economic and Monetary Union. We are also able to define the EMU periphery. Business cycles of countries that form such periphery are lowly correlated to other countries, especially to the core. Greece and Ireland are the periphery countries of the EMU. The latter one undergoes an obvious convergence of its business cycle correlation to the eurozone since the end of the 90's. Our analysis of long-term business cycles include Finland to the periphery as well. However there was a significant convergence to the EMU core (to the eurozone as a whole as well) since the end of the 90's and now we don't consider Finland as a part of the EMU periphery. The reason is probably an entrance to the European Union of the country in 1995. Austria entered the EU in the same year, but belongs to the core. What is the reason behind it? Tight economic relations with the core EMU countries probably stand behind.

The Czech business cycle became clearly more convergent to the eurozone during the last years. It's even more correlated to the eurozone than for example the business cycle of Slovakia, the country that joins the eurozone in January 2009. On the basis of our analysis we would classify Slovakia as a part of the periphery while the Czech Republic converge to the core. Hence we can assume that potential economic disturbances in the eurozone would affect more symmetrically (with the core) the Czech Republic than Slovakia.

Is there any influence of participation on the Economic and Monetary Union on a higher business cycle correlation among the member countries? Its almost impossible to answer this question now, regardig too short period since the EMU was created. So the reason behid higher correlation among the EMU countries is rather completion of the single European market than the single common currency euro. This hypothesis is confirmed by the cyclical development of the countries outside the eurozone, as their business cycles became more convergent with the eurozone.

BIBLIOGRAPHY

- [1] BALDWIN, R., WYPLOSZ, CH. (2004): The Economics of European Integration. McGraw-Hill Education, pp. 458, 2004. ISBN 0-077-103947.
- [2] DE GRAUWE, P (2003): Economics of monetary union. 7th edition, Oxford University Press, pp.281, 2003. ISBN 978-0-19-929780-1.
- [3] DEJONG, D. N., DAVE, CH. (2007): Structural Macroeconometrics. 1st edition, Princeton University Press, pp. 338, 2007. ISBN 978-0-692-12648-7.
- [4] DSI: Statistical Databases: Gross Domestic Product by Expenditure. Available on URL: <http://195.145.59.167/ISAPI/LogIn.dll/login?lg=e> (placený přístup).
- [5] EUROPEAN CENTRAL BANK – Statistical Data Warehouse: GDP and Expenditure Components. Available on URL: <http://sdw.ecb.europa.eu/browse.do?node=2120796>.
- [6] EUROPEAN COMMISSION – DG Economic and Financial Affairs: The EU Economic Situation – Economies of the Member States. Available on URL: http://ec.europa.eu/economy_finance/eu_economic_situation/eu_economic_situation86_52_en.htm.
- [7] UNITED NATIONS STATISTICS DIVISION – National Accounts (Basic Data Selection): GDP by Expenditure, at Constant Prices. Available on URL: <http://unstats.un.org/unsd/snaama/selectionbasicFast.asp>.
- [8] WOITEK, U. (2008): Workshop: Programming in Matlab. University of Lecce, Summer 2008.

Petra Černíková
Masaryk University, Faculty of Economics and Administration
Lipová 41a
602 00 Brno-Pisárky
Petra.cernikova@mail.muni.cz

REFORMATIVE ECONOMIC THINKING IN CZECHOSLOVAKIA IN THE 1960S

Zuzana Hrdličková

ANNOTATION

The paper is concentrated on forming reformative economic thinking in socialistic Czechoslovakia in the 1960s. Reformative economic thinking had the direct linkage at creating the practise economic policy and projected to the composition of the reform concept at the end of the 1960s. The paper is trying to find the answer to question: “What was the contribution of significant socialistic economists in the scope of reform economic thinking in the existent period?” In this context there is outlined the revolution in economic thinking, which gradually started happen from the middle of the 1960s on the basis of revision of Stalin’s political economy and the opening space for exercise various non-Marxist theories, e.g. the education Neo-classic and Keynes economy.

KEY WORDS

Socialistic Czechoslovakia, reformative economic thinking, economic reform, crisis, price mechanism, market.

INTRODUCTION

At the turn of the 1950s and 1960s, after unsatisfactory economic progression in economy there was happening refusing basic system components on which there was based socialists system functioning. After decomposition of the third five-year plan (1961-1965) economic progression in the CSSR was managed by only operative annual plans. The failure of the third five-year plan projected unsuccessfully to the socially feeling and made easy enforcement of various non-Marxist theories and to the weakening trust of central planning. Here there is necessary to seek one of corporate crisis roots, which culminated several years later. Political authorities decided in reaction on it to prepare new economic reform. The significant inciting factor was revision of Stalin’s political economy. From the beginning of the 1960s there was devoted more attention to studies of Neo-classic and Keynes economy. Reformative economic thinking had direct impact on formation reform concept at the end of the 1960s.

AIM AND METODOLOGY

The aim of this paper is to analyse the main partial contributions of the Czech economics to development reformative thinking in the 1960s, which started theoretically the starting point of the economic reform. The paper has the structure of a basic theoretic research. It responses the choice of used methods as well as. In the whole paper there will be used the historic method. The aim of this method is mainly monitored a particular phenomenon in his progression and involved basic tendency of his development. The substantial role in this paper plays the work with the special economic literature. Problems will be analyzed mainly on basic of special publications which are concerning on problems of Czechoslovakia reform in 1968. The basic information will be drawn both from the present and contemporary literature. Furthermore in this paper I would like to use the analytical approach. On the basis there will be carried out the analysis of basic ideas of the reformative economists. After that, with using the synthesis of the knowledge there will be made evaluation of reform thinking concerning the economic reform. Other suitable method for using is appearing the method of description which serves as a background for explication of theoretic connections. In the final part of this

paper there is expressed own author's position to the investigated problem and there is suggested the procedure for other work of surveyed problems.

RESULTS

Preparation of reform

As I mentioned at the beginning of this paper, early 1960s Czechoslovak economy passed development of crisis, which opened the space for the criticism of current mechanism of controlling economy. The leadership of KSC was refusing the criticism of the system. Over this disfavour of the leadership there was a number of economists, who reflected unfavourable economical development, grew and formulated new theoretical solutions of the reform economical mechanism. Persisting unsatisfactory function of the economical mechanism compelled the centre to search a solution from this crisis. In the leadership of KSC there were not well-educated economists, but only ideologically oriented persons. In 1963 some representatives of the leadership took the view that they cannot dispense with the participation of economical science. ÚV KSC entrust directors of two research institute (O.Šik from Economical institute ČSAV and Z. Vergnera from Research institute national-economical planning) with presentment of subject on process of the reform of economical institutes. Both directors created the working group (B. Komenda and Č Kožušník from EÚ ČSAV, R. Kocanda, L. Matějka and L. Říha from VÚNP) (Šulc, 1998). The working group worked up "Proposal of thesis about improvement the system of the planned operating national economy." Unfortunately, group didn't reach the unique proposals and submitted two alternatives of the possible solution. The first alternate assumed creating a new controlled system based on economical principles. The second alternate was formulated as improvement of the existent system. The first alternate became the basis for a work on creating new economical system. In thesis there was demonstrated the above mentioned revision of Stalin's political economy, for which gradually happened both on basis of realistic development and on basis rapid spreading of findings non-Marxist economists. The revision had a lot of forms and the broad range of authors participated at this.

Economical thinking in ČSSR in the 1960s

In the following part there will be carried out a short analysis of contribution of the choices reform economists. These contributions had become theoretic solutions of reform.

Economical thinking did not focus only on the empiric-analytical direction but also on abstractedly theoretical. In the first phase there is predominated mainly critical analysis of the function existing mechanism. This mechanism is based on empiric findings. The great contribution in this direction was the study of Z. Kodet "Tangible interest in industry" (Kodet, 1963). The author analysed irrational behaviour of a socialistic company based on planning indicator (e.g. return, long-term normative of tangible interest, rough production). He took the view that planned indicator only take effect on the quantitative aspect, but not on the qualitative aspect.

B. Komenda analysed these empirical findings as a theoretical problem. He managed that the existence of commodity relationship cannot be derived from the proprietary relationship, but from the social distribution of labour, which separates producers and get through them the market. The price plays the important role. Central planning of companies is failing, companies behave market in fact, monitor their own interests and no plan isn't able to schedule their activity. Komenda carried out the analysis of various forms of used systems "tangible interest"(on profit, on reducing costs, on rough production). This analysis is based

on the mathematical formula. He exactly defined the structure of deformations, to which using these indicators lead.

Later Komenda with Kožušník put forward the concrete proposals on change of the economic mechanism functioning. According to authors the exchange relationships between companies mustn't be regulated by any other instrument than the prices (Komenda, Kožušník, 1964). Flexible prices are the main category of the economic mechanism functioning.

As I mentioned previously, economical thinking did not focus only on the empiric-analytical direction, but also the abstract-theoretical direction. The abstract-theoretical approach carried out the revision of Stalin's political economy through the new interpretation Marx and Lenin. This approach enabled the legalization of the commodity monetary relations for the socialistic economy and led to the new conception of central planning. The significant work in this area was O. Šik's book "Economy, interests, policy". He was especially concerned with the conception of the socialistic proprietorship. Šik refuted Stalin's idea nationalization of syndicates in SSSR with the aim of creating non-market centrally planned socialistic economy. Šik gave reason for causations the existence of markets from the extended distribution of labour. Significant contribution of Šik to last way of economical thinking was elaboration the psychological aspect of economy, whose decisive signification had behavior of an economical subject (especially companies). Šik draw conclusion from these findings for the functioning mechanism of socialistic economy concerning especially the independent market position of company. He defined the economical category such as price, costs, return.

Other important reform economist was Č. Kožušník. He characterized the goods production as a particular social distribution of labor. In study "Problems theory of the value and the price in socialism" he derived, that planning doesn't mean abolition of the commodity-monetary relationships. He focused main attention on creating the price mechanism based on the balanced price of the realistic demand and supply on the market. Kožušník evolved this idea in cooperation with B. Komenda. They didn't solve only static equilibrium, but also dynamic, it means the ability of price mechanism to react on changes of the demand and supply.

The role of prices played the important role in the commodity monetary relationship. There were started proceed a discussion about the advantages and disadvantages of particular types of prices. Up to now it was centrally defined price (wholesale and retail prices). The authors didn't understand the balanced prices as prices created by the market. It meant about planned prices, whose equilibrium should be assured by the center with the suitable choice of the mutual relations of demand and supply.

O. Turek contributed to questions of prices with requirement on objectification value category, especially the category of prices. He refused the differentiable deliveries from the rough income, because these deliveries don't force companies to rational behavior. He requested objectification of the general terms of companies economy for which uniform deliveries from the rough income belonged. The other factor influencing the behavior of companies should be the prices determined by the market.

This idea was accepted in general plane by the most of the reformative economists. They agreed that free movement of prices cannot be implemented by a single application, but the changeover must be successive.

F. Fišer contributed notably to elaboration problems of central planning. He formulated a new conception of the macroeconomic plan. He elaborated the idea of adequate planning – planning tools must agree with the elected economic mechanism. O. Turek analysed the tree models of operating socialistic economy. His conclusion was that market relations in the economic system play a decisive role. He was engaged with idea of the relation between plan and price. According to him on the basis of planning decision there is necessary to determine prices.

Next discussing problems between the reformative economists were the problem with company managing. This question was discussed by R. Kocanda a P. Pelikán from VÚNP or L. Mlčoch. Kocanda and Pelikán promoted the autonomous solution. Mlčoch maintained that management of a decentralized company should be interested in a profit.

The reformative economists were head to foreign knowledge whereby they were overcoming the isolation of economy from the world economic science. In this area there was significant Czech publication of Poland economist W. Brus “Models of socialistic economy”. This book showed that problems of plan and market in the socialistic economy had been solving long ago in SSSR in the 1920s.

Economic thinking revision meant a radical shift of imaginings of the socialistic economic system functioning. In general plane the theory formulated also a new conception of the central plan as a basic for formation the economic government policy. The economic science in the 1960s was engaged with questions of an economic grow. The significant contribution for a statistic analytic work was studies from V. Nachtigal. These studies were engaged with problems of the national income. Nachtigal’s contribution is that the methodology of statistic returns system based on economic audits was changed into the internationally recognized methodology based on formation aggregates according to the national accounts system.

CONCLUSION

The described development of reformative economic thinking represented the main trend in the 1960s, with the direct linkage on formulation of the practise economic policy. Relations between theoretical data of reformative economic thinking and their practical application were long-lasting process. This process has not been ended even in time when the Warsaw armies burst violently into the CSSR in August 1968. During formation of the reform ideas on its rate and running was changing during the time. The reformative economists were engaged in mainly questions of pricing mechanism, a relation of market and plan, firm position. There were opinion disagreements between them. The form of the reform was not influenced only by the reformative economists, but also by the forceful pressure of the governmental apparatus. For other work of surveyed problems I think that it would be interesting to analyze in detail contribution of the one from the reformative economists.

BIBLIOGRAPHY

- [1] KAPLAN K.: *Kořeny československé reformy 1968*. 1. vydání Brno: DOPLNĚK, 2002. 428 s. ISBN 80-7239-135-6
- [2] KODET Z.: *Hmotná zainteresovanost v průmyslu*. Prah: SNTL. 1964
- [3] KOMENDA B., KOŽUŠNÍK Č.: *Některé základní otázky zdokonalení soustavy řízení národního hospodářství*. Politická ekonomie č. 3. 1964.
- [4] KORNAI, J.: *Economic of Shortage*. Amsterdam: český překlad EÚ ČSAV, 1981-1982.
- [5] MLČOCH, L.: *Institucionální ekonomie*. 2. vydání. Praha: Univerzita Karlova, 2005. 189 s. ISBN 8024610299
- [6] NACHTIGAL, V.: *Otázky dynamiky hospodářského rozvoje Československa v 60. až 80. letech*. Praha: Ekonomický ústav ČSAV, 1991. 125 s. ISBN 80-70006-068-9
- [7] ŠIK, O.: *Ekonomický růst, nerovnováhy a hospodářská politika*. 1. vydání Litera NOVA, 1991. 121 s. ISBN 80-901081-0-5
- [8] ŠIK, O.: *Ekonomika, zájmy, politika*. 1. Vydání Praha: Rudé právo, 1962. 593 s.
- [9] ŠIK, O.: *Plán a trh za socialismu*. 1. vydání Praha: Československé akademie věd, 1967. 366 s.
- [10] ŠULC, Z.: *Ideály, iluze a skutečnost*. 1. vydání Praha: Svoboda, 1968. 72 s.
- [11] ŠULC, Z.: *Stručné dějiny ekonomických reforem v Československu (České republice) 1945-1995*. 1. vydání Praha: Ediční středisko ČVUT, 1998. 118 s.
- [12] ŠULC, Z.: *Vize a skutečnost české transformace*. 1. vydání Praha: ČVUT, 2002. 153 s.
- [13] TUREK, O.: *Podíl ekonomiky na pádu komunismu v Československu*. 1. vydání Praha: Sešity Ústavu pro soudobé dějiny AV ČR, 1995. ISBN 80-85270-46-3

Zuzana Hrdličková
Masarykova univerzita
Ekonomicko-správní fakulta
Lipová 41 a
Brno 602 00
z.hrdlickova@mail.muni.cz

THE NOTION OF RATIONALITY IN ECONOMIC THEORY

Jana Chmelová

ANNOTATION

The conception of rationality lies in the foundations of modern economic theory. Rationality of human action presents the general presumption of the theory of decision-making. Nevertheless the form of conceptualization of the rationality remains questionable. The generalization of the term of rationality represents an important question from the reason, that economic theory makes recommendations to the policy. And if the rationality is unreal and empirical unconfirmed, then realized institutional reforms can tend to another (sometimes undesirable) ends. The aim of this contribution is to briefly sketch the presumptions of conventionally received definition of rational action and classical objections to this notion. The classical objections lead to emergence of alternative theories of the rationality of action. The contribution is devoted to evolutionary approach (Armen Alchian), another approach represents limited rationality (Herbert A. Simon) and Austrian school (Ludwig von Mises).

KEYWORDS

rationality; evolutionary analysis; behavioural approach; Austrian rationality of human action

The conception of rationality lies in the foundations of modern economic theory. Nevertheless the form of conceptualization of the rationality remains questionable.¹ The rationality in classic economics means the choice of optimal means to attainment given ends.² Many open questions within problems of grasping the term of rationality concern, in particular, with empirical relevance. Some economists agree with the attitude requiring the acceptance of the notion of limited rationality. Simultaneously it is recommended to devote more attentions to effects and impacts of ever-present element of uncertainty on economic subjects' decision-making process. This opinion is not received as universal.

Rationality of human action presents the general presumption of the theory of decision-making.³ The rational behavior seems to be more profitable: we will be wealthier, if we behave rational. This argumentation leads to the term of optimalization. The economics also tries to describe and predict economic behavior. Hence it has a need of some consistency in behavior of economic subjects. It is assumed that the relationship remains still constant and the behavior, on which the prediction is engineered, remains consistent in the future with it, which has been in the past. We believe people act with definite kind of systematic way. If we find out what this systematic way is, we can improve the science of the positive economics. The theories based on this line of argumentation have achieved greater success in the past than theories based on the alternative presumptions.

The aim of this contribution is to briefly sketch the presumptions of conventionally received definition of rational action and classical objections to this notion. The classical objections lead to emergence of alternative theories of the rationality of action. The contribution is devoted to evolutionary approach (Armen Alchian), another approach represents limited

¹ Gerrard, B.: *The Economics of Rationality*. London, Routledge 1993. 203 s. ISBN 0-415-06875-4

² Economic behavior consists of subjects' actions striving after the optimalization with respect to exactly defined objective function.

³ Hey, J. D.: *Rationality is as rationality does*. in Gerrard, B.: *The Economics of Rationality*. London, Routledge 1993. 203 s. ISBN 0-415-06875-4

rationality (Herbert A. Simon) and Austrian school (Ludwig von Mises). These theories concern with process of subjects' decision-making process and take account of uncertainty. The exact delimitation and understanding of the rationality of different theoretical approaches lead to determination of the abstraction level, on which individual economists move. Moreover, the generalization of the term of rationality represents an important question from the reason, that economic theory makes recommendations to the policy. And if the rationality is unreal and empirical unconfirmed, then realized institutional reforms can tend to another (sometimes undesirable) ends. So it is convenient to view on the reality of theories' assumptions.

The paper's structure corresponds with given aim. The initial introduction in problems of rationality in classical conception is followed by the estimation of the evolutionary approach's presumptions and then the behavioral and subjective approach. Every alternative suffers from certain shortcomings and these shortcomings lead to the statement that it is not to obtain logically maintainable rationality, which would be valid for all economic subjects in every time and in all situations.

This contribution treats the subject matter on theoretical basis. The description of theoretical view points of different economic schools will be employed in the paper. Some extent will be devoted to comparison of economic approaches to find out the different/identical features related to surveyed issue. The axiomatic-deductive method of Austrian school will emerge in the contribution, too. The synthesis will be employed to summarize the surveyed issue.

THE CONVENTIONAL NOTION OF RATIONALITY

The proponents of the main approach in economics proceed from the conventional definition of the rational economic behavior. The term of rational behavior means the action, when a human being at given preferences maximizes self-profit at constraints of minimal costs.⁴ The automatic mechanism of classic economics considers the individual always for rational, so the agent knows what he wants; he wants what he knows.⁵ This hypothesis is characterized by deviation from reality.

The apt summary of neoclassical presumptions of behavior has brought Sidney Winter⁶:

- I. the economic world is viewed as being in equilibrium (statical approach)
- II. individual economic actors repeatedly face the same choice situations (or sequence of very similar choices)
- III. the subjects have stable preferences – they assess the outcomes of their choices according to stable criteria
- IV. any individual subject could identify and grasp any available opportunity for improving outcomes (by virtue of repeated situations)
- V. hence no equilibrium can arise in which individual actors fail to maximize their preferences
- VI. if the world is in approximate equilibrium, it displays at least approximately patterns employed by the assumptions that the actors are maximizing
- VII. the details of adaptive process are complex and probably actor and situation specific. On the contrary, the regularities associated with optimalization equilibrium are relatively

⁴ Hindls, R. – Holman, R. – Hronová, S. a kol.: *Ekonomický slovník*. Praha, C. H. Beck 2003. 519 s. ISBN 80-7179-819-3. str. 331

⁵ Baudin, L: *Irrationality in Economics*. The Quarterly Journal of Economics, Vol. 68, No. 4 (Nov., 1954), pp. 487-502. [online]. Dostupné z: <<http://www.jstor.org/stable/1881874>>. [cit. 2008-10-06]

⁶ North, D. C. (1990): *Institutions, Institutional Change and Economic Performance*. Cambridge, Cambridge University Press 1990.152 s. ISBN 0-521-39734-0.

simple. The inquiry of these regularities on the theoretical base infers some advance in economic theory.

The mentioned presumptions are possible to summarize to the statement, that the actor is rational if he is able continuous and global consideration devoted to behavior (comprehensive of wide data' scope). In such case, it enables subject to decide and monitor his own action. It is acceptable assumed about actors that they are rational, because rational entities are more effective and effective elements dispose of more suitable assumptions to survival.⁷

The basic objections against the conventional assumptions of rationality are repeated in history of economic thought all the time. It is possible to say thought the individuals are confronted with many repeated situations, they face many unique and unrepeatable choices, in which information is incomplete and outcomes are uncertain. Preferences change in time. And actors would certainly like to improve outcomes, but the information feedback may be so poor that the actor cannot identify better alternatives.⁸ The simple notion of utility or profit maximalization would not be employed to situations, in which optimal action depends on uncertain events of the environment or actions of other rational subjects.⁹ Also a lack of explanatory force, that is an inability to explain how are made decisions (due to unrealistic nature of assumptions), leads to the statement, that rational choice is inadequate.¹⁰

These and many other objections lead to building of alternative theory of rational action, which takes account of the uncertainty and incomplete information of economic subjects, or limited subjects' capacity to treat information. In economics a new branch of thought emerges which makes use of evolutionary arguments for explanation of uncertain and incomplete information in economic subjects' decision-making.

EVOLUTIONAL THEORY OF ARMEN A. ALCHIAN¹¹

Armen Alchian has modified economic analysis by incorporation of incomplete information and uncertain foresight. The suggested approach embodies the principles of biological evolution and natural selection by interpreting the economic system as an adoptive mechanism which chooses among explanatory actions generated by the adaptive pursuit of "success" or "profit".

In the environment of uncertainty it is not possible quite exactly to estimate the impacts of decisions for future. Uncertainty arises from two reasons: imperfect foresight and human inability to solve complex problems containing a host of variables. In uncertainty potential outcomes are overlapping. The decisions become the choice from set of potential activity outcomes.

⁷ Hodgson, G. M.: *Calculation, Habits and Action*. in Gerrard, B.: *The Economics of Rationality*. London, Routledge 1993. 203 s. ISBN 0-415-06875-4

⁸ North, D. C. (1990): *Institutions, Institutional Change and Economic Performance*. Cambridge, Cambridge University Press 1990. 152 s. ISBN 0-521-39734-0.

⁹ Simon, H. A.: *Rationality as Process and as Product of Thought*. The American Economic Review, Vol. 68, No. 2. [online]. Dostupné z: <<http://www.jstor.org/stable/1816653>>. [cit. 2008-10-13]

¹⁰ Gerrard, B.: *Beyond the Logical Theory of Rational Choice*. In Gerrard, B.: *The Economics of Rationality*. London, Routledge 1993. 203 s. ISBN 0-415-06875-4

¹¹ Alchian, A. A.: *Uncertainty, Evolution and Economic Theory*. The Journal of Political Economy, Vol. 58, No. 3. (Jun., 1950), pp. 211-221. [online]. Dostupné z: <<http://links.jstor.org/sici?sici=00223808%28195006%2958%3A3%3C211%3AUEAET%3E2.0.CO%3B2-K>>. [cit. 2008-10-12]

There is no meaningful criterion for selecting the decision that will „maximize profits“ in the presence of uncertainty (a necessary condition for existence of profits). The realization of profits represents the criterion in an economic system according to the successful and surviving firms are selected. Realized positive profits, not maximum profits, are the mark of success and viability. Positive profits accrue to those who are better than their actual competitors. Judgments and opinions of people will differ under condition of uncertainty. The pursuit of profits is relevant aim whose fulfilment is rewarded by survival.

The author distinguishes two forms of adaptive behavior: imitation and process of „trial and error“. Uncertainty provides an excellent reason for imitation of observed success. Any innovation comes either as a consequence of imperfect imitation of successful firms or conscious actors' action. Worse solution is eliminated gradually by process of evolution. Alchian asserts the process tends not always towards attainment of optimal solution. To realize an optimal solution, two conditions must be satisfied: a trial must be classifiable as a success or failure (the position achieved must be comparable with results of other potential actions) and continuous growth toward some optimum without interventions and external shocks. Comparability of resulting situations is destroyed by the changing environment.

It seems evolutionary theory abandons the idea of deliberation and choice which Robbins and others had considered as central point (in orthodox biology, evolution is blind and unintended process).¹² It is convenient to answer the question, whether this „evolutionary“ theory is applicable to consumers as well as to firms. If evolutionary theory depends on the assumption of survival, it is applicable to firms because some forms survive and others go out of existence. But what about consumer? If non-rationality simply means inconsistent preferences, there is no obvious reason to assume that a „rational“ consumer will have a superior survival value in socio-economic evolution.¹³ Moreover, „evolutionary“ process cannot be an optimizing one because for evolution to work there must always be a variety from which to select.

Optimization implies finality and the attainment of equilibrium. By contrast, modern biological idea of evolution involves variety, change, process and an open conception of unfolding time. It is evident, that evolutionary theory is not sufficient for explanation of rational action of economic actors. Evolutionary argument for rationality has serious limitations. Thus behavioural analysis represents certain alternative.

HERBERT SIMON'S BEHAVIOURAL ANALYSIS

Herbert Simon emphasizes that economics is the study of rational allocation of scarce resources.¹⁴ The term „rational“ has long had in economics a much more specific meaning than its general dictionary signification of „agreeable to reason; intelligent, sensible“. In general it is accepted, the rational man of economics is a maximizer who will settle for nothing than the best. Even his expectations are rational (John Muth, 1961). What economists have to export is not rationality, but a very particular and specific form of it: the rationality of the utility maximizer.¹⁵

¹² Hodgson, G. M.: *Calculation, Habits and Action*. In Gerrard, B.: *The Economics of Rationality*. London, Routledge 1993. 203 s. ISBN 0-415-06875-4

¹³ It seems Hayek has accepted both possibilities: „competition will make it necessary for people to act rationally to maintain themselves ... a few relatively more rational individuals will make it necessary for the rest to emulate them in order to prevail“. vide Hodgson, G. M.: *Calculation, Habits and Action*.

¹⁴ Simon, H. A.: *Rationality as Process and as Product of Thought*. The American Economic Review, Vol. 68, No. 2. [online]. Dostupné z: <<http://www.jstor.org/stable/1816653>>. [cit. 2008-10-13]

¹⁵ Orthodox theory often assumes the subjects „are selected“ as optimizers through some darwinian process „survival of the fittest“.

Author believes almost all human behavior has a large rational component, but only in terms of the broader everyday sense of rationality, not in economic specialized sense of maximization. He shows that economics itself has largely been preoccupied with the results of rational choice rather than the process of choice. As economic analysis devotes much attention to the dynamics of choice under uncertainty, it will become more and more essential to consider choice processes.

Simon asserts that we accept values as given and consistent, simultaneously we require an objective description of the world (as it really is) and unlimited computational ability of decisionmaker, we do not need to distinguish between the real world and the decisionmaker's perception of it (he perceives the world as it really is).¹⁶ Moreover, we can predict the choices of rational decisionmaker entirely from our knowledge of the real world and without a knowledge of the decisionmaker's perceptions or modes of calculation.

If we accept the proposition, that the knowledge and the computational power of the decisionmaker are limited, then we must distinguish between the real world and the decisionmaker's perception of it and a reasoning about it. We must construct a theory (and test it empirically) of the processes of decision. The theory must include not only the reasoning processes but also processes that generate the actor's subjective representation of the decision problem, his frame.

Simon's statement captures the essence why the subjective and incomplete processing of information plays a critical role in decision making.¹⁷ It explains the attitude, based on subjective perceptions of reality, playing a major part in human beings' choices. It brings into forefront the complexity and incompleteness of our information and the efforts of understanding. It focuses on the need to develop regularized patterns of human interaction. To explain the economic subjects' behavior in the face of such complexities, the theory must describe the subject as something much than monotonous, adaptive organism; it must incorporate at least some description of processes and mechanisms through which the adaptation takes place.

Simon requires that we must give an account not only of substantive rationality, that is the extension which appropriate courses of action are chosen, but also procedural rationality that is the effectiveness, in the light of human cognitive powers and limitations, of the procedures used to choose actions.¹⁸ As economics concerns with situations of increasing cognitive complexity, it must take account of ability of actors to cope with the complexity, and hence procedural aspect of rationality. Procedural rationality supplements substantive rationality.

Substantive rationality assumes that people's choices are well informed and directed towards unambiguous goals involving individual maximands.¹⁹ Hence substantive rationality views the utility function as a simple maximand. It assumes that relevant information is at least equally accessible to all market participants, if not costless, and does not view decision making as a constraining input at the individual level. This conception of rationality views

¹⁶ North, D. C. (1990): *Institutions, Institutional Change and Economic Performance*. Cambridge, Cambridge University Press 1990.152 s. ISBN 0-521-39734-0.

¹⁷ North, D. C. (1990): *Institutions, Institutional Change and Economic Performance*. Cambridge, Cambridge University Press 1990.152 s. ISBN 0-521-39734-0.

¹⁸ Simon, H. A.: *Rationality as Process and as Product of Thought*. The American Economic Review, Vol. 68, No. 2. [online]. Dostupné z: <<http://www.jstor.org/stable/1816653>>. [cit. 2008-10-13]

¹⁹ Ley, R. D. – Johnson, L. E.: *Both the Orthodox and the Heterodox must be able to explain the Origin and Significance of Values*. American Journal of Economics and Sociology, Vol. 49, No. 4 (Oct., 1990), pp. 469-481. [online]. Dostupné z: <<http://www.jstor.org/stable/3487542>>. [cit. 2008-10-13]

maximizing one's self-interest as a proper and descriptive end of human action (Sen, 1987). Any ends that cannot be explained in terms of self-interest are judged irrational and rejected.

Procedural rationality is satisfied when behavior is the outcome of „appropriate deliberation“ rather than impulse.²⁰ Rationality may refer to any thoughtful, reasoned recommendation or action. That is, it may refer to anything which is the outcome of a rational process. Procedural rationality is not irrationality, but recognizing people's limited computational capacity (Simon 1985) and the fact that cognition is culturally specific (Hodgson 1985) suggests that human action may not systematically maximize anything.

Agents follow rules and standard operating procedures which are used to search out an alternative that satisfies some aspiration level.²¹ Agents are satisficers rather than optimizers. The search process comes to an end when a satisfactory alternative is identified. Agents do not continue to seek indefinitely for the best alternative.

The term of limited rationality is used to determination of rational choice which takes account of cognitive limitation of decision-maker, that is limited knowledge and computational capacity.²² For Simon, complexity equals incompleteness of the information.²³ If agents do not possess perfect information about situation of choice, then an interpretative problem arises. Agents must interpret the available information in the context of some set of presuppositions about the choice situation. Different interpretations are possible. Agents face a situation of uncertainty. This is another aspect of complexity. Thus agent's information set contains knowledge in the form of a set of justified partial beliefs about the possible nature of the world. This knowledge is not objective but a matter of interpretation. As such it is not accurate. The partial and not accurate nature of knowledge is the defining characteristic of a situation of uncertainty.

Simon's behaviouralist analysis has also emphasized the functional necessity of decision-making rules.²⁴ An evolutionary approach goes further and considers the origin of those rules and the combined effects of individual decisions within economic system as a whole.

The central limitation of the behavioural research program is that it focuses almost exclusively on the decision-making of the given individual agent. Two important aspects are thus neglected: insufficient attention is given to the processes through which actors' rules may be created or changed through time; nonconforming room is devoted to the unintended consequences, that result from the actions of agents interacting with one another. Thence it follows behavioural approach is not convenient as a central base.

²⁰ Ley, R. D. – Johnson, L. E.: *Both the Orthodox and the Heterodox must be able to explain the Origin and Significance of Values*. American Journal of Economics and Sociology, Vol. 49, No. 4 (Oct., 1990), pp. 469-481. [online]. Dostupné z: <<http://www.jstor.org/stable/3487542>>. [cit. 2008-10-13]

²¹ Gerrard, B.: *Beyond the Logical Theory of Rational Choice*. In Gerrard, B.: *The Economics of Rationality*. London, Routledge 1993. 203 s. ISBN 0-415-06875-4

²² Simon, H. A.: *Models of Bounded Rationality: Empirically Grounded Economic Reason – Volume 3*. Cambridge, Mass.: MIT Press 1987. 456 s. ISBN 0-262-19372-8 – vybrané kapitoly.

²³ Gerrard, B.: *Beyond the Logical Theory of Rational Choice*. In Gerrard, B.: *The Economics of Rationality*. London, Routledge 1993. 203 s. ISBN 0-415-06875-4

²⁴ Hodgson, G. M.: *Calculation, Habits and Action*. In Gerrard, B.: *The Economics of Rationality*. London, Routledge 1993. 203 s. ISBN 0-415-06875-4

THE AUSTRIAN ATTITUDE TO RATIONALITY OF HUMAN ACTION

Each science specifies, implicitly or explicitly, the level of reality in which it is interested.²⁵ „Levels“ demarcate the different aspects of what might be considered the same phenomena. The level of reality, standing in the center of Austrian approach, represents the realm of purposes, plans, valuations and expectations. That is the realm of subjective meaning. This world of subjective meaning is inextricably bound up with the world of everyday life. Recognition of the realm of subjective meaning is therefore a prerequisite for understanding of human action.

For Austrian approach, the action is purposeful. There is no human action without purpose.²⁶ The Austrian school, in general, positions all human action in the same category, that of „conscious, active or creative choice“. Mises re-defines action as that which determines the course of events.

For Mises the term „rational“ means the outcome of uses of characteristic human mental processes through which a man strives to connection all his thoughts deliberately, coherent and purposeful as it is possible in order to planning of attainment of desired ends.²⁷ Consequently, all deliberate human action, without no respect of its fitness or unfitness to the desired ends‘ attainment, are rational.

Economics is a theoretical science about means employed to chosen ends‘ attainment, not a science about the choice of ends. The action equals to use of the means to achievement of the ends. To do nothing and be idle, it is action too, it determines also a course of events. The human being proves to suppress the emotions and instincts. He proves to rationalise his behavior. The man arranges his wishes and desires into the scale, chooses and acts. The human action is necessarily the rational action.

The expressions of rational and irrational in the connection of ultimate ends of action are unfit and nonsensical. Because praxeology²⁸ does not judge actions, it is not in a position to regard any act as „irrational“. ²⁹ He recognizes that all acts of the choice have their meaning for an individual decision-maker on the base of some end and purpose, being strange or transient, which guide his action: „The idea of an action not in conformity with needs is absurd“. Mises very rightly says that a goal is always considered rational by the person who has chosen it, since it reflects a value judgment; our definition is concerned with the means and not with the end.³⁰ Praxeology does not address the content of individual preferences or the particular motives that give rise to those preferences. It is concerned with the the pure logic of choice.

When the expressions of rational or irrational are employed to means to achievement of the ends, it represents a judgment about fitness or adequacy of used procedures. It is a fact, the human reason is not infallible and the actor in the process of choice and use of means very often errs. The action, that is not suitable for achievement of pursued end, does not fulfill the expectations. It stands against its purpose, but it is rational – it means it is the outcome of

²⁵ O Driscoll, Gerald P. – Rizzo, Mario J.: *The Economics of Time and Ignorance*. London, Routledge 1996. 256 stran. ISBN 0-415-12120-5

²⁶ Hodgson, G. M.: *Calculation, Habits and Action*. In Gerrard, B.: *The Economics of Rationality*. London, Routledge 1993. 203 s. ISBN 0-415-06875-4

²⁷ Mises, L.: *Lidské jednání: Pojednání o ekonomii*. Praha, Liberální institut 2006. 959 stran. ISBN 80-86386-45-6

²⁸ Praxeology is a universal theory about logic of human choice.

²⁹ Selgin, G.A.: *Praxeology and Understanding: An Analysis of the Controversy in Austrian Economics*. Ludwig von Mises Institute. [online]. Dostupné z: <mises.org/books/prax-and-understanding.pdf>. [cit. 2008-08-22]

³⁰ Baudin, L.: *Irrationality in Economics*. The Quarterly Journal of Economics, Vol. 68, No. 4 (Nov., 1954), pp. 487-502. [online]. Dostupné z: <<http://www.jstor.org/stable/1881874>>. [cit. 2008-10-06]

reasonable, though erroneous, consideration and attempt of achievement of particular end. Action is necessarily rational because the notion of purpose carries with it invariably the implication of requiring the selection of the most reasonable means for its successful fulfilment.

Even an ordinary man makes a decision. He decides on acceptance of conventional patterns or patterns of the other people, because he believes this procedure is the fittest alternative for his well-being. Most of the everyday human behaviour is a routine. The individual obtains some habits, he creates the automatic reactions. He employs these habits because of their effects. The fact, the action takes place under normal conditions as if spontaneously, does not mean that this situation arises in terms of deliberative decisions and intentional choice.

At the root of the notion of human action is the simple assumption that human reason plays a role in every action.³¹ The concept of human action depends on the introspectively valid fact that there is a form of conduct that is specifically human, i.e., the conduct that is accompanied by the consciousness of volition.

Economizing consists in the allocation of scarce resources among competing ends. Acting, in the praxeological sense, consists in selecting a pattern of behaviour designed to further the actor's purposes. A concept of rationality exists for praxeology only as the expression of human purposes. In the praxeological view, action is rational by definition. Man's actions are not haphazard, but are expressions of a necessity for bringing means into harmony with ends. It seems that the Austrian approach reflects best the substance of the reality of human action.

CONCLUSION

The most interesting epistemological datum for economic theory is that we actually know that maximum efficiency is achieved through ideal allocation of allocable resources and we also know that no individual achieves this maximum.³² This divergence results from the ignorance, error and „prejudice“ in the innumerable forms of effect of real choices. There exist many causes and respects in which neoclassical paradigm is not adequate.³³ Its abstraction level is too high and no efforts are taken to reduce it. This reduction might lead to approximation to reality. The alternative interpretations of rational action lead to the statement that it is not possible to obtain logical maintainable rationality, which would be valid for all people in every time and in all situations.

BIBLIOGRAPHY

- [1] Alchian, A. A.: *Uncertainty, Evolution and Economic Theory*. The Journal of Political Economy, Vol. 58, No. 3. (Jun., 1950), pp. 211-221. [online]. Dostupné z: <<http://links.jstor.org/sici?sici=00223808%28195006%2958%3A3%3C211%3AUEAE T%3E2.0.CO%3B2-K>>. [cit. 2008-10-12]
- [2] Baudin, L.: *Irrationality in Economics*. The Quarterly Journal of Economics, Vol. 68, No. 4 (Nov., 1954), pp. 487-502. [online]. Dostupné z: <<http://www.jstor.org/stable/1881874>>. [cit. 2008-10-06]

³¹ Kirzner, I. M.: *The Economic Point of View*. Mises Institut. [online]. Dostupné z: <mises.org>. [cit. 2008-10-06]

³² Knight, F. H.: „*What is Truth*“ in *Economics*? The Journal of Political Economy, Vol. 48, No. 1 (Feb., 1940), pp. 1-32. The University of Chicago Press. [online]. Dostupné z: <<http://www.jstor.org/stable/1825908>>. [cit. 2008-10-06]

³³ Lavoie, D.: *Expectations and the Meaning of Institutions: Essays in Economics* by Ludwig Lachmann. London: Routledge, 1994. 331 s. ISBN 0-415-10712-1

- [3] Hindls, R. – Holman, R. – Hronová, S. a kol.: *Ekonomický slovník*. Praha, C. H. Beck 2003. 519 s. ISBN 80-7179-819-3. str. 331
- [4] Hey, J. D.: *Rationality is as rationality does*. in Gerrard, B.: *The Economics of Rationality*. London, Routledge 1993. 203 s. ISBN 0-415-06875-4
- [5] Hodgson, G. M.: *Calculation, Habits and Action*. in Gerrard, B.: *The Economics of Rationality*. London, Routledge 1993. 203 s. ISBN 0-415-06875-4
- [6] Gerrard, B.: *The Economics of Rationality*. London, Routledge 1993. 203 s. ISBN 0-415-06875-4
- [7] Kirzner, I. M.: *The Economic Point of View*. Mises Institut. [online]. Dostupné z: <mises.org>. [cit. 2008-10-06]
- [8] Knight, F. H.: „*What is Truth*” in *Economics?* The Journal of Political Economy, Vol. 48, No. 1 (Feb., 1940), pp. 1-32. The University of Chicago Press. [online]. Dostupné z: <<http://www.jstor.org/stable/1825908>>. [cit. 2008-10-06]
- [9] Lavoie, D.: *Expectations and the Meaning of Institutions: Essays in Economics* by Ludwig Lachmann. London: Routledge, 1994. 331 s. ISBN 0-415-10712-1
- [10] Ley, R. D. – Johnson, L. E.: *Both the Orthodox and the Heterodox must be able to explain the Origin and Significance of Values*. American Journal of Economics and Sociology, Vol. 49, No. 4 (Oct., 1990), pp. 469-481. [online]. Dostupné z: <<http://www.jstor.org/stable/3487542>>. [cit. 2008-10-13]
- [11] Mises, L.: *Lidské jednání: Pojednání o ekonomii*. Praha, Liberální institut 2006. 959 stran. ISBN 80-86386-45-6
- [12] North, D. C. (1990): *Institutions, Institutional Change and Economic Performance*. Cambridge, Cambridge University Press 1990. 152 s. ISBN 0-521-39734-0.
- [13] O’Driscoll, Gerald P. – Rizzo, Mario J.: *The Economics of Time and Ignorance*. London, Routledge 1996. 256 stran. ISBN 0-415-12120-5
- [14] Selgin, G.A.: *Praxeology and Understanding: An Analysis of the Controversy in Austrian Economics*. Ludwig von Mises Institute. [online]. Dostupné z: <mises.org/books/prax-and-understanding.pdf>. [cit. 2008-08-22]
- [15] Simon, H. A.: *Theories of Decision-Making in Economics and Behavioral Science*. The American Economic Review, Vol. 49, No. 3. (June, 1959). pp. 253-283. [online]. Dostupné z: <<http://www.jstor.org/stable/1809901>>. [cit. 2008-01-01]
- [16] Simon, H. A.: *Rationality as Process and as Product of Thought*. The American Economic Review, Vol. 68, No. 2, Papers and Proceedings of the Ninetieth Annual Meeting of the American Economic Association (May, 1978), pp. 1-16. [online]. Dostupné z: <<http://www.jstor.org/stable/1816653>>. [cit. 2008-10-13]
- [17] Simon, H. A.: *Models of Bounded Rationality: Empirically Grounded Economic Reason – Volume 3*. Cambridge, Mass.: MIT Press 1987. 456 s. ISBN 0-262-19372-8 – vybrané kapitoly.

Address

Ing. Jana Chmelová

76118@mail.muni.cz

Ekonomicko-správní fakulta, Masarykova univerzita

Lipová 41a, Brno

KNOWLEDGE MANAGEMENT AS A DRIVING TOOL OF MACROECONOMIC DEVELOPMENT

Sarath Kumara Idirisinghe Idirisinghe Mudiyansele, Pavel Ondrcka

ANNOTATION

In the world priorities are changing time to time. Earlier material resources played major role in the development process of the countries. But today it has changed into knowledge bases and knowledge bases have become as one of the most important resource to the world. The problem of the world today is the disparity of knowledge distribution among countries due to the resource gaps. These knowledge gaps and resource gaps were aggravated with different ruling systems in the world. This has resulted to fail both socialist system as well as capitalist system. Therefore time has come for us to think different way to find solution for this crisis. In this process new knowledge based development strategies will help to gear world into proper direction.

KEY WORDS

Macroeconomic Development, Sustainable development, Aggregate Demand, Aggregate Supply, Knowledge management, Knowledge society, Resource pool,

INTRODUCTION

Globalization has become a challenge to development policies of individual countries as most of the activities of those countries are linked with global resources and global market. As these individual countries have to cater the demand of global customer, individual countries has to design their policies to match with the requirement of global customer network. In this process resource management systems have contributed enormously to increase the efficiency and productivity of individual production processes. The evolution process of management system marked from process management from input to output and quality control (QC), total quality control (TQC), total quality management (TQM), business process reengineering (BPR), Knowledge Management (KM) and outsourcing the production process. As the global resources are becoming scarcer than earlier these management aspects should be broaden to address development issues of individual countries.

In the process of development sustainable development as being the global scenario of development process of present world, almost all the countries are making efforts to contribute for that. The World commission on Environment Development (Brundtland Commission) in 1977 has defined the sustainable development as "meets the needs of the present without compromising the ability of future generations to meet their own needs"⁹. The United Nations 2005 World Summit Outcome Document, refers to the "interdependent and mutually reinforcing pillars" of sustainable development as economic development, social development, and environmental protection"¹⁰. This has become as very important issue to the present world as world has faced crisis situation due to resource shortage such as fuel, foods, drinking water, space to live, and most of basic needs for the people due to the increasing population. The world poverty line accepted by World Bank, the reference level for per day spending range for consumption is \$1 and \$2. According to the estimates in year 2001, 1.1 billion people had a consumption level below \$1 per day and 2.7 billion lived on less than \$2 per day for their consumption⁵. According to the report of World Vision, more than 26,000 children under the age of 5 die every day due to preventable poverty, disease and due to hunger. In year 2006 estimated child death (under 15 years) was 380,000 and also has been

estimated that 15.7 million children will be orphaned by AIDS in sub-Saharan Africa³. Further to the United Nations Environmental Centre, the global population will be 10 billion in year 2050 and process managers have to produce four to ten times as much food and 10 to 30 times as much energy requirement for the expected population⁷. Also Millennium Development Goals (MDGs) have been targeted to reduce extreme poverty to halting the spread of HIV and AIDS and providing universal primary education, all by the target date of 2015 and a blueprint agreed by the entire world's countries and leading development institutions³.

Although production process management of some countries has achieved considerable improvement in the management level they have not contributed to address the needs of the people of the above category. It is true that increase of resource use efficiency contributes to protect world resource base but the knowledge distributions to different locations have not been satisfactory. Therefore to strengthen the process there should be mechanism to share available knowledge and to manage the knowledge to address the development issues.

OBJECTIVES OF THIS PAPER

1. Is to identify the mechanism to share the available knowledge bases among countries for the betterment of each countries
2. To stress the possibilities of using knowledge bases to govern fiscal policies and achieve sustainable development of the countries

METHODOLOGY AND DATA

Paradigm will be developed using literature based evidences through inductive approach.

RESULTS

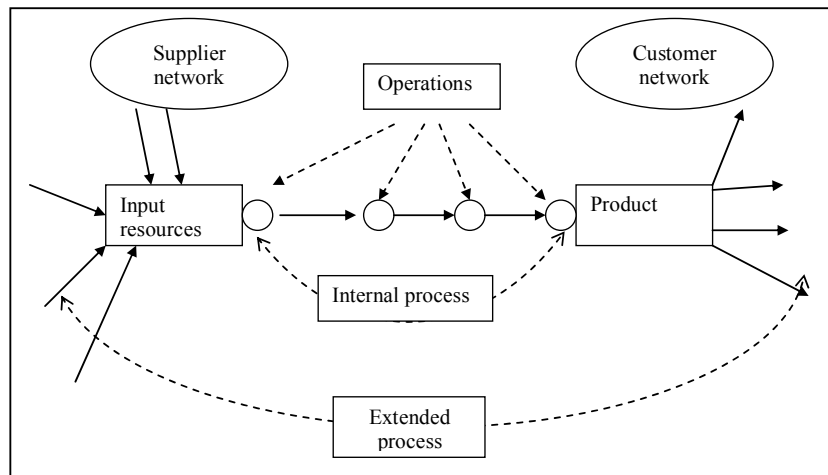
Knowledge management and production process

Known history of management process goes back to six thousands years. In this era civilization existed known as Sumarians in Sothern part of Mesopotamia above the Persian Gulf. This culture was rich with the knowledge of stars and planets, an enormous mathematical knowledge, agriculture, the art of building aqueducts, knowledge about how to control community, manipulating, town and other matters and how to build gold mines⁴. Knowledge is defined as purposeful coordination of actins^{7,10}. Knowledge can be data, simple facts or figures. These data can be transformed in to information and information can be transform into knowledge, wisdom. In the process of knowledge management the structure of knowledge management should be sufficiently broad to cover customer value management, quality improvement through knowledge management, change management process and benchmarking as a specific tool⁷.

Figure 1 depicted the basic product, process and possible networks in the production process. In this network from supplier network to customer network improvement of efficiency of each chain is very important. If knowledge bases provide the incentives to make easier this links it will enhance the efficiency of the system.

Economic performances of a country are mainly depending on the success of these individual production processes. Many factors will contribute for the success of this production process. If considered the whole economy, fiscal policies are very important. Mainly national output will decide the equilibrium level of Aggregate Demand and Aggregate Supply.

Figure 1: Production and services delivery process



Source: Zeleny, M 2007⁹

An important issue in growth economics is the contribution of different factors such as capital, labour and technology to drive the economic growth. Robert Solow and Meade J E (1956) developed the neoclassical growth model with two factor production function with capital and labour determinant of output. Besides it added exogenously determined factor, technology into production function of a country¹. The long run aggregate output or real Gross Domestic Product (GDP) of an economy depends on mainly three factors viz; a. the quantity of available labour (L), b. the stock of capital (K), and c. the state of technology (A).

Aggregate production function is written as $Y = AF(K, L)$

As mentioned in the equation, there are three main forces which can shift the aggregate output of an economy. Labour is an important resource of production. Over time, given capital stock and the state of technology potential GDP will increase as full-employment quantity of labour force increases leading to shift the aggregate supply curve to the right. Similarly human capital and physical capital brings about increase in potential GDP and causes shift in the long-run aggregate supply curve.

At present most important consideration in the world is resource limitation. Progress in technology enables firms to produce more from given resources. Empirical research studies have shown that technological progress is by far the most important source of increase in GDP over past two centuries¹. This is due to the advances in technology that a modern worker, both industrial and agriculture produce many times output than the older times. Even with fixed quantities of labour and capital, progress of technology raises potential GDP and causes in shift in the long run aggregate supply curve to the right¹.

Above literature has clearly emphasized the importance of new technologies or new knowledge for a country to improve their performance of an economy. Specially, these knowledge bases are very important for developing nations to adjust their economic activities. Therefore it is worth to share the knowledge with other countries to create playing field environment to the producers to play their role without disturbances. Fiscal policy frameworks should be varied from country to country depending on the needs of particular

country and they have to select appropriate policies to handle their resource levels. In this process knowledge generated in the outside can play significant role to drive economies in correct direction.

Benchmarking and establishment of knowledge bank

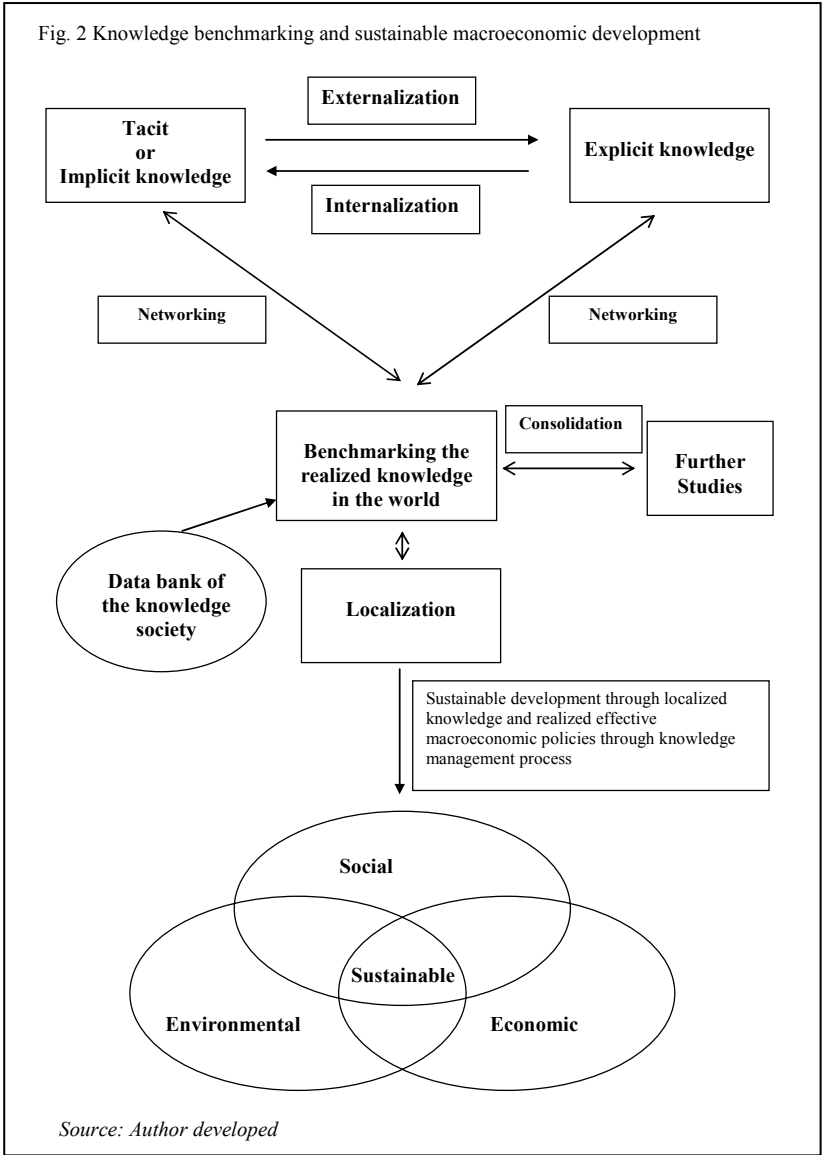
“The mission of science is not only to know the objects but to form a system of knowledge about objects that are transformed through knowledge into the complexes of individual sciences; but to use the acquired knowledge in favour of the long term sustainable development of human society”⁴.

According to the model developed by Professor I Nanaka, explains the path of transferring tacit and implicit knowledge into explicit knowledge through externalization and explicit knowledge transfer into tacit knowledge thorough internalization⁷. Also he has further explained the improvement process of explicit knowledge as consolidation. At present this knowledge transformation process has become the main concern of most of leading institutions in the world and literature revealed that this has created favourable environment inside and outside those institutions. “Knowledge is the currency of Hewlett-Packard and faster we can acquire knowledge and move it around our organization, the better we will create extraordinary value for our clients”⁶.

The main problem in this process is that all these knowledge bases have confined to the limited number of institutes in the world and they are benefiting. Almost all the networks are targeting on these highest performers and the activities are planned to address their requirements. This has worsened the existing disparity situation in the world and few leading companies have started to handle most of business activities by gaining high competitive advantages through reducing their maintenance cost. The problem with the developing countries is that they are far behind the knowledge gaining process and the knowledge adoption process. Therefore it is high time to address the issue of creating mechanisms to share the available knowledge among developed and developing countries.

One way of facilitating the needs of developing nations is by creating organized knowledge pool or knowledge bank with benchmarking the finding. This will open the path for all nations to use the available knowledge and also to localize (adopt the knowledge according to the requirement of the particular nation) the available knowledge to convert the usable form in particular location. Also this will provides opportunities to further modifications of above level of knowledge. Figure 2 explains the possible linkages to create knowledge bank with benchmarked knowledge.

The model explains the conversion process of tacit knowledge into explicit knowledge and some explicit knowledge into implicit knowledge. As this knowledge is confined to few locations it should be transferred into central database or knowledge bank. The knowledge bank will categorize the realized knowledge and benchmark the available knowledge. This knowledge can further use to create explicit knowledge or can use by the different people in the world for their benefits. Author named this process as localization. As we are living in the age of networking this process is very easy and very effective. There should be one knowledge pool in the hand of knowledge society and that should provided links to all the nations. This does not mean that all produced knowledge should be delivered free of charge but there should be an indication in the knowledge base the level of knowledge realized and the available places. It is true that present data bases available through world



wide web provides comprehensive level of literature for the researchers and other searchers but it is not in an order and the information have spread in different data bases. Also most of the important information is hidden as tacit knowledge in some locations. Therefore there should be a pooling mechanism in the knowledge creating process. To strengthen this process strategies like; a. Start reward system for contributors to the knowledge bank, b. give recognition to the contributors, c. creating exchange links with the contributors to the data bank, d. categorize the available information according to the level of importance and charge for those information and pay for the contributors, e. identify the available new knowledge locations and provide links for those knowledge producers, f. Provide links to policy makers in countries to contribute to the knowledge base as well as to get their cooperation to stimuli the participants from their countries for knowledge bank. With these strategies most of the available knowledge can be extracted. All these inputs will facilitate the formation process of knowledge bank.

CONCLUSION

Important issue today is that why we waste global resources without availing the realized methods of optimum resource use to the world. As knowledge gaps has created the disparities of living environment of different nations there should be a mechanism to harmonize the knowledge levels of different nations. The objective of this paper was to highlight the importance of knowledge sharing mechanism and to explain the importance of new knowledge for the development process. As elaborated in the paper, out of three contribution factors (labour, capital and technology) for economic growth, technology plays the main role. Technology development of a country will positively contribute to improve efficiency of production and service delivery process. Therefore it is vital to formulate knowledge sharing mechanism among developed and developing countries. Although, already networking process has contributed to reduce the these gaps, this process should be more strengthen though establishing knowledge societies and providing more links to the developing nations. That will help them to gear their economies to jump from low national production level to high national production level.

BIBLIOGRAPHY

- [1] Ahuja, A L and Chand, S (2007) Macroeconomics Theory and Policy Advanced Analysis, Ram Nagar, New Delhi
- [2] <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTPA/0,,contentMDK:20153855~menuPK:435040~pagePK:148956~piPK:216618~theSitePK:430367,00.html>
- [3] http://www.worldvision.org/get_involved.nsf/child/globalissues-world-poverty?Open#MDGs
- [4] Porvaznik J and Coll (2008), Holistic Management – Pillars of Competence in Management, Slovak Academy of Management, IRIS, Bratislava
- [5] Ravallion, M (2004), "Absolute Poverty Measures for the Developing World, 1981-2004", <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTPOVERTY/EXTPA/0,,contentMDK:20153855~menuPK:435040~pagePK:148956~piPK:216618~theSitePK:430367,00.html>
- [6] Royal L Chase (2001), Creating World-class Knowledge Organizations, Report of the World Commission on Environment and Development, General Assembly Resolution 42/187, 11 December 1987. Retrieved: 2007-04-12
- [7] Sakurai M (2001), Challenges for Winners in the 21st Century: RICOH's Customer Satisfaction Management Innovation, Report of the World Commission on Environment and Development, General Assembly Resolution 42/187, 11 December 1987. Retrieved: 2007-04-12
- [8] Takanashi, T (2001), Introduction to Knowledge Management: A Tool for Knowledge Creation, APO Top Management Forum, 17th Series, Asian Productivity Organization, Kyoto, Japan, 2001
- [9] United Nations (1987), "Report of the World Commission on Environment and Development." General Assembly Resolution 42/187, 11 December 1987. Retrieved: 2007-04-12
- [10] World Summit Outcome Document, 2005 World Health Organization, 15 September 2005
- [11] Zeleny, M (2006), From Knowledge to Wisdom: On Being Informed and Knowledgeable, Becoming Wise and Ethical, International Journal of Information Technology and Decision Making, Vol. 5, No 4, World Scientific, pp. 751-762, London, 2006

[12] Zeleny, M (2007), The Mobile Society: Effects of Global Sourcing and Network Organization, Int. J Mobile Learning and Organization, Vol. 1, No. 1, pp. 30-40

1. Idirisinghe Mudiyansele Sarath Kumara Idirisinghe, MSc.
PhD Student
Faculty of Management and Economics
Tomas Bata University in Zlin
Sarath658@yahoo.com
2. Ing. Pavel Ondrcka, CSc
Senior Professor
Faculty of Economics
Masaryk University in Brno
ondrka@econ.muni.cz

PHILLIPS CURVE, NAIRU AND DEFINITION OF ECONOMIC CYCLE FROM LABOUR MARKET POINT OF VIEW IN THE CZECH REPUBLIC AT MACRO AND MEZZO-LEVEL

Emilie Jašová

The economic development points out to importance of the development study of sectors and branches of economics, because they can deepen or moderate volatility of the economic cycle. The article deals with analysis of the construction industry contribution to this volatility from the standpoint of methods analyzing a relation of unemployment and inflation and includes for comparison the industry and the whole national economy.

Unemployment rate, which is consistent with the stable inflation rate, represents in the majority of industrially developed countries an integral part of the monetary policy frame. In this case the key factor is if the present unemployment rate lies above or under the level, which corresponds to the inflation stability. Unfortunately the unemployment rate, which corresponds to the stable inflation, is not directly observable. Creators of policies can only anticipate it by means of others, better perceptible data on the state of economy.

Divergences in values outputting from the individual methods are essential; they differ from one country to another in the course of time. Theoretical scarcities together with extensive problems at statistical measurement weaken the NAIRU (Non-accelerating inflation rate of unemployment) usability as a structural parameter at the level of the macro-policies creation. Taking these scarcities into account it is not surprising that NAIRU is more frequently considered as a zone not as point estimate.

KEY WORDS

Phillips curve, NAIRU, Wage-price models, Hodrick-Prescott filter, The Kalman filter, hybrid expectations

1. INTRODUCTION

The economic stability since the last year has been more frequently becoming an important topic in media as well as in the professional world. The starting point for the overall economic stability is monetary stability. Therefore the monetary policy of central banks is very important. Nowadays turmoil on financial markets can damage and probably it has been already going on both global and local economic growth. The strengthening crown in combination with diminishing demand in the Western Europe fortifies the pressure on inflation decline and consequently growth of unemployment in intentions of short-term trade off. Growth of volatility and changes in the development of chosen indicators at the level of individual sectors can be considered for the evident signal of the change of trend at the macro-level.

The development at the Czech economic scene is also a proof of it. Inter-annual dynamics of GDP growth decreased already in 1. quarter of this year (-1,3 p.p.). The same repeated also in the subsequent part of this year even though with a lesser intensity (-0,8 p.p.). According to the latest information from the chosen sectors of the national economy the slowdown of economic growth can be expected also in the future. Despite the worsening of economy

output the labour market has manifested inertia for now, which reveals itself by a slower increase of unemployed, but also a slower decrease of unemployed at almost 151 thousands of job vacancies. The slowdown of the unemployment decrease from 1. half a year continues also in the first months of 2. half a year of this year. The unemployment rate dropped inter-annually by 1,3 p.p. to 5,0 % to the end of 1. half of 2008. In July and August it was 5,3 % and inter-annually decreased only by 1,1 p.p. Development of unemployment at the sector level indicates much more principal changes on the labour market.

The theoretical presumption of short-term substitution between unemployment and the price indicator supports also development of the inflation rate, which in the last half a year already reached its climax and gradually is being lowered (July +6,9 % and September +6,6 %). The similar development at this mezzo level can be monitored in the sector of construction industry, where in July the index of construction works was 4,8 % and in August 4,7 %.

For trade off detection between unemployment rate development and inflation, i.e. unnoticeable quantities of NAIRU (rate of unemployment, which does not accelerate inflation) on historical data the set of methods, which were applied on the whole national economy and on construction industry sectors, was presented in the following part.

2. DEVELOPMENT OF CONCEPTION FRAME AND MODEL APPROACHES

Of fundamental importance for mapping the relation between unemployment and inflation was an experiment by A. W. Phillips [18]. In his study from year 1958 Phillips assumed that (nominal) wage level in any period can be explained by previous values of unemployment rate. Schematic depiction of this inversion relation has been since called as Phillips Curve (further PC). In the seventies M. Friedman [11] and E. Phelps [17] introduced two crucial conceptions into analysis of the traditional PC, inflation expectation and natural unemployment rate. Further defining the unemployment level not accelerating inflation, so called NAIRU, was carried out by J.Tobin [20]. It is unemployment rate, which persists even though the labour market is in balance.

In case of the Czech Republic the analyses, which have already dealt with trade off problems between unemployment and inflation, can be also mapped. For example, we can name V. Izák [15], M. Hájek and V. Bezděk [14], P. Sedláček [19], V. Flek [10] and R. Pavelka [16].

Methods of the NAIRU estimate can be divided into three main categories: structural methods, purely statistical (direct) methods and approach of reduced form. The first group estimates NAIRU as balanced output of structural model representing behaviour of aggregate price and wage (The Bargaining model). One-equation method so called Gordon's Triangle model [12], which postulates dependence on three factors, i.e. on inflation expectation, on demand conditions represented by unemployment gap and on supply shocks, belongs to the structural methods. The second group of methods for the NAIRU estimate uses different purely statistical methods (Hodrick Prescott filter). The third group compromise between two above mentioned approaches (Kalman filter).

3. EMPIRICAL TESTING

One of difficulties of empiric research of trade-off PC between inflation and unemployment is a shortage of precise inflation rates. For measurement of inflation at the level of the whole national economy we prefer deflator of households' consumption from the national accounts. Nevertheless, calculations of NAIRU using index of consumers' prices are also carried out

and compared with values of comparable variants for the chosen sectors. At the sectors level a deflator for construction industry and index of construction works prices are used. Individual estimates respect time logics of NAIRU, do not reflect method sequencing in the previous theoretical part.

3.1. AGGREGATED LEVEL

This part serves as a starting point of the whole analysis. It examines in more details effect of appropriate measures on inflation development.

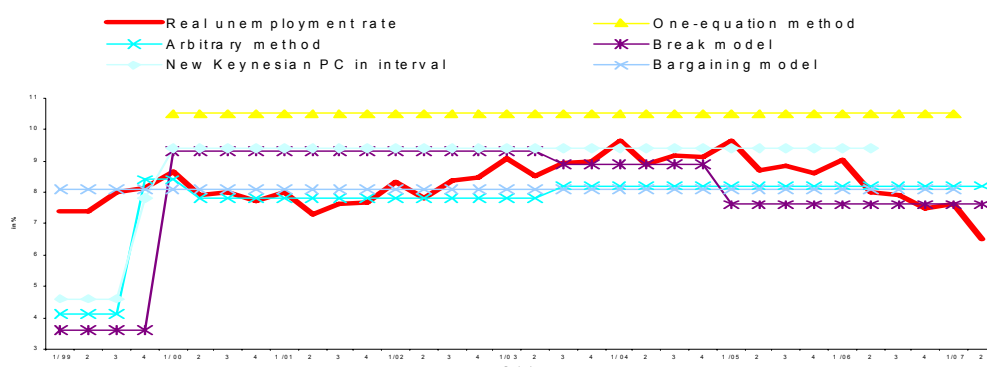
One equation method applied for the whole period shows to the long-term NAIRU equal to 10,5 %. It is already being estimated in the economically stable conditions after year 2000, but it does not take into account structural shifts after year 2004. Gradient of estimated PC curve is $-6,7$, which indicates for makers of economic policy, relatively large substitution ability of inflation by unemployment in comparison with other methods.

Bargaining model method offers a value of 8,1 %, which is, however, calculated from PC equilibrium gradient on condition of unchanged structural characteristics. This estimate can be considered for slightly exaggerated, even though more plausible.

On the basis of **Break model** analysis the last structural period is from 2005/1, a value of NAIRU is 7,6 %. On the one hand it is a short period, on the other hand it corresponds to the real inflation development and as the short-term NAIRU prediction it seems to be the most suitable.

In case of **New Keynesian PC** the growth of NAIRU values can be seen between 1. and 2. period, but also between 2. and 3. period, which opposes to the previous methods. This can be attributed to the differently specified creation of inflation expectations. In the third period the NAIRU value is 9,4 %. This implies then strongly negative unemployment gap in the last period, which serves to clarification of the recent inflation development. In the second period big positive PC gradient (13,6) which indicates existence of stagflation pressures in economy, was detected.

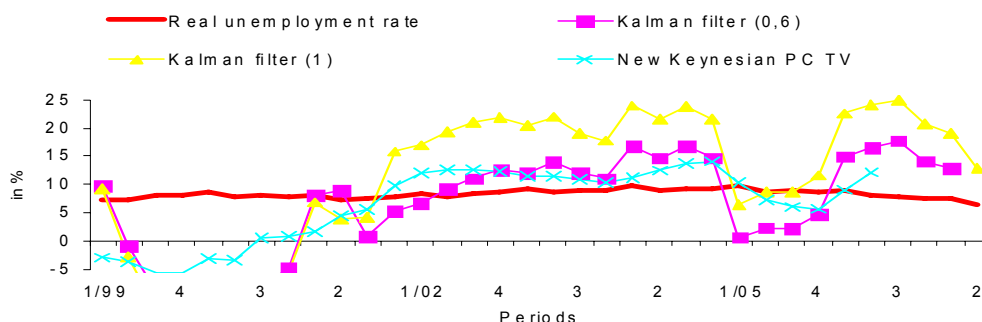
Fig. 1 Real unemployment rate and in parts constant natural unemployment rates including one equation method and Bargaining model



Source: Own calculation based on the Czech Statistical Office, the Ministry of Labour and Social Affairs and the Czech National Bank data.

Further we will focus on methods of the time variable NAIRU. This is examined both in simple PC and in **New Keynesian PC**. The qualitative course is absolutely identical, but amplitudes differ. However, all methods also display a negative unemployment gap in the last quarters, even though size of this gap is inadequately big.

Fig. 2 Real unemployment rate and time variable NAIRU



Source: Own calculation based on the Czech Statistical Office, the Ministry of Labour and Social Affairs and the Czech National Bank data.

3.2. DICHOTOMY AT AGGREGATED AND SECTORAL LEVEL

It was Robert Gordon [13], who pointed out to dissimilarities in the development in international comparison, but also to differences at aggregated level. According to Gordon the dissimilarities in development display that at the explanation searching the aspects of individual sectors must be examined rather than one general explanation.

3.2.1 CONSTRUCTION INDUSTRY - DEFLATOR

Substitution between inflation and unemployment rate is estimated in two variants that differed in the used price indicator. The first variant uses construction industry deflator. Only import prices may be considered for the statistically significant exogenous factor. Price expectations represent earlier used information on situation in non-financial corporations and in firms.

The first sight at the examined substitution is in this sector also **Graphic analysis** without using exogenous quantity. Not even in this variant we succeeded to gain classic negative PC gradient (+0,5). The estimated NAIRU is 4,9 %, which is in contradiction with a substantially higher value of the average unemployment rate in the whole monitored period (7,4 %). In the next part of analysis we take into consideration an exogenous quantity of import price. The result of **One-equation approach** is NAIRU in the height of 6,1 %, PC gradient has already have negative incline (-1,8). **New Keynesian curve** of estimated NAIRU confirms the estimate undervaluation by the initial Graphic method.

Arbitrary method defined five periods. Curve gradient for the first period in the height of 9,3 signalizes existence of stagflation pressures in economy. The second period distinguishes itself by perceptible negative gradient (-29,7), which provide the economic policy makers with the biggest space for using ability of substitution of inflation by unemployment from all variants of industry and construction industry. **Break model** detected three break periods. The first three of four periods merge directly with intervals defined by Arbitrary method. This method derived the first period as a period with the biggest space for economic policy makers (PC gradient -13,9). Method of **New Keynesian PC** disclosed intervals, which practically coincide with results of Break model. The estimated NAIRU ranges only in the very narrow

interval (from 6,0 to 7,0 %). All derived PC gradients are negative and their size ranges in the wide interval.

NAIRU estimated by **HP-filter** occurs from the beginning of the monitored period above the real unemployment rate, which indicates the period of prosperity in economy and possible acceleration of inflation pressures. On the contrary it passes from the period of 1996/1 to 1998/4 under the reality level in such a way so that from the period of 2002/1 it can again settle above its value. For both smoothing the **classic Kalman filter** (0,6 and 1,0) the qualitative course of NAIRU is in essence identical (average deviation is 0,2 p.p.). NAIRU according to **New Keynesian PC** ranges only in positive values and in the very narrow interval (from 5,0 to 6,4 %). The estimated NAIRU ranges in the most monitored period in negative gaps.

In case of the construction industry we will also apply two-equation **Bargaining model**. Estimated parameters imply a value of long-term NAIRU equal to 5,6 %. This value does not go beyond the Graphic analysis, Method of one-equation and New Keynesian PC, how we witnessed in case of variants in the industry.

3.2.2 CONSTRUCTION INDUSTRY – PRICE INDEX

This second variant uses price index of construction works. The examined period, an exogenous factor, price expectations, wages and labour productivity are the same as in case of the first variant.

Graphic analysis managed to estimate a classic negative PC gradient (-0,4). The estimated NAIRU is 4,2 %, which is surprising taking into account the initial values of unemployment rate markedly exceeding 10 %. The result of **One-equation approach** is NAIRU in the height of 6,1 %, which exceeds the initial estimate by the Graphic method by 1,9 p.p. NAIRU according to **New Keynesian curve** in the height of 6,1 % confirms the estimate undervaluation by the initial Graphic method.

Arbitrary method defined five periods. A number of positively inclined PC in this variant can be considered for the highest crosswise all variants of both evaluated periods. Even the result of **Break model** is different from the one presented earlier. Within this method five intervals were estimated for the first time. The first three periods are overlapping with the Arbitrary method result. **New Keynesian method** estimated intervals, which fully coincide with the time sections created by Arbitrary method. All derived PC gradients are negative and their values range in the interval from -0,4 to -4,3.

NAIRU by means of **HP-filter in New Keynesian PC** ranges in the very narrow interval from 5,0 to 6,3 %. PC gradient is negative and equally big as in case of HP-filter classic in the first variant (-0,4). In the qualitative course of NAIRU for both smoothing of the **classic Kalman filter** (0,6 and 1,0) the substantial differences become evident in certain time sections. The average value of these differences is for the whole period 3 p.p. PC gradient at this method is again the lowest of all used methods in this variant of the construction industry. NAIRU derived by **Kalman filter according to New Keynesian PC** does not range in such a wide interval and considerable deflection was recorded only in the period from 2004/3 to 2005/2. In this period also the most considerable deflations in unemployment gap were calculated.

A value of **long-term NAIRU** in the height of 5,7 % does not go beyond the Graphic analysis, Method of one-equation and New Keynesian PC equally as in the first variant, how

we witnessed in case of both variants in the industry. Except for the last two periods NAIRU occurs under the value of real unemployment rate.

3.2.3 DEFINITION OF ECONOMIC CYCLE FROM THE LABOUR MARKET POINT OF VIEW

The natural conclusion of the NAIRU analysis is definition of economic cycle from the labour market point of view. Each method defined its NAIRU. In the next step at estimate of unemployment gaps and consequently the economic cycle we will calculate an average of NAIRU values estimated by the chosen methods. The biggest weight is attributed to the Arbitrary method, respectively the Break model. Further we take advantage of priority of HP-filter and finally we also incorporate Kalman filter with the lowest weights. The exception is the level of the whole national economy with price index, where at calculation of average NAIRU we put emphasis above all on HP-filter. Kalman filter and Break model are taken into account with substantially lower weights.

In the next part of analysis the appropriate real unemployment rates are subtracted from the above calculated average NAIRU values for NE and sectors and then unemployment gaps gained. The analysis commences in the period of 2003/1, when the whole national economy and the construction industry sector achieved approximately zero values of unemployment gap. After that the whole national economy experienced shallow prosperity till 2004/4. In the construction industry there is an apparent interruption of prosperity in 3. quarter of 2003 and in the first two quarters of year 2004. Recession in the construction industry lasted in year 2005 only one quarter (1/2005).

Comparison of the real unemployment rate with average NAIRU values, which were calculated by using price indexes. In this part both the whole national economy and both chosen sectors achieved approximately zero values of unemployment gap in the period of 1/2004. In case of both sectors very solid prosperity was recorded even in the first quarter of year 2005. In the next five quarters the trend in NE and in the construction industry turned.

4. CONCLUSION RESULTING FROM ANALYSIS

Application of methodology for detection of relation between unemployment and inflation offers different view on NAIRU and PC at the level of the whole national economy and individual chosen sectors. Dissimilarities are also caused by the price indicator choice.

Analysis of unemployment gaps can discover that in case of variant with deflators the whole national economy and the construction industry sector achieved approximately zero value in the period of 2003/1.

BIBLIOGRAPHY

- [1] Czech Statistical Office. 1995-2008. Quarterly National Accounts of the Czech Republic.
- [2] Czech Statistical Office. 1995-2008. Registered Number of Employees and Their Wages in the Czech Republic.
- [3] Czech Statistical Office. 1995-2008. Export and import price indices.
- [4] Czech Statistical Office. 1995-2008. Producer prices.
- [5] Czech Statistical Office. 1995-2008. Consumer price index.
- [6] Czech Statistical Office. 1995-2008. Business cycle survey - October 2008.
- [7] Czech Statistical Office. 1995-2008. Industry of the Czech Republic.
- [8] Czech Statistical Office. 1995-2008. Construction.

- [9] Czech Statistical Office. 1995-2007. Employment and Unemployment in the Czech Republic as Measured by the Labour Force Sample Survey.
- [10] Vladimír Flek. July 2004. Anatomy of the Czech Labour Market: From Over-Employment to Under-Employment in Ten Years? WP Czech National Bank.
- [11] Milton Friedman. March 1968. The Role of Monetary policy. The American Economic Review.
- [12] Robert J. Gordon. August 1996. The Time-varying NAIRU and its Implications for economic Policy. National Bureau of economic Research. Cambridge.
- [13] Robert J. Gordon. March 1996. Problems in the Measurement and Performance of Service-sector Productivity in the United States. National Bureau of Economic Research.
- [14] Mojmír Hájek, Vladimír Bezděk. 2000. Odhad potenciálního produktu a produkční mezery v ČR. WP the Czech National Bank.
- [15] Vratislav Izák. 2000. Dezinflace a hrubý domácí produkt, VP č. 16, the Czech National Bank.
- [16] Radek Pavelka. November 2005. Inflace a zdanění, Národohospodářská škola Boskovice.
- [17] E. S. Phelps. August 1967. Phillips Curves, Expectations of Inflation and Optimal Unemployment Over Time. *Economica*.
- [18] A. W. Phillips. 1958. The relationship between unemployment and the rate of change of money wages in the United Kingdom 1861-1957. *Economica*.
- [19] Petr Sedláček. Co způsobilo posun České NAIRU, the Czech National Bank.
- [20] Tobin, J. (1980), Stabilization Policy Ten Years after, *Brookings Papers on Economic Activity*, No. 1, 19-71.

List of source of statistical data and predictions

Ministry of Labour and Social Affairs:

<http://portal.mpsv.cz/>.

<http://www.mpsv.cz/cs/>.

Czech National Bank:

http://www.cnb.cz/cs/financni_trhy/inflacni_ockavani_ft/.

http://www.cnb.cz/cs/financni_trhy/devizovy_trh/.

Ing. Emilie Jašová

Adresa: Ministerstvo práce a sociálních věcí, Na Poříčním právu 1, Praha 2 128 01

E-mail: emilie.jasova@mpsv.cz

Mobil: 728991467

HOW TO UNDERSTAND “NEW ECONOMY”?

Onur Köprülü

ABSTRACT

The structure of the world economy has been fundamentally reshaped by the revolution in information and communication technologies (ICT). Therefore, the term “new economy” has been given a different meaning by different people. The aim of this paper is to bring up the distinguishing characteristics of new economy and its impacts on unemployment and productivity. Economic and social indicators from different countries have been chosen to understand the transition to new economy.

KEYWORDS

New economy, information and communication technologies, unemployment, productivity

INTRODUCTION

It is inevitable to emphasize the transition from old economy to new economy in the last two decades. We can briefly summarize the main concepts that have engendered this transition as globalization, high technology, information economy and knowledge-based economy. In other words, globalization and computerization have reshaped the modern economy that is totally different from earlier industrial periods. The outstanding transition to “New Economy” has caused a revolution not only in macro and micro level economic perspective but also in social structures and human behaviors.

The aim of this paper is to illustrate the basic characteristics of new economy on which still does not exist a consensus for the definition of the term. In addition, some evidences will be given to clarify the structural change in social and economic indicators from European Union (EU) and United States of America (USA). Therefore the main impacts of new economy on GDP growth, productivity and employment will be investigated. Furthermore, the measurement problem and Solow Paradox will be emphasized.

NEW ECONOMY

The aim of this chapter is to specify the different definitions about the term “new economy” and to investigate the main features.

Many economists, observers from academia and businessmen denote 1990s as the beginning of a new economy. Cohen et al. (2000)¹, denotes the different names given to new economy such as; a ‘post-industrial society’, an ‘information society’, an ‘innovation economy’, a ‘knowledge economy’, a ‘network economy’, a ‘digital economy’, a ‘weightless economy’, and an ‘e-economy’.

Stiroh (1999)² points out this period as: “New economy proponents view globalization and computerization as powerful forces that are reshaping the modern economy in a way that is fundamentally different from earlier industrial periods.”

In addition, Kelly (1999)³ emphasizes the new economy having three distinguishing characteristics: “It is global. It favors intangible things—ideas, information, and relationships.

¹ Cohen, S.S., DeLong, J.B., Zysman, J., 2000. “Tools for thought: what is new and important about the ‘e-economy’”. Berkeley Roundtable on International Economics, Berkeley CA, Working paper no. 138.

² Stiroh, K. 1999 “Is There A New Economy?” Challenge, Vol.42. July/August, 1999, pp. 82-101. ISSN 0577-5132

³ Kelly, K. 1999, “New Rules for the New Economy: Twelve Dependable Principles for Thriving in a Turbulent World”, Penguin Books, ISBN 0-670-88111-2

And it is intensely interlinked. These three attributes produce a new type of marketplace and society, one that is rooted in ubiquitous electronic networks”

Although there is not yet a consensus about the unique definition of new economy, it is inevitable to say that globalization and the revolution in information and communication technology (ICT) are the main factors which have sparked this transition to new era. Furthermore, the contribution of ICT to knowledge-based society has caused knowledge worker as the unique and the most important asset. In other words, knowledge has become the new competitive resource. Webber (1993)⁴ explains information as new raw material in new economy. However, transformation of information to knowledge for competitive advantage has become vital.

ICT AND ITS IMPACTS ON PRODUCTIVITY AND UNEMPLOYMENT

One of the basic features of new economy triggered by ICT developments can be explained as providing stronger productivity with a downward pressure on inflationary rates. This chapter aims to shed a light to the impact of ICT on productivity and unemployment levels in USA and EU. van Ark et al. (2003)⁵ focused on ICT and its contribution to employment and productivity with a comparison in EU and USA as shown on Figure 1.

The first two columns show the contribution of each industry group to aggregate productivity growth in the EU and the U.S. respectively. The third column is the difference between the two. Together ICT producing manufacturing (0.48 percentage-points larger contribution in the U.S.) and ICT using services (0.89 percentage-points larger contribution in the U.S.) account for more than the total productivity growth difference between the EU and the U.S. The decomposition shows that in ICT producing manufacturing the difference in contribution is mainly a case of differences in employment shares in the EU and the U.S., and to a lesser extent differences in productivity growth. The largest contributor to the overall productivity growth difference between the EU and the U.S. is the ICT using services sector. In this sector, much higher productivity growth rates in U.S. ICT using services explain most of the productivity growth differential. Neumark and Reed (2002)⁶ focus on the possible impacts of ICT on unemployment level as follows:

1. link between the growth of computer use in the workplace and increases in the demand for more-educated workers
2. the role of technology in general, and information technology in particular, in changing the organization of work and production systems and sometimes the nature of the goods or services produced
3. advent of the new economy threatens traditional employment relationships

⁴ Webber, A. M., 1993. “What is So New About the New Economy?”, Harvard Business Review, January February 1993

⁵ van Ark, B., Inklaar, R. and McGuckin, R. ICT and Productivity in Europe and the United States Where Do the Differences Come From? CESifo Economic Studies, Vol. 49, 3/2003, 295–318

⁶ Neumark, D. and Reed, D. 2002. “Employment Relationships in the New Economy”, Working Paper 8910, National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138

Figure 1 Contribution of industry groups to aggregate productivity growth and decomposition for the EU and U.S. for 1995–2000

	Contribution to productivity growth		Total difference U.S. – EU	Contribution of			
	U.S.	EU		Productivity share	Employment share	Productivity level	Change share employment
Total Economy	2.49	1.40	1.09	0.84	0.35	-0.08	-0.02
ICT Producing Industries	0.99	0.60	0.39	0.00	0.29	-0.01	0.11
ICT Producing Manufacturing	0.73	0.25	0.48	0.18	0.29	0.00	0.01
ICT Producing Services	0.26	0.35	-0.09	-0.19	0.01	-0.01	0.10
ICT Using Industries ^{a)}	1.22	0.42	0.80	0.77	0.13	0.03	-0.12
ICT Using Manufacturing	-0.08	0.01	-0.09	-0.06	-0.01	0.00	-0.02
ICT Using Services	1.30	0.41	0.89	0.83	0.14	0.02	-0.11
Non-ICT Industries	0.28	0.38	-0.10	0.07	-0.08	-0.09	-0.01
Non-ICT Manufacturing	-0.05	0.04	-0.09	-0.01	-0.05	-0.02	-0.01
Non-ICT Services	0.23	0.38	-0.14	0.13	0.04	-0.07	-0.25
Non-ICT Other	0.10	-0.03	0.13	-0.05	-0.07	0.00	0.25
<i>Pro-memoria: contribution of</i>							
Business sector	2.60	1.34	1.26	0.97	0.30	-0.07	0.06
Non-ICT market services	0.35	0.32	0.03	0.26	-0.01	-0.06	-0.17

a) Excluding ICT producing.

Figure 2 shown below, indicates the unemployment data for USA. Therefore the time period after 1990 which can be expressed as a burst in ICT developments is giving us the level and direction of unemployment. Nonetheless, it is also apparent from the table that the level of unemployment increased in 1991, 1992 and 1993. This period coincides with the growth of computer use in the workplace and an increase in the demand for more-educated and qualified workers. However, since 1994 the level of unemployment decreased until the year 2000. Davis (1992)⁷, in addition, highlights the increased wage inequality in many OECD countries in the 1980s. In parallel with the researcher, this paper also supports the idea of explaining the inequality of wages in this period due to skill biased technical change. In addition, the aim of this paper is to highlight the intersection point of ICT boom, productivity growth and unemployment. Nevertheless, many social and economic factors have not been involved on the scope of this study to analyze this relationship with all the dimensions.

⁷ Davis, S.J., 1992. "Cross-country Patterns of Change in Relative Wages". In: Blanchard, O.J., Fischer, S. (Eds.), NBER Macroeconomic Annuals 1992, pp. 239–300.

Figure 2 Unemployment Data for USA

YEAR	LABOR FORCE	EMPLOYED	UNEMPLOYED	UNEMP RATE
2008 YTD Avr	154,246,800	145,639,100	8,607,700	5.6%
2007	153,124,000	146,047,000	7,078,000	4.6
2006	151,428,000	144,427,000	7,001,000	4.6
2005	149,297,833	141,707,250	7,590,583	5.1
2004	147,401,000	139,252,000	8,149,000	5.5
2003	146,510,000	137,736,000	8,774,000	6.0
2002	144,863,000	136,485,000	8,378,000	5.8
2001	143,734,000	136,933,000	6,801,000	4.7
2000	142,583,000	136,891,000	5,692,000	4.0
1999	139,368,000	133,488,000	5,880,000	4.2
1998	137,673,000	131,463,000	6,210,000	4.5
1997	136,297,000	129,558,000	6,739,000	4.9
1996	133,943,000	126,708,000	7,236,000	5.4
1995	132,304,000	124,900,000	7,404,000	5.6
1994	131,056,000	123,060,000	7,996,000	6.1
1993	129,200,000	120,259,000	8,940,000	6.9
1992	128,105,000	118,492,000	9,613,000	7.5
1991	126,346,000	117,718,000	8,628,000	6.8
1990	125,840,000	118,793,000	7,047,000	5.6

Source: <http://www.nidataplus.com/lfeus1.htm>⁸

THE SOLOW PRODUCTIVITY PARADOX

1990s have been an age with unsurpassed amount of investments made for ICT. However, measuring the impact of ICT has become difficult due to the complicated process of identifying the linkages between economic inputs and their impacts. Landefeld and Fraumeni (2001)⁹ emphasized the press attention on the e-business aspects of the new economy. Researchers addressed the difficulties to estimate the impacts of changes in the economy by computing the contribution of high-tec goods and services to real GDP growth and to inflation as measured by the chain-price index for gross domestic purchases. Nobel-winning economist Robert Solow (1987)¹⁰ expressed the relationship between computers and productivity as follows: “You can see the computer age everywhere but in the productivity statistics.” In other words, the paradox is asking “Why is productivity not higher?” (Tripplett, 1999)¹¹ Although many studies about the productivity paradox at the level of individual firms, Roach (1992)¹² denotes the contradiction between a rapid increase on investments in ICT since 1960 and less increase in measured productivity gains. It is believed in this paper that measuring the impacts of ICT by searching its contribution to economic returns will not reflect the total outcome of ICTs. In plain terms, many researchers have focused ICT while ignoring the social, cultural and environmental impacts. Morales-Gomez and Melesse (1998)¹³, in addition to this, remarks the long term impacts of ICT while considering the socio-economic and cultural dimensions. Therefore, it is believed in this paper that the impacts of ICT will be more efficiently measured by a multidimensional analysis.

⁸ USA unemployment data, Source: <http://www.nidataplus.com/lfeus1.htm>

⁹ Landefeld, J. S. and Fraumeni, B. M. (2001) “Measuring the New Economy”, Survey of Current Business, March 2001

¹⁰ Solow, Robert M. (1987) “We’d better watch out”, New York Times (July 12), Book Review, 36

¹¹ Tripplett, J. (1999) “The Solow Productivity Paradox: What to Do Computers Do to Productivity?”, Canadian Journal of Economics, vol. 32, No.2

¹² Roach, S. S (1992).” Technology Imperatives” (Morgan Stanley, New York, 1992)

¹³ Morales-Gomez, D. and Melesse, M. (1998) “Information Technology for Development”, 02681102, 1998, Vol. 8, Issue 1

CONCLUSION

Revolution in information and communication technologies and its impacts on macro and micro level economic consequences have been discussed by many researchers mainly after 1990s. However, ICT has been undertaken with its impacts on productivity and unemployment in the scope of this paper by focusing on EU and USA country data. It can be understood from the data mentioned before that there is a parallelism among ICT, productivity and unemployment especially for specific dates. Consequently, it is believed that measuring the social impacts as a factor to be considered in addition to economic outcomes appears as a vital situation. Lack of measurement tools for the social impacts of ICT also engenders researchers to obtain deficient results for total outcomes of ICT. It is believed that this problem will be overcome with multidimensional impact analysis.

BIBLIOGRAPHY

- [1] Cohen, S.S., DeLong, J. B., Zysman, J. (2000) "Tools for Thought: What is New and Important About the 'e-conomy'". Berkeley Roundtable on International Economics, Berkeley CA, Working paper no. 138.
- [2] Davis, S. J. (1992) "Cross-country Patterns of Change in Relative Wages". In: Blanchard, O.J., Fischer, S. (Eds.), NBER Macroeconomic Annuals 1992, pp. 239–300.
- [3] Landefeld, J. S. and Fraumeni, B. M. (2001) "Measuring the New Economy", Survey of Current Business, March 2001
- [4] Kelly, K. (1999) "New Rules for the New Economy: Twelve Dependable Principles for Thriving in a Turbulent World", Penguin Books, ISBN 0-670-88111-2
- [5] Morales-Gomez, D. and Melesse, M. (1998) "Information Technology for Development", 02681102, 1998, Vol. 8, Issue 1
- [6] Neumark, D. and Reed, D. (2002) "Employment Relationships in the New Economy", Working Paper 8910, National Bureau of Economic Research, 1050 Massachusetts Avenue, Cambridge, MA 02138
- [7] Roach, S. S. (1992) "Technology Imperatives" (Morgan Stanley, New York, 1992)
- [8] Solow, R. M. (1987) "We'd Better Watch Out", New York Times (July 12), Book Review, 36
- [9] Stiroh, K. (1999) "Is There A New Economy?" Challenge, Vol.42. July/August, 1999, pp. 82-101. ISSN 0577-5132
- [10] Tripplett, J. (1999) "The Solow Productivity Paradox: What to Do Computers Do to Productivity?", Canadian Journal of Economics, vol. 32, No.2
- [11] USA unemployment data, <http://www.nidataplus.com/lfeus1.htm>
- [12] van Ark, B., Inklaar R and McGuckin, R. H. (2003) "ICT and Productivity in Europe and the United States Where Do the Differences Come From?", CESifo Economic Studies, Vol. 49, 3/2003, 295–318
- [13] Webber, A. M. (1993) "What is So New About the New Economy?", Harvard Business Review, January February 1993

Onur KÖPRÜLÜ, MSc.

Ph.D Student

Faculty of Management and Economics

University of Tomas Bata in Zlín

nám. T. G. Masaryka 5555

760 01 Zlín

Czech Republic

Email: onurkoprulu@gmail.com

LOOKING FOR COMMON DRIVING FACTORS IN THE EUROPEAN UNION

Michaela Krčilková

ANNOTATION

In this paper principal component analysis (PCA) is resorted in effort to find out whether the common factors determining macroeconomic performance of European countries do exist. Our data set contains macroeconomic indicators for 25 members of European Union. Resulting series indicate existence of common factors for GDP growth and rate of unemployment but country-specific factors prevail in the case of inflation and deficit.

Pieces of knowledge introduced in this paper resulted from solution of an research intention IGA 11120/1312/113113 “Harmonization of Fiscal Instruments in the EU”

KEY WORDS

Monetary integration, European Union, Principal Component Analysis,

INTRODUCTION

Two issues have to be analyzed in order to be able to answer the question whether a country should join a monetary union. First of them focuses on the similarity of the countries considering a single currency. This similarity can be understood as a synchronization of business cycles or as a low probability of asymmetric (country specific) shocks. The idea is clear; the more similar countries are the less adjustment through the exchange rate is needed and the more a common monetary policy is suitable for those countries.

The second topic concerns with adjustment mechanisms through which a country can deal with an asymmetric shock until the economic convergence is sufficient to eliminate relative idiosyncrasies. Rationale for this question is obvious; since common monetary policy can no longer fully consider regional needs and requirements, there has to be other channels through which regions or countries adapt.

The discussion whether to join a monetary union or not can then be seen from two points of view. Firstly, we ask whether countries are similar enough that a single monetary policy would be suitable for all of them. If not, i.e. if there is evidence that each country needs a different approach, we have to ask whether independent monetary policy can be substituted by any other mechanism.

Theoretical foundations of both these aspects of monetary integration have been developed in context of the Optimum Currency Areas (OCA), first put forward by Robert Mundell (1961) and later developed by Ingram (1962), McKinnon (1963), Kennen (1969) and Fleming (1971), to name early contributors. Literature that then followed is quite broad and includes, among others, Tavlas (1993), Krugman (1993), and Frankel and Rose (1996) to name a few.

While the earlier contributions focus mainly on specifying conditions under which single currency should be established, more recent work tries to estimate costs and benefits of joining monetary union. From the OCA theory perspective, the asymmetric (country-specific) shocks are the crucial factor determining the costs of single currency. In the European context, the latest empirical studies then focus either on question whether Europe is a region where shocks affect all countries similarly, or on the question whether sufficient adjustment mechanisms exist for the countries hit by asymmetric shocks.

The earliest papers dealing with the incidence of asymmetric shocks originate in the late 1980's. Cohen and Wyplosz (1989) and Weber (1990) are considered to be the first to attempt

to measure the symmetry of shocks in Europe. Since then various methods have been developed in an effort to measure the extent of asymmetries among the countries or regions. Bayoumi and Eichengreen (1992) measure the asymmetry of shocks using the structural vector autoregressive model (VAR) of inflation and output growth. Their model uses the system of decomposition of shocks into supply and demand ones originally developed by Blanchard and Quah (1989). Correlation of shocks between the potential members of monetary union and the benchmark area representing the monetary union indicates whether the common monetary policy may be appropriate. Bayoumi and Eichengreen use Germany as a benchmark and show that supply shocks in Belgium, Denmark, France, and Netherlands are highly correlated with the supply shocks in Germany. This methodology was later extended and modified by many, using different sample periods, countries or data frequencies. For example, Whitt (1995) uses monthly data of industrial production and prices. Frenkel et al. (1999) consider 8 Central and Eastern European countries. Dupasquier, Lalonde and St-Amant (1997) use real output, inflation and interest rate to identify monetary policy shocks, Dibooglu and Horvath (1997) identify in addition to supply shocks also fiscal shocks. The empirical studies using the VAR approach experienced boom during the 1990's but rarely reach straightforward and clear-cut conclusion. Despite the similar methodology, results differ significantly among the studies. However, with little bit of simplification, most of the studies indicate rather low correlation of supply and demand shocks among the countries.

Another way to assess the importance of asymmetric shocks is to examine the volatility of the real exchange rate. The basic idea is that the more symmetric shocks are reflected in less real exchange rate variability. The more variable real exchange rate is between the two countries, the more would adjustment fall on domestic prices and wages in the case of monetary unification and in the presence of price and wage rigidities, this would lead to output and unemployment volatility. Von Hagen and Neumann (1994) examine variance of real exchange rate in nine European countries to determine which nations are well-suited for the Euro. Although their methodology was precise and the reality during the Euro adoption process confirmed their results, the capability of exchange rate volatility to reflect shock asymmetries is disputable. Lafrance and St-Amant (1999) note that the exchange rate volatility can be limited by the weak response of prices to employment shock. On the other hand, volatile exchange rate can reflect flexible prices which enable quick adjustment to shocks. They conclude that looking at the volatility of both the unemployment and the real exchange rate might provide better picture.

Some authors use clustering method in an effort to identify homogeneous groups of countries in EU. The basic idea of cluster analysis is to measure similarity or, conversely, dissimilarity between the countries. Similarity is measured according to the distances based on characteristics assigned to each country. The OCA criteria or their modification are often used. Artis and Zhang (1997) first suggested use of the clustering method. They use business cycle correlation with USA and Germany, exchange rate volatility and trade with USA and Germany. They identify 4 groups of countries, and mark Germany, France, Belgium and Netherlands to be the core of the EU. Same authors (2001) confirmed France, Belgium and Netherlands to be the core of EU but replace Germany by Austria. Boreiko (2003) applied clustering method to assess readiness of Central and Eastern European Countries to join EMU. He identified Czech Republic, Estonia, Hungary and Slovenia as the best performers. Comacho et al. (2006) employ clustering on all (27) EU countries, Turkey, Canada, US, Norway and Japan using industrial production index. Their results suggest that the business cycles of Euro economies are more closely linked than the business cycles of new members; in additional testing they show that there is no main attractor in European economy.

OCA focus on common versus country-specific shocks leads naturally to another methodology from multivariate statistics – principal component analysis. This method

takes multiple data series and constructs new multiple series, with the special property that the first new series contains maximum of the information from the original series, second new series contains maximum of the information from the original series not explained by the first new series etc. The new series can be interpreted as a common underlying factors determining the behavior of individual original series.

In this paper principal component analysis is resorted in effort to find out whether the common factors determining macroeconomic performance of European countries do exist. Our data set contains macroeconomic indicators for 25¹ members of European Union. Resulting series than can be interpreted as a common factors determining the behavior of the countries in the sample and correlation of the original series for a given country with the new series reveals to what degree the behavior of its economy is given by factors common to all the countries in the sample.

The paper is structured as follows. Section 2 describes the data used and briefly introduces the PCA methodology. Section 3 discusses results of principal component analysis and section 5 concludes.

METHODOLOGY

General purpose of principal component analysis (PCA) is to find a way of summarizing the information contained in a number of original variables into a smaller set of new composite factors with a minimum loss of information. Originally, principal components analysis was developed as a data reduction technique, but can be also used for identifying common factors shared by all variables, in the case of this paper by all countries. Formal descriptions of PCA method is taken from Johnson and Wichern (1992) and can be summarize as follows.

Algebraically, principal components are particular uncorrelated linear combinations of the measured characteristics which account for much of the variation in the sample. Let us assume the data $\{x_1; x_2; \dots; x_n\}$ represent n independent drawings from some p -dimensional population. If Σ is covariance matrix with eigenvalue-eigenvector pairs $\{(\lambda_1, e_1), (\lambda_2, e_2), \dots, (\lambda_n, e_n)\}$, where $\lambda_1 \geq \lambda_2 \geq \dots \geq \lambda_p \geq 0$, the i^{th} principal component is given as:

$$y_i = e_i' x = e_{1i}x_1 + e_{2i}x_2 + \dots + e_{pi}x_p \quad i = 1, 2, \dots, p \quad (1)$$

With these choices:

$$\begin{aligned} Var(y_i) &= e_i' \Sigma e_i = \lambda_i \\ Cov(y_i, y_k) &= e_i' \Sigma e_k = 0 \quad i \neq k \end{aligned} \quad (2)$$

Two aspects have to be examined in the context of principal component analysis. Firstly, the ability of estimated components to explain the variation in original data. Secondly, the relations between original variables and principal components. A measure how well the first q PC's explain a variation is given by the relative proportion:

$$\varpi_q = \frac{\sum_{i=1}^q \lambda_i}{\sum_{i=1}^p \lambda_i} = \frac{\sum_{i=1}^q Var(y_i)}{\sum_{i=1}^p Var(y_i)} \quad (3)$$

The ratio in equation (3) provides the information on how successfully the original set of variables can be substituted by principal components and can serve also as a criterion for deciding about the number of components to extract (use). To consider PCA useful technique it is expected that most of the variation is explained by first few components.

¹ Bulgaria and Romania, which joined EU this year, are not included into research because of missing data.

To evaluate the relationships between original variables and principal components, we can use simple correlations. The correlation between the variable x_i and the PC y_j is given as:

$$r_{x_i, y_j} = e_{ij} \frac{\sqrt{\lambda_j}}{\sqrt{\text{Var}(x_i)}} \quad (4)$$

Correlations estimated by equation (4) can be interpreted as the proportion of variance of x_i explained by y_j .

The number of factors to extract is by its nature an arbitrary decision. An exact quantitative basis has not yet been developed, however there are some guidelines commonly used. Here, the percentage of variance criterion is mostly applied but latent root criterion (Kaiser criterion) is held in mind.

The PCA method is applied to data set containing macroeconomic indicators for European Union countries. Individual country is described by four indicators: (1) Gross domestic product growth – described by quarterly data measured as a percentage change compared to corresponding period of the previous year, (2) Inflation – expressed as a harmonized index of consumer prices, monthly data measured as a percentage compared to corresponding period of previous year, (3) Unemployment rate – monthly seasonally adjusted data measured according to ILO definition (4) Deficit of government finances – measured by ESA 95 methodology as a percentage of GDP in market prices. More details about dataset are provided in appendix. All data included in the dataset come from Ameco database provided by European Commission.

RESULTS

In below principal component analysis is employed to find common factors or similarities which determine level of particular macroindicators. The basic idea for this exercise follows from the original purpose of PCA. As mentioned above, PCA was developed as data reduction technique and here we consider European countries as 25 variables and we ask if those 25 variables can be substituted by one or two principal components without loss of information.

Let us consider these two first PC's to be hypothetical countries constituting the core of EU. Calculating the correlations of original variables with this hypothetical core, we can infer whether macroeconomic performance of the original countries is similar to the performance of the hypothetical core.

Another way to look at the PCA is to consider first two PC's. By construction, their interpretation is such that they are two underlying unobservable common factors, which influence macroeconomic development of the countries in the sample. Therefore, high correlation of given macroeconomic series for countries in the sample with first two PC's is suggestive of the fact, that economic development of those countries is driven predominantly by common factors. On the other hand, low correlation suggests high incidence of country-specific economic shocks. As Härdle and Simar (2003) suggest, in space of the first two components the correlations estimated by equation (4) can be plotted to show which original variables are most strongly correlated with the PC's and to identify groups within which original variables exhibit similar correlations.

In the context of monetary unification, it is also important that economic development is driven by single factor common to all countries, as there is only one monetary policy which can be implemented. Hence, despite high correlation of the countries in a sample with the first two PC's, it could happen that the development in a certain subgroup will be given by the first PC and the development in a different subgroup will be given by the second PC, situation unified monetary policy can hardly accommodate.

Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	9.3791	5.8166	0.4690	0.4690
Comp2	3.5624	2.0465	0.1781	0.6471
Comp3	1.5159	0.4248	0.0758	0.7229
Comp4	1.0911	0.1260	0.0546	0.7774
Comp5	0.9651	0.2631	0.0483	0.8257
Comp6	0.7020	0.1188	0.0351	0.8608
Comp7	0.5832	0.1018	0.0292	0.8899
Comp8	0.4815	0.1239	0.0241	0.9140
Comp9	0.3575	0.0532	0.0179	0.9319
Comp10	0.3043	0.0627	0.0152	0.9471
Comp11	0.2416	0.0605	0.0121	0.9592
Comp12	0.1811	0.0232	0.0091	0.9682
Comp13	0.1579	0.0175	0.0079	0.9761
Comp14	0.1404	0.0447	0.0070	0.9832
Comp15	0.0957	0.0064	0.0048	0.9879
Comp16	0.0894	0.0365	0.0045	0.9924
Comp17	0.0528	0.0019	0.0026	0.9951
Comp18	0.0510	0.0143	0.0025	0.9976
Comp19	0.0367	0.0254	0.0018	0.9994
Comp20	0.0113	.	0.0006	1.0000

Figure 1: Principal component analysis based on GDP growth rates

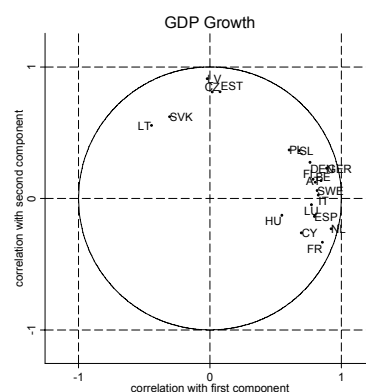


Figure 2: GDP growth – correlation of countries with first two components

With this intuition in mind, we can focus on results of principal component analysis for GDP growth rates which are shown in figures 1 and 2. By applying percentage variance criterion we can consider first two components as satisfactory solution. From table it is evident they explain almost 65 % of total variance of the original variable, but then explained variance increases more slowly. Kaiser criterion also suggests to remain at least 4 factors. This indicates that some country specific determinants of GDP growth exist.

Let us consider just two first components as suggested by PV-criterion for a while. For detailed analysis we can use figure 2, where correlation with the first PC is measured on the horizontal axis and the correlation with the second PC on vertical. Plot shows which of the countries are strongly correlated with the PC's, namely those that are close to the periphery of the circle of radius 1. It can be shown (see Härdle and Simar (2003) for proof) that all points are always inside the circle.

Two groups of countries can be found on figure 2. One group is concentrated at the right end of horizontal axis and second on the upper end of vertical axis. In the first group we can find those countries, which are highly and positively correlated with the first component, and almost uncorrelated with the second one. This finding suggests a presence of GDP growth factor common for all countries in given group. Closer look to the first group reveals that primarily EMU countries, United Kingdom and Denmark are included in this group. So let us call this component “EMU component”.

In the second group are those countries which do not share this factor. Czech Republic, Estonia and Latvia exhibit almost zero correlation with the first component and Slovakia and Lithuania even negative. Since the correlations are rather low it is likely that some other factor is important for those countries. This is supported by high correlation with second component. Since only Central and Eastern European countries are included in this group we can call this component as “CEE component”.

On picture we can also see that four New Member States, namely Poland, Slovenia, Cyprus and Hungary, sneaked into EMU countries group. This is not surprising in the case of Cyprus, which did not undergo the process of transformation as other NMS did. Poland and Slovenia exhibit partial correlation with both components. That implies both factors influence their GDP. This seems quite logic especially in the case of Slovenia, which as the best prepared state has already joined the EMU in 2007. No matter how surprising is that for Poland the real puzzle remains Hungary. Hungary does not only exhibit high correlation with “EMU component” but exhibits also negative correlation with “Central and Eastern European” component. Any reasonable explanation was not found for that.

Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	7.8730	2.5595	0.3149	0.3149
Comp2	5.3136	1.2479	0.2125	0.5275
Comp3	4.0657	2.0582	0.1626	0.6901
Comp4	2.0075	0.7145	0.0803	0.7704
Comp5	1.2930	0.3581	0.0517	0.8221
Comp6	0.9349	0.2260	0.0374	0.8595
Comp7	0.7089	0.1098	0.0284	0.8879
Comp8	0.5991	0.2189	0.0240	0.9118
Comp9	0.3802	0.0530	0.0152	0.9270
Comp10	0.3272	0.0424	0.0131	0.9401
Comp11	0.2848	0.0359	0.0114	0.9515
Comp12	0.2489	0.0564	0.0100	0.9615
Comp13	0.1925	0.0317	0.0077	0.9692
Comp14	0.1608	0.0293	0.0064	0.9756
Comp15	0.1315	0.0318	0.0053	0.9809
Comp16	0.0996	0.0068	0.0040	0.9848
Comp17	0.0928	0.0106	0.0037	0.9886
Comp18	0.0822	0.0297	0.0033	0.9918
Comp19	0.0525	0.0076	0.0021	0.9939
Comp20	0.0449	0.0069	0.0018	0.9957
Comp21	0.0379	0.0120	0.0015	0.9973
Comp22	0.0259	0.0075	0.0010	0.9983
Comp23	0.0185	0.0041	0.0007	0.9990
Comp24	0.0144	0.0047	0.0006	0.9996
Comp25	0.0097	.	0.0004	1.0000

Figure 3: Principal component analysis based on inflation rates

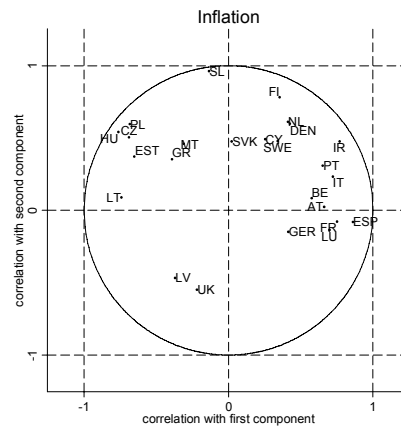


Figure 4: Inflation – correlation of countries with first two components

Figures 3 and 4 present results of principal component analysis when inflation is considered. With respect to inflation principal component analysis is quite insufficient as cumulative percentage of explained variance indicates. In the last column of the table can be seen that explained variance increases slowly with additional components. Three factors according to PV-criterion and five or six according to Kaiser criterion should be extracted, to preserve enough information of original data. Hence, if only two PC's are considered, 47 % of variance remain unexplained. This implicates that there is still considerable amount of country-specific factors determining the development of inflation.

Comparison of picture 4 for inflation with picture 2 for GDP growth makes the difference more explicit. Whereas in picture 2, most of the countries are close to the circumference of the unit circle which suggests development of GDP growth determined by common factors, picture 4 has many countries lie in the circle, which suggests that behavior of the inflation of those countries is given predominantly by country-specific factors.

Focusing on figure 4 we can find that countries are correlated with the first two PC's in different directions and at different levels, thus there is no common factors shared by all countries. This finding can explain why so many countries have problems with Maastricht inflation criterion. Even more, fulfillment of inflation criterion before Euro introduction itself cannot guarantee smooth existence within the EMU. If one looks at the inflation of 12 countries which already introduced Euro, he finds that many countries met the Maastricht criterion only in the examination years and later on, inflation rates diverged. One natural explanation of this phenomenon is that low levels of inflation needed for accession were attained through different sets of tools used by the independent central banks of EU countries, which were later unified into European central bank.

Turning attention to figure 5 which does similar exercise but for unemployment rates, it is evident that first two PC's are enough to explain about 76 % of its total variance. From figure 6 we can conclude that countries are again divided into two groups but the separation is not so clear as in the case of GDP was. Furthermore the classification is not caused by existence of two different factors (components) but by distinct impact of only one factor. Seven CEE countries are highly and positively correlated with the first component but also Finland, Greece Italy, and Spain are included in this group. Most of the EMU states are placed in second group.

Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	13.3040	7.5966	0.5322	0.5322
Comp2	5.7074	3.0672	0.2283	0.7605
Comp3	2.6402	1.2735	0.1056	0.8661
Comp4	1.3667	0.5815	0.0547	0.9207
Comp5	0.7853	0.4685	0.0314	0.9521
Comp6	0.3167	0.0915	0.0127	0.9648
Comp7	0.2252	0.0895	0.0090	0.9738
Comp8	0.1357	0.0303	0.0054	0.9792
Comp9	0.1054	0.0117	0.0042	0.9835
Comp10	0.0937	0.0059	0.0037	0.9872
Comp11	0.0878	0.0312	0.0035	0.9907
Comp12	0.0566	0.0194	0.0023	0.9930
Comp13	0.0371	0.0103	0.0015	0.9945
Comp14	0.0268	0.0040	0.0011	0.9955
Comp15	0.0228	0.0043	0.0009	0.9965
Comp16	0.0184	0.0011	0.0007	0.9972
Comp17	0.0173	0.0045	0.0007	0.9979
Comp18	0.0129	0.0028	0.0005	0.9984
Comp19	0.0101	0.0018	0.0004	0.9988
Comp20	0.0083	0.0007	0.0003	0.9991
Comp21	0.0076	0.0019	0.0003	0.9994
Comp22	0.0058	0.0017	0.0002	0.9997
Comp23	0.0041	0.0015	0.0002	0.9998
Comp24	0.0025	0.0009	0.0001	0.9999
Comp25	0.0016		0.0001	1.0000

Figure 5: Principal component analysis based on unemployment rates

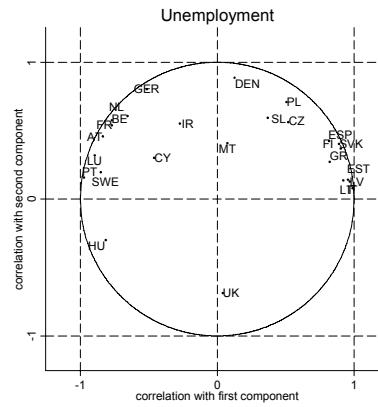


Figure 6: Unemployment – correlation of countries with first two components

The last indicator under study is deficit of public finances. On figure 8 we can see that most of the countries are spread throughout the whole picture and are not grouped into homogeneous set. This indicates that country specific factors play more important role in the determination of public budget deficits. This finding implicates that neither Maastricht Criterion nor Growth and Stability Pact are strong enough to influence public expenditures considerably. In the light of that is not too much surprising that ten EU member states faced to excessive deficit procedure in 2005 and eight in 2006.

Component	Eigenvalue	Difference	Proportion	Cumulative
Comp1	11.1281	4.1101	0.4451	0.4451
Comp2	7.0180	4.1207	0.2807	0.7258
Comp3	2.8972	1.3260	0.1159	0.8417
Comp4	1.5713	0.6312	0.0629	0.9046
Comp5	0.9401	0.2105	0.0376	0.9422
Comp6	0.7295	0.2203	0.0292	0.9714
Comp7	0.5092	0.3025	0.0204	0.9917
Comp8	0.2067	0.2067	0.0083	1.0000
Comp9	0.0000	0.0000	0.0000	1.0000
Comp10	0.0000	0.0000	0.0000	1.0000
Comp11	0.0000	0.0000	0.0000	1.0000
Comp12	0.0000	0.0000	0.0000	1.0000
Comp13	0.0000	0.0000	0.0000	1.0000
Comp14	0.0000	0.0000	0.0000	1.0000
Comp15	0.0000	0.0000	0.0000	1.0000
Comp16	0.0000	0.0000	0.0000	1.0000
Comp17	0.0000	0.0000	0.0000	1.0000
Comp18	0.0000	0.0000	0.0000	1.0000
Comp19	0.0000	0.0000	0.0000	1.0000
Comp20	0.0000	0.0000	0.0000	1.0000
Comp21	0.0000	0.0000	0.0000	1.0000
Comp22	0.0000	0.0000	0.0000	1.0000
Comp23	0.0000	0.0000	0.0000	1.0000
Comp24	0.0000	0.0000	0.0000	1.0000
Comp25	0.0000		0.0000	1.0000

Figure 7: Principal component analysis based on deficits

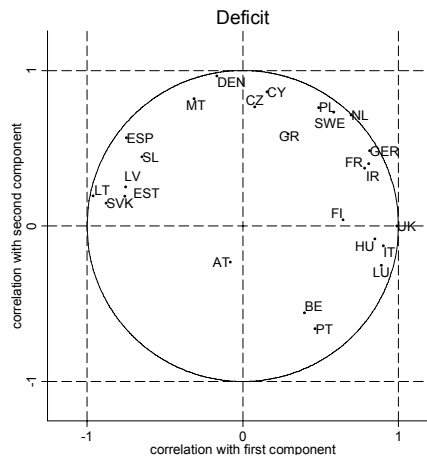


Figure 8: Deficit – correlation of countries with first two components

CONCLUSION

In this paper similarity of European countries is analyzed in order to contribute to discussion about the European monetary integration. Results of principal component analysis suggest existence of common factor determining GDP growth and unemployment. Fifteen EU countries exhibit strong and positive correlation with the first PC in the case of GDP growth and 12 countries in the case of unemployment. Principal components for inflation reveal that there is little support for unified driving force influencing the level of inflation in EU countries. Neither existence of Maastricht criterion, nor European Central Bank, are strong enough to influence inflation significantly in EU countries. Although countries of eurozone brought their inflation rates closer during the examination period, later their inflation rates diverged.

Principal component analysis of deficit suggests existence of common factor for nine European countries. We can guess that this common factor could be an effort to satisfy Maastricht criterion during the original Euro accession period or later Stability and Growth Pact. This is supported by the fact that none of the 10 new members of EU is affected by this factor.

We can summarize that dissimilarities between European countries still exist. This implicates possible difficulties and additional cost of single currency. These costs can be eliminated by some other adjustment mechanisms through which disparities between countries or regions can be accommodated.

BIBLIOGRAPHY

- [1] ARTIS, Michal – ZHANG, Wenda (1997): *On Identifying the Core of EMU: An Exploration of Some Empirical Criteria*: CEPR Discussion Paper 1689, London, Centre for Economic Policy Research.
- [2] ARTIS, Michal – ZHANG, Wenda (2001): Core and Periphery in EMU: A Cluster Analysis. *Economic Issues*, Vol. 6, Part 2, September 2001. pp. 39 -59
- [3] BAYOUMI, Tamin – EICHENGREEN, Barry (1992): *Shocking Aspects of European Monetary Unification*, NBER working Paper Nr. 3949, National Bureau Of Economic Research, Cambridge.
- [4] BLANCHARD, O. – QUAH, D. (1989) The Dynamic Effects of Aggregate Demand and Suplly Disturbances. *American Economic Review*, 79. pp. 655-673
- [5] BOREIKO, D. (2003) EMU And Accession Countries: Fuzzy Clustering Analysis of Membership. *International Journal of Finance And Economics*. No. 8. pp.309 -325
- [6] COHEN, D. – WYPLOZS , Ch. (1989): *The European Monetary Union: An Agnostic Evaluation.*, CEPR discussion paper No. 306. London, Centre for Economic Policy and Research.
- [7] COMACHO, M. – PEREZ-QUIROS, G. – SAIZ, L. (2006): Are European Business Cycles Close Enough To Be Just One? *Journal of Economic Dynamic & Control*. No. 30, pp. 1687 - 1706
- [8] DIBUGLOO, S. – HORVÁTH, J. (1997): Optimum Currency Areas and European Monetary unification. In *Contemporary Economic Policy*, vol. 15, Nr. 1, 1997, pp. 37 – 49
- [9] DUPASQUIER, C. – LALONDE, R. – ST-AMANT, P. (1997): Optimum Currency Areas As Applied To Canada and the United States. In *Exchange Rates and Monetary Policy*. Proceeding of a conference held by Bank of Canada, October 1996. Ottawa, Bank of Canada. pp. 131-170
- [10] FLEMING, J M. (1971): On Exchange Rate Unification. In *Economic Journal*. Vol. 81., 1971, s. 467-488. ISSN 0013-0133
- [11] FRANKEL, Jeffrey A. – ROSE, Andrew K. (1996): *The Endogeneity Of The Optimum Currency Area Criteria*, NBER Working Paper Series, WP Nr. 5700, National Bureau Of Economic Research, Cambridge.
- [12] FRENKEL, M. – NICKEL, Ch. –SCHMIDT, G. (1999): *Some Shocking Aspects of EMU Enlargement*. Deutche Bank Research Note. No. 99-4
- [13] FUNKE, M. (1997): The Nature of Shocks in Europe and Germany. In *Econometrica vol. 64.*, Journal of the Econometric Society, Blackwell Publishing , pp. 461 – 469
- [14] HÄRDLE, W. – SIMAR, L. (2003): *Applied Multivariate Statistical Analysis*. MD*Tech (Method & Data Technologies) www.xplora-stat.de
- [15] INGRAM, James C. (1962): A Proposal for Financial Integration in the Atlantic Community. In *Factors Affecting the US Balance of Payments*. Joint Committee Print. US Government Printing Office.

- [16] JOHNSON, R.A. – WICHERN, D. W. (1992): *Applied Multivariate Statistical Analysis*. Prentice Hall International Edition, Egelwood Cliffs, New Jersey.
- [17] KENNEN, Peter B.(1969): The Theory of Optimum Currency Areas: An Eclectic View. In *Monetary Problems in the International Economy*. Chicago: University of Chicago Press, 1969, pp. 41-60
- [18] KRUGMAN, Paul (1993): The Lessons of Massachusetts for EMU, In *Adjustment and Growth in the European Monetary Union.*, Giavazzi, Torres (editors), Cambridge University Press, New York, 1993, pp. 241-261
- [19] LAFRANCE, Robert – St-AMANT, Pierre (1999): *Optimal Currency Areas: A Review of the Recent Literature*. Bank of Canada Working paper 99-16. Bank of Canada, Toronto
- [20] MCKINNON, Ronald. (1963): Optimum Currency Areas. In *American Economic Review*. Vol 53. September 1963, pp. 717-725
- [21] MUNDELL, Robert A.: A theory of Optimum Currency Areas. In *American Economic Review*. Vol 51. No. 3., September 1961 pp. 657-665
- [22] TAVLAS, G. S. (1993): The “New” Theory of Optimum Currency Areas. In *World Economy 16*. Oxford, Basil Blackwell Ltd. pp. 663-685
- [23] Von HAGEN, J. – NEUMANN, M. (1994): Real Exchange Rates Within and Between Currency Areas: How Far Away Is EMU? In *The review Of Economics and Statistics*. No. 76, pp. 236-244
- [24] WEBER, A. A. (1990): *EMU and Asymmetries and Adjustment Problems in the EMS: Some Empirical Evidence*. CEPR discussion paper, No. 448. London, Centre for Economic Policy Research.
- [25] WHITT, J. A. jr. (1995): *European Monetary Union: Evidence From Structural VARs*. Federal Reserve Bank Of Atlanta Working Paper, 1995-1.

APPENDIX

List of abbreviations:

AU – Austria	GR – Greece	POL – Poland
BE - Belgium	HU – Hungary	POR – Portuguese
CY – Cyprus	IR – Ireland	SLO – Slovenia
CZE – Czech Republic	IT – Italy	SP – Spain
DEN – Denmark	LA - Latvia	SVK – Slovakia
EST – Estonia	LI – Lithuania	SWE – Sweden
FI – Finland	LU – Luxembourg	UK – United Kingdom
FR – France	MA – Malta	
GER – Germany	NE – Netherlands	

Michaela Krčilková
 Česká zemědělská univerzita
 Kamýcká 129
 165 21 Praha 6
krcilkova@pef.czu.cz

EFFECT OF MARGINAL PROPENSITY TO SAVE ON THE ECONOMY WITH USE OF CGE MODELLING

Zuzana Křístková

ANNOTATION

The paper deals with illustration of the use of CGE modelling approach in the policy scenario analysis. CGE model describing the economy of the Czech Republic was used to assess the impact of proposed changes in the marginal propensity to save. The results show that decrease in the propensity to save is associated with negative impacts in the economy due to decline of investments. Pieces of the Knowledge presented in this paper are the result of grant solution MSM 6046070906 “Economics of Czech agriculture resources and their efficient usage within the framework of multifunctional agri-food systems” and the grant project IGA 11110/1312/113137.

KEY WORDS

CGE model, Czech Republic, simulation, marginal propensity to save.

INTRODUCTION

Quantitative assessment of economic policies is highly important concern for any public institutions and private companies. Even though it might be argued that the present turbulent environment is hardly predictable, in the same light the existence of well developed techniques to predict possible changes in the economy is needed. In the year 2004, the Czech Republic has joined the European Union and started a process of integration to the European structures. Ongoing adaptation requires changes in the structure of the economy associated with increased investments, updates of new technologies and profiling of competitive industries. The changes are also tackling labour market, economic boom in recent years has led to high levels of consumption and employment. In view of this favourable development, an unexpected hit of the financial crisis causing major impacts in particular labour markets has occurred. Highly uncertain economic environment represents a challenge for the economists to predict possible outcomes of the ongoing changes.

AIM AND METODOLOGY

General equilibrium models represent one of possible methods for policy scenario analysis. Its main strength lies in the fact that it takes into account simultaneous changes in all markets of the economy and hence it differs from the methods which measure only partial impact in the separated markets.

The main aim of the paper is to illustrate the use of the general equilibrium model on the economy of the Czech Republic and to quantify and interpret results of chosen policy scenarios.

The modelling activity was carried out with the use of data arranged into the form of Social Accounting Matrix (SAM). SAM represents a consistent accountancy framework which is used by means of economic theory in the behavioural equations in order to quantify the intensity of shocks introduced in the system [1]. Most of the information in the SAM was provided by the Czech Statistical Office (CSO) by their published version of the SAM for the year 2005 (by the time of constructing this was the most update version). Since the proposed CGE model is not focused on modelling of financial market, some of the accounts presented in the CSO SAM were aggregated. On the other hand, due to main expected use of the model

in the agricultural simulations, the production and commodity sectors of the matrix were further disaggregated to enable detailed focus on the agrarian sector.

Aggregated form of the matrix which was used in the analysis is presented in the Fig. 1:

Fig.1: Aggregated SAM for CR (2005)

SAM CR 2005	Com	Activities	Prod. Factors	Institutions	Taxes	Capital Account	Rest of the World	Total
Commodities		4 847 529		2 120 934		771 076	2 156 031	9 895 570
Activities	7 527 194							7 527 194
Prod. Factors		2 153 894					21 994	2 175 888
Institutions			2 130 356	1 710 966	280 289		130 790	4 252 401
Taxes	308 057	-27 768						280 289
Capital Account		553 539		147 885		262 500	91 171	1 055 095
ROW	2 060 319		45 532	272 616		21 519		2 399 986
Total	9 895 570	7 527 194	2 175 888	4 252 401	280 289	1 055 095	2 399 986	

Source: Czech Statistical Office, author's elaboration

In the disaggregated matrix, the accounts commodities and activities contain 11 sub-accounts for the sector of agriculture. The production factors are divided into labour, capital and land. Institutions which are included are households, firms and the government. Furthermore, there is a detailed split of taxes on consumption, production, tariffs and taxes on production factors. The capital account is also analyzed separately – it registers flows of savings recorded on the institutional capital account and depreciation in a separate account. The final arrangement of the data thus represents a square matrix of 38 x 38¹.

Description of the CGE model

1. Production structure and technology

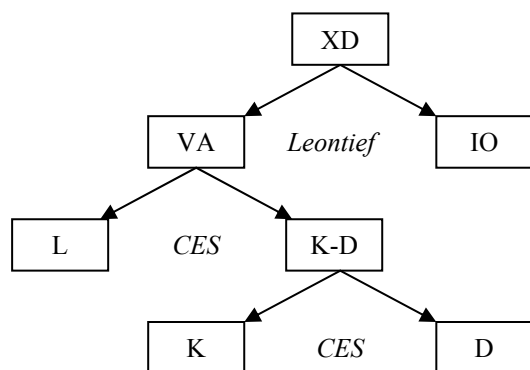
Total domestic supply is a Leontief combination of intermediate consumption and value added under perfect competition and constant returns to scale. The producers minimize costs of employing production factors of capital, land and labour subject to their production technologies expressed by Constant Elasticity of Substitution function (CES)².

Scheme representing nested production structure used in the model is provided in the Fig. 2:

¹ Not presented due to paper extent.

² $XD_i = aF_i (\gamma K_i K^{-\rho F} + \gamma L D_i L D^{-\rho F} + \gamma L_i L^{-\rho F})^{-1/\rho F}$ (first introduced by Arrow and Sollow in 1961)

Fig. 2: Nested production structure used in the CGE model



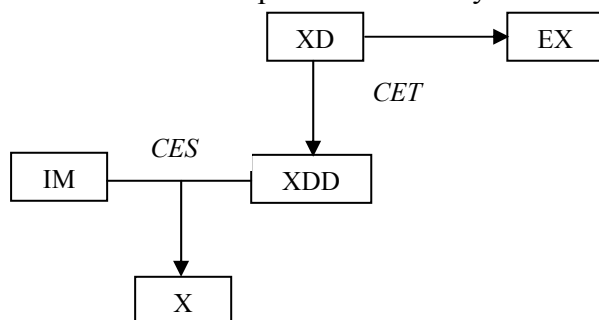
Note:
XD=total domestic production,
K, L, D = factors of production (D= land),
VA= value added,
IO= input output
Terms in italic represent the functional relation which is assumed in the nested structure.

Source: Author's elaboration

2. Composite commodity

Total supply in the market is represented by *composite commodity* consisting of domestically produced goods supplied to domestic markets and imports. CET function (Constant Elasticity of Transformation) and CES function with Armington assumption are used to determine optimal level of the composite commodity³.

Fig. 3: The scheme of composite commodity creation



XD= total domestic production,
EX= exports to the Rest of the World
IM= imports to the Rest of the World
XDD= domestic production sold in domestic market
X = composite commodity (total domestic supply)

Source: author's elaboration

3. Household income

Utility function is expressed by the Linear Expenditure System (LES)⁴. The demand equations are derived on bases of maximization the LES function subject to the budget constraint. The consumer's budget represents net value of income after taxation, transfers and savings.

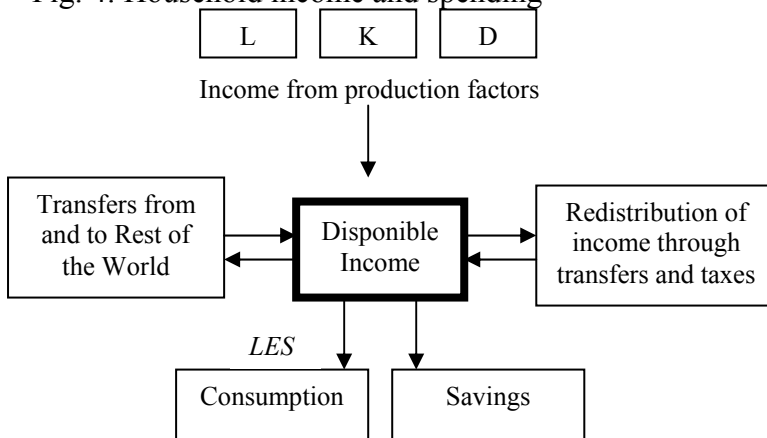
The scheme of household income generation is presented in the Fig. 4:

³ CET: $XD_i = aT_i (\gamma T_i E_i^{pT} + (1 - \gamma T_i) XDD_i^{pT})^{-1/pT}$

⁴ LES: $U = \Pi[(C_i - \mu H_i)^{aHLES_i}]$

CES: $X_i = aA_i (\gamma A_i M_i^{pA} + (1 - \gamma A_i) XDD_i^{pA})^{-1/pA}$

Fig. 4: Household income and spending



Source: author's elaboration

Constructed equations follow the structure of general equilibrium models:

1. Demand equations:

Demand equations are derived from the optimization procedure following the behavioural assumptions of the agents:

- Producers are minimizing costs of production factors subject to their technology expressed in form of CES function.
- Producers decide about allocation of their product between domestic and foreign markets in order to maximize revenues subject to production capacities expressed in form of CET function.
- Composite commodity is derived as minimization of expenditures of consumer basket consisting of imported and domestically produced goods subject to CES function with Armington substitution elasticities
- Consumers maximize their LES utility function subject to budget constraint
- Investments are allocated as a share of savings expressed in the form of the Cobb-Douglas investment function.

2. Zero profit equations

In the presence of perfect competition, the price is determined in the zero profit conditions which equalize the output to the costs of production.

3. Market clearing equations

They enable to clear the market by equalling total supply and demand. Market clearing equations refer to:

- Equilibrium in the market of production factors.
- Equilibrium in the commodity market.

4. Income balance equations

They require maintaining the balance between institutions' revenues and expenditures including:

- Governmental income balance (total gov. income – expenditures = governmental savings)
- Firms income balance (total firm income – expenditures = firm savings)
- Households income balance (total household income – expenditures = household savings)

There are 48 blocks of equations in the model.

Further assumptions are:

- Fixed supply of production factors capital, labour and land.
- Capital is fully employed, land is employed in agriculture.
- Labour allows for certain level of unemployment modelled by Phillips curve.

- Fixed governmental savings.
- Fixed foreign export and import price (small country assumption).
- Endogenous exchange rate adjusts to the level of fixed foreign savings.

RESULTS

Suggested structure of the model was applied to evaluate the impact of policy scenarios in the real economic framework of the Czech Republic describing year 2005. It is assumed that the economy is enough stabilized so that it can provide a baseline for the simulations.

The model was used to measure the impact of the consumer behaviour expressed in form of the propensity to save. The Czech Republic belongs to countries with lowest propensity to save among the European Union countries. According to the Czech Statistical Office report [2] rate of gross savings declined from 15.2% in the year 1995 to 5% in 2006, which is outstandingly bellow EU 27 average (11.2%).

The rate of savings is determined by several factors. In the Czech Republic, positive economic development in the past years and increased portfolio of financial services offering different possibilities of hire purchase led to over-proportionate households' spending. In light of this fact, present threat of the financial crisis might bring change in the consumer behaviour and their willingness to save. In order to asses the impact of the marginal propensity to save on the economy, three scenarios were constructed.

Scenario definition

Status Quo= Baseline

In this scenario, it is expected that no major changes will occur in the following year thus the economy will remain with the same characteristics. The result of this scenario will represent a benchmark level for the following scenarios.

Scenario 1: Short term downturn

This scenario takes into account the ability of the Czech economy to recover soon from the crisis with only short recession. Some analytics predict that the reduction of number of employees will mainly affect foreigners contracted through agencies and thus will not have such effect on the labour market [3] Another argument for only a short term crisis provides the rigidity of labour market where the unemployment will react only with delay and in the same time the labour union will negotiate continuous growth of real wages which will support household consumption [4]. In view of these facts, it is possible to assume that the consumer behaviour will not be significantly changed, which means the consumers will keep the same consumer baskets bringing them equal utility levels but achieved with lower incomes. Therefore, the propensity to save might decrease slightly.

Scenario 2: Long term downturn

More pessimistic scenario counts with the fact that the economic crisis which mainly attacks particular countries will have also heavier impacts on the Czech economy being highly dependent on the exports to European countries. Due to dramatic decrease of foreign private consumption, the possibilities of export will be reduced. According to the prediction of the European Commission, the average level of unemployment in the whole EU would rise by 2% in the following period [5]. Unfavourable development in the economy with increased pessimism and reduction of the trust will lead to change in the consumption behaviour towards savings. The marginal propensity to savings will increase as a result of major shrinks in the household consumption.

The proposed scenarios are presented in the Fig. 5.

Fig. 5: Marginal propensity to save in the proposed scenarios

Scenarios	Marginal propensity to save
Baseline	no change
Scenario 1	decrease by 25%
Scenario 2	increase by 25%

Source: Author's elaboration

RESULTS

The simulations were processed in the GAMS modelling software (using solver CONOPT). Results of the two considered scenarios were analyzed with respect to the baseline and the percentage changes in comparison to the benchmark level were calculated (in case of agriculture, the results represent average value of all agricultural sub-sectors).

Every simulation, that is carried out represents an external shock into the system. The benchmark equilibrium, which truly reflects the original structure of the economy, is changed and the economy adopts to find new market equilibrium. Such simulations have extreme requirements on simultaneous calculations which GAMS software enables.

The simulations that were carried out consider change in the marginal propensity to save. In order to track all consequent changes, it is useful to start from the main impact that the shock brings, which is the level of consumption. If the marginal propensity to save declines (as in the Scenario 1) the rate of consumption will logically increase. This is supported by results displayed in the Fig. 6. It is possible to observe, that main growth of household consumption is recorded in the services sector, positive reaction is also noticed in agriculture. Considering the scenario 2, where marginal propensity to saving increases, both demand for agricultural commodities and services decreases. It is possible to observe, that similar reaction emerges in the case of governmental consumption, which reacts more sensitively in the sector of manufacturing.

In order to satisfy increased consumption, either the imports or domestic production must adjust. Development of imports expressed in the Fig. 6 suggests that increased demand in the agricultural and services sector is covered by domestic market. The reason for decrease in imports is the depreciation of exchange rate (Fig.7) which makes the imported goods relatively more expensive while it favours the exports, noticeably in the sector of services (growth by 1.24%).

Looking at the level of investments, predicted impact is negative in all sectors, which is in compliance with a decrease of savings rate. Opposite result can be observed in the case of Scenario 2 which supports the investments.

Fig.6: Effects on GDP components

% Change	Scenario 1			Scenario2		
	Agri	Manuf.	Services	Agri	Manuf.	Services
Private Consumption	0,0765	-0,0347	0,284	-0,6994	0,028	-0,2844
Gov Consumption	0,038625	-0,1402	0,1417	-0,04265	0,1273	-0,1427
Investments	-0,9282	-1,134	-0,855	0,9242	1,124	0,8513
Exports	0,00562	-0,7529	1,2379	-0,0559	0,7198	-1,186
Imports	-0,7589	-0,4424	-1,0591	0,7317	0,4315	1,03

Source: Author's elaboration

The figure 7 provides more detailed view on the situation in particular markets. Both price and quantity changes can be observed. It is necessary to mention that the price changes should be interpreted with respect to the *numeraire* which in this case is the wage rate. This is to say,

that the percentage indexes represent relative not absolute changes. When comparing price effects in the three analyzed sectors, it can be seen that prices of domestically produced goods decrease both in the sectors of services and agriculture. The price of composite goods which is the decisive price for the consumers changes in the same direction. As a result, in the services sector it leads to increased production and hence the consumption. On the other hand, considering sector of manufacturing, the production becomes more expensive and thus the consumption followed by respective production decreases. It should be mentioned, that in the Czech Republic a major part of the manufacturing production is used in the production process – intermediate consumption of manufacturing sector is triple value that of the private consumption. Another surprising point is that labour costs play significant role in the production process of the manufacturing sectors.

Fig. 7: Effects on the markets

% Change	Scenario 1			Scenario2		
	Agri	Manuf.	Services	Agri	Manuf.	Services
Composite price	-0,037	0,1709	-0,1111	0,03626	-0,1614	0,1086
Domestic price	-0,0255	0,1663	-0,0774	0,0256	-0,1568	0,0767
Composite commodity	-0,4358	-0,5326	0,1181	0,4176	0,5151	-0,1174
Domestic production	-0,3337	-0,673	0,4129	0,29062	0,6695	-0,4002
Demand for capital	-0,3783	0,003	0,0049	0,3625	-0,0029	-0,0047
Demand for labour	-0,438	-0,6996	0,4099	0,4198	0,6717	-0,3973
Demand for land	-0,02477	-	-	0,023363	-	-

Source: Author's elaboration

Finally, in the sectors of agriculture, despite growth of consumption, both imports and production declines which suggests that the consumption is outweighed by sharp decrease of investment demand. It is worth mentioning, that the changes induced by the simulations are mainly of a very small scale due to noticeably lower importance in the total economy (this is meant in the sense when comparing one single sub-sector of agriculture to aggregated sector of manufacturing or services).

Changes in production structure can be associated with changes of indexes of production factors prices. In the Fig. 8, it can be observed that as a result of change in marginal propensity to save and consequent shifts in the consumption, the demand for capital increases in most of the sectors. It could be expected that it would lead to increase of price of capital, but observing changes in the demand of labour, it will outweigh the relative price of labour. As a result, the price of labour becomes relatively more expensive than the price of capital.

Since the land is demanded only in the agricultural sector and the production of those sectors decreases, the price of land with respect to the wage rate declines as well.

Due to assumed substitution between the production factors, more expensive labour is substituted for capital and the households' income from labour decreases.

Fig. 8: Price effects

% Change	Scenario 1	Scenario2
Return to capital	-0,0066	0,0064
Wage rate	<i>numeraire</i>	<i>numeraire</i>
Rent rate	-0,5078	0,4874
Exchange rate	0,1255	-0,1198

Source: Author's elaboration

Final effects on the economy are illustrated in the Fig. 9. As it could be expected, total savings under the first scenario drop by 0.96% while the private spending increases by 0.15%. Increase of wage rate consequently causes rise in unemployment and drop in GDP. Consumer utility, associated with the level of consumption increases by 0.13%.

Fig. 9: Final effects on the economy

% Change	Scenario 1	Scenario2
Total Savings	-0,9651	0,9608
Private spendings	0,1516	-0,152
Unemployment	0,2971	-0,2621
Consumer utility	0,1342	-0,1383
GDP	-0,0951	0,0917

Source: Author's elaboration

CONCLUSION

From the simulation results follows that the scenario 1, which considers decrease in the marginal propensity to save, brings rather negative results. This is caused mainly by the fact, that increased consumption, despite bringing higher utility levels for the consumers, outweigh significantly the investments and hence it leads to decrease of the GDP and rise of unemployment. As opposite, it could be concluded that increase of the propensity to save brings positive effects on the production and the unemployment.

Even though the changes induced by the simulations are considerably small, the results provided an illustration of possible use of the CGE modelling approach in the policy analysis.

BIBLIOGRAPHY

- [1] TAYLOR, L., VON ARNIM, R: *Projected Benefits of The Doha Round Hinde on Misleading Trade Models*, Policy Note. New York: Center for Economic Policy Analysis, March 2007.
- [2] Czech Statistical Office: “*Úspory a zadluženost : ocitly se české domácnosti v dluhové pasti?*”, July, 2008. online January 1, 2009.
<http://www.czso.cz/csu/2008edicniplan.nsf/p/1151-08>
- [3] Financial Newspapers: “*Analytics: The unemployment will rise next year*”. Online January 1, 2009 http://www.financninoviny.cz/index_view.php?id=346245
- [4] Analytical team of the Czech Savings Bank: “*Year of buffalo and recession*, published in www.investicniklub.cz Online January 1, 2009.
- [5] “*The crisis will increase unemployment in EU by 2%, warns Špidla*” Online January 1, 2009 <http://aktualne.centrum.cz/zahranici/clanek.phtml?id=626218>

Ing. Zuzana Křístková
 Czech University of Life Sciences,
 Faculty of Economics and Management
 Department of Economics
 Kamýcká 129
 165 21 Prague 6
kristkova@pef.czu.cz

ENERGY FACTOR OF INTERNATIONAL ECONOMIC RELATIONS

Andriy Ruban

ANNOTATION¹

The paper explores the role of the energy sector in modern international economic relations with the specific implication for the Eurasian integrating environment. It defines energy sector as a milestone of global economy. The paper explores evolution of theories of resource supply, the place of energy supplies in the system of global resources. Based on the world energy market analysis the author picks out European gas market for further consideration. It is explained why gas industry is vital for Europe's economy development and what are the major problems the European market faces. In the final part, the paper challenges diversification of energy supply as the best alternative to balance interests of gas consumers and suppliers. It recommends a four level integration model of Eurasian gas industry to achieve effective cooperation between European energy customers and Eurasian energy suppliers.

KEY WORDS

energy, energy security, energy market, EU-Russia relations, international relations, oil, gas, market integration, resources supply.

INTRODUCTION

Energy resources is a primary factor of converting objects of labor (raw resources or products of previous labor) into subjects of labor and means of mankind existence. Among the other resources energy material is the basis for the industrial and postindustrial civilization development as none of economic processes can be organized without substance and energy.

Energy is a prerequisite to economic growth. The prosperity that economic development brings, in turn, stimulates demand for more and better-quality energy services. Energy services enable basic human needs, such as food and shelter, to be met. They also contribute to social development by improving education and public health. The absolute amount of energy used per capita and the share of modern energy services are key contributors to human development.

From early stages of mankind history production process was relying on usage of energy. First manufacturing was enabled by muscle-power of human beings and animals. Later on civilization progress were relying on usage of power from burning different organic substances (primarily wood) and wind usage (in wind mills and sails). As technology level was advancing people started using the energy of water. However, energy from burning fossil fuels – primarily wood, coal and peat and later on gas and oil – became dominant in world energy balance for a long time.

¹ The conference research paper is realised within the Grant projects managed by Faculty of International Relations of Economic University in Prague: "Energetická náročnost: determinanta změn toků fosilních paliv a implikace pro EU a Českou republiku" (GA402/07/0440), "Regionalismus a multilateralismus: základy nového světového obchodního řádu?" (GA402/07/0253) and „Governance v kontextu globalizované společnosti a ekonomiky” (MSM6138439909).

AIM AND METODOLOGY

The aim of the research is to find the way for improving efficiency of the energy supply in a globalized and interconnected environment.

Analysis of the paper relies on historical overview of factor theories of production and analyses of the energy consumption and market development data of International Energy Agency. The paper depicts globalized world with available energy resources as an integral system, where change in one element can cause any kind of shock. The approach from general to specific enables to regard European situation in more detail. The hypothesis of diversification as an effective system of energy supply is challenged of being the best alternative and a market integration model is proposed.

RESULTS

The research recommends further energy market integration within Eurasian region. This integration should take place not only between the energy market consumers within EU, but also between states outside of EU, i.e. energy transporters and energy suppliers. This integration trend logically results into a proposed four stage convergence model for the Eurasian gas market.

Energy Resources in the System of the Global Resources Supply

Modern international economic relations are characterized by their further in-depth development. This development unifies not only economic components, but also technological, sociocultural, and political elements. All these elements – in their counter-dependence, interaction and increasing integration – form a complex system of relations, currently known as globalization. And though non-materialistic imperatives (i.e. ecology, environment protection, information, and humanization of the society) are of growing importance, material factors – natural and energy resources specifically – remain the milestone of the postindustrial economic development.

In economics, resources (from *fr. ressources* – means, assets, wealth, economic factors, sources) are considered as part of the potential owned by a country or a world community. They are used for economic, social and technical development. Thus supply and exchange of resources means resources availability for market agents.

Resources – as a social category – were analyzed by a number of economic schools. Mercantilists were relating the availability of resources to the prosperity of the nation. A. Smith believed that natural resources limitation can cause nations stagnation [1]. Resources were also considered by fisiocrats as part of land production factors.

Industrial revolution in Europe facilitated development of factors theories of production. It further explained labor, land, capital, technology and entrepreneurship as specific resources' categories. Theories of international trade explained international exchange by nation's possession of advantages in the resources allocation, availability of mobile and specific resources. Industrialization, militarization and energy crisis of the second half of the XXth century resulted in “zero growth” futurological theories, which proved that future technological development and population growth are not possible without primary energy sources. Thus resources availability and their ecological efficiency became the mile stone of economy.

Obviously, energy resources are important in gaining national security, developing regional cooperation and integration of the transit states in the “East-West” energy market relations. It's no wonder that fossil fuels – ranging from cleaner low carbon substances (such as natural gas) to higher carbon substances (such as coal) – are still the key economic resources. They are the part and parcel of power generating industry, manufacturing industries, transportation etc.

The influence of energy resources on national stability can be illustrated by the following example with mutually dependent countries “X” and “Y”. Country “X” reduces oil supplies and creates danger for political regime for country “Y”. If “Y” is efficient enough, then it can import energy substitute from the third country and destabilization would not take place. The war situation when resources are conquered is not the case here. However, if decision making in “Y” is constrained by finance resources, than “Y” may increase its foreign debts or it may experience inflation due to increase of prices. The scarcity of oil in the state “Y” can cause import of alternative energy sources (coal or natural gas). Increase of these imports would reduce their availability for other countries. If country “Y” introduces embargo on technologies exports to “X”, than the system should come into original equilibrium (of course, this would work only when “Y” is a monopolist supplier of technologies to “X”). This example proves that within integrated mutually dependent economies a trade-off in exchange of the required resources and balance of economic interests are always possible.

International Energy Market: Product and Geographical Structure

Starting with the industrial revolution and the introduction of the internal-combustion engine², oil has become an essential factor in the economic expansion of the twentieth century. Its importance has become more pronounced with the internationalization of world economy, when oil replaced energy of wind, vapor, burning of coal and wood in transportation and manufacturing (fig. 1)³. Commercialization of the energy supply, international division of labor, search of the energy material with the best energy properties, regional differences in availability of energy resources caused further development of international energy markets and structural changes in international energy balance worldwide.

In 2005 Energy Information Administration estimated that 86% of primary energy production in the world came from burning fossil fuels [2]. Even though renewable sources are still the perspective energy sources in the world; gas, oil and coal – as traditional fuels – will dominate in energy consumption and international trade still for a long time. It is projected that energy demand will continue to grow, with the world set to use 60% more energy in 2030 than at present. Among fossil fuels oil will be dominating in fuel consumption. Natural gas will be ranking the second and will be the fastest growing primary energy source [4].

Fig.1 Structure of the primary energy consumption in the world 1900-2030, %

Year	Coal, peat	Oil and petroleum products	Gas	Hydroenergy	Nuclear power	Alternative energy of (Sun, wind, geothermal, biomass)
1900	89,8	3,5	1,1	1,6	0	4,0
1935	72,2	16,7	4,4	4,9	0	1,7
1970	35,0	42,5	16,4	5,1	0,3	0,7
2005	23,3	36,3	27,5	6,2	6,1	0,8
2030*	21,8	35,0	25,0	2,2	4,6	11,3

* Forecasted data are based on the estimates of the International Energy Agency

² The early models of internal combustion engines used different sources of energy: water, air and hydrogen, hydrogen and oxygen mixtures, vapor, lighting gas, gasoline and different forms of liquid petroleum fuels. For more details see “History of the internal combustion engine” at <http://en.wikipedia.org/>.

³ See in: Нефтегазообеспечение глобальной экономики. Миловидов К.Н., Коржубаев А.Г., Эдер Л.В; М.: ЦентрЛитНефтеГаз; 2006. – p. 10. Forecasted data are taken from Vošta M., Dynamika energetické náročnosti s implikací pro EU, Současná Evropa a česká republika 1, 2007. – p. 252

The above trend is also confirmed by the data from fig. 1. It confirms that the share of coal consumption significantly decreased, the share of oil went up and gas is the most demanded energy source of today.

Not all countries can produce all of the energy resources they use. Thus net importers and net exporters of oil, gas and other resources can be distinguished. The interdependence between these groups plays a significant role in shaping global economic and political developments.

From the supplies side, the Organization of Petroleum Exporting Countries (OPEC), a group of 11 countries⁴, produces close to 40 percent of total world oil production and owns about 70 percent of proven oil reserves. Other major oil producers in decreasing order of production are the U.S., Russia, Mexico, China, Canada, and Norway. Overall, the Middle East, especially the Persian Gulf, remains the major oil and gas producing region, and holds around 60% of the proven global oil reserves⁵ and 40% of the proven gas reserves. Post USSR region and primarily Russia, for instance, has 31% of the proved global gas reserves⁶.

From the consumers' side, during the last decade the increase of demand of energy consumption was observed in Eastern Europe, South-Eastern Asia, India, China and Latin America. The growth for energy demand here was caused by further population growth and increase in industrial production based on cheap labor [10]. All the large consuming countries – including China and India – are increasingly dependent on imports from an ever-smaller group of distant producer countries, some of them politically unstable. In consequence, energy markets become less flexible and prices more volatile. Thus misbalances in energy supply and demand give rise to the problems of energy security and national stability.

Due to continuation of integration processes within European Union its output continuously grows. Due to that EU ranks as the second biggest consumer of energy after the USA. In 2004 EU-25 was consuming 15,8% of the total used energy worldwide, USA – 12,1% and China – 14,7% [9].

Considering the above, we would focus our further research on European natural gas markets and gas supplies from the former USSR⁷. Gas has lower carbon content comparing to traditional energy sources. It can easier replace usual and alternative energy resources. Its increasing usage can also solve the existing global warming problem in the light of the EU commitment to carbon emission reduction within the Kyoto Protocol.

European Gas Market

The studies of the Gas Center of UN Commission for Europe in Geneva proved that natural gas demand is expected to increase strongly in Western and Central Europe. In EU-15 gas demand will be increasing at an average rate of 2,1% per annum till 2020: from 386 bcm in 1999 to some 600 bcm in 2020. In EU-30⁸ it is expected to grow at a higher pace of 4,2% per annum: from 462 bcm in 1999 to 777 bcm in 2020 [5].

The increasing demand for natural gas in Western and Central Europe and the decline of indigenous production reconfirm the need to explore opportunities for supplies diversification and constructive relations with the main gas supplies: Russian Federation, North Africa, Middle East and Central Asia. Current demand-supply situation till 2020 may cause more

⁴ International Energy Agency, Oil Market Report, May 11, 2005. The most recent issue of the Oil Market Report is available online at: <http://omrpublic.iea.org/>

⁵ Department of Energy, Energy Information Administration, "Non-OPEC Fact Sheet". Available online at http://www.eia.doe.gov/emeu/cabs/topworldtables1_2.html

⁶ World Energy Outlook 2004, Paris 2004. p. 137. Available online at <http://www.iea.org/textbase/nppdf/free/2004/weo2004.pdf>

⁷ Except of Russia the biggest supplies are Kazakhstan and Turkmenistan.

⁸ EU-30: in addition to the EU-15, the EU-30 includes Estonia, Latvia, Lithuania, Poland, the Czech Republic, Slovakia, Hungary, Slovenia, Romania, Bulgaria, Turkey, Cyprus, Malta, Switzerland, and Norway

than 70% EU dependence on the external gas supplies. And though diversification of energy and gas supply specifically is the most frequently used argument for the European policy makers, practice works contrarily.

Due to the limited LNG supplies, insignificant usage of alternative energy, environmental threats and governmental restrictions for nuclear energy usage, high costs of constructing new energy routes and low costs for gas transport by existing pipelines Europe will be primarily dependant from Russia [5]. For instance, in 2005 Poland imported 50% of the demanded gas from Russia, Estonia – 100%, Finland – 100%, Czech Republic – 70%, Austria – 74% , Germany – 39%, Italy – 30% [6].

Russia actively uses its monopolistic supplier positions in relations with Europe. It leverages its risks of getting access to higher profits from financially sound customers in EU. Gazprom buys gas infrastructure in Europe to guarantee access to the “higher profits” in EU than for instance in Ukraine or Belarus.

Empiric economic research proves that Russia should invest in European gas storage, transmission and distribution facilities [8], and that profit-maximizing behavior is a clear fact. However, in 2008 Germany and UK created precedents to limit investments from Russia [9]. Thus EU tried to politically block liberal economic movement of capital between East and West. In response Russia was pressurizing Ukraine and Belarus in gas transit cooperation trying to get debts out of them.

Russian-Ukrainian “gas” wars in 2006 and 2008 made EU to think over the security of the gas supply over again. However, to achieve stability EU should let Russia integrate into the single European gas market. In exchange Russia should provide western companies opportunities to invest into the gas resources extraction in Russia. Only this interdependence can lead to economically and politically stable and profitable international relations for all the parties.

Eurasian Gas Market Convergence Scenarios

Globalization processes in relations between Russia (alternatively CIS) and EU-30 on the energy market are realized on four levels. Those levels result into intensive cross-border cooperation, technical progress and environment protection.

The first level is a microeconomic level, i.e. cooperation between upstream, middle-stream and down-stream corporations. This “market consolidating” level is realized through foreign direct investments, “know-how” transfers, creation of strategic alliances, by signing service and product sharing agreements, and concession contracts.

Gazprom has set ambitious goals to grow and globalize gas exports in 2008. It undertakes the first LNG deliveries to the Asia-Pacific region. Additionally it exercises its stronger management role in Wingas GmbH (following the recent build-up of its stake to 50% less 1 share) and other affiliated European companies. Gas prices on markets of the Baltic States will reach average European levels. The South Stream project will take its first steps aimed at bringing Russian gas to South Eastern Europe circumventing the traditional transit countries.

The second level is a mezo-economic level, meaning creation of local, regional and international market places such as electronic gas commodity exchanges. The latter ones are functioning already in certain EU countries, for instance in Germany and Netherlands. It may also include creation of the regional product associations, which can be an analogue for OPEC, i.e. “Gas” OPEK (OGEC) including such main gas extracting states as Algeria, Iran, Norway, Russia, Kazakhstan, Netherlands, and Turkmenistan. Alternatively it can be nongovernmental public organisations like MANNGO (from *rus. Международный альянс неправительственных некоммерческих организаций газовой отрасли*), creation of which was discussed in 2008 between Russia, Turkmenistan, Uzbekistan, Ukraine, Belarus and Iran.

The third macroeconomic level of the Eurasian integration is extensive international governmental legal cooperation connected to national law developments. EU member states

have signed already two EU Gas Directives (1998, 2007), established primary institutional mechanisms to collectively address energy relations with Russia: the Energy Charter Treaty and the EU-Russia Energy Dialogue. The Energy Charter Treaty, which Russia has signed but not ratified, would oblige Russia to adopt a legal framework governing investment, transit, and trade in energy resources. Some analysts contend that European leaders should make Russian implementation of the Treaty a requirement of any future EU-Russia Partnership and Cooperation Agreement [7]. In April 2008 Russia also adopted the law allowing foreign companies invest in national strategic branches, such as geology and fossil fuels extraction. The fourth and final level of cooperation is setting up mechanisms to implement a common Eurasian gas market based on non-discriminatory principles. This macroeconomic level should primarily address political recognition of the market forces, integration of sub-regional country groupings (EU, EEC, CIS, EVRAZES), development of trans-European energy corridors, adopting legislation on ownership and free access to the infrastructure. It requires in-depth development of the first three levels but functioning together as a single system. This cooperation should avoid conflicts between Russia and Europe, by using NATO expansion in protection of energy interests for certain states.

CONCLUSION

Analysis of the world energy market demonstrates a clear domination of oil and gas in energy consumption. The major part of produced energy sources is consumed by the leading world industrial centers. European Union, which ranks the second in energy consumption worldwide, till 2030 would heavily rely on external gas supplies. In view of high volatility of oil prices, ecological limitations imposed by Kyoto Protocol, “green” parties lobbying, insufficient developments in alternative energy sources, and governmental restrictions for nuclear power usage enlarged European Union will be focusing on developing further its gas supplies.

EU gas supplies can be secured either through diversification of energy supplies recommended by International Energy Agency or deeper integration with existing suppliers. As diversification strategies is a costly way of contracting limited non traditional gas supplies, from our point view, EU should be developing a four steps energy market integration model with Russia as its traditional oil and gas supplier. This model, outlined in part four of this paper, should be more relying on economic incentives of cooperation than political reasoning very often hindered by pro-American interests in the European region.

Europe’s willingness to purchase large amounts of additional Russian gas depends on perceived reliability, price, and EU energy competition policy. More competition and a reduction in the use of high-cost coal would allow more gas into the European market. Though EU started already an energy dialog with Russia, there is still a strong resistance observed from the side of EU gas market monopolists like Ruhrgas and RWE [13, p. 18]. The latter are more inclined to protect costly diversification strategies and implementation of clean coal technologies. These difficulties can only result in delays to increase imported gas volumes from Russia and letting Russian gas companies in forming gas alliances in EU.

BIBLIOGRAPHY

1. Ядгаров Я.С. История экономических учений. – М.: Экономика, 1996. – 249 с.
2. Fossil fuel. From Wikipedia, the free online encyclopedia. Available online at: http://en.wikipedia.org/wiki/Fossil_fuel#cite_note-2
3. Нефтегазообеспечение глобальной экономики. Миловидов К.Н., Коржубаев А.Г., Эдер Л.В., – М.: ЦентрЛитНефтеГаз; 2006. – 400 с.
4. Assessment of internal and external gas supply options for the EU, evaluation of the supply costs of new natural gas supply projects to the EU and an investigation of related

- financial requirements and tools. OBSERVATOIRE MEDITERRANEEN DE L'ENERGIE. Available online at: <http://www.iea.org/dbtw-wpd/textbase/work/2002/seegas/OMESum.PDF>
5. Natural Gas, International Energy Outlook 2004. Energy Information Administration. Available at: http://www.eia.doe.gov/oiaf/archive/ieo04/nat_gas.html
 6. Paul Belkin. The European Union's Energy Security Challenges. CRS Report for Congress. Congressional Research Service. Updated May 7, 2007.
 7. Bolle F., Ruban R. Competition and Security of Supply: Let Russia Buy into the European Gas Market! European University Viadrina. Discussion paper No. 258. – Frankfurt (Oder), 2007.
 8. Реут А., Чайка Ф., Русиш инвестор? Хенде хох!, Известия, Июль 2007, Available online at: <http://www.izvestia.ru/economic/article3105903/>
 9. Vošta M. Dynamika energetické náročnosti s implikací pro EU. Současná Evropa a Česká republika, 2007, č. 1. Centrum evropských studií Vysoké školy ekonomické v Praze. – str. 250-264.
 10. Gueye M. K. Trade, Climate Change and Sustainable Energy Transition. International Centre for Trade and Sustainable Development. 2006. Available at: http://unfccc.int/files/meetings/cop_12/climate_talk_series/application/pdf/20061115_17.30_gueye.pdf
 11. Либб Д., Либб С. Фактор нефти: Как защитить себя и получить прибыль в период грядущего энергетического кризиса: Пер. с англ. – М.: ООО «И. Д. Вильямс», 2007. – 320 с.
 12. World Energy Outlook 2004, Paris 2004. p. 137. Available online at <http://www.iea.org/textbase/nppdf/free/2004/weo2004.pdf>
 13. Gray D. Reforming the Energy Sector in Transition Economies: Selected Experience and Lessons. World Bank Discussion Paper No. 296. – World Bank, Washington, D.C., 1995.

Mgr. Andriy Ruban
Vysoká Škola Ekonomická
Fakulta Mezinárodních Vztahů
nám. W. Churchilla 4
Praha, 130 67
Česka Republika
rubanand@yahoo.com
Mob: +420-724-824-822
Mob: +420-776-28-49-91

UNDERSTANDING HOUSEHOLD ENERGY BEHAVIOR THE MULTI PERSON CASE

Axel Sonntag

KEY WORDS

Energy consumption modelling, intra household bargaining, decision making, non-unitary economic households

INTRODUCTION

Analyzing energy issues at least since the oil price shocks of the 1970s and 1980s has become a serious concern of the economic science. As there have been developed many specific fields of energy consumption analysis, the residential sector due to its big share in total consumption has been of particular interest. Thus a lot of studies were conducted to investigate the consumption patterns of household energy use. Although there is a range of insufficiencies in the current household energy consumption models this paper only focuses on criticising the assumption that households are acting like single rational economic individuals, the unitary household. Against the background of intra household bargaining theory and small group research I explore whether a simplification to a unitary household like it is implicitly existent is acceptable for energy consumption models.

AIM AND METODOLOGY

The aim of this paper is to call attention to proliferating indications that intra household bargaining is very likely to affect the household energy consumption decision and shall therefore provide a theoretical basement for upcoming empirical research. This should be demonstrated by analyzing current household energy consumption models for space heating and discussing their determining variables. That section is followed by a short review of articles explicating household-internal decision making processes. Merging the thoughts of generally non-unitary households with current energy consumption models results in a set of requirements that forthcoming models should fulfil in order to improve the understanding of household energy behavior.

RESULTS

Current Energy Consumption Models

As mentioned in the introduction several studies have been carried out so far to help understanding what drives residential energy consumption for space heating purposes. Traditionally the authors in the field used technically triggered variables like heating degree days, the size of the dwelling or the vintage class of the building to estimate the household energy consumption. In the first instance this mechanistic and technology focused approach has rightly been criticized for leaving out socio-economic aspects of energy consumption as well. Hence subsequent studies also revealed socio-economic determinants like the age of people in the household, the household income, or the legal relation of rather owning or renting a dwelling as important influential factors (for a list of some more determinants see Figure 1).

In any case the household is implicitly assumed to be a single rationally behaving individual. In this paper I will not stress the fundamental criticism of the assumption of total and pure rationality (*homo economicus*) in the tradition of Herbert Simon's bounded rationality

approach although it is still relevant and I very much agree with it (Gigerenzer and Dahlem 2002, Gigerenzer and Todd 1999, Simon 1957).

Figure 1: Determinants of recent household energy consumption models for space heating

Determinants	Literature
<i>Dwelling characteristics / technical factors</i>	
Heating degree days / weather data	(Haas et al. 1998, Nesbakken 2001, Shimoda et al. 2007)
Dwelling size	(Haas et al. 1998, Rehdanz 2007, Schuler et al. 2000, Shimoda et al. 2007, Nesbakken 2001, Sardianou 2008)
Type of the dwelling (single or multi family dwelling / detached house or apartment)	(Haas et al. 1998, Shimoda et al. 2007, Nesbakken 2001, Rehdanz 2007, Schuler et al. 2000)
Vintage class and thermal quality of the building	(Schuler et al. 2000, Rehdanz 2007, Shimoda et al. 2007, Haas et al. 1998, Sardianou 2008, Nesbakken 2001, Kletzan et al. 2006)
Type of heating system (district, central, non-central)	(Schuler et al. 2000, Rehdanz 2007, Haas et al. 1998)
Type of energy carrier	(Rehdanz 2007, Nesbakken 2001, Schuler et al. 2000)
Lifetime of technology	(Kooreman 1996)
<i>Socio-economic factors</i>	
Number of people in the household	(Haas et al. 1998, Shimoda et al. 2007, Nesbakken 2001, Rehdanz 2007, Schuler et al. 2000, Sardianou 2008)
Age of people in the household	(Rehdanz 2007, Nesbakken 2001, Sardianou 2008, Schuler et al. 2000, Shimoda et al. 2007)
Employment status of people living in the household	(Schuler et al. 2000, Rehdanz 2007)
Household income	(Haas et al. 1998, Nesbakken 2001, Rehdanz 2007, Schuler et al. 2000, Sardianou 2008)
Dwelling ownership	(Nesbakken 2001, Rehdanz 2007, Schuler et al. 2000, Sardianou 2008)
Investment cost	(Kooreman 1996, Nesbakken 2001)
Energy price	(Haas et al. 1998, Nesbakken 2001)
Indoor Temperature	(Leth-Petersen 2007, Haas et al. 1998)
Hours of utilization per day	(Kooreman 1996, Sardianou 2008)
Regional idiosyncrasies	(Rehdanz 2007)

This paper criticizes the often stated assumption that households can be seen as unitary entities. Without a doubt this would only be correct for one person households. In all other cases, where two or more people live together the question arises under which circumstances they make decisions or who is actually responsible for (or at least influences) the decision outcome of the whole household.

Certainly it seems logical that a household has to speak with one voice when articulating an energy consumption relevant investment choice. It is quite clear that e.g. in the case of an energy technology like a new central heating system or better insulated windows it wouldn't make much sense e.g. to only upgrade parts of the dwelling or choose different quality standards maybe according to different preferences of the people living in this certain household (e.g. renew 3 out of 5 windows). On the other hand households still consist of

human beings that cannot be equalized and added up to one fictitious individual¹ easily, like it has been done in most of the previously mentioned energy consumption research implicitly. Therefore if the aim is scrutinizing energy consumption behavior of households deeper in order to better understand the underlying processes we first have to treat households as what they really are, groups of interdependent individuals and not unitary black boxes!

The Myth of Unitary Households

How must individuals behave to fit into a unitary household model best? As two or more people are expected to behave like one fictitious individual called “the household” adding up all incomes to one collective sum obviously would make sense. Income pooling means that all members of a household pay their income into a collective pool out of which then the wants and needs of all payers can be satisfied jointly. If the income really would be pooled before spending, a relative change of the share of income should not have an effect on the welfare distribution between the household members. This can empirically be tested by monitoring the consumption of a good or service that only provides utility to one of the household members and is ignored by the other(s). Ermisch and Pronzato do so in choosing the spending on the father’s children from his previous union assuming that the new spouse does not derive any utility out of this kind of expenditure (Ermisch and Pronzato 2008). The results reveal that a pure form of income pooling cannot be proved. Ermisch and Pronzato conclude that some bargaining power probably could be derived from one household member’s income share in relation to the total household budget, what will be discussed in the light of other authors later on. I fully agree with the aim of Ermisch and Pronzato’s test to show that pure income pooling is fictitious. However, I have to mention that there probably exist better examples than the expenditure for children from earlier unions, because it is not so clear to me that new spouses would totally ignore his/her spouses’ children. And that is in fact what is assumed here.

Coming from the opposite direction Chen and Woolley conduct a totally different approach. They use a game theoretic model to represent households as two rational and separately utility maximizing individuals (Chen and Woolley 2001). Each household member herein is expected to act like a selfish homo oeconomicus. Unsurprisingly they found an intra household free rider problem which results in the underproduction of public household goods (e.g. cleaning). Although it has not been shown formally they also argue that long time partners could be expected to find ways to negotiate over the provision levels of the household public good as well in order to overcome the free rider thread.

Badoe on the other hand was investigating the traffic mode choice behavior for the daily travel to work and came up with a nested decision structure where one person’s choice is conditional on the other person’s² (Badoe 2002). In this set a utility gain of the spouse also increases the own utility. He found that his nested model fitted the data better than an individual model. Hence households with more than one worker more likely form a decision unit that maximizes the joint utility³ of both people rather than choosing egoistically and independently like a rational individual in Chen and Woolley’s game would be expected to do.

Another, quite common way to design household decisions is called the collective approach i.e. the household utility equals the weighed sum of the individual utilities of the household members (Lancaster et al. 2006). The weights are often defined as relative decision power over the other person or influence on household decision making (Dobbelsteen and Kooreman 1997). Lancaster et al. assumed that the decision power varies over the different expenditure

¹ the unitary household

² The assumption that both members of the household have jobs is a requirement to monitor work trip behavior.

³ or minimizes the joint disutility

categories. This should represent possible inequalities in the distribution of responsibilities between the spouses. Each spouse has to take care of some parts of the household which logically leads to a specialization that could be followed by decision power redistribution for specific commodities⁴. One of the main challenges using the collective approach is to specify weights which represent the relative bargaining power. Lancaster et al. applied a 3 stage least square procedure and estimated the weights simultaneously to the household's expenditure and earnings decisions. The empirical results show evidence that it is relevant who of the household members contributes the biggest income share. Even though their findings also reveal more complex interdependencies that warn us not to draw too fast conclusions, but to cautiously analyze data.

As the models described so far consider how power is distributed within some kind of bargaining environment. Dobbelsteen and Kooreman tried to find out whether a household production approach can probably perform better than a bargaining design (Dobbelsteen and Kooreman 1997). They do so by investigating how financial management is distributed between two spouses. It is assumed that the more power one spouse has, the higher the probability to satisfy his or her own preferences. In the bargaining power driven model a positive relationship between bargaining power and control over expenditures would be expected. Regarding the household production approach where time is the key variable the opposite is the case. Time can be used for market work, financial management and leisure. In this case financial management needs time (which could be used elsewhere) and therefore it is "more of a chore than a source of power" (Dobbelsteen and Kooreman 1997: p.346). Those two models have been tested in a game theoretic framework. The overall result clearly shows that a bargaining model, where control over financial management is seen as a result of bargaining power, dominates the household production function approach. However, control over expenditures does not automatically mean more bargaining power. Dobbelsteen and Kooreman hence distinguish between "strategic control" and "executive management" (Dobbelsteen and Kooreman 1997: p.346). The former more implies (probably rare but) important decisions (e.g. big investments) whereas the latter has more to do with time consuming daily business like paying small bills etc.

Moreover besides the criticism of the model structure discussed so far, also empirical weaknesses have been found. Traditionally empirical surveys to test for household behavior select their sample out of a set of households. After the selection procedure certain members of this household (individuals) are asked to fill out questionnaires to inquire their behavior. With the collected data researchers then wrongly explain the behavior of the household although they only got the answers of individuals, not the households itself (Badoe 2002). Therefore modeling households as individuals that interact with each other in groups not only due to structural considerations seems to be the more appropriate method but also for statistical reasons.

CONCLUSION

Energy has become one of the most important policy fields today. In order to provide a useful basement for the development of specific consumption decreasing policy actions a detailed understanding of household decision behavior is needed. As strong evidence exists that there is a level beneath the abstract household entity further research has to unveil the concrete structures and processes at the individual level and regarding interdependencies. Furthermore there is no scientifically tenable reason why especially energy decisions should be carried out in a totally different way as other choices, i.e. the individual level does matter! Current energy

⁴ Lancaster et al. differentiated between 9 commodity categories: food, tobacco, alcohol, fuel and light, clothing, footwear and bedding, education, medical items, other commodities

consumption models so far seem to be blind beneath the household level which obviously results in an unsatisfying situation.

That's why further research is needed bringing light into the darkness of following questions: In the more general case, it would be interesting what kind of influence do close friends, the family⁵, or neighbours⁶ have on the household decision outcome. Therefore it would be necessary to investigate more social interdependencies, their importance, and impact mechanisms first.

Another remaining field of research is the application and empirical verification of current household decision theories to the specific energy relevant context.

BIBLIOGRAPHY

- BADDOE, D. (2002) Modelling Work-Trip Mode Choice Decisions in Two-Worker Households. *Transportation Planning & Technology*. Routledge.
- CHEN, Z. & WOOLLEY, F. (2001) A Cournot-Nash Model of Family Decision Making. *Economic Journal*. Blackwell Publishing Limited.
- DOBBELSTEEN, S. & KOOREMAN, P. (1997) Financial management, bargaining and efficiency within the household; An empirical analysis. *Economist*, 145, 345-366.
- ERMISCH, J. & PRONZATO, C. (2008) Intra-household allocation of resources: Inferences from non-resident fathers' child support payments. *Economic Journal*, 118, 347-362.
- GIGERENZER, G. & DAHLEM, W. (2002) *Bounded rationality - the adaptive toolbox ; report of the 84th Dahlem Workshop on Bounded Rationality: The Adaptive Toolbox, March 14 - 19, 1999*, Cambridge, Mass. [u.a.], MIT Press.
- GIGERENZER, G. & TODD, P. M. (1999) *Simple heuristics that make us smart*, New York [u.a.], Oxford Univ. Press.
- HAAS, R., AUER, H. & BIERMAYR, P. (1998) The impact of consumer behavior on residential energy demand for space heating. *Energy and Buildings*, 27, 195-205.
- KLETZAN, D., KOPPL, A., KRATENA, K., SCHLEICHER, S. & WUGER, M. (2006) Towards sustainable consumption: Economic modelling of mobility and heating for Austria. *Ecological Economics*, 57, 608-626.
- KOOREMAN, P. (1996) Individual discounting, energy conservation, and household demand for lighting. *Resource and Energy Economics*, 18, 103-114.
- LANCASTER, G., MAITRA, P. & RAY, R. (2006) Endogenous Intra-household Balance of Power and its Impact on Expenditure Patterns: Evidence from India. *Economica*. Blackwell Publishing Limited.
- LETH-PETERSEN, S. R. (2007) Habit Formation and Consumption of Energy for Heating: Evidence from a Panel of Danish Households. *Energy Journal*, 28, 35-54.
- NESBAKKEN, R. (2001) Energy consumption for space heating: A discrete-continuous approach. *Scandinavian Journal of Economics*, 103, 165-184.
- REHDANZ, K. (2007) Determinants of residential space heating expenditures in Germany. *Energy Economics*, 29, 167-182.
- SARDIANOU, E. (2008) Estimating space heating determinants: An analysis of Greek households. *Energy and Buildings*, 40, 1084-1093.
- SCHULER, A., WEBER, C. & FAHL, U. (2000) Energy consumption for space heating of West-German households: empirical evidence, scenario projections and policy implications. *Energy Policy*, 28, 877-894.

⁵ in a broader sense than the nuclear family.

⁶ also other peer groups and superiors

SHIMODA, Y., ASAH, T., TANIGUCHI, A. & MIZUNO, M. (2007) Evaluation of city-scale impact of residential energy conservation measures using the detailed end-use simulation model. *Energy*, 32, 1617-1633.

SIMON, H. A. (1957) *Models of man social and rational ; mathematical essays on rational human behavior in a social setting*, New York u.a., Wiley.

Mag. Axel SONNTAG
Vienna University of Economics and Business Administration
Nordbergstraße 15
1090 Vienna
axel.sonntag@wu-wien.ac.at

POTENTIAL ECONOMIC EFFECTS OF THE LOMÉ CONVENTIONS IN SUB-SAHARAN AFRICA

Beáta Udvari

ANNOTATION

The European Union has built up special relationship with the developing countries. To achieve the aims of the common development policy, the EU grants not only financial aid but also trade preferences in order to help the reintegration of these countries into the world economy. The most important commercial tool is the conventions granting trade preferences for the contracting parties – like the four Lomé Conventions, which ensured the ACP-countries free access to the European markets in contractual form for a period of 25 years. This paper tries to investigate the possible economic effects of the Lomé Conventions on the Sub-Saharan African countries.

KEY WORDS

Lomé Conventions, trade preferences, Sub-Saharan Africa

INTRODUCTION

Nowadays one of the world economic challenges is the extremely bad position of the developing countries. On one hand it cannot be accepted morally that the majority of the inhabitants in these countries live on less than 1 dollar a day. On the other hand, the disadvantaged situation of these economies has effect on the international community also: in the current era of globalization, mutual dependence, threatening international terrorism, global epidemic danger and global climate change we have to take account of the problems of the developing nations.

Several international organizations try to decrease this problem, but the financial aid they grant has dangers (e.g. corruption, dependency) and it becomes not effective in the long-term view [1]. Furthermore, the current financial crisis predicts less aid flow into these countries, so another possibility for promoting development should be found. One solution could be the trade preferences granted for the underdeveloped countries.

Beside the classical-neoclassical theories, the export-base theory (dealing with regional development) emphasizes the importance and advantages of international trade as a key point for further development [2]. This *trade-centred approach* can be seen in the practice of both the United Nations (UN) and the World Trade Organization (WTO). In 2000 the UN announced the *Millennium Development Goals*, one of which says ‘Develop a global partnership for development’ [3], which contains trade promotion. Besides, the WTO launched the *Aid for Trade* development program aiming the establishment and development of trading capacities (such as infrastructure) in the developing countries, so they could take part in the international trade more effectively [4]. Beside them, the European Union has been concentrating on trade and trade preferences in its common development policy for more than 3 decades. The EU – as the biggest development aid provider – has built up special relationship with some of the developing countries, but the largest preferences are granted for the ACP-countries¹, based on the four *Lomé Conventions* (1975-2000) and the *Cotonou Partnership Agreement* (2000-2020). The key element of these EU-ACP agreements is the trade preferences – expecting that they would promote real development in the beneficiary countries.

¹ African, Caribbean, Pacific countries.

AIM AND METHODOLOGY

Because of the growing importance of trade and international trade, the aim of this paper is to investigate *how effective the trade and other preferences of the Lomé Conventions were in Sub-Saharan Africa*. Since these Conventions were in effect for 25 years, there should be positive impacts on the economy of the contracting countries. Considering these, this paper tries to investigate the possible impacts of the Conventions by statistical methods. To understand the logic of the methodology worked out for the analysis, the Lomé Conventions should be discussed first.

THE LOMÉ CONVENTIONS

The Lomé Conventions were unique in the era when they were signed. Four Conventions continued each other, and they were in effect between 1975-2000. It is unambiguous that their key point is the *non-reciprocal trade preferences and long-term free access* to the European market granted *in contractual form* to the recipient countries [5], [6]. The trade and economic diversification were expected to promote economic growth and development [7], [8]. The concept seems to be successful, as the number of ACP countries, signed the Conventions, grew (and there was no left): 46 ACP countries joined the first Convention, while 68 the fourth one.

The granted trade preferences are important because it affected the 90% of the ACP export products [5]. Besides, more than half of the ACP countries were contracting parties of the GATT², which dealt with tariff cuts of only industrial products but not of agricultural ones – which meant a large disadvantage for the ACP countries [9]. What is more, non-tariff barriers were imposed on goods produced by the ACP countries [10], so these countries had a non-favourable position in the international trade.

Most of the literature dealing with the Lomé Conventions emphasizes the trade preferences only, but I believe they were more than simple trade conventions, since they contained elements in connection with industrialization and foreign direct investments. All of them had the aim to diversify the economy and to hinder that the ACP countries become dependent from one (generally agricultural) export product and be able to decrease the risk coming from the fluctuating price of the products they can export.

All these facts suggest that the intervention of the European Union seemed to be favourable for achieving real development in the beneficiary ACP-countries. Considering this, I tried to analyse the economic effect of these Conventions in the Sub-Saharan African countries (i.e. the poorest nations in the world) by statistical methods.

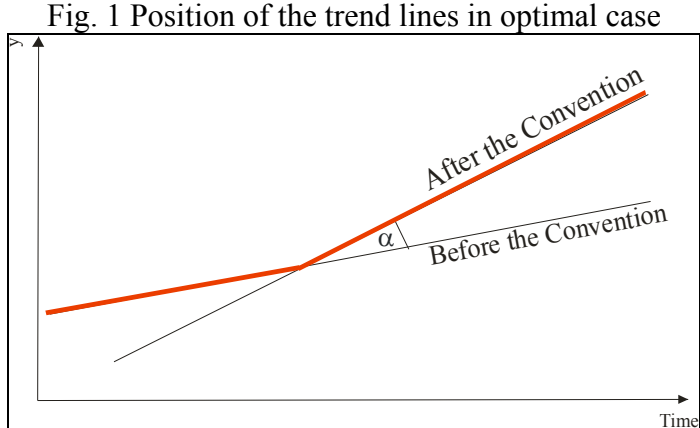
METHODOLOGY OF THE EMPIRICAL ANALYSIS

I worked out an own methodology with simple assumptions for the statistical analysis. It was assumed that the greatest effects can be experienced in those countries which are mostly dependent on the EU – therefore the statistical investigation covers only the Sub-Saharan African countries signed the Lomé Conventions³. Furthermore, since the number of countries, signed the Lomé Conventions, was different, the four Conventions were analysed separately – I created a group from the African countries of each Convention.

² General Agreement on Tariffs and Trade, signed in 1947. It was the former „institution” of the World Trade Organization.

³ For determine the most dependent countries, I remembered the fact that Africa remained the only continent where the EU could gain economic and political influence, so I assumed that the EU’s interest is to develop this area. Furthermore I analysed the trade data of the country-groupings, finding that the EU is the largest trade partner of the African countries, while the USA is for the Caribbean states (the Pacific countries have no special trading partner) [11].

Considering the areas and aims of the Lomé Conventions and looking at the relevant literature, I determined six, exclusively economic indicators to analyse the effectiveness of the Conventions.⁴ These indicators are as follows: (1) GDP per capita, (2) growth of GDP per capita, (3) share of industry from the GDP, (4) share of Sub-Saharan Africa from the EU's extra-import, (5) its share of the EU's extra-export and (6) foreign direct investment flowing into the African countries. These indicators were investigated in the period of 1970-2005 based on yearly data. The concept of the methodology worked out is the comparison of the pre- and after Conventional period. Consequently, the whole 1970-2005 period was divided into two sub periods: a 'before the Convention' and an 'after the Convention' period, and trend lines were drawn on the data of these two periods. It is said that one trend is valid till essential change happens in the main economic process, so a new development tendency can be experienced after the essential change [12]. Because signing one of the Conventions can be considered as an essential change in the economy, it is worth comparing the two ('before' and 'after the Convention') trend lines. I assumed that the pre-Conventional period describes the development tendency with the original economic policy (without the external intervention), while the after-period trend includes the possible effects of the external interventions, namely the Lomé Conventions. After testing several opportunities, linear trend lines were drawn on the data points and their inclinations were compared. In my assumption there was a positive effect if the inclination of the after-line (containing the effects of external intervention) is higher than the before-line (Figure 1). To watch the difference, I calculated the included α angle, though I did not give any importance of its measure, I analysed only its sign (positive or negative).



Source: own edition

RESULTS

All the Conventions and indicators were tested by this method; the results are summarized in Figure 2. It has to be emphasized that this method is suitable only for showing development tendencies and we will not get a general picture on the economic effects of the Lomé Conventions. Furthermore, the results of the empirical analysis are based on the last three agreements as the trend lines of the first one were drawn according to only 6 data points. The tendencies of the empirical investigation show that in case of GDP per capita positive change can be experienced only in Lomé IV. Although in the other three cases the gradient of the 'after' trend lines were lower than the 'before' lines, the tendencies showed further growth – but by a less pace we expected according to the 'before' trend lines. Furthermore, the GDP per capita and its growth are dependent on several factors (e.g. labour force, capital, institutional background), so the changes cannot be exclusively the effects of the Lomé Conventions.

⁴ To analyze other, so called social indicators was hindered by the lack data in the 1970s for the sample countries.

As for the industrial cooperation, the ‘after’ trend lines had negative inclination in case of the first three Lomé Conventions, and the only positive change can be experienced after Lomé IV. In spite of this, between the data of 1970 and that of 2005 only little difference can be seen: the contribution of industry to the GDP is 21-23% on average. Consequently, according to the analysis the Conventions had low impact on this area, which predicts problems in economic diversification in the investigated African ACP-countries.

Fig. 2 Evaluation of the Lomé Conventions

Aim and areas	Economic growth		Trade cooperation		Industrial cooperation	
Indicator	GDP per capita	Growth of GDP per capita	African share from EU25 extra-export	African share from EU25 extra-import	Contribution of industry to GDP	Foreign direct investment
Lomé I	-	-	-	-	-	+
Lomé II	-	+	+*	-	-	+
Lomé III	-	+	+*	+*	-	+
Lomé IV	+	+	+*	+*	+	+

Key to signs: +: positive change; -: negative change; +*: positive change compared to the pre-Convention period, but the ‘after’ trend line had negative inclination.

Source: own edition

The key element of the Lomé Conventions was the trade cooperation – and this area had the most unfavourable results. The trend lines in case of all the Conventions showed a decreasing share from the European extra-export and –import, although it became less than the pre-Convention trend lines predicted. It can be a positive effect of the Conventions⁵, but the preferences granted by the EU suggested higher share in EU-trade. Looking at the country groups of each Convention, the share in 2005 is only one-third of the share in 1970. It is important to note that the base for the calculation in case of every agreement was the EU25; consequently the decreasing share cannot be the consequence of the continuously enlarging EU. Considering these, this situation may be the result of external, global economic changes and the change of the European strategy.⁶

The empirical analysis shows positive changes in the foreign direct investments: the ‘after’ trend lines have higher inclination than the ‘before’ ones. But the basic data of the calculation were in current prices; therefore it is not sure that the growth is due to the Conventions and not due to the increasing prices.

CONCLUSION

As nowadays the trade and trade preferences as a potential basis for real development get more importance by the WTO (*Aid for trade program*) and by the UN (*Millennium Development Goals*), the aim of the paper was to investigate whether earlier trade agreements could contribute to economic development in underdeveloped countries. Therefore this paper tested the possible effects of the Lomé Conventions signed by the EU and ACP countries.

The Lomé Conventions were more than simple trade conventions, and knowing the granted preferences and the supported areas (free access to European markets, industrial cooperation, investments), I assumed they could be beneficial for further and more ambitious development of

⁵ Persson and Wilhelmsson achieved similar results in their study, saying that the trade achievements between the ACP countries and the EU would be worse without the trade preferences of the Lomé Conventions [13].

⁶ For example, the products of the emerging Asian states were more competitive than those of the African states. Furthermore the EU concentrated on Central-Europe after the collapse of the Soviet era, and this area became more important for the EU in a strategical view [6], [14].

the recipient African ACP-countries. Besides, knowing the positive correlation between trade and development, I supposed the trade preferences together with the industrial cooperation (including investments) outlined in the Conventions would lead the recipient countries to a more favourable economic situation. I tested it by empirical analysis, which showed extremely unfavourable results in the recipient Sub-Saharan African countries.

In spite of these weak results, I assume taking part in international trade could have positive effects on development, but it is essential to improve the background infrastructure in the beneficiary countries (as aimed by the WTO program). Furthermore, the EU through the new Cotonou Partnership Agreement tries to differentiate the recipient countries (creating homogeneous groups) – and this cooperation could lead to more favourable achievements. And together with the WTO and UN programs, perhaps the beneficiary countries could experience real economic development.

BIBLIOGRAPHY

- [1] Szent-Iványi, B. (2005): A nemzetközi fejlesztési együttműködés politikai gazdaságtana. *Kül-Világ*, 4, pp. 28-45.
- [2] Lengyel, I. – Rechnitzer, J. (2004): *Regionális gazdaságtan*. Dialóg Campus Kiadó, Budapest-Pécs.
- [3] UN (2008): *Official list of MDG indicators*.
<http://mdgs.un.org/unsd/mdg/Host.aspx?Content=Indicators/OfficialList.htm> (downloaded: 10 October 2008)
- [4] OECD – WTO (2007): *Aid for trade at a glance 2007. 1st global review*. Executive summary. World Trade Organization, Geneva.
- [5] Babarinde, O. – Faber, G. (2004): From Lomé to Cotonou: Business as Usual? *European Foreign Affairs Review*, 9, pp. 27-47.
- [6] Cosgrove, C. (1994): Has the Lomé Convention failed ACP trade? *Journal of International Affairs*, 1, pp. 223-250.
- [7] Babarinde, O. A. (1994): *The Lomé Conventions and Development. An Empirical Assessment*. Aveburg Ashgate Publishing Limited, Aldershot, England.
- [8] Spaventa, A. (1999): The Lomé Convention. Objectives, Instrument, Results. *Federico Caffè Centre Research Reports*, 2, Roskilde University, Denmark
- [9] Stiglitz, J. E. (2003): *A globalizáció és visszasságai*. Napvilág Kiadó, Budapest.
- [10] Somai, M. (1997): A GATT-ból a WTO-ba: az Uruguayi forduló előzményei és eredményei. *Külgazdaság*, 10, pp. 4-20.
- [11] Bjornskov, C. – Krivonos, E. (2001): From Lomé to Cotonou. The new EU-ACP Agreement. *Working Papers*, 14, Danish Institute of Agricultural and Fisheries Economics (SJFI).
- [12] Köves, P. – Pármiczky, G. (1975): *Általános statisztika*. Közgazdasági és Jogi Könyvkiadó, Budapest.
- [13] Persson, M. – Wilhelmsson, F. (2006): Assessing the Effects of EU Trade Preferences for Developing Countries. *Working Paper*, 4, Lund University, Department of Economics.
- [14] Santos, S. (1997): *Lomé Convention*. Government Institute for Economic Research, Helsinki.

Beáta Udvari

University of Szeged, Faculty of Economics and Business Administration

Kálvária sgt. 1.

Szeged, Hungary

udvari.beata@eco.u-szeged.hu

**BUSINESS ECONOMICS, MANAGEMENT AND
MARKETING**

WHERE IS THE WORLD HEADING? – TOWARDS INFORMATION-BASED OR KNOWLEDGE-BASED SOCIETY?

Dan-Eugen Birtu

ANNOTATION

Information technology has developed very rapidly during the last decades of the twentieth century. A global information infrastructure has been created, which has led to the development of the information society. Seeking for competitive advantage, many companies turned to IT, and, the lack of expected benefits has been referred to as the “Information technology productivity paradox”. Because of its ubiquity, IT has become a commodity, unable to provide competitive advantage. Companies need something which is neither highly available, nor easy to copy or imitate, like knowledge, which has become more emphasized, leading to the emergence of the knowledge-based society. The aim of this paper is to emphasize the continuous transition towards the knowledge-based society and the increasing need for a competitive advantage which can be best achieved by focusing on human resources and knowledge.

KEY WORDS

Information technology, information society, productivity paradox, knowledge-based society, knowledge

INTRODUCTION

The breakthroughs in electronics from the second half of the twentieth century have led to an unprecedented development of information technology (IT). New means of communication have evolved very rapidly, which facilitated generation, transfer and storage of information. People have started to gain access faster and easier to more and more information. Due to the continuous development of the Internet, computers and mobile communication systems, IT became “the biggest technological revolution men have known” [9].

The first computers network was developed in 1965, but the Internet gained a public approval at the beginning of the 1990s, and, according to the Internet World Stats there are over 1.46 billion people worldwide using the Internet. Due to its increasing popularity, a growing number of services have become available online: World Wide Web, E-mail, E-commerce, E-learning, E-marketing, E-banking, etc. If 15 years ago people started to discover things that could be done on the Internet, today, there are few things that cannot be done on the Internet.

Today it is evident that IT has become one of the main pillars of commerce. It supports the operations of individual companies, connects widespread supply chains, and, increasingly, brings businesses closer to the customers they serve. “Hardly a dollar or a euro changes hands anymore without the aid of computer systems” [5]. “We live in an IT-enabled world” [14].

According to the International Telecommunication Union (ITU), there were approximately four billion phone subscribers worldwide by the end of 2006. The continuous improvements in telecommunication networks, computers and the Internet have led to the creation of a global information infrastructure. This infrastructure allows a very high amount of information to be stored, transferred and accessed very easily. The global information infrastructure has had the biggest impact on the society since the industrial revolution and it has contributed to the development of the information society.

In the information society, the access to information is no longer a problem. The time required for information processing is decreasing, and more and more information is processed in the

same amount of time. The biggest advantage of the information society, the access to information, constitutes also a drawback, because people confront with information overload. The continuous development of the information infrastructure and the increasing power of IT are clearly reflected in the companies' expenditures: firms around the world spend well over \$2 trillion a year on IT [5]. Gartner Inc. reports this figure reached \$3.1 billion in 2007. In the year 2000, U.S. firms invested \$409 billion in IT [11]. Nearly 50% of the capital expenditures of American companies go to IT [5].

Obviously, companies expect superior financial performance after the considerable expenditures on IT. Despite substantial investments in IT, the economical achievements were lower than previously anticipated for many organizations. The discrepancy between investments in IT and productivity became known, in the eighties, as the "information technology productivity paradox" [2, 3, 4, 7, 11, 12].

The information technology productivity paradox

The weak relation between IT and productivity has become controversy and the IT productivity paradox became the source of a significant amount of research [2, 3, 4, 7, 11, 12]. Although during the last two decades the improvements of IT have been spectacular, and, the delivered computing-power has increased by more than two orders of magnitude, the effects of productivity proved almost impossible to assess. The lack of confidence regarding IT is obvious in statements like "no, computers do not boost productivity, at least not most of the time" [6], and it's often summarized with Robert Solow's quip: "you can see the computer age everywhere but in the productivity statistics" [10].

The peak of disillusionment regarding IT was in the 1980s, and it was chronicled in many articles which have disclosed negative correlations with economy-wide productivity. The business media's publications regarding the productivity paradox were premature and over-emphasized. Following the same practice, many cover stories from the 1990 have rushed to announce the "productivity payoff", overstating reality and overlooking the limitations of the academic studies on which they were based.

After the 1990s, new data has been identified, and, the new methodologies that have been applied have had more encouraging results. The presumption of the productivity paradox has declined. Researchers found positive evidence regarding the use of IT and the lack of trust in computers has began to fade [4]. A growing number of studies have reported positive effects of IT on various measures of economic performance [4].

Brynjolfsson [2] proposed four non-exclusive explanations for the productivity paradox: measurement errors of inputs and outputs, lags due to learning and adjustment, redistribution and dissipation of profits, and mismanagement of information and technology. Bakos [1] offers an alternative list of possible explanations, listing measurement errors, mismanagement, diffusion delay, and capital stock theory.

However, more recent studies regarding IT and productivity focus more on mismanagement [12]. The information infrastructure is continuously expanding, and, IT's power and ubiquity are increasing and manifold companies might invest in the same technology, but only those that manage to successfully integrate IT into their business processes will prove to be successful. It was concluded that IT has affected competition in three ways: it has led to changes in industry structure and competition, it has been used to support the creation of new businesses, and companies using IT have outperformed their competition [8].

As the power of IT and its presence have increased, the possibility of becoming a source of competitive advantage has also decreased. IT has become a foundation for most of today's businesses; it is necessary but not sufficient. Nevertheless, a high percentage of top executives still consider IT as a key to a company's profitability and survival. The way of thinking

behind this assumption is that the potency and ubiquity of IT have increased, so too has its strategic value.

From information to knowledge

Because of the high amount of information available, searching for something precise is becoming more time consuming. The availability of information to everybody decreases its value. Nowadays, there is no such thing as a shortage or lack of information. The real challenge, for every person, is to deal with all the information available efficiently, to be able to select and to have the useful information in the right time and in the right place. Almost every worker, in any domain of activity, confronts daily with more information than he needs. In order to maintain a competitive position on the market and to be profitable, companies must have a competitive advantage. The overwhelming amount of information available, especially in the managerial field, hardly makes it a source of competitive advantage, and this is the main reason why the information society is already outdated.

The premise for a resource to be strategic, and its ability to underpin a sustained competitive advantage, is not ubiquity but scarcity. The increasing power and presence of IT has begun to transform it from a potentially strategic resource into a commodity. It is becoming “the cost of doing business that must be paid by all but provide distinction to none.” [5]. An edge over rivals can only be gained by having or doing something different, that they cannot have or do. Today, all the main aspects and functions of IT are available and affordable to virtually everybody, which makes it a strategic necessity rather than a source of competitive advantage. The real challenge is how to use this information, or to “know-how” to act in order to create value.

The increasing availability of information, and its decreasing importance, in a world where competitive advantage is the most important factor, has led to the knowledge-based society. The global information infrastructure constitutes a foundation for the knowledge-based society which couldn't exist without it; information is still needed, but knowledge is more emphasized. The transition from the information-based to the knowledge-based society has been made gradually, globally, and this transition is still taking place today. Also, it is improper to refer to a society as being a fully information or knowledge-based society. More properly is to refer to the information and the knowledge aspects of a society. These sides of a society coexist and the transition from the information to the knowledge-based society is more about the change of the emphasis from the information side of a society to the knowledge side. In order to understand this transition and the necessity for it, first a proper distinction between information and knowledge has to be made.

According to Albert Einstein, “Information is not knowledge”. In Latin, there are two verbs, which express the verb “to know”: “sapere” and “conoscere”. Although both can be translated using the same word, their meanings are different: “sapere” can best be translated as “know-what”, and “conoscere” as “know-how”. Their meanings are different, and the same difference can be made between knowledge and information. Information means “to know-what” and knowledge means “to know-how. “Knowledge is a purposeful coordination of action”[13]. Knowledge is all about doing, and it can be demonstrated through action. Information is available almost anytime and everywhere. The information infrastructure allows information to be downloaded in much higher amounts than it can be processed. People often confront with too much information, irrelevant information or information overload; it rarely happens to be short of information. Regarding knowledge, it is never too much, and it is improper to say that people confront with knowledge overload. Knowledge can contain information, but information can't contain knowledge. Knowledge can be expressed by information, but just reading some information doesn't make us knowledgeable. Information can be used to describe action, but knowledge is action. Knowledge can also be

described as a process, but information is only a part of that process. "Information is not knowledge and knowledge is not a part of IT." [15]

All these differences between information and knowledge explain why the information side of the society is losing importance, and the emphasis has moved towards the knowledge side of the society. As Alvin Toffler expressed, "we are now living in a knowledge-based society, where knowledge is the source of the highest quality power".

Another aspect that makes knowledge a source of competitive advantage is that it is difficult to copy and the attempts of imitating it has often led to less valuable outcomes than the original. Information can be copied almost instantly, virtually anywhere and anytime. Knowledge refers to an action or a process, with multiple inputs and a proper coordination. Knowledge is embodied in the workers, it is about the way of doing things, and although it might be observed and studied by the competition, it is difficult to copy.

These distinctions about knowledge have to be very clear in the knowledge management field, in order for this resource to be used to its full potential. The objectives of creating, improving, developing or sharing the knowledge can be easily turned into generating information, if there isn't a proper understanding of knowledge. A proper description of action, cannot replace action itself.

CONCLUSION

The rapid development of IT has led to the development of the global information infrastructure. Although the way of doing business has changed and many processes have been modified, the lack of evidence regarding the bottom-line benefits from using IT, mainly in the 1970s and 1980s has been referred to as the IT productivity paradox.

Although, after finding positive evidence from using IT in the 1980s, the presumption of the productivity paradox has diminished, IT has never become a source of competitive advantage again, and, on the contrary, it has become a commodity. In the search for a different source of competitive advantage, a transition to knowledge, and the knowledge-based society, has begun, and it is still taking place today.

In a world where the uncertainty is growing continuously and where forecasting of the future is becoming less reliable, knowledge is a sure source of competitive advantage. When markets shift, technologies evolve very rapidly, competition is increasing and products become obsolete faster than ever, successful companies are those which continuously create new knowledge, disseminate it throughout the organization and embed it in their activity, products and services.

BIBLIOGRAPHY

- [1] BAKOS, Y. The Productivity Payoff of Computers: A Review of the Computer Revolution: An Economic Perspective by Daniel E. Sichel, *Science* 281, 1998, p. 52
- [2] BRYNJOLFSSON, E. *The Productivity Paradox of Information Technology: Review and Assessment*, Communications of the ACM, December 1993, pp. 66-77
- [3] BRYNJOLFSSON, E., HITT, L. M. *Beyond Computation: Information Technology, Organizational Transformation and Business Performance*, Journal of Economic Perspectives, Volume 14, Number 4, Fall 2000, pp. 23-48
- [4] BRYNJOLFSSON, E., YANG, S. *Information Technology and Productivity: A Review of the Literature*, Advances in Computers, Academic Press, Vol. 43, 1996, pp. 179-214.
- [5] CARR, N.G. *IT Doesn't Matter*, Harvard Business Review, May 2003, pp. 41-49
- [6] Economist. *Working Harder, Doing Less*, 1990, p. 17
- [7] HITT, L., BRYNJOLFSSON, E. *Productivity, Business Profitability, and Consumer Surplus: Three Different Measures of Information Technology Value*, Management

- [8] PORTER M. E., MILLAR V. E. *How Information Gives You Competitive Advantage*, Harvard Business Review, Vol. 63, No. 4, Jul /Aug 1985, pp. 149-160
- [9] SNOW, C. P. *Government Science and Public Policy*, Science, 1966, Vol. 151, pp. 650-653.
- [10] SOLOW R. M. *We'd Better Watch Out*, New York Times Book Review, July 12, 1987, p.36
- [11] STIROH, K. J. *Information Technology and the U.S. Productivity Revival: What Do the Industry Data Say?* Federal Reserve Bank of New York Staff Report, no. 115, January 2001
- [12] STRATOPOULOS, T. DEHNING, B. *Does Successful Investment in Information Technology Solve the Productivity Paradox?*, Information & Management, Volume 38, 2000, pp. 103-117
- [13] ZELENY, M. *Human Systems Management: Integrating Knowledge, Management and Systems*, World Scientific, 2005
- [14] ZELENY, M. *The IEBM Handbook of Information Technology in Business*, Thomson Learning, 2000, ISBN 1-86152-636-9
Information Systems Quarterly, June 1996, pp. 121-142
- [15] ZELENY, M. *Knowledge-information autopoietic cycle: towards the wisdom systems*, Int. J. Management and Decision Making, Vol. 7, No. 1, 2006.

Dan-Eugen Birtu
Thomas Bata University, the Faculty of Management and Economics
Nam. T.G.Masaryka 5555
Zlin
birtudan@yahoo.com

FORMULATION AND TRANSLATION OF THE ORGANIZATIONAL CULTURE FROM HOME COUNTRY TO THE FOREIGN ACQUISITION WITHIN AN INTERNATIONAL RETAIL ORGANIZATION

Lenka Drličková

ANNOTATION

The paper is first partial output of an ongoing joint international research focussed on Role of organizational culture in international retail organizations from Czech Republic. The paper deals with questions of culture translation from home country to the foreign acquisition in Czech Republic, and of the way of the organizational culture formulation in the Czech acquisition.

KEY WORDS

Organizational culture, international retail organization, translation of organizational culture, organizational culture in a Czech acquisition,

INTRODUCTION

National and organizational culture is not a new phenomenon of which researchers and scholars talk. Hofstede (1984) distinguished four main dimensions which country cultures differ. Martin (1992) summarized characteristics of three different points of view on culture research. Schein (1984) explained three layers of a culture and Trompenaars (2001) showed the interactions of different cultures in companies.

This paper presents partial research findings¹ and is focussed on one particular example of an International Retailer active in Czech Republic. By using the theoretical framework and comparison of approachable information (described closer in methodology) it tries to answer three questions concerning the formulation and translation of the culture in the example organization. The name of the International Retailer remains unrevealed on purpose as it was agreed with the organization; however, this should not blur any research findings.

Presented paper begins with outline of the methodology used and states the three hypotheses. Afterwards the first findings of the research are shown and in the end these are discussed in order to find the right answers on main hypotheses.

AIM AND METHODOLOGY

Aim of the paper is to show first partial pieces of information from the international research which came out within the first stage of the research carried out in the Czech Republic. Firstly, the paper is focussed on how an international retailer formulates his organizational culture in Czech Republic; secondly, the paper tries to establish whether these formulations are the same in company's different national trading areas; and thirdly, it strives to trace if and

¹ The paper was prepared in the Framework of the Research Program No.: MSM 6138439909 "Governance in the Context of the Globalized Economy and Society". And it is a partial research output within the Internal Grant No.: 3/08 "Role of organizational culture in international retail organizations" supported by the Internal Grant Agency of University of Economics in Prague.

how an international retailer aim to translate his organizational cultural aspirations (either adapted or standardised) into Czech organizational reality.

The methodology of the research process is based on Schein's approach of recognizing the organizational culture, its' layers and the mutual interaction among these layers (Schein 1997). Concretely, Schein mentions three layers following from the most upper one to the deepest one:

- Artefacts and creations – which can be understood as visible signs of the organization behaviour e.g. uniforms, the standardized way of communication within the organization and with its customer;
- Values – these are usually proclaimed and/ or are seen thanks to some way of behaviour of the organization;
- Basic assumptions – the most basic motives and beliefs are understood under basic assumptions. These beliefs are something as predispositions for creation of the values really lived.

The methodology was applied within the investigation of secondary as well as primary data collection. In the first step secondary data as documents and relevant web-sites of the international retailer² were analysed. In the second step initial semi-structured interview with two HR managers was carried out. Both types of data were confronted. In further research structured interviews with Store managers and Shop-floor workers as Focus Groups will be realized.

EXPECTED RESULTS

At the beginning of the research main expected results were set as initial hypotheses. The hypotheses follow:

Hypothesis 1: The international retailer formulates his organisational culture exactly the same way in Czech Republic like in his home country.

Hypothesis 2: These formulations do not differ in company's different national trading areas.

Hypothesis 3: The international retailer translates his organisational cultural aspirations standardised into Czech organisational reality.

First Findings of the Organizational Culture Perceiving

As found on the home country web-pages and also told by HR manager in Czech Republic, the International Retailer's organizational culture is based on the company core values which have been already set for few years by the International Retailer (IR). The two basic values are oriented toward the customers of the organization and toward the employees of the organization. It does not matter whether it is spoken of the home country, other operating countries or particularly Czech Republic – one of the operating countries of the organization, according to the interviewed Head office HR manager and home country accountability report, there is the customer and his contentment in the middle of all striving. The IR's aim is to take the best care of his customers, and the second basic value lays in the idea that only satisfied employee can make a satisfied customer and so it ends in a thought like: "Treat others how we like other people treat us."

² Ment web-sites as in home country so in Czech Republic.

Human Resources Organizational Structure

The HR organizational structure can be viewed in three functional levels. The first level – the planning level, is realized in the central office³. Here the strategy, methodology and policies are prepared. From the central office the prepared plans are forwarded to the second implementation level which is carried out by region teams. These have to teach and lead store managers how to implement the strategies. At the third level HR store managers are then executives who are responsible for the putting plans into day-to-day practice. The way of HR management is corresponding with the IR's store formats. Although there is always one HR manager for each bigger unit or one HR manager for a territory with couple of smaller units, the aim is to act as one employer. So, the way of implementing and afterwards the execution of the HR strategies and plans is the same all over the country.⁴

Translation of the Organizational Culture

The International Retailer has his own IR operating model.⁵ The operating model tries to integrate those processes which can be unified on international level. Within the operating model there is a programme oriented on talents which belongs into the model. The programme is focussed on employees from managerial positions or on employees with talent and ambition to make a further step in their career. The basic condition is to speak and be able to communicate fluently in IR's home country language⁶. This might be the reason why rather managers from central office and people with language skills take part in this programme. The programme is based on the idea to move the programme participants from home country to the retailer's foreign acquisitions and vice versa from foreign units to home country units. Thanks to this programme participants can see and experience the way of operating in home country or the potential differences in operations of other countries.

It seems to be quite common for the described IR to make one's career from an assistant position on the shop floor to higher strategic management levels within the company. And this is not the only way how someone comes in touch with a shop floor position without staying on the position for a long time. Besides the talent programme there are other programmes within the operating model which allow managers to return for couple of days to the shop floor. During the peak shopping periods such as Easter and Christmas not only store managers but also those from the central office come into the store and give store employees help by doing the basic operations like cashier or warehouseman.⁷

Other values oriented programmes involve the corporate responsibility issues. The IR has been launching a united corporate responsibility strategy in all operating countries since 2007.⁸ At the first glance the idea is the same but individual programmes within the strategy are then adapted and the foreign acquisition in Czech Republic can choose e.g. its own non-profit partner.

³ The central office is common for at least one country.

⁴ Information based on realized interview.

⁵ Information based on home country web-pages and realized interview.

⁶ The home country language is also at the same time the International Retailer's official language which should be mastered by all managers in all operating countries.

⁷ Information based on IR's Corporate Responsibility Report and realized interview.

⁸ Information based on IR's Corporate Responsibility Report.

Findings

As mentioned earlier, three main hypotheses were set at the beginning of the research. Now, let us see whether they are true or false, or at least partially true.

Hypothesis 1: The international retailer formulates his organisational culture exactly the same way in Czech Republic like in his home country.

If the Schein's methodology is adhered and we take the retailer's artefacts, values and basic assumptions into account, following findings can be observed:

There have been investigated web-pages, documents and realized only one interview so far; and artefacts – the visible signs of organizational behaviour, can be better understood directly on the shop floor and in the interaction with more than just two employees of the organization. Common colours, uniforms or handling of complaints – all these are seen on the first sight on the shop floor in the retail sector. We did not observed the created artefacts yet; therefore these need to be observed in further research. It is needed to find out whether they exist and if so, how they are, what their meaning is and whether they are able to create common artefacts throughout all operating countries. As mentioned there are two core values which are common for both home country and foreign acquisition. So, the basic idea is the same, however, there is further research needed to find out whether these values are also translated into daily operation in the same way within both countries or whether there are some differences. To state what are the basic assumptions there are more interviews needed within the organization.

Hypothesis 2: These formulations do not differ in company's different national trading areas.

According to the human resources organizational structure we found out that there are divisions which correspond with the IR's formats of units and not according to the trading areas within one country. However, communication of all plans and strategies within the country is always realized uniformly from the central office, through the implementation level – the region teams – and further to all store managers in units all over the country. The question remains whether the formulations of the organizational culture remain the same throughout the whole forwarding process from the very highest levels of management to each store unit and if/ how much a human factor can influence the formulations.

Hypothesis 3: The international retailer translates his organizational cultural aspirations standardised into Czech organisational reality.

The third hypothesis is quite similar to the second one. However, in the second one we were only focussed on national trading area. Now the question is more oriented toward the home country and the translation of its organizational cultural aspirations to the Czech acquisition. Are these formulations standardised?

The IR operating model and his talent programme seems to function not only in home country but also in the Czech Republic. The helping programmes within which managers come to shop floor a give the helping hand directly in stores are also realized in both home country and in the Czech Republic. The corporate responsibility strategy is also common for both countries although the execution of the strategy can be adapted to the Czech market situation.

CONCLUSION

In meantime it appears that formulation of core values is the same for the country and the Czech Republic. We have not reached basic assumptions and have not investigated the organizational artefacts in our research so far. Although the formulation of organizational culture seems to be the same throughout the whole country, we cannot state that the formulations are all over the same as we would need to come closer to other organizational levels from the managerial to the store units. Concerning the third hypothesis we can answer it partially positively. It appears that the organizational culture aspirations are translated standardised into the Czech organizational reality. However, as mentioned before, more research still needs to be done to confirm it on all layers of the culture. For the future the question arises whether it is possible to reach a competitive advantage by an integrated culture or not.

BIBLIOGRAPHY

- [1] Harris, L. C. and Metallinos, G. (2002). The fact and fantasy of organisational culture management: A case study of Greek food retailing. *Journal of Retailing and Consumer Services*, 9, 201-213.
- [2] Hofstede, G. (1984). *Culture's Consequences*. London, UK: Sage Publications.
- [3] Martin, J. (1992). *Cultures in Organizations*. New York, New York: Oxford University Press.
- [4] Schein, E. H. (1984). Coming to a new awareness of organisational culture. *Sloan Management Review*, Winter, 3-16.
- [5] Schein, E. H. (1997). *Organizational Culture and Leadership*. – 2nd ed. San Francisco, CA: Jossey Bass.
- [6] Trompenaars, F. and Hampden-Turner, G. (2001). *Twenty-one Leaders for the Twenty-first century*. Oxford, UK: Capstone Publishing Ltd.

Ing. Lenka Drličková
University of Economics in Prague
Faculty of International Relations
Department of Commercial Enterprise and Commercial Communications
W. Churchill Sq. 4
130 67 Prague 3
lenka.drlickova@vse.cz

STRATEGIC NETWORKING AS A MANAGEMENT TOOL

Eva Maria Eckenhofer

ANNOTATION

I had my first experience with the management tool Strategic Networking¹ during my internship at the Austrian Lobbying Agency Trimedia Public Affairs. While participating in several workshops for different companies, my interest in Networking and particularly in Strategic Networking grew. As I was getting more and more familiar with this topic I realized that using one's contacts just provide additional opportunities. One could use that chance and present his/her work/study experience. If one is not good at what he/she is doing, even the best contacts cannot help him/her.

KEY WORDS

Social networks, social network analysis, network management, social capital, trust.

INTRODUCTION

Networking has been a major keyword for the last few years, even though neither networks nor networking is something new. Every contact, friendship, school class or football club is a network. Networking is a human ability and need. There are different types of networks distinguished in scientific literature, but basically they can be structured as formal and informal, inter- and intraorganisational networks.² Beside informal networks of friends, it is proved that exclusive and formal networks exist since the 18th century. Examples of such networks are the famous network of freemason, lions, rotary, or student associations.³ During the recent years the idea of networking was also established in economy. In 1998 the OECD (Organization for Economic Co-operation and Development) suggested using Innovation-Networks for establishing innovative products. Political networks are not something new as well. Parties could be considered as formal networks whereas conflicts among them could be considered informal networks.⁴

AIM AND METHODOLOGY

Strategic Networking is a management tool which is used in strategic management, Public Relations, Marketing and Sales. Strategic Networking workshops are offered by Lobbying Agencies and Consultants. As far as Strategic Networking has not been discussed in scientific literature yet it should be defined and the tool explained with the help of scientific literature about strategy, social networks, social network analysis and network management. Additionally, more of the functions and effects of the management tool Strategic Networking will be highlighted based on the results of an expert survey, which was held in spring 2008 with nine Austrian experts on Strategic Networking. These experts were chosen because of their different system access point towards Strategic Networking. The interviewees were selected from consulting, political and industrial side. The duration of each interview was about 45 minutes and has been recorded and transliterated word by word. The findings were evaluated by using qualitative data analysis, in order to prove the findings from the theoretic part based on scientific literature studies.

¹ Strategic Networking is seen as a product name, therefore it is written in capital letters.

² Cf. Sydow, 2006, p.393 et seq.

³ Cf. Anon., 2008, Geschichte der Freimaurerei in Österreich, <http://www.liberal-grossloge.at/index.php?pageID=16>

⁴ Cf. Fröschl et al., 2007, p.125 et seqq.

STRATEGIC NETWORKING

Strategic Networking uses the influence of individual behaviour within the network to adapt the network's characteristics. Starting from a strategic goal a network analysis is performed. Then the four network-management steps "selection", "allocation", "regulation" and "evaluation" are processed. As a result of such network management, positive effects could be achieved because of the network. These effects could be proved regarding the achievement of the goals.

1. Definition of Strategic Networking

Strategic Networking has not been defined in scientific literature yet. Therefore a definition has to be found, based on the meaning of the words "Strategy" and "Networking" and compared to how providers of Strategic Networking workshops define the objective of their workshops.

1.1 The Meaning of Strategy and Networking

In scientific literature as well as in business guidebooks the activity of networking is mentioned and explained.

Networking is defined by Furnham⁵:

"Networking is the process of building relationships within and between groups".

While Furnham does not mention the targets of networking, Scheler formulates it⁶:

„Networking is a methodical and systematic action for contacting people, foster relations on a long-term basis. This happens with the intention of reciprocal advancement and reciprocal personal advantage.“

Strategy comes from the greek word ‚strategos‘, which means the art of war. Since the 60s and 70s strategy is used in business studies.⁷ Company's strategic decisions define its position on a certain market and provide its resources.⁸ To simplify it, strategic decisions always affect a goal in the future and try to find a way to achieve this goal.

1.2 Definition of Strategic Networking in praxis

Providers of Strategic Networking workshops define the objectives of their workshops and seminars, and to what extent the aims cover the conceptual definitions of strategy and networking. All of the stated will be used to find out a definition for Strategic Networking.

Thomas Landschof from Hamburg promises in his Strategic Networking seminars that participants will learn how to change strategically their networks for reaching private, business and organisational goals. Networks will be analysed and visualised and because of that it should be recognized which actions have to be undertaken for reaching strategic goals.⁹

Europronet, the European Promotion Network, offers support in every phase of business contacts development, so that the right persons are provided with information at the right time.¹⁰

⁵ Furnham, 1997, after Renz, 2007, p.22

⁶ Scheler, 2000, after Renz, 2007, p.22

⁷ Cf. Hungenberg, 2004, p.5

⁸ Cf. Hungenberg, 2004, p.6

⁹ Cf. Anon., 2007, <http://www.openpr.de/news/131868/Strategisches-Netzwerken-Exklusiver-Seminartermin-am-19-Mai-2007-Live-in-Hamburg.html>

¹⁰ Cf. Anon., Strategisches Networking, http://www.eupronet.com/3_strategisches_networking.php

Christof Zernatto from Trimedia Public Affairs describes Strategic Networking:¹¹

„[Strategic] Networking can be a powerful tool for business success – it is properly targeted, analysed and strategic. Recognising the contacts that will benefit your organisation is all about converting that gut feeling into astute analysis and planning”

The aspect of strategy, the different levels and kinds of networking as well as the factor trust have not been mentioned in these definitions. As a result the definition will be expressed as following:

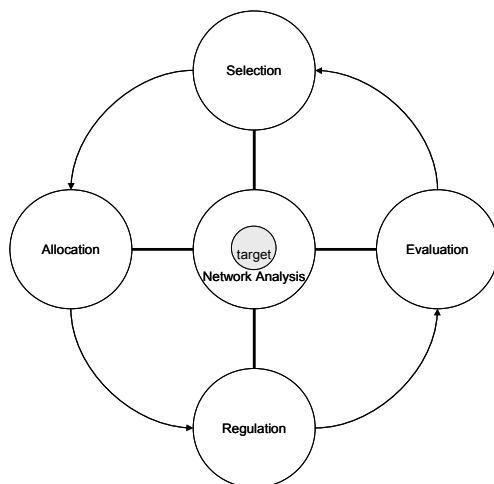
Strategic Networking is the strategic and target-oriented analysis, development, fostering and control of (inter- as well as intraorganisational) networks on the basis of trust, with the intention to reach certain (organisational) goals.

2. Network Management

The management of networks gets more important as a network-organisation gets more complex. This results from networks which overdraw companies' borders and hierarchy within a company.¹²

Interorganisational networks add three network activities to management: Development of relationships, exchange of knowledge and benefits, and coordination of interests and conflicts. Sydow and Windeler expand this approach and suggest four functions of network management: the selection of network partners, the allocation of duties, resources and responsibility, the regulation of the cooperation and the evaluation of networks.¹³

Figure 1: Strategic Networking



Source: Sydow, 2006, p.409 mod.

The figure above shows the four steps of network management, the way it is suggested by Sydow and Windeler plus two more functions. The core of Strategic Networking is a certain strategic target. This target could be a new market, a new customer or the implementation of a new product. On the basis of a network analysis, which should be done during each step of the network management, the characteristics of the network could be modified so that the goal could be reached. The network analysis helps visualize the network and achieve knowledge about the company's network.

¹¹ Zernatto, Our Strategic Networking Tool, <http://www.trimedialogroup.com/index.php?page=1787&l=1>

¹² Cf. Sydow, 2006, p.407

¹³ Cf. Sydow/Windeler, 2000, p.110 et seqq.

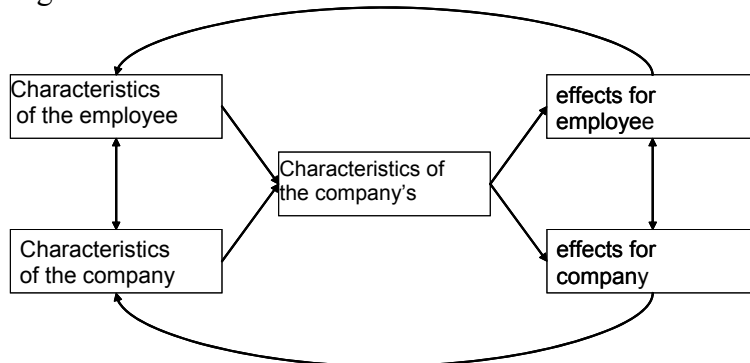
With the help of the four network-management-steps strategic goals or certain effects can be reached by changing the characteristics of the network. There are a lot of demands on employees, the company and the network in order to achieve the set goals.

3. Demands on individuals, companies and the network

Strategic Networking uses the influence of individual behaviour on the network to adapt the networks' characteristics. Positive effects can be achieved if the demands on individuals, company and network are fulfilled.

The following figure shows the influence of employees' and company's characteristics on the network. The characteristics of the network in turn have influence on the effects for employees and company.

Figure 2: Influence of characteristics on the effects of networks.



Source: author's own

A lot of demands on employees and company exist to build up an effective network because of this influence. Employees should be target-oriented, communicative, trustful and honest. Cross-linked thinking, social competence and connectivity are also important for networking. Furthermore, people in networks have to be philanthropist and should like meeting new people. Good relationship with its customers and other stakeholders, good organisation, corporate culture and continuity of networking are the demands on a company.¹⁴

If the characteristics of the company and employees' behaviour exist, the following demands on networks can be achieved:

The principle of "do, ut des", the balance of giving and taking are the most important demand on the network. Trust, tolerance, discretion, respect, fairness and cooperativeness are unwritten laws in networks. For the effects of networks the diversity of contacts in hierarchy and branches are as important as the topics in the network and the advantages for all members of the network.¹⁵

In return of effects, the characteristics of a network have an influence on the company and employees. Positive effects of the network lead to success and trust within the company. Too many positive effects for one employee lead to information and power asymmetry and therefore to risks for the company. However these risks can be avoided by networking within the company.

4. Strategic Networking as a management tool

Strategic Networking can be used in every company regardless of its business area and size, though the necessity increases with the size of a company and complexity of its products. The tool helps to identify the existing company networks and which contacts are needed for a

¹⁴ Cf. Friedschöder, 2005, p.63

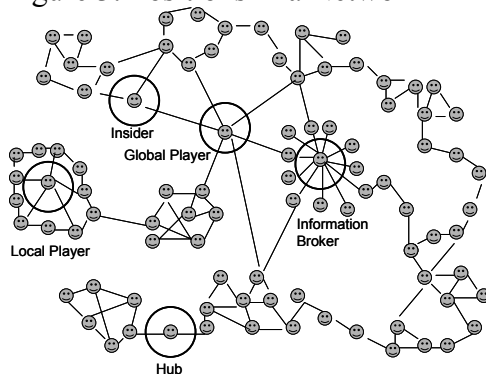
¹⁵ Cf. Friedschöder, 2005, p.63

specific project. When the need for a new contact arises, relations can be built-up and managed by network management.

The basis of Strategic Networking is the intraorganisational network, because employees are an important gateway to the stakeholders of a company and they influence the network of a company with their behaviour. Furthermore, a good network within a company reduces the risk of instable networks when employees gather too much power out of a position as a cutting point or hub as shown in the figure below.¹⁶

Strategic Networking also provides knowledge about the considered network and the employees' networks. Different positions within a network can be identified. Global players are people with a lot of influence, while insiders do not have a lot of influence, but good connections to global players. Information broker have a lot of relations, while local players only have a lot of relations in a certain branch or area.¹⁷

Figure 3: Positions in a Network



Source: Fried Schröder 2005, p.70, mod.

Trust-based networks within a company optimize the interdependence between the company and its employees by avoiding dependency, but there are also a lot of other positive effects of trust-based networks deriving from Strategic Networking.¹⁸

5. Effects of Strategic Networking

Strategic Networking helps a company to build up stable networks based on trust to all of its stakeholders. These networks lead to presence and awareness of a company and have positive effect on the company's image and revenue. When a company gets references from its network, new orders and projects can be received. Strategic Networking can also lead to savings if customers and orders are received from the network, without any costs for sales and distribution. Strategic Networking leads to transparency in a company. This characteristic helps avoiding mistakes and working target-oriented. A good positioning and social capital could arise for individuals from Strategic Networking, as far as the Strategic Networking can also be used for career planning and management.

CONCLUSION

The Expert Survey clearly shows a lot of advantages of this management tool, though the difficulty is to find a way to measure the effects of Strategic Networking. Scientific literature proposes cooperative scorecard and network-balanced-scorecard. It was tried in praxis to implement return-on-networks, where costs are compared to effects of the network. This tool

¹⁶ Cf. Fried Schröder, 2005, p.69 et seq.

¹⁷ Cf. Fried Schröder, 2005, p.69 et seq.

¹⁸ Cf. Sydow, 2006, p.90 et seqq.

was not accepted because it is difficult to ascribe cost savings, advantages in competition and other effects clearly to Strategic Networking. Achievement of objectives is a one way to prove whether Strategic Networking was successful or not. From this point onwards, a more detailed research should be conducted.

BIBLIOGRAPHY

- [1] Baumgartner, Imma et al. (2008): Netzwelten – strategisches Netzwerken im Business. Wien: Facultas Verlags- und Buchhandels AG
- [2] Friedrichschröder, Thomas (2005): Spielanleitung für Netzwerker. Wien: Facultas Verlags- und Buchhandels AG.
- [3] Fuhse, Jan A. (2005): Persönliche Netzwerke in der Systemtheorie, in: Schriftenreihe des Instituts für Sozialwissenschaften der Universität Stuttgart, No. 1/2005.
- [4] Furnham, Adrian (1997): The psychology of behavior at work: The individual in the organization. Hove: Taylor & Francis
- [5] Holzer, Boris (2006): Netzwerke. Bielefeld: transcript Verlag.
- [6] Hungenberg, Harald (2004): Strategisches Management in Unternehmen, 3. Auflage. Wiesbaden: Gabler Verlag.
- [7] Jansen, Dorothea (2006): Einführung in die Netzwerkanalyse, 3. Auflage. Wiesbaden: VS Verlag.
- [8] Landschof, Thomas (25.4.2007): Strategisches Netzwerken - Exklusiver Seminartermin am 19.Mai 2007 Live in Hamburg. URL: <http://openpr.de/news/131868/Strategisches-Netzwerken-Exklusiver-Seminartermin-am-19-Mai-2007-Live-in-Hamburg.html>
- [9] Milberg, Joachim; Schuh, Günther (2002): Erfolg in Netzwerken. Berlin: Springer Verlag
- [10] Anon.: Strategisches Networking, URL: http://www.eupronet.com/3_strategisches_networking.php
- [11] Öttl, Christine; Härter, Gitte (2004): Networking. Hamburg: Hoffmann und Campe Verlag
- [12] Renz, Florian (2007): Praktiken des Social Networking: eine kommunikationssoziologische Studie zum online-basierten Netzwerken am Beispiel von openBC (XING). Ort: Verlag Werner Hülsbusch.
- [13] Scheler, Uwe (2000): Erfolgsfaktor Networking. Frankfurt/Main: Campus Verlag
- [14] Staehle, Wolfgang H. (1991): Funktionen des Management, 3. Auflage. Bern; Stuttgart: UTB für Wissenschaft
- [15] Sydow, Jörg (2006): Management von Netzwerkorganisationen, 4. Auflage. Wiesbaden: Gabler Verlag.
- [16] Sydow, Jörg; Windeler, Arnold (2000): Steuerung von Netzwerken. Wiesbaden: Westdeutscher Verlag GmbH.
- [17] Weyer, Johannes (2000): Soziale Netzwerke. München: Oldenbourg Wissenschaftsverlag GmbH.
- [18] Zernatto, Christof (n.d.): Our Strategic Networking Tool. URL: <http://www.trimedialogroup.com/index.php?page=1787&l=1>

Mag. (FH) Eva Maria Eckenhofer
 Tomas Bata University in Zlín
 Faculty of Management and Economics
 Mostní 5139
 760 01 Zlín
eva_eckenhofer@hotmail.com

THE INFLUENCE OF CONTROL AND RISK FACTORS ON CHANGES IN THE FINANCING OF FAMILY-OWNED BUSINESSES

Alicja Hadryś, Paweł Niszczoła

ANNOTATION

Family-owned enterprises are (in a broader sense) special kinds of economic entities, in which members of a family play a crucial role. The stakes in the firm belong in its entirety or in a greater part to family members while control issues span from the situation where one member has a decisive influence on management to the situation where the family exercises full authority on its own. Further features can be identified such as the eagerness to sustain independence in decision making and the need of assuring the continuity of ownership. The maximization of the firm's profit is not the sole objective as the augmentation of the family's wealth can become equally if not more important. The bivalency of attributes realized through the specific relation between economic and non-economic aims (mainly the willingness to keep the ownership within family control) has severe implications as it influences - to a significant extent - the way the company is financed.

Although, in general, the pecking order theory explains the financing decisions of family businesses particularly well there are certain situations in which a firm becomes forced to fund its operations externally. The paper identifies such situations, in which non-financial stimuli alter the combination of financial instruments used by the company and thus its capital structure. It is discussed that the decision to modify the financing mix results from the domination of benefits from the strategic move that will be financed over the costs of external financing. Considering the risk of losing control over the company or surpassing an investment which seems vital for its competitiveness many inconveniences related to using a previously unemployed source of capital can be neglected.

The omission, introduction or intensification of external financing in a family business can be explained either through risk or through control factors. The former case is applicable to small businesses when risks associated with using a bank loan which would finance the firm's expansion exceed the potential gains from the operation (such a decision can put the business in jeopardy, which would result - in most cases - in an extreme reduction of the owners' wealth). The latter case applies to a greater degree to larger firms which have the possibility of issuing stock, a task that requires the owner to balance the need of funds with the danger of losing control over the company through a hostile takeover (in such an event the owner might try to buy-back shares from the market). The paper investigates an array of similar situations involving control, risk or the combination of both factors and analyzes the effects of suitable financing strategies.

KEY WORDS

Family business, financing, strategies, control, risk, pecking order

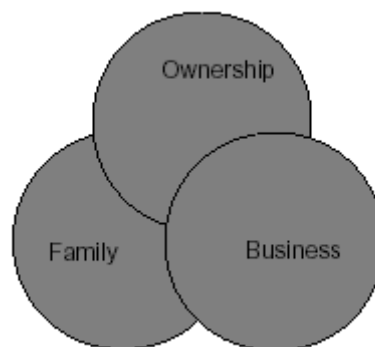
INTRODUCTION

Numerous definitions of the family firm have been proposed, most of which focus on a series of factors such as ownership, control and management. Nevertheless, there is still no single generally accepted definition of the family business. The precise definition of a family business has been one of the most written about aspects, and it's possible to find a vast range of definitions and concepts in the literature. Those definitions can be divided into three categories:

- those related to content,
- those centered on the objective,
- those analyzing the structure of the family business.¹

Family enterprises share many similar characteristics, even if they are very different from one another. A family business may be small or large, listed or unlisted, and it can operate in any line of business. A common feature for all family enterprises different from other companies is that family, business and ownership are intertwined. Tagiuri and Davis (1982) presented the three circle model (Figure 1) where these segments are described as separate, but they are in very close interaction. Everyone in the family business system has one or several roles. He may be the owner of the family enterprise only or he may fall into all three segments at the same time as an owner, family member and an operative manager.²

Fig. 1. Family business system (Tagiuri & Davis, 1982)



Source: M. Cohn, „*Passing the Torch, Succession, Retirement, Estate Planning in Family-Owned Businesses*”, McGraw-Hill Inc., New York 1992, pp. 34.

A weakness in this three circle model is that it is static. Family, business and ownership are in constant change and this is not considered in the model.³ Gersick (1997) introduced a time dimension to the classic three-circle model, putting a dynamic model. Each of the circles passes through a series of different stages.⁴ For example the business circle is divided into: the moment of foundation, the process of expansion and formulation and maturity. However, the important point is not whether a business is a family one, but the level to which, and the way in which, a family is bound to a business and influences that business. The power a family firm has over a business may drive from ownership, from its influence and participation in the governing bodies of the business or its management.⁵

¹ Casillas J., Acedo F., Moreno A., “International Entrepreneurship in Family Businesses”, Edward Elgar Publishing 2007, pp. 16.

² Jeżak J., Popczyk W., Winnicka-Popczyk A., „Przedsiębiorstwo rodzinne. Funkcjonowanie i rozwój”, Warszawa 2004.

³ Ibid.

⁴ Casillas J., Acedo F., Moreno A., “International Entrepreneurship in Family Businesses”, Edward Elgar Publishing 2007.

⁵ Frishkoff P.A., “Understanding Family Business : What is Family Business?”, Oregon State University, Austin Family Business Program, 15 April, 1995.

A dilemma in family enterprises is the difference between the requirements of family life and business life. Collisions between the family and business occur e.g. in making a decision to employ a family member, to reward family members, to finance expansion of the business or to appoint a successor for the business. In any case, the family is often a major competitive factor in family businesses. The family shares a common history and identity that often strengthen the base for the business activities. Family members, in a manner of speaking, grow to form an entity with the business and this gives them better opportunities to acquire silent information on the business. The owning family puts a face to the business and the products often bear the name of the owner family. Family brings emotions to business activities, which gives an additional dimension to the rational decision-making.⁶ The family members' set of values has a great impact on the formation of the business culture in the family enterprise. The culture of family entrepreneurship strongly determines the success of a family enterprise, generation after generation. Family enterprises often have unofficial decision-making systems and less formal organizational structures that enable more flexible management practices and improve the efficiency and swiftness of decision-making. It is easy to define the authority in family enterprises, which may in turn contribute to the swiftness of decision-making. The *shares* of a family business *are often illiquid*. They have no market value and they are often transferred within the family enterprise as an inheritance, gift or purchase to the next generation. Some family businesses are listed on a stock exchange, which improves the liquidity of the shares and enables the acquisition of new assets. Listed family enterprises usually combine the best aspects of the worlds of family enterprises and stock exchanges. According to an article published in Newsweek in December 2004, the share prices of family-enterprise shares increased by 206 per cent in Spain within a ten-year period (1993-2003) while share prices of other firms increased by only 47 per cent. In France, the respective figures were 203 per cent and 76 per cent. The ten best family businesses in Europe combine the strength of the family and the "discipline" of listed companies. Commitment is usually strong in family enterprises. Ownership in a family business is usually seen as "a gift from the previous generation and as a loan from the next generations". The objective of a family business owner is to transfer the family business to the next generation in better shape than that received from the previous generation. *Long-term strategic planning* is valued in family enterprises more than responsiveness to the figures in the interim report. Long-term planning also affects the business results. Maury (2004) shows that long-term and active commitment by the family enhances the firm's performance. The culture of family entrepreneurship usually involves major *concern for the interest groups and for the surrounding community*. (Kenyon-Rouvinez et al., 2002) They carry a strong responsibility for the employees, customers and subcontractors. In many family businesses, the employee turnover is low and employment may continue from one generation to the next. When a family business is transferred from one generation to the next, a major challenge is to avoid losing entrepreneurialism and innovation. The first generation owner-entrepreneur had a certain mission at the start-up of the business for which he was willing to work day and night and even to take some risks. The future owners of the family business should be encouraged to preserve this entrepreneurialism to make them responsible owners of the family business and not only investors. The characteristics of family enterprises – continuity, putting a face to the company and close interaction between the family and the business – may have a strong impact on the strategic choices in the business. If the entrepreneur has a vision to transfer the business to the next generation, his strategic choices are likely to be different to those of an entrepreneur who wants to make quick money from his business. The owners of family enterprises putting a face to the business are committed to the continuity of business activities.

⁶ Jaffe D.T., "Working with ones you love: Conflict resolution and problem solving strategies for a successful business", Berkeley, CA, Conari 1990.

The financing decision

After establishing a viewpoint on a family business as presented above we propose a framework explaining the financing patterns of such enterprises through two factors. The first factor is directly related to the multi-generation scope of such a business: incorporating such an objective implies that the family must maintain full control over the company. The transfer of control over the firms' operations and the loss of independence in formulating strategies might jeopardise the family's long-term interest and thus it is better avoided.

The second factor affecting the core business decisions of a family-owned business is risk. As the total wealth of the (family) owners is strongly tied to the firms' performance, risk aversion emerges: the owners will prefer to forego certain business opportunities (which they would have to finance externally), in an attempt not to alter the total level of risk. The family is often better off neglecting growth opportunities and realising lower profits, but with a significantly lower probability of going bankrupt.

The interaction of the factors mentioned above results in family businesses following a financing pattern being in line with the pecking order theory (Myers 1984; Myers and Mayluf 1984).^{7,8} Internal financing becomes the preferred source of financing as neither does it incur a direct increase of total risk nor does it diminish the degree of control the family has in favour of debt- or shareholders. The least preferred method of financing for a family-business is issuing stock, which might severely limit the family's control over the company and introduces considerable monitoring costs. Issuing equity remains a rather troublesome way of financing a family-owned business as it requires considerable financial resources to perform the underwriting and it might also be difficult for the owners to attract potential investors given the discrepancies in each parties objectives (risk of an IPO failure). Debt – as a source of capital for the family business – falls in between the other two sources, as it results in an increase of business risk, but has a smaller monitoring burden and causes less loss of control over the company than in the case of equity.

Control and risk should be seen as factors keeping sources of capital as low in the pecking order as possible, although one must at the same time identify an array of scenarios that encourage or force the owners to employ „riskier” forms of financing - scenarios that would violate the control factor, the risk factor or both.

Scenarios leading to the adoption of new financial strategies

The most prominent and obvious circumstance validating the use of debt or equity involves taking on an investment vital for the firms' competitiveness or supplying start-up funds for the firm (applicable for firms in a highly volatile environment or requiring considerable initial investments, respectively). The risks associated with applying „risky” sources of capital are outweighed, as it provides means of existence for the firm.⁹ However, this shifting of risks in an existing company should satisfy the minimum wealth condition i.e. the owners, after taking the new investment and going bankrupt, must still be left with satisfactory wealth. If this condition is not satisfied, the company will be shutdown.

The results of a survey in Graham and Harvey (1999) show that financial flexibility plays the most important role when choosing debt as a source of capital. Myers and Mayluf (1984) on the other hand argue that a firm might keep considerable amounts of funds reserved for a future investment, when carrying a quick stock issue could be troublesome. New sources of

⁷ In the original form the theory is explained through the existence of information asymmetry.

⁸ A similar observation can be found in Citterden et al. (1996), where the specific financing pattern is motivated solely through the cost of capital.

⁹ The operation can be realised through funding by venture capital or business angels with the future prospect of an IPO.

capital can therefore be applied to provide financial slack¹⁰ i.e. „emergency” funds in the form of cash or marketable securities. These funds can be used to finance future investments (in case of an emergence of a vital investment, similar to the last scenario), they can provide satisfactory liquidity (the lack of which endangers the firms’ operations) or the cash can be used as a mean of defending against a hostile takeover¹¹. The preferred form of slack-financing for a majority of family businesses would be short-term debt¹², although given the different roles financial slack plays one can easily imagine other forms of external financing being employed.

Extending the role of financing as a means of retaining control, the owners – either under direct risk or as a preventive measure – can install additional anti-takeover defenses. One way would be to simply increase debt and thus reduce the attractiveness of the company to a potential acquirer (Israel (1991)). Another possibility would be to initiate a share buyback programme, which would sweep the market from investors most likely to respond to the potential acquirers’ offer (DePamphilis (2005)). It is also possible to combine the previous two methods by performing a leveraged recapitalization.¹³

Finally, we present a strategy that strongly violates the control factor i.e. a strategy in which the owners of the company might try to trade in a large portion of the control rights in an attempt to diversify their portfolio. By investing outside of the company the proceeds from the sale of shares after the IPO, the owners perform an operation that diversifies their family’s wealth, thus securing it at the cost of giving up part of the control over the company. This operation can also be carried in an aggressive form, when the owners control less than half of the stakes in the company, allowing them to diversify to a greater extent. To retain control, however, the stock ownership must be diluted. A possible way of achieving diluted share ownership would be underpricing the IPO as argued in Brennan and Franks (1997), although such an operation is costly and risky, inducing the need to constantly monitor share concentration and adapt anti-takeover defenses. On the other hand, subject to having sufficient funds the family might quite successfully purchase shares themselves, in an attempt to stop the takeover from happening.

After simplifying our framework and treating control as a risk factor, the decision to apply a certain strategy can be explained through the domination of one risk factor over another. The strategies presented earlier along with this property are shown in fig. 2:

¹⁰ This term is derived from Myers, Mayluf (1984), although a narrower definition is proposed there.

¹¹ Evidence can be found in Pinkowitz (2000).

¹² Romano A.R., Tanewski G.A., Smyrnios K.X., “Capital structure decision making” a model for family business, *Journal of Business Venturing* 16, 2000, pp. 291.

¹³ Another anti-takeover defense worth mentioning is a corporate restructuring plan involving the purchase of shares by the management team.

Fig. 2. Strategies causing a deviation from the default financing pattern

Strategy	Objective	Risk interactions
Obtaining funds for an initial/vital investment	Survival	The risk of forfeiting an investment vs. the risks of using external finance
Supplying financial slack	Providing liquidity (for current operations, prospect investments and anti-takeover purposes)	Risks related to the lack of financial flexibility vs. risks associated with the accumulation of additional funds
Asset diversifying IPO	Diversification of assets of the owners	The risk of the family losing the majority of their wealth vs. the risks related with losing control over the family business
Increasing debt Share repurchasing Leveraged recapitalization	Defending against a hostile takeover	Risk related to using funds needed elsewhere vs. the risk of losing control over the family business

CONCLUSIONS

Accepting the perspective on a family business as a multi-generation entity suggests the adoption of a control factor, as one that determines the financing decision, corresponding with the influence of risk, resulting from a risk-averse nature of the owners. The existence of these factors strongly bounds the financing to a certain pattern – a pecking order. The decision to violate the rule of applying internal finance comes – directly or indirectly – from the necessity to guard the heritage of future generations.

BIBLIOGRAPHY

- [1] Berkovitch E., Israel R., “The Design of Internal Control and Capital Structure”, *The Review of Financial Studies*, Vol. 9, No. 1. 1996.
- [2] Brennan M.J., Franks J., “Underpricing, ownership and control in the initial public offerings of equity securities in the UK”, *Journal of Financial Economics* 45: 391-413, 1997.
- [3] Casillas J., Acedo F., Moreno A., “International Entrepreneurship in Family Businesses”, Edward Elgar Publishing 2007.
- [4] Chittenden F., Hall G., Hutchinson P., „Small firm growth, access to capital markets and financial structure: Review of issues and an empirical investigation”, *Small Business Economics* 8:59–67, 1996.
- [5] DePamphilis D.M., „Mergers, Acquisitions, and Other Restructuring Activities: An Integrated Approach to Process, Tools, Cases, and Solutions”, Academic Press 2005.
- [6] Duliniec A., “Finansowanie przedsiębiorstwa”, PWE, Warszawa 2007.
- [7] Frank M.Z., Goyal V.K., “Trade-Off and Pecking Order Theories of Debt” [in:] “Handbook of corporate finance: Empirical corporate finance”, ed. Espen Eckbo B., Chapter 7, Elsevier/North-Holland, 2005.
- [8] Frishkoff P.A., “Understanding Family Business: What is Family Business?”, Oregon State University, Austin Family Business Program, 15 April, 1995.
- [9] Harris M., Raviv A., “Capital Structure and the Informational Role of Debt”, *The Journal of Finance* Vol. 45, No. 2, 1990.
- [10] Harris M., Raviv A., “The Theory of Capital Structure”, *The Journal of Finance* Vol. 46, No. 1, 1991.

- [11] Israel E., Capital Structure and the Market for Corporate Control: The Defensive Role of Debt, The Journal of Finance, Vol. 46 No. 4, 1991.
- [12] Jaffe D.T., "Working with ones you love: Conflict resolution and problem solving strategies for a successful business", Berkeley, CA, Conari 1990.
- [13] Jeżak J., Popczyk W., Winnicka-Popczyk A., „Przedsiębiorstwo rodzinne. Funkcjonowanie i rozwój”, Warszawa 2004.
- [14] Myers S.C., "The Capital Structure Puzzle", The Journal of Finance Vol. 39 No. 3, 1984.
- [15] Panikkos Zeta Poutziouris., Kosmas X.Smyrnios., Sabine B. Klein., "Handbook of Research on Family Business.", MPG Books Ltd 2006.
- [16] Pinkowitz L., "The Market for Corporate Control and Corporate Cash Holdings", NBER Working Paper Series, 2000.
- [17] Philips B.D, Kirckhoff B.D, "Formation, growth and survival :Small firm Dynamics in the U.S economy.", "Small Business Economics.", nr 1/1989:65-74.
- [18] Romano A.R., Tanewski G.A., Smyrnios K.X., "Capital structure decision making" a model for family business, Journal of Business Venturing 16:285–310, 2000.
- [19] Safin K., „Przedsiębiorstwa rodzinne”.., *Ekonomika i Organizacja Przedsiębiorstwa.*, nr 5/1991.
- [20] Safin K., „Przedsiębiorstwa rodzinne – istota i zachowania strategiczne.”, Wydawnictwo AE im.O.Langego w Wrocławiu., Seria: Monografie i Opracowania.

Alicja Hadryś
Poznań University of Economics
Chair of International Trade
al. Niepodległości 10
61-875 Poznań, Poland
alicja.hadrys@ae.poznan.pl

Paweł Niszczoła
Poznań University of Economics
Chair of International Finance
al. Niepodległości 10
61-875 Poznań, Poland
pawel.niszczoła@ae.poznan.pl

IMPLEMENTATION OF CORPORATE SOCIAL RESPONSIBILITY IN COMPANIES IN SLOVAKIA

Lýdia Halagová, Miroslava Hricová

ANNOTATION

Different organisations have framed different definitions - although there is considerable common ground between them. For most of us the corporate social responsibility (CSR - Corporate Social Responsibility) is a term, that imply the social, economic and political problems together in one bulk. Our definition is that **CSR is about how companies manage the business processes to produce an overall positive impact on society.**

Socially responsible companies are trying to create higher ethical standards in their business conduct and to help improve the environment and overall growth of the society they make business in on voluntarily bases, all of this apart from their normal economic activities.

KEY WORDS

corporate social responsibility, responsible business, companies

INTRODUCTION

Every company or business usually starts out with its own set agenda, which differs from business to business. A lot of businesses exist simply to make money. There are others who seriously wish to provide a needed service to a community or to the world. Each of these businesses has a corporate responsibility to the public, its shareholders and the world it trades in. One thing that is for sure - the pressure on business to play a role in social issues will continue to grow.

As CSR as a term attracts different interpretations, the authors emphasize right from the outset the definition applied in this study. The study was concerned with:

*The management of, and response to, social, environmental, broader economic and ethical issues – and the extent to which businesses are responsive to stakeholder expectations on these issues.*¹

CSR (also called corporate responsibility, corporate citizenship, responsible business and corporate social opportunity²) is a concept whereby organizations consider the interests of society by taking responsibility for the impact of their activities on customers, suppliers, employees, shareholders, communities and other stakeholders, as well as the environment. This obligation is seen to extend beyond the statutory obligation to comply with legislation and sees organizations voluntarily taking further steps to improve the quality of life for employees and their families as well as for the local community and society at large.

CSR is becoming an increasingly powerful tool of modern societies – carried out by companies on a voluntary basis working to deliver social cohesion and environmental sustainability as well as economic development. In transition and post-transition countries, CSR can become a forceful tool contributing towards sustainable development and societal regeneration as well. In addition to the obvious, direct, benefits of CSR enjoyed by the ultimate beneficiaries of responsible corporate practices, Corporate Social Responsibility

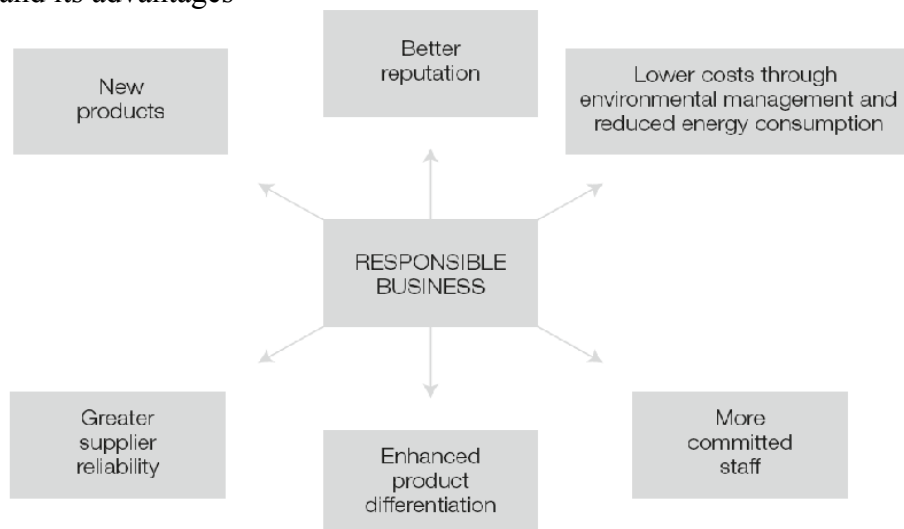
¹ LINE M. - BRAUN R.: *Baseline Study on CSR Practices in The New EU Member States and Candidate Countries*. UNDP, 2007. Available in < http://www.partnerstva.sk/buxus/generate_page.php?page_id=763 >

² GRAYSON, D. - HODGES, A.: *Corporate Social Opportunity! Seven Steps to Make Corporate Social Responsibility Work for your Business*. Greenleaf Publishing, 2004. ISBN 1874719837

brings benefits to the companies that practice it. Organizations considering environmental, social and broader economic questions in connection with their core operations unleash innovations and deliver better financial returns. Strategically and systematically integrated into their business, CSR helps companies to better address reputation risks, attract investors, improve relations with stakeholders and become more competitive in mature markets.

The following figure illustrates potential advantages of social responsibility for the business.

Fig. 1 CSR and its advantages



Source: from own resources

Corporate social responsibility is at heart a process of managing the costs and benefits of business activity to both internal (for example, workers, shareholders, investors) and external (institutions of public governance, community members, civil society groups, other enterprises) stakeholders. Setting the boundaries for how those costs and benefits are managed is partly a question of business policy and strategy and partly a question of public governance.

AIM AND METODOLOGY

The main aim of this study was to assess the level of Corporate Social Responsibility (CSR) practices and its implementation in companies.

Corporations³ exist to provide products and/or services that produce profits for their shareholders.⁴

Milton Friedman and others take this a step further, arguing that a corporation's purpose is to maximize returns to its shareholders, and that since (in their view), only people can have social responsibilities, corporations are only responsible to their shareholders and not to society as a whole. Although they accept that corporations should obey the laws of the countries within which they work, they assert that corporations have no other obligation to society. Some people perceive CSR as incongruent with the very nature and purpose of business, and indeed a hindrance to free trade. Those who assert that CSR is incongruent with capitalism and are in favour of neoliberals argue that improvements in health, longevity and/or infant mortality have been created by economic growth attributed

³ The word "corporation" derives from *corpus*, the Latin word for body, or a "body of people". Entities which carried on business and were the subjects of legal rights were found in ancient Rome.

⁴ MALLOY, D. C.: *Understanding the Nature of Ethics, and Purposes of Business Health Care and Law*. Implications and Applications for Community Sport. University of Regina. 2003. Available in <<http://www.cces.ca/pdfs/CCES-PAPER-Malloy-E.pdf>>

to free enterprise.⁵ The study will employ a variety of methodologies and will include both qualitative and quantitative methods, internet and book study.

RESULTS

The entirety of CSR can be discerned from the three words this phrase contains: corporate, social, and responsibility. CSR covers the relationship between corporation (or other large organizations) and the societies with which they interact. CSR also includes the responsibilities that are inherent on both sides of these relationships. CSR defines society in widest sense, and on many levels, to include all stakeholder and constituent groups that maintain an ongoing interest in the organizations operations.⁶

Slovakia has undergone a difficult transition from a centrally planned to a market economy. The Slovak government made progress in 2001 in macroeconomic stabilization and structural reform, but this came at a cost of increasing unemployment. Overall, macroeconomic developments are currently favourable in Slovakia with robust growth, the decline of unemployment and easing inflation. Slovakia became a member of the European Union in May 2004. In November 2005, Slovakia joined the Exchange Rate Mechanism 2 (ERM2), and Central European financial markets clearly indicate that it stands the best chance of adopting the single European currency earlier than any other new EU member state in the region and adopts the Euro in January 2009 (according to World Bank).

A study by the World Bank also found that most companies in Slovakia consider shareholder, customers and employees as well as top management and board of directors to be their key stakeholders. Only very few companies think of local communities as stakeholders. The same study established that most companies understand “socially responsible activities” as addressing stakeholders’ concerns and ethical conduct. Companies are also concerned about transparency in operations and compliance with existing regulations.

A vast majority of companies believe that avoiding the use of child labour and complying with the existing legal framework are their main roles in society. However, the protection of employee health, the provision of job security and job creation as well as protection of the environment are also seen as important. Employee health protection plans are the norm in Slovakia.

On the other hand there is still a large level of unawareness and low implementation percentages amongst small and medium companies.

Many companies undertake various environmental projects and in order to implement these projects, most companies collaborate with a number of institutions. Activities providing education and information on environmental issues (for example, school programs, community meetings, internal training, etc.) are relatively popular.

In addition, the study found that written codes of conduct are widespread in Slovakia and that very large companies seem to have the highest percentage of written codes. Companies believe that having a code of conduct helps to improve company reputation and employee relations. Anti-corruption policies are widespread in Slovakia but only very few address the financing of candidates for public positions.

⁵ FRIEDMAN, Milton: The Social Responsibility of Business is to Increase its Profits, *The New York Times Magazine*. Retrieved on 7 March 2008

⁶ WERTHER, W. B. – CHANDLER, D.: *Strategic Corporate Social Responsibility: Stakeholders in a Global Environment*. SAGE. 2006. ISBN 141291373X

Slovakia is enjoying sustained high economic growth in recent years. Unemployment has fallen considerably, although long-term unemployment remains stubbornly high.

Some Slovak companies also engage in social projects as they believe this will help to improve reputation, local community relations and assist in building a global corporate brand. In order to implement their social projects, companies collaborate with a number of institutions that can be broken down into: civil society organisations, governmental, municipal, health, educational, cultural and sports institutions. Social projects can be implemented in a variety of areas, and serve a variety of beneficiaries. The study finds a noticeable trend in areas such as health, education, and community development.

Overall, Slovak respondents list the greatest internal benefits to their companies deriving from CSR practices as follows: business sustainability; increase in productivity, quality and sales; easier compliance with legislation; competitive advantage; employee loyalty; financial improvement, and access to capital attraction; reduction of costs; and retention of qualified employees.

However, many companies believe that the highest barriers to the adoption of CSR practices are the overall costs of CSR projects and the lack of direct impact on financial success. At the same time companies believe that sharing information, discussing, collaborating and negotiating with different stakeholders would make their CSR practices more relevant.⁷

Companies accept and endorse the following principles of CRS - corporate social responsibility:

- to integrate voluntarily a body of principles pursuing social, ethical and environmental aspects of business conduct;
- to build relationships towards its employees, customers, business partners and other entities based on these principles;
- to inspire other companies, conducting their business on the territory of Slovak Republic, to socially responsible way of business conduct, • to maintain its leader position in the field of companies social responsibility;
- to disseminate, in intensive manner, awareness concerning advantages arising from company's socially responsible way of management;
- to help to create partnerships between entrepreneur, non-profit and government state administration sector with an aim to contribute to sustainable development as well as improvement of social and natural environment;
- to co-operate with organisations unifying companies on both national and transnational level and to hold a dialog about benefits arising from socially responsible business conduct.

CONCLUSION

Today, corporations are expected to give something back to their communities in the form of charitable projects. In *Corporate Social Responsibility*, Philip Kotler wrote that Corporate Social Responsibility is a commitment to improve community well-being through discretionary business practices and contributions of corporate resources. A key element of this definition is the word discretionary. And the term community well-being in this definition includes human conditions as well as environmental issues.⁸

CSR in Slovakia is often reduced to philanthropy or charity for several reasons. Philanthropy as a concept has existed in Slovakia for longer than that of CSR. Moreover, philanthropy is less complex and diverse, making it more easily understood and implemented. Philanthropic

⁷ LINE, M. – BRAUN, R.: *Baseline Study on CSR Practices in The New EU Member States and Candidate Countries*. UNDP, 2007. Available in < http://www.partnerstva.sk/buxus/generate_page.php?page_id=763 >

⁸ KOTLER, P. – LEE, N.: *Corporate Social Responsibility: Doing the Most Good for Your Company and Your Cause*. John Wiley and Sons. 2005. ISBN 9780471704522

activities are also more visible to the public than CSR activities, making it easier to generate support for it.⁹ Or corporations outsource CSR activities to foundations.

Corporate responsibility has a huge impact not only on the local community, but also on the world. Its affects are social, economic and environmental. Bad and good corporate responsibility has effects that reach from the worker in the third world country to the air that we breathe.

We strongly recommend that companies focus on creating a formal CSR strategy that defines the goals and methods of implementation and evaluation (measurement). Such a strategy is crucial to improving CSR activities; it enables companies to incorporate CSR into their core business, which is a keystone CSR success.

BIBLIOGRAPHY

- [1] FRIEDMAN, M.: The Social Responsibility of Business is to Increase its Profits, *The New York Times Magazine*. Retrieved on 7 March 2008.
- [2] GRAYSON, D. - HODGES, A.: *Corporate Social Opportunity! Seven Steps to Make Corporate Social Responsibility Work for your Business*. Greenleaf Publishing. 2004. ISBN 1874719837
- [3] KOTLER, P. – LEE, N.: *Corporate Social Responsibility: Doing the Most Good for Your Company and Your Cause*. John Wiley and Sons. 2005. ISBN 9780471704522
- [4] LINE, M. – BRAUN, R.: *Baseline Study on CSR Practices in The New EU Member States and Candidate Countries*. UNDP, 2007. Available in
< http://www.partnerstva.sk/buxus/generate_page.php?page_id=763 >
- [5] MALLOY, D. C.: *Understanding the Nature of Ethics, and Purposes of Business Health Care and Law*. Implications and Applications for Community Sport. University of Regina. 2003. Available in <<http://www.cces.ca/pdfs/CCES-PAPER-Malloy-E.pdf>>
- [6] VAŠEČKA, M. – GALLOVÁ-KRIGLEROVÁ, E. – KERESTEŠOVÁ, Z. – KOLLÁR, M.: *Baseline Study on Corporate Social Responsibility Practices in Slovakia*. United Nations Development Programme. Bratislava : 2007. ISBN: 978-92-9504-274-2
- [7] WERTHER, W. B. – CHANDLER, D.: *Strategic Corporate Social Responsibility: Stakeholders in a Global Environment*. SAGE. 2006. ISBN 141291373X

Ing. Lýdia Halagová
Ekonomická Univerzita Bratislava, Podnikovohospodárska Fakulta Košice
Tajovského 13
Košice
halagova@euke.sk

Ing. Miroslava Hricová
Technická Univerzita Košice, Fakulta BERG
Letná 9
Košice
miroslava.hricova@tuke.sk

⁹ VAŠEČKA, M. – GALLOVÁ-KRIGLEROVÁ, E. – KERESTEŠOVÁ, Z. – KOLLÁR, M.: *Baseline Study on Corporate Social Responsibility Practices in Slovakia*. United Nations Development Programme. Bratislava : 2007. ISBN: 978-92-9504-274-2

MOTIVATION AND THEIR USE IN BEHAVIOR OF FARMERS IN TECHNOLOGY ADOPTION WITH REFERENCE TO DEVELOPING COUNTRIES

Chaminda Shaman Herath¹, Ján Porvazník²

ANNOTATION

Technology adoption in agriculture is an important for increase productivity and income in farmlands of developing countries. Motivation is the stimuli/drive that influences farmers' behavior in technology adoption. Self Determination Theory is used to identify different motivations. Theory of Reasoned Action used to identify different farming groups in the community with respect to attitudes and behavior. The purpose of this paper is to link the different types of motivation to improve the farmers' decision-making behavior in different farmer groups identified by the Theory of Reasoned Action.

KEYWORDS

Technology adoption, Self Determination Theory, Extrinsic motivation, Intrinsic motivation, Theory of Reasoned Action, Attitudes, Behavior.

INTRODUCTION

Technology adoption as an important issue in agricultural development

The United Nations Food and Agriculture Organization (FAO, 2003) has found that more people are unable to access basic foods. This is caused by continuous widening income gap between poor and wealthier households, particularly in developing countries. In addition, world agricultural production is facing more uncertainties due to the decreasing availability of farmland and the declining quality of the agro-ecosystem. At the same time, socioeconomic conditions have not been helping farmers, particularly the poor ones in developing countries, to access productive resources, such as land, capital and technology. Therefore, FAO suggests addressing the above issues through promoting technology and advanced farming practices.

What is motivation?

Motivation is the set of reasons that determines one to engage in a particular behavior. The motive is "internal tension" or "internal urge" that drives the human's organism to set himself a goal by means of the activity and to achieve it. The term motivation relates to the activation, it means invocation of the man's activity, to organization of his organism and in the same time to the coordination of the developed activities in certain direction, to certain objective (Porvazník, 2008).

Motivation can be categorized as either extrinsic (outside the person) or intrinsic (internal to the person). Intrinsic motivation is defined as doing something for the enjoyment of doing it rather than for an external reward (McBride, Curry, and Stephens, 1994). McMurrin (2002) describes internal motivation as derived from values and beliefs and it is associated with greater long-term change (Deci and Ryan, 1985).

External motivation is the motivation derived from the social environment (Petri, 1996) and may further be associated with material and/or social rewards (McMurrin, 2002). Deci and

¹PhD Student, Faculty of Management and Economics, Tomas Bata University in Zlin, Czech Republic.

² Professor, Faculty of Management and Economics, Tomas Bata University in Zlin, Czech Republic.

Ryan, 1985, described that there is a relationship between internal and external motivation exists. Professor Porvaznik in his Holistic Management publication, mention that motivation can be identified as positive and negative motivation apart from the external and internal motivation. Further, motivation again classified as material and non-material. Material motivation is an extrinsic motivation, which comes from out side to the person. Material motivation is a strong motive for the people who has low living standard. Non-material motivation can be categorized under intrinsic motivation. It is not a quantitatively or qualitatively weaker motivation. (Porvaznik, 2008).

AIM AND METODOLOGY

The goal of this paper is to identify deferent categories of farmers in the community, and how to improve their behavior towards technology adoption. In order to fulfill this purpose, deferent types of motivation and how it contributed to behavior of technology adoption decisions of farmers were identified. The main theoretical models used were Self Determination Theory and Theory of Reasoned Action to identify different levels of motivations and the relationship between attitudes and behavior of farmers respectively.

Self Determination Theory (SDT)

Self-determination theory (SDT; Deci and Ryan 1985, 2000) proposes that different types of motivation, varying in degree of self-determination, underlie human behavior. Intrinsic motivation refers to engaging in an activity for its own sake, because one finds it enjoyable and interesting. Extrinsic motivation refers to engaging in an activity for instrumental reasons, such as acquiring a reward. Beyond this simple dichotomy, SDT expands the concept of extrinsic motivation by theorizing that there are autonomous and controlled types of extrinsic motivation that can be aligned along a continuum of increasing internalization.

Table 1: Types of motivation according to the SDT

<i>Type of Motivation</i>	Extrinsic Motivation			Intrinsic Motivation
	External regulation	Introjected regulation	Identified regulation	Intrinsic motivation
<i>Perceived locus of causality</i>	External	Somewhat External	Somewhat Internal	Internal
<i>Quality of Behavior</i>	Non self determined (Controlled)			Self determined (Autonomous)

Source: Ryan, R., and Deci, E. (2000). Self determination theory and the facilitation of intrinsic motivation, social development and well-being.

Attitude and behavior

Attitude is determined by the beliefs that are salient or important to a person. Attitudes are formed by what an individual perceives to be true about the attitude-object. This perception may or may not be based upon information and knowledge and/or an emotional reaction towards the object. Many beliefs and values may underpin an attitude (Willock et al. 1999). Attitude simply refers to “a person’s evaluation of any psychological object”. These evaluation judgments are represented as items of knowledge (Allen et al. 2003).

The Theory of Reasoned Action (TRA)

The theory of Reasoned Action was pioneered by Izek Azjen and Martin Fishbein in 1980. It is a model of the psychological processes that mediate observed relations between attitudes and behavior (Willock et al. 1999). This theory argues that behavior is best predicted by a person's intentions, which are in turn affected by his/her attitudes. Thus, the TRA provided a theoretical framework for examining the influence of attitudes and goals on volitional behaviors (Willock et al. 1999). The TRA model has been extended to address behaviors over which a person acting has little volitional control, i.e., attempting to perform a behavior may not lead to actual behavior.

RESULTS AND DISCUSSION

Application of motivation to the farming community

According to the attitudes and behaviour, farming community can be categorized in to four groups (Karami, and Mansoorabadi, 2008). Analysis of four groups will provide a platform for better understanding of how to apply motivation upon them to change their behaviour favourably to accept new agricultural technology.

1. Low-attitude and Low-behavior group

This group has low attitudes towards change in behavior. They are reluctant to change their behavior and accept new technology. These farmers have not developed favorable attitudes towards change their behavior to technology adoption.

Attitudes and behavior have mutual causal impact (Bentler and Speckart 1981). If either attitude or behavior in a favorable way, will help to change or develop the other. But in this group neither of them are in a favorable manner. Therefore, this group is very difficult to make a behavioral change towards technology adoption. This category of farmers can be called as laggards.

2. High-attitude and Low-behavior group

While this group has a high level of favorable attitudes towards technology adoption, they are not translated in to actual behavior. Even though they have positive attitudes towards change their behavior and adopt new technology, their actual behavior is not change. This can be explained by; the behaviors are not within a person's control. That means, external factors can affect individuals behavior. Environment or some other control factor deals with performing the behavior. This explanation is supported by Rotter 1990, he explained that external motivation can be viewed as beyond the control of an individual. Further Petri 1996, expressed that external motivation is the motivation derived from the social environment.

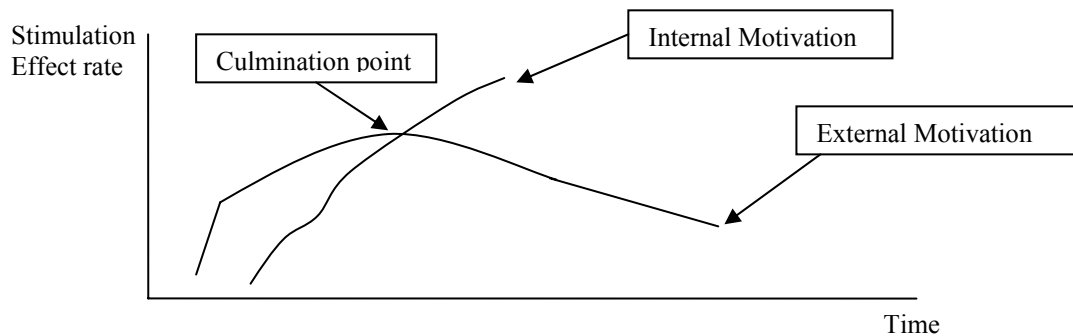
It is identified that the behavior of this group is not totally controlled by the individuals themselves. There are external factors, mainly economic factors may influence the low behavior of farmers. This can be further elaborated by study conducted by Dimara and Skuras in 1999. They identified the attitude surveys in agriculture could lead to a more adequate explanation and prediction of farmers' economic behavior related issues, focusing on the influence of attitude variables as predictors of behavior.

In this group, the low behavior of farmers is due to unfavorable economic factors such as low quality of life, low income, small farmland, no access to information and lack of labor. It becomes the external factors, which determine the low behavior. All these external factors can be considered as extrinsic motivation to the farmers. This statement is supported by Petri 1996 and McMurrin 2002. They have indicated that external motivation is motivation derived from

social environment and may further be associated with material and/ or social rewards. These factors may vary according to the farming environment of the area. Therefore, this group needs extrinsic motivation to make them a perfect group.

Further, when economic factors are provided as external motivation, their living standard will increase. It will change the low behavior. After certain time (culmination point) the external motivation can be gradually reduced (Porvaznik, 2008).

Fig: 1 Culmination point of Internal and External Motivation



Source: Porvaznik, J, and Coll, 2008, *Holistic Management*

3. Low-attitude and High-behavior group

This group is characterized by low attitudes but high levels of behavior to adopt new technology. High behavior is due to environment or control factors have favorably contributed to change their behavior towards adopting new technology. This argument is supported by Petri 1996, that change in the external environment may also activated external motivation. Environment and control factors act upon attitudes in this group. Therefore, attitudes are suppressed and behavior becomes activated. As explained by Petri in 1996, the external motivation is the motivation derived from the social environment. In addition, Dimara and Skuras in 1999 explained that attitude surveys in agriculture could lead to a more adequate explanation and prediction of farmers' economic behavior related issues, focusing on the influence of attitude variables as predictors of behavior.

External economic factors has contributed favorably to make the farmers change in behavior to adopt new technology. These favorable economic factors can be high quality of life, high-income level, large farmland, easy access to information and availability of labor.

In order to make favorable attitudes towards adopting new technology, the external factors such as education level has to be increased and at the same time, internal motivation will also be contributed to change their attitudes. Therefore, this group needs somewhat internal and somewhat external motivation, which are under extrinsic motivation to make them a perfect group.

4. High-attitude and High-behavior group

Both attitudes and behavior are in favorable in this category to change behavior to adopt new technology. Attitudes cause behavior; behavior cause attitudes (Bentler and Speckart 1981). Therefore, both will leads to adopt the technology. These farmers are motivated by intrinsic motivation. Therefore, attitudes and motivation are in favorable way to adopt technology. Internal motivation characterized by satisfaction and interest. Further it is associated with increased performance (McBride, Curry and Stephens, 1994). McMurrans 2002 describe that

internal motivation is a more reliable predictor of behavior change. Deci and Ryan 1985 further highlighted that it is associated with greater long term change.

This group in the society are the innovators. They are the first who accept new information and adopt technology. This group of people are always willing to change. This category of people can be utilized as a external motivation agent for the other groups.

CONCLUSION

Technology adoption in agriculture is an important for increase productivity and income in farmlands of developing countries. The goal of this paper is to identify deferent categories of farmers in the community, and how to improve their behavior towards technology adoption. For this purpose deferent types of motivation and how it contributed to behavior of technology adoption decisions of farmers were identified. The main theoretical models used were Self Determination Theory and Theory of Reasoned Action to identify different levels of motivations and the relationship between attitudes and behavior of farmers respectively.

Finally, it can be concluded that, when it comes to attitude – behavior relations farmers are not a homogenous group and their classification would provide explanation for which type of motivation needed to change their behavior towards technology adoption.

BIBLIOGRAPHY

1. Allen, C. T., Machleit, R. A., Kleine, S. S., & Notani, A. S. (2003). A place for emotion in attitude models. *Journal of Business Research*, 56(1), 1–6.
2. Bentler, P. M., & Speckart, G. (1981). Attitudes “cause” behaviours: A structural equation analysis. *Journal of Personality and Social Psychology*, 40(2),.
3. Deci, E., and Ryan, R. (1985). *Intrinsic motivation and self-determination inhuman behavior*. New York: Plenum.
4. Dimara, E., & Skuras, D. (1999). Importance and need for rural development instruments under the CAP: A survey of farmers’ attitudes in marginal areas of Greece. *Journal of Agriculture Economics*, 50(2).
5. FAO. (2003). Medium-term prospects for agricultural commodities, projections to the year 2010. Rome: Food and Agriculture Organization of the United Nation.
6. Karami, E. and Mansoorabadi, A., Sustainable agricultural attitudes and behaviours: a gender analysis of Iranian farmers, *Journal of [Environment, Development and Sustainability](#), Volume 10, Number 6 / December, 2008*
7. McBride, C., Curry, S., Stephens, R., Wells, E., Roffman, R., and Hawkins, D. (1994). Intrinsic and extrinsic motivation for change in cigarette smokers, marijuana smokers, and cocaine users. *Psychology of Addictive Behaviors*, 8.
8. McMurrin, M. (2002). Motivation to change: Selection criterion or treatment need? In McMurrin, M (ed). *Motivating offenders to change*. NY, NY: John Wiley and Sons.
9. Petri, H. (1996). *Motivation: Theory, research, and applications*, 4th ed. Pacific Grove, CA: Brooks Cole Publishing.
10. Porvaznik, J. and Coll (2008), Holistic Management – Pillars of competence in Management, Slovak Academy of Management, IRIS, Bratislava.
11. Rotter, J. (1990). Internal versus external control of reinforcement: A case history of a variable. *American Psychologist*, 45(4).
12. Willock, J., Deary, I. J., Edwards-Jones, J., Gibson, G. J., McGregor, M. J., Sutherland, A., Dent, J. B., Morgan, O., & Grieve, R. (1999). The role of attitude and objectives in farmer decision making: Business and environmentally-oriented behavior in Scotland. *Journal of Agriculture Economics*, 50(2), 286–303.

Full name: Chaminda Shaman Herath
Institution: Tomas Bata University in Zlin
Street: Mostni 5139
City: 76001 Zlin
Email: hmcsherath@yahoo.com

INNOVATIONS INCREASE THE COMPETITIVENESS OF FIRMS VIA QUALITY HUMAN CAPITAL

Petr Holoubek, Jitka Studeníková

ANNOTATION

Innovations play a very important and essential role in economic, political and social transformation of both evolving countries and countries with evolved infrastructure. Innovations are becoming the ground element of world economy. Innovations also bring higher competitiveness of companies and better satisfaction of consumers. The holder of an innovation always was and always will be human. The importance of human capital, together with problems of innovations and its implementation in already existing system, together with competitiveness increment which innovation brings is the aim of this article.

Managing people have close to chaotic characteristic while people are no considered as robots and their behavior together with their decisions are not (sometimes) easily predictable. Most managers and academics believe that human behavior has aspects of chaos. But people and their ideas and thoughts are playing the key role in companies of 21st century. How to deal this dilemma is main topic of this paper. Beside managing people, the question is the importance of innovations and managing people the right way to gain the as biggest as possible effect from those innovations. That is the second key point this paper is focusing on.

KEY WORDS

Innovation, Effect, Competitive Advantage, Human Capital, Chaos Management

INTRODUCTION

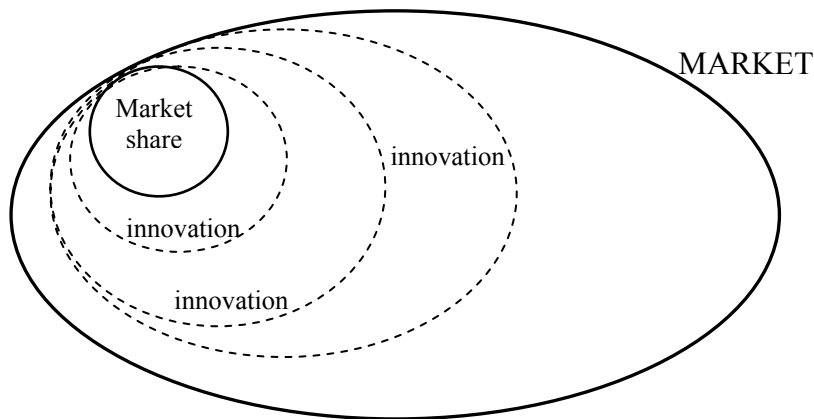
Innovation has existed ever before. Impacts of innovations and progress concern everybody and we have to deal with that every day. Their spread is very wide. People make effort for more easy and high-grade work all the time. Creating new tools, new values, new properties – creating innovations. The most important part of it brings human - unpredictable chaotic behavior together with biggest bank of all innovations – brain. How to manage people towards the innovation and its right implementation to gaining the biggest effect of it as possible will be discussed in this paper.

AIM AND METODOLOGY

Using of innovation potential of a company is one of the possibilities how to protect the firm before failure – how to stay ahead of competition and survive on the market. Innovations can therefore be regarded as the key tool for successful business. It can be favorably applied other things in changes aimed at various improvements - it means: “things which we make good we could make better”, which make also for a breakthrough – i.e.: “we can make things, which nobody does. So we will be the first and only one on the market¹”. This brings us a competitive advantage, and consequently prosperity and welfare. One of the problems is courage of entrepreneurs to innovate and to seize the opportunity of innovation potential for their increase or to keep at least at the same level on the market.

¹ This approach has been widely spread by Mr. Kim and Mrs. Mauborgne with their Blue Ocean Strategy publication (2005).

Fig.1 Relationship between Innovation and Competitiveness



Source: Authors' layout

It is very important for contractors to find new sources of innovations and also to utilize them to improve their businesses, because the success on the market is conditional of the ability to meet the needs and wants of potential customers. Success is granted to such companies that offers better services or better goods, and flexibly reacts to the changes on the market and keeps up with the technical progress.

Consequently it is necessary for all entrepreneurs to analyze and investigate opportunities, needs, threats and possibilities. They have to decide what kind of innovation should be preferred on the base of these examinations. Innovations are substitution for something old by something new with higher efficiency. From this point of view, innovations can be regarded as the most important phenomenon in the reproductive process. Innovations show effects in cost saving on a unit of exact effect or in increasing using effect from utilized sources. The problem is how to define, determine or evaluate the unit from using effect in a case, when changes are even in the area of these useful effects (new requirements and new kinds of pleasures occur, which can result in changes in human abilities and the way of its use).

What does it mean exactly to be competitive is not defined in general. It is necessary to take in consideration the industry where the business is happening. Besides the industry other aspects – mainly external ones – are up to. Business environment, law conditions, level of country development, culture habits, closest and strongest competitors, geographical position together with sources needed etc. It is many fields which manager has to be able absorb, plan with and predict its future together with variety of the plan especially in the modern business environment – meaning the environment of 21st century.

RESULTS

After industrialization and post industrialization accompanied with scientific-technical revolution the world step into 21st century. The Ford's production lines work assigns the possible perfectionism today and new trends came; the whole specific of modern business is leaden with specific technical progress. By specific technical progress the authors means progress in the fields of digitalization, biotechnology, intelligent materials and so on, which all together brings new opportunities.

Besides these “technological” factors the information became a very huge importance from all possible point of views – the number of possible gained information, the option how to get them, the criteria of sorting them, the speed of information transfer, the ease of information manipulation, disinformation together with industrial espionage.

The importance of customer as the individual is increasing too. From this point of view we could talk about individuality, innovations and quality.

Anyway the whole business environment is influenced by latest trends as informatization, globalization, super-turbulence, super-competition, intellectualization, diversification, militarization, ecology versus devastation (Vágner, 2000).

The first five terms brings the existence of information in it; the importance of information and the speed of its transfer. Diversification underlines the importance of nowadays “being different”. As an example of the importance of diversification it is possible to mention Mr. Ford when he did not diversify his “for everyone reachable” car and his market shares became to decrease in the moment of relatively saturated market. The militarization together with globalization brings the treatments of terrorists’ attacks – the new version of war in 21st century which can hit in any place and any time and this is why it is so dangerous (Vágner, 2000).

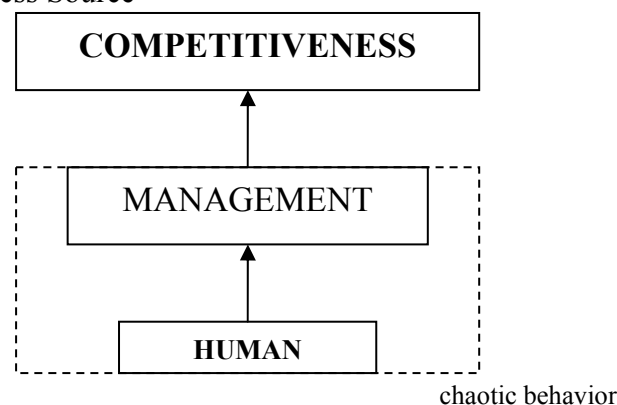
The weathering the competition belongs to the most important elements in business environment. How to compete to be successful in our business is the question of most of the managers. There are “classics” of competing dilemma as M.E.Porter (strategies - Cost Leadership, Differentiation Strategy, and Segmentation Strategy), P. Kolter and F.P.Drucker. Anyway if taking in consideration about mentioned conditions of modern business environment then the author has to admit “the classic strategies” could be good as the theme, starting point, but it is well applicable to today’s business world?

We can try to succeed through different strategies such as Benchmarking, Strategic Alliances or worldwide known Blue ocean strategies. The interesting moment can emerge in case of Blue Ocean which leads to any benefits to any other branch or industry. In this point of view we are talking about Non-collusive Strategic Alliance. Anyway, the strategy is the whole plan. The innovation is the ingredient needed for it.

DISCUSSION - ASPECTS

Today’s business as it has been mentioned above brings, thank to high speed of information and never ending changes coming in relatively unexpected time and order, moment of Chaos. Deeply if we take the whole changes seriously in consideration, then we talk about Chaos management. This is nothing new, but it is necessary for managers to understand their industry features and copy their behaviors and reaction to coming action by rules of Chaos management.

Fig. 2 Competitiveness Source



Source: authors’ layout

There are many authors, already describing the dilemma of Chaos management². As “Guru” of Chaos management could be considered Mr. T.J. Peters and his book “Thriving on Chaos –

² N.M. Tichy, M.A. Devann, N.A. Austin, R.M.Kanter and even P.F.Drucker.

Handbook for a Management Revolution” (1988). Even in early 90s the theme of Chaos management was not too hot, it would be naive to not involve this aspect to today’s business; to understand it as conditions of external surrounding which is highly touching the internal environment of the company (and industry also). It is not the purpose of this paper to describe precisely the theme of Chaos Management. For the survey and aim of this paper it would be enough to mention one of the most important rules for its encompassment. The real key is hidden in Peters “learning to love to change”. It is possible to see a little analogy between the innovative management and this kind of approach. The biggest problem after finding new solution in the innovative management point of view is to implement the new solution to the system. People has problem to embrace changes - more lower management we take in consideration, worse the change adaptation is supposed to be. This small analogy should underline the importance of “loving the change”.

Besides the “learning to love changes” other chaos management recommendation are:

- to emphasize the human factor,
- consider as the strategic sources: information, knowledge and
- creative thinking and acting
- the Leader personality
- simplification (organizational structure, information transfer etc.).

If the Chaos management dilemma is not acceptable for company’s thinking, then just the existence of wildly turbulent environment is necessary to accept. Because if everything is changing and one subject is not, then this subject is sentenced to death – understand to bankrupt.

For every statement has to be said its conditions. This could be seemed as audacious but for describing the conditions under which is derived the Competitive aspects the Chaos environment is precise and just right.

As it has been said earlier to choose the right competitive strategy it is necessary to know and understand the key competitive aspects; especially for their “magic” feature to be competitive strategy building stone and the magnetic needle of future evolution.

Many authors bring several aspects regarding as core competitive aspects. From those ones considering as external as: competitive struggle (in general), the bargaining power of suppliers and/or following, corruption, support of public and state administration, the market development etc; to those reviewing as internal aspects: innovation activity, flexibility, quality of products, workforce costs, qualification of employees, customer care, availability of financial sources, brad etc.

However evaluation of effects of business opportunities is very important for controlling of a company. It is necessary for both incremental innovation (improving current existing technology and goods), as well as for radical innovation (creating and implementation of completely new technology and goods).

CONCLUSION

Innovation process is very expensive and freezes money and other sources for a long time. All the expenditures and efforts have to come back to the firm if the company wants to survive under the conditions in a strong competitive market. Unluckily, nearly 35 percent of innovations are not finished by entrance of a new product on a market or (what is even worse,) the new product is not successful. Reasons of these unfavorable results can be connected in bad decisions made in the first stages of the innovative process, as well as in failures which were relatively easy to check. Managing people towards the innovations in today’s business environment is then the key moment. The real entrepreneur should not only know all the recommendations and rules mentioned above, but also understand them and use them the right way.

BIBLIOGRAPHY

- [1] ADAIR, J. Efektivní inovace. Praha: Praha Publishing, 2004. ISBN 80-86851-04-4.
- [2] ALBANO, R. E., BIRD, H. M. B, CLIFTON, M. B.. Target Costing [online]. 2003 [cit. 2008-01-22]. Dostupný z WWW: <<http://www.focusmag.com/pages/targetcosting.htm>>.
- [3] Chan Kim, W., Mauborgne, Renée. (2005) *Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant*. Boston: Harvard Business School Press, 2005. 240 p. ISBN 1-59139-619-0
- [4] Chaos Management and the Dynamics of Information : A New Way to Manage People in Action [online]. 2004 [cit. 2007-07-16]. Dostupný z WWW: <http://www.bydesign.com/powervision/Mathematics_Philosophy_Science/>.
- [5] DRUCKER, P. Inovace a podnikavost. Praha: Management press, 1993. ISBN 80-85603-29-2.
- [6] Engeseth, S. (2006): One A Consumer Revolution for Business. Singapore: Marshall Cavendish Business, 2006. 202s. ISBN 1-904879-36-5.
- [7] HADRABA, J.: Marketing, produktový mix a tvorba inovací produktů. Praha: Vydavatelství a nakladatelství Černík, 2004. ISBN 80-86473-89-9.
- [8] JÁČ, I., RYDVALOVÁ, P., ŽIŽKA, M. Inovace v malém a středním podnikání. 1. vyd. Brno : Computer Press, 2005. 174 s. ISBN 80-251-0853-8.
- [9] Nordström, K.A. – Ridderstrale, J. (2005): Karakoe kapitalismus. Praha, Grada Publishing, 2005.
- [10] PETERS, Thomas J. Thriving on Chaos : Handbook for a Management Revolution. New York : HarperPerennial, 1988. 708 s. ISBN 0060971843.
- [11] PITRA, Z. Inovační strategie. Praha: Grada Publishing, spol. s r.o., 1997. ISBN 80-7169-461-4.
- [12] PITRA, Z. Management inovačních aktivit. Praha: Professional publishing, 2006. ISBN 80-7261-126-7.
- [13] Porter, M.E. (1980): Konkurenční strategie. Praha, Victoria Publishing, 1994.
- [14] ŠVEJDA, Pavel. Inovační podnikání. Praha : Asociace inovačního podnikání ČR, 2007. 345 s. ISBN 978-80-903153-6-5.
- [15] Vágner, I. MANAGEMENT Z POHLEDU VŠEOBECNÉHO A CELOSTNÍHO. 1. vyd. Brno: Masarykova univerzita v Brně, 2000. 300s. ISBN 80-210-2459-3.
- [16] VLČEK, R. Hodnota pro zákazníka. 1. vyd. Praha: Management Press 2002, 444 s. ISBN 80-7261-068-6
- [17] Vodáček, L. Vodáčková, O. MANAGEMENT TEORIE A PRAXE V INFORMAČNÍ SPOLEČNOSTI. 3. vyd. Praha: Management press, 1999. 291s. ISBN 80-85943-94-8.
- [18] What is the Positive and Negative Side of Chaos? [online]. 2000 [cit. 2007-07-16]. Dostupný z WWW: <<http://www.horsesenseatwork.com/psl/pages/chaosdefined2.html>>.

Petr Holoubek, Jitka Studeníková
BUT, Faculty of Business and Management
Kolejní 2906/4
612 00 Brno
holoubekp@fbm.vutbr.cz, studenikova@fbm.vutbr.cz

WORKING MOTIVATION IN SPECIFIC COMPANY IN SLOVAK REPUBLIC

Elena Horváthová

ANNOTATION

The article deals with status employee's motivation and usage of motivation programme in a company, which offers services in interpretation and translation. The article is concerned with theoretical knowledge about working motivation, it contains analyses contemporary status of employee's motivation and usage of motivational programme in the company. There was also realized research of employee's motivation in a form of questionnaire composed from 14 questions. The last part of the article includes suggestions for motivation in the company.

KEY WORDS

motivation, employees, working motivation, career rise, education, intrinsic motivation, extrinsic motivation

INTRODUCTION

Empirical research suggests that the standard neoclassical view of worker behaviour is often too narrow. Rather than monetary incentives, managers emphasize that work should be interesting and stimulating, that workers should feel involved in decision-making, and that workers' achievements are noticed and appreciated.

The observation that workers may provide effort for non-pecuniary reasons has two important implications. First, monetary incentive schemes designed to motivate a standard neoclassical worker' may be sub optimal. Second, when people differ in their motivation, the performance of a firm may become dependent on its capability to select the 'best motivated' candidate among job applicants.

AIM AND METODOLOGY

The present study defines working motivation. There was realized research of employee's motivation in a form of questionnaire composed from 14 questions. Aim of these article includes suggestions for motivation in the company including financial and non financial remuneration, career rise, education, etc.

WORKING MOTIVATION

We distinguish between intrinsic and extrinsic motivation. Managers act in an intrinsically motivated way if they perform their tasks without external inducement. Rewards from intrinsically motivating tasks include feelings of achievement and self-actualization. Managers act in an extrinsically motivated way if they receive tangible rewards with a measurable, quantifiable market value in exchange for delivered task effort. Intrinsic motivation may also be related to 'self-esteem', broadly defined as how people think about themselves. Thus, people may be intrinsically motivated to work (or to refrain from shirking), because it makes them think well about themselves. Working or refraining from shirking in general may enhance self-esteem, but it may also be related to particular kind of jobs.

Regardless of the precise reason for the enjoyment of or satisfaction from work, the baseline is that people can derive utility from working. The presence of intrinsically motivated workers has important implications for firms. Motivated people probably work harder, which increases output. And because people derive utility from the job, they may be willing to work for a lower wage. People will take job satisfaction into account when deciding on whether to accept

or reject a wage offer. A higher wage at another job may not compensate for the loss of intrinsic qualities of the job.¹

When the firm has sufficient bargaining power, a better-motivated worker brings about higher output and, under a mild condition, lower wage cost. Both with observable and with unobservable motivation, the firm can attract applicants by making a credible commitment to pay at least a certain wage. When motivation of applicants is observable to the firm, the firm hires the worker with the highest motivation among those who applied. The profit-maximising level of the minimum wage is determined by the trade-off between wage cost and the probability of filling the vacancy. When motivation is unobservable, there is an additional selection effect. A higher minimum wage decreases the expected average quality of job applicants, as it induces lower motivated workers to apply. Hence, the probability that a high-motivated worker is selected decreases. However, if applicants can credibly signal their motivation to the firm, a commitment to a minimum wage gives them an incentive to reveal their motivation, which eliminates the selection effect.

Motivation not only affects the worker's productivity, but also his willingness to work. A higher motivated worker is willing to exert a given level of effort for a lower wage. This gives workers an incentive to conceal their motivation.

THE COMPANY CHARACTERISTIC

The company didn't want to be named. The company is member of The Group, which has tradition from 1992, when was founded in Czech Republic company TRANSLATING SERVICES company, Ltd. The company in Slovak Republic was founded in February 2003 by fusion, which was established after its predecessor, daughter company functioning on Slovak market from 1998. The Company Group has become on one of the biggest translating companies in middle and east Europe. In present time the company offer its translating services in Czech Republic, Poland, Hungary, Bulgaria, Lithuania, Latvia, Estonia, Slovak Republic, China, Belgium, Germany, USA, etc.

The company is doing especially reporting and translating in Bratislava, Trnava, Nitra, Žilina, Banská Bystrica and in Košice. Company is registrated supplier in European Union and also it has certificates of quality EN ISO 9001:2001.

Services offered by the company: translates and reports in every language, correction of pronunciation by native speaker, special and judicial translates, graphic processing of random format include DTP, complete processing of special technical documentation, translates with help of CAT Tools, localization of software and websites, complex reporting services, company's individual and group courses, language audit.

Wide net of branch offices, large database of translators and spellers, experienced teams of project managers and supporting teams of technical employees are guaranteeing to handle all projects and special express terms of translation processing.

In every branch office are these job positions:

- Manager of branch office,
- Project manager,
- Project assistants,
- Sales agent,
- Language school coordinator,
- Language school assistants.

¹ BLAŽEK, L.: Pracovní motivace jako součást managementu. In: *Acta Oeconomica*, 2005, 9, 14- 25.

RESEARCH SAMPLE AND RESEARCH OF MOTIVATION SITUATION IN THE COMPANY

In present time is working in the company 35 employees (in branch office in Košice). We were focused on research of motivation in this branch office.

Analyse of present state we did following questionnaire did by us, which includes 14 questions. On the research was taking part 26 respondents from 29 samples, which represent 89,6%. In questionnaire we used 3 forms of questions: scale questions, questions with answer choice and opened questions. Scale question has scale from 1 to 5 (1 is the best and 5 is the worst).

Sample was created from 21 women and 5 men. They were divided to four groups, which depends on length of working in company (in some questions we divided results also like this).

RESULTS

Fluctuation of employees is quite high, because almost 77 % of present employees is working in company mostly 3 years.

In the first question were employees evaluating motivation on scale 1 – 5. More like half of respondents (58%) evaluate present job motivation by middle value 3, another two groups (cca 1/6 of respondents) of respondents evaluate job motivation by value 2 and 4, and two employees evaluate job motivation by value 1, which is 8%.

In the second question we asked about most frequently form of remuneration. They could choose from financial and non-financial remuneration. They could mark one or both remuneration forms. The most often remuneration form are financial forms, which selected 73,3 % respondents.

In the third question we asked about six factors, which have influence on working output in the company (scale from 1 to 5). The best evaluation got factor team work with 1,73 and the worst got factor relationship and communication with leader with 2,19 and working time with 2,5. Is necessary to say, that this factors don't act individually, but every act with some mood on general satisfaction and on working output of employee in company. Of course every employee has different chart from most important to less important factors.

The fourth question about accent of company on motivation according to employees. Answers are divided according to length of working for company. New employees working for company maximum 1 year is 50 % answered „yes“. 40 % didn't know exactly answer yes, so they chose „maybe“. It could be probably caused by lack of stimulation and motivation philosophy among management and employees.

In the fifth question we wanted to know, if management of company receive and respect thoughts of employees in solving of company responsibilities or problems. Six employees answered „yes“, four selected „sometimes“ and six chose „no“, 39 % didn't know, it was 10 respondents. Thoughts of employees are many times very valuable, because they are in direct contact with final client. Because of that should they be involved into solving of companies tools, not only from point of valuable information, but also from psychological point. It gives to employee feeling of importance and involving to success and activity of company.

The sixth question was about access to employees, if they have feeling that they are taken equally to other employees of company or there are evident some differences. We can say that management inside of company don't differ any employee (because of sex, age, etc.), but it can finally get to some form of discrimination.

In next question could respondents design their own motivation element, which they would like to see in their job. Eight respondents didn't answer anything, rest we classified from the most answered to less answered:

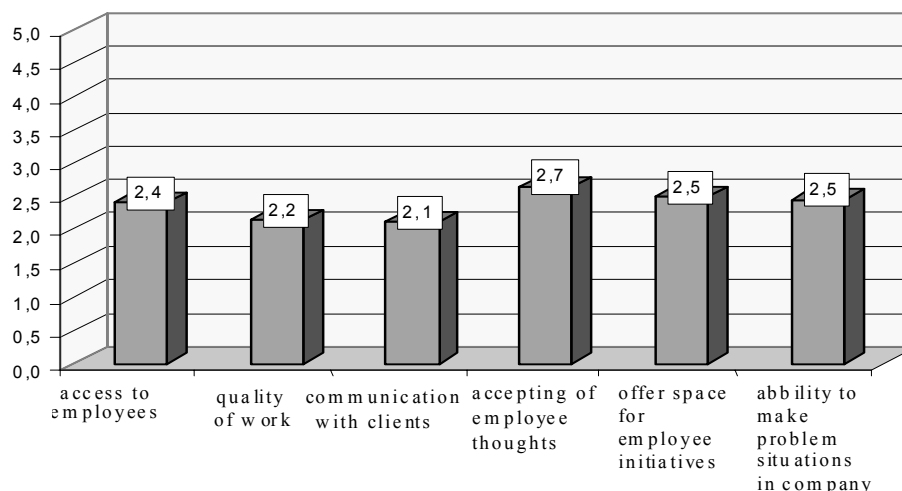
- Rebuild of financial remuneration and financial conditions.
- Allowance of overtimes and their retirement.
- Differentiation of remuneration according to real outputs, knowledge, skills and working years.
- Career rise.
- Creativity.
- More often organized teambuilding.
- Consultations – meeting, consultation about problems, information about new things.
- Wearing informal clothes at least once a week.

In the eight questions we asked about objective addition of teambuilding for employees. 11 respondents answered that teambuilding is good (42 %), five answered that its relaxing weekend and two don't like it. 31 % didn't know, probably because of that most of them are working for company maximum one year and probably they didn't have chance to participate on this action or they didn't quantificate that addition exactly.

The ninth question is about controlling of results and evaluation by managers. Most of employees are continuously evaluated; it means that it can make some motivator in their job, even if their successful outputs are projected also into financial remuneration, or career rise in company. And next question is about carrier rise. Two identical groups of respondents answered different. It could be caused by wrong information about career rise or results achieved by them wasn't enough for company and because of that it has to take new employees instead internal employees. Four employees are working too short of this company.

Next question is oriented on qualities and characteristics of leader from employee's side (1 – 5 scale). The results we can see in figure 1.

Fig. 1 Characteristics of leader



Source: Own figure

Next question is about general atmosphere on working place with scale from 1 to 5. Total average of points was 2, 15. It's truth that good relationships help to better outputs and results of employees.

Next question shows average points of general employee satisfaction in groups of length of work for this company. For company is important to see, that average in groups of employees working in company longer is worse than in groups of employees working for company short time. Also this quite low satisfaction can cause high fluctuation of employees, what we can see on number of employees working for company more than three years.

The last question gives opportunity for employees to design what would they like to have in their job. They could answer seven concrete designs and one own design. The most wanted were carrier rise, exchange stations in foreign branch offices of company and communication improvement, these designs was creating almost 20 % from total of chosen answers.

CONCLUSION

People like their job, not only because they get paid, but also because they enjoy working. Whereas this type of motivation is virtually absent in mainstream economics, scholars outside economics often have a much broader view on people's motivations. Psychologists, in particular, have argued that people undertake many activities without expecting an extrinsic reward. 'Intrinsic motivation' is considered to be of major importance for human behaviour (Furnham, 1990).

From realized research in the company we made following suggestions:

1. The employee are not so satisfied with their wage and because of that we suggest the forth element of wage. It could be special form of reward for achieved outputs per month, for example employee of month.
2. Many employees also answered, that they would like to have some sales on language courses for themselves and for their family. It also could offer good lectors to employees from its database.
3. Give opportunity of exchange stations in abroad branch offices, because in present time company doesn't offer this opportunity and 20 % of employees would like to have this chance.
4. 77 % of employees are working for the company less than three years. This means, that fluctuation of employee is in this company high and it could be caused also with unclear career rise in company. Company should determine requirements needed on every position, needed qualification, taking courses (some % of courses organized for employees), minimal length of working for company needed for career rise, etc.
5. Each employee choose courses for 7000 Sk. Company should divide courses into *required courses* and *elective courses (7000 Sk)*. For the future could be design required courses for each position in company (required courses).
6. Company could also implement into motivation program the newest trends in this area, for example outdoor training manager- useful training programme realized in nature.
7. The company exploits financial rewards mostly (73,3 % of total selected answers) that should be completed by appropriate share of non-financial rewards. So it need to get better its non- financial rewards.

BIBLIOGRAPHY

- [1] BLAŽEK, L.: Pracovní motivace jako součást managementu. In: *Acta Oeconomica*, 2005, 9, 14- 25.
- [2] BLAŽEK, L., HÁLEK, I., KUBÁTOVÁ, E., NEKUDA, J., SEDLÁKOVÁ, J.: Rozdíly v úrovni pracovních podmínek. In: *Slaný, A a kol. Vývoj institucionálního rámce fungování české ekonomiky a vstup do EU*, 2004.

- [3] DELFGAAUW, J., Dur, R.: Signaling and screening of workers' motivation. In: *CESifo Working Paper*, 2003, No. 1099.
- [4] FURNHAM, A.: *The Protestant Work Ethic*, London: Routledge, 1990.
- [5] KREPS, M.: Intrinsic Motivation and Extrinsic Incentives, In: *American Economic Review (Papers and Proceedings)*, 1997, vol. 87 (2), pp.359-364.
- [6] MESÁROŠ, P – MESÁROŠ, F – ČARNICKY, Š.: *Manažment znalostí a perspektívy jeho uplatnenia v slovenských podnikoch*, Bratislava : Ekonóm, 2008.
- [7] MESÁROŠ, P.: *Eudské zdroje a vytváranie znalostnej kultúry v podniku*. In: *eFocus*, 2008, roč. 8, č.1, s. 24-27.
- [8] Internal sources from TRANSERV, Ltd.
- [9] SANSONE, C., HARACKIEWICZ, J.M.: *Intrinsic and Extrinsic Motivation: The Search for Optimal Motivation and Performance*, San Diego: Academic Press, 2000.

Full name Ing. Elena Horváthová
 Institution Faculty of Business Economics in Košice, Economic University in Bratislava
 Street Tajovského 13
 City Košice
 Email elenka.horvathova@gmail.com

THE APPLICATION OF BALANCED SCORECARD IN SPECIFIC SLOVAK ORGANIZATION

Ludmila Karabašová

ANNOTATION

This article aims to present intended research work focused especially on well-known strategic tool called Balanced Scorecard (BSC). Comprehensive project includes conduction of future research in specific Slovak great-sized manufacturing organization operating in garment industry. Concerning valuable access to relevant data of that company, important information for creating Balanced Scorecard was obtained and thus stated in article. Consequently, after planned development of BSC implementation in mentioned company, different particular surveys and analyses will take place. The major objective of entire research work is to contribute to unexplored possibility of implementation of performance measurement system The Balanced Scorecard into Slovak great-sized manufacturing organizations and thus exploitation of its advantages. In general, many Slovak companies use only traditional financial measures of their performance and do not have complex image about their functioning. Aim of our research is to change this situation!

KEY WORDS

Balanced Scorecard, Performance Measurement System, Measures, BSC Implementation

INTRODUCTION

The theory as well as research studies deal with different possible models of how to measure aggregate performance of organizations. One of them is Balanced Scorecard as strategic management tool developed by Robert Kaplan and David Norton in 1992 which revolutionized conventional thinking about performance metrics.

The article is divided into main chapters covering aims and several methods which are anticipated to be used within research work particularly case study, questionnaire and market survey. Second part of the article includes results obtained from several financial analyses of examined organization. That chapter is supplemented by own viewpoint of the author at problematic of indicator EVA application into organization as this model joins two important perspectives of BSC – internal processes perspective and financial one.

AIM AND METODOLOGY

In framework of our research of Balanced Scorecard application into Slovak organization we agreed upon steps progression. Our research work is in early beginning stage of elaboration. We have recently launched cooperation with one manufacturing company functioning in garment industry in eastern Slovakia. That organization employs 530 people and one of two top managers is interested in trial of BSC application into the company. We intend to exploit that opportunity and examine all phases of BSC implementation within half a year.

Case study: Implementation of BSC

Forasmuch as we have no experience in any Balanced Scorecard implementation or even some part of that work, we will follow recommendations of authors who already elaborated this measurement tool in hundreds of companies within done research work. After reading

different literature resources concerning BSC application we decided to pursue steps set by Neely¹ or modify them according to current situation in researched company:

1. Clearly define the firm's mission statement.
2. Identify the firm's strategic objectives using the mission statement as a guide (profitability, market share, quality, cost, flexibility, dependability, and innovation).
3. Develop an understanding of each functional area's role in achieving the various strategic objectives.
4. For each functional area, develop global performance measures capable of defining the firm's overall competitive position to top-management.
5. Communicate strategic objectives and performance goals to lower levels in the organization. Establish more specific performance criteria at each level.
6. Assure consistency with strategic objectives among the performance criteria at each level.
7. Assure the compatibility of performance measures used in all functional areas.
8. Use the performance measurement system.
9. Periodically re-evaluate the appropriateness of the established performance measurement system in view of the current competitive environment.

Assumed research will be based on a case study as the research method of BSC realization in Slovak garment firm. Case study was chosen as the research method, because the objective was to gather data on the process of developing and implementing performance measurement systems in a real-life setting².

Questionnaire: Personnel satisfaction

As we will realize our research work in mentioned company there is hopefully possibility to pursue personnel satisfaction survey. That area regards to one of four important perspectives of entire Balanced Scorecard concept: Employee learning and growth perspective.

We anticipate creating questionnaire for working staff concerning following points:

1. **Work motivation** is in our opinion crucial factor for proper functioning of analyzed company. Garment firm battles with long-time high absence of line workers at work. Moreover, situation with skilled sewers has become worse in last few years and there is significant lack of such workforce at labour market.
2. **Remuneration** is other considerable topic to discuss. There are set applied metrics used to reward line working employees in the company. However, top manager also conceded, that measures do not motivate workers to stay at work and produce value for themselves as well as for the organization. We suggest establishing new supplementary measure called e.g. "Innovation reward" which will honour those workers who submit any proposal for improving some process. BSC team created by middle management would evaluate every innovation offer and responsibly decide to reward an employee with financial or non-financial bonus, or even garment product in case of worthy innovation suggestion. That could highly influence workers motivation as well as quality of organizational processes.
3. **PC educational program** might be very helpful for number of departments or particular employees at different positions. Company uses informative system, however, level of its

¹ NEELY, A. D. – MILLS, J. – PLATTS, K. – RICHARDS, H. – GREGORY, M. – BOURNE, M. – KENNERLEY, M.: *Performance measurement system design: developing and testing a process-based approach*. In: WOUTERS, M. – SPORTEL, M.: *The role of existing measures in developing and implementing performance measurement systems*. In: *International Journal of Operations & Production Management*, roč. 25, 2005, č. 11, s. 1066. ISSN 0144-3577

² VOSS, C. – TSIKRIKTSIS, N. – FROHLICH, M.: *Case research in operations management*. In: WOUTERS, M. – SPORTEL, M.: *The role of existing measures in developing and implementing performance measurement systems*. In: *International Journal of Operations & Production Management*, roč. 25, 2005, č. 11, s. 1067. ISSN 0144-3577

IT hardware as well as administrative workers PC knowledge is poor and simply not acceptable in 21st century. Therefore we suggest choosing one skilled employee who will be responsible for enhancement of PC knowledge and its transfer among personnel.

4. **Relationship to customers** is only mediate for line workers and production masters so far. It might be worthful to bring customers needs and requirements near to all employees of the organization and so avoid non-acceptable behavior and potential products reclaiming. So they perceive responsibility to customers and behave correctly on behalf of the firm.
5. **Relations to other departments** of the company could be also assessed by employees. There will be possibly found interesting aspects regarding to quality of different departments functioning. It is also way how to enhance organizational processes.
6. **Awareness of the strategy** at all hierarchical levels of the firm is crucial point of view covered by BSC conception. After consulting with top director she confesses that strategic tendencies are exclusive matter of top management. Therethrough we see much work to do within BSC realization in that field.

Issue of questionnaire was already discussed with top manager of the company and she recommends us to place elaborated questionnaire to billboard accessible for working staff first, to let them think about questions and respective answers in advance. Therefore we expect obtaining relevant data helpful for successful and principally purposeful BSC implementation process.

Market survey: Great-sized manufacturing firms using BSC

We suppose that after worthy experience of BSC implementation in mentioned garment company where we will most likely discover many traps as well as good practices of whole process progression, we will address specified sample of organizations from different industrial segments in Slovakia. We intend to concentrate on great-sized manufacturing organizations and cover approximate survey sample of 100 firms.

Our aim is to realize market survey by sending short electronic questionnaire about BSC importance for managers of organizations within different segments of Slovak economy with valuable reference to realized Balanced Scorecard in specific garment company. Mentioned questionnaire might include following questions:

1. What managerial system for implementation of the strategy you currently use?
2. Do you consider your managerial system as transparent and sufficient for top management decision making process?
3. Have you ever heard about strategic management tool Balanced Scorecard?
4. Are you possibly interested in inexpensive Balanced Scorecard application to your company in case of cooperation with PhD student at University of Economics in Bratislava within her dissertation thesis?

Expectable reactions of addressed organizations are these four possibilities:

1. no received response from addressed organization,
2. organization replies and states reasons why it is not interested in executed survey,
3. organization only fills up the BSC questionnaire sent electronically, or
4. addressed organization agrees upon joining to our research and permit to realize trial BSC implementation within whole company or special department.

When there will be only few organizations interested in Balanced Scorecard realization in their company, what is highly presumable, it is actually excellent result for our research as we are not able to perform BSC trial application to many firms within short time of elaborating dissertation thesis. Following research work in addressed organizations which are interested in BSC implementation testing will embody initial presentation of our Balanced Scorecard research experience. After adjustment of CEOs of the firm we will start working on creation

of BSC team of key employees, or at worst we require at least one universal assistant responsible for BSC application.

What we suspect as relevant research obstacles is long-term knowledge of complicated business processes, comprehensive clarification of firm strategy, strategic goals and strategic actions as well as special performance measures creation seeing that we are interested in great-sized organizations.

We studied several publications, case studies and scientific articles about tool Balanced Scorecard concerning different aspects. Finally, we found publication from Horváth & Partners³ which covers various specific areas of BSC creation as well as highly worth guidelines how to implement BSC in praxis. Therefore we agreed to help to practical realization of BSC research in garment company with that publication.

RESULTS

On the basis of the information provided by top manager of the garment company we analyzed them from several points of view. We obtained variety of analyses which are monthly elaborated in the company. After consulting all models, ratios, parameters and their attributes we decided to organize used measures among four BSC perspectives as follows:

Fig. 1 Measures used in Slovak manufacturing garment company

Financial Perspective	Perspective of Internal Processes
Liquidity ratios I., II., III., IV.	number of manufactured products per day
Profitability ratios	number of manufactured products per employee
Activity ratios	performance fulfilment
Indeptedness ratios	labour consumption
employee labour price per standard hours	number of standard hours per day per employee
employee contribution to produced value	time usage per day per employee
surcharge to minimal wage	nonattendance
	spare leisure usage
Customer Perspective	Employee Learning and Growth Perspective

Source: Own figure

According to interpreted measures using in the company there is relevant basis for creation of performance metrics for Balanced Scorecard. However, as also top manager admitted, there are several mistaken value inputs in calculation of those measures. Therefore there is a space for improvement and supplement of BSC metrics.

Company regularly, normally once per month, scores particular financial analyses known also in theory as quick test, Altman model, Taffler model, financial standing and pyramidal decomposition of parameters.

³ HORVÁTH & PARTNERS: *Balanced Scorecard v praxi*. Praha : Profess Consulting, 1. vyd. v ČR, 2001. ISBN 3-7910-1813-2

We paid greater attention to indicator EVA as model covering financial and internal processes perspective some time ago⁴. We perceive that conception as one of relevant performance measures within possible BSC in garment company.

Basically, it is common situation in daily praxis when production organization executes identical manufacturing activity by utilizing different types of production process. Current conditions in garment industry force manufacturers maximally adjust to market and so change their traditional production structure. Companies were considered as major large-lot producers in the past. Actual market conditions are changing that situation and producers are constraint to accept except great contracts also medium-sized series as well as small orders to survive on the market. Regarding to this fact we consider generally known method EVA as too complex tool for business performance assessment. Each production type (for simplification we take into account only three groups: large-lot, medium-lot and piece production) creates for organization different performance which is in EVA indicator just averaged therefore shows incorrect information about performance of business activities.

In order to apply our theoretical proposal of EVA we have to state basic hypotheses:

1. Customers leave the production manufacturer soonest after 2 or 3 years.
2. Profit indexes of all production types are calculated correctly and according to real corporate data.

General formula for EVA enumeration is as follows:

$$EVA_t = NOPAT_t - NOA_{t-1} \times WACC_t$$

The result of this indicator provides managers with valuable information about achieved outcome of net operational activity after recovery of all belonging costs. However, as we have already mentioned, that information is too comprehensive and top manager does not know real performance of different production types and consequently cannot change or influence that status or even manage it!

Therefore we provide own detailed formula of coefficient EVA calculation applied on conditions of manufacturing organizations. We propose to divide firm's customers into three groups – A, B, C what should not be the obstacle for employees of marketing department. The A group present clients with huge orders (large-lot production), second group is filled by consumers of small amounts (small-lot production) and finally customers with piece orders (piece production) represent last group assigned by letter C. Here we show suggested EVA formula for partial unit A as well as schematic formulation of thought model for three customer groups at figure 2.

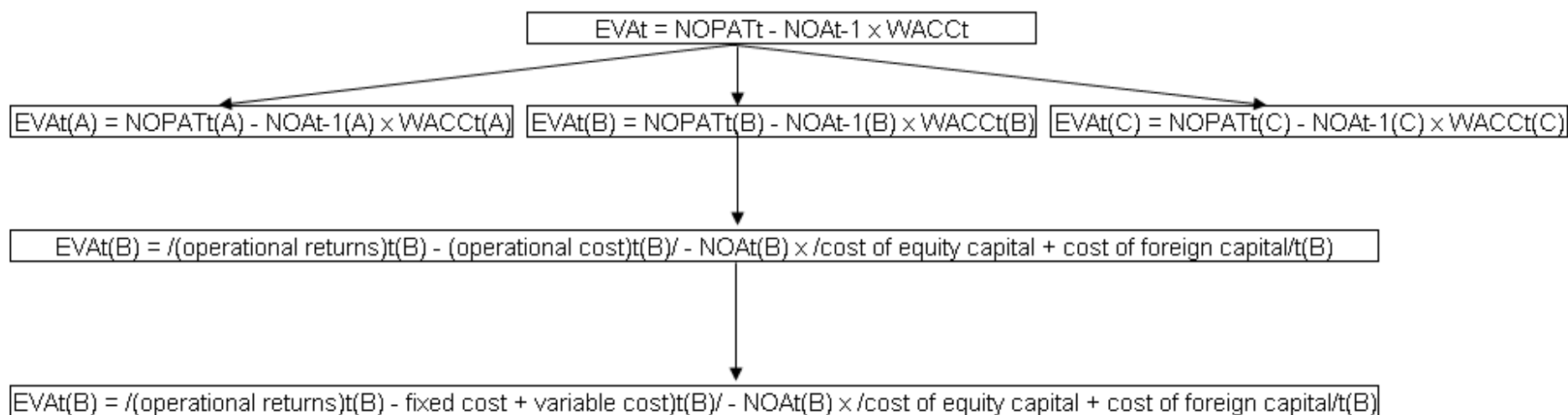
$$EVA_t(A) = NOPAT_t(A) - NOA_{t-1}(A) \times WACC_t(A)$$

Model seems to be uncomplicated at a glance. In fact, there is a need for elaboration of business background analyses and use of expert estimation method to quantify EVA in repeated intervals and so inform managers frequently about performance status of all production activities.

Examined garment organization actually calculate indicator EVA every month, however, according to standard model. Therefore top managers dispose only with general information about business performance. Our proposal might enhance quality of information concerning company's produced outputs.

⁴ LIPOVSKÁ, L.: *Organization Performance Measurement and its Influence on Economic Results of the Organization*. In: časopis MANAŽMENT PRIEMYSELNÝCH PODNIKOV /MANAGEMENT OF INDUSTRIAL COMPANIES/, vol. 2008, ISSN 1336-5592.

Fig 2 Pyramidal decomposition of adjusted indicator EVA



Source: Own scheme

CONCLUSION

There are many manufacturing companies which do not measure their performance by any comprehensive management tool in Slovakia. Most of them use only traditional financial indicators which are in our opinion static and do not support other important perspectives as internal processes or employees potential to grow. That is in today's competitive and rapidly changing entrepreneurial environment dangerous for entire existence of firms.

Although we anticipate that realization of BSC project in real company will be difficult and long-time lasting task, we believe in successful and meaningful application as it was highly appreciated in many American organizations implementing BSC conception.

BIBLIOGRAPHY

HORVÁTH & PARTNERS: *Balanced Scorecard v praxi*. Praha : Profess Consulting, 1. edition v ČR, 2001. ISBN 3-7910-1813-2

LIPOVSKÁ, E.: *Organization Performance Measurement and its Influence on Economic Results of the Organization*. In: časopis MANAŽMENT PRIEMYSELNÝCH PODNIKOV /MANAGEMENT OF INDUSTRIAL COMPANIES/, vol. 2008, ISSN 1336-5592.

NEELY, A. D. – MILLS, J. – PLATTS, K. – RICHARDS, H. – GREGORY, M. – BOURNE, M. – KENNERLEY, M.: *Performance measurement system design: developing and testing a process-based approach*. In: WOUTERS, M. – SPORTEL, M.: *The role of existing measures in developing and implementing performance measurement systems*. In: *International Journal of Operations & Production Management*, vol. 25, 2005, nb. 11, p. 1066. ISSN 0144-3577

VOSS, C. – TSIKRIKTSIS, N. – FROHLICH, M.: *Case research in operations management*. In: WOUTERS, M. – SPORTEL, M.: *The role of existing measures in developing and implementing performance measurement systems*. In: *International Journal of Operations & Production Management*, vol. 25, 2005, nb. 11, p. 1067. ISSN 0144-3577

Full name	Ing. Ľudmila Karabašová
Institution	Faculty of Business Economics in Košice, University of Economics in Bratislava
Street	Tajovského 13
City	Košice
Email	mtz@odeva.sk

ENVIRONMENTAL MANAGEMENT AND ITS INFLUENCE ON A COMPANY PERFORMANCE

Eva Karpissová

ANNOTATION

The paper deals with the environmental management and its benefits for a company. A management of a company that implements the environmental management system, evaluates the benefits and the costs of the implementation. In the paper, the author addresses to the positive effects that are the results of the environmental management activities.

The aim of the paper is to make the literature search of the empirical researches, that were focused on looking for the benefits of the environmental management implementation. The author further summarizes the results of the Research of the Competitiveness of the Czech companies in the surveyed area.

KEY WORDS

Environmental management, ISO 14000, performance, competitiveness.

INTRODUCTION

The enterprises have to realize that the business activities have the significant ecological impacts. Environmental management is the systematic approach to the environment protection in all aspects of a business. It is the intentional activity that focuses on the processes and the products that can or could have the impact on the environment. The environmental management targets the environmentally risk factors of a business with a goal to reduce the negative environmental impacts.

Before, the firms were focused just on the profit and they did not take account the another aspects of a business. But over time, they have found out that it is necessary to respect the another matters of their activity. At this time, the products are very similar in a quality and another parametres so the companies have to search for a new ways how to diversify their own production from the competitor's products. It causes that the companies continue to focus especially on a profit, but they begin to respect the social, ecological and the other aspects of a business.

It is an evident fact that the companies do only the activities that are profitable for them. The environmental activities are not the exception. The firms are obliged to observe the laws and limits concerning the environment. Managers of the Czech firms suppose that the Czech legislature is very severe in this area compared the European Union countries.

Moreover, the companies can implement some form of the voluntary environmental instrument and there is an increasing number of the companies in the Czech Republic that do it. The most frequent voluntary instruments of environmental management are:

1. Eco-labelling is a voluntary method of environmental performance certification. It is a term used for products and services, which are friendlier to the environment and the health of the consumers during their entire life cycle. In the Czech Republic, the enterprises are in a position to obtain two czech eco-labels: „Environmentally Friendly Product“ and „Bio“ foodstuff. The European eco-label is „The Flower“.

2. EMAS or ISO 14000 are the certificates that codifies environmental management systém (EMS). ISO 14000 is an international certificate, meanwhile EMAS is an European standard. The requirements of EMAS are stricter compared to ISO 14000.
3. Cleaner production is a preventive strategy, it is focused on avoiding the rise of the negative ecological impacts.

AIM AND METODOLOGY

The aim of the paper is to examine if it is possible to find out the relationship (positive or negative) between the implementation of the environmental management to the company and the economic performance.

At first, selected foreign surveys concerned on the above-mentioned area are presented in brief.

Further, the author would like to present the partial results from the Research of the Competitiveness of the Czech companies – the results concerning the certification ISO 14000 and its connection to performance of the companies.

The data from 432 enterprises has been collected in the research. The authors of the research has collected data through the questionnaire (the questions were put to the company representatives) and public resources (especially data about economic performance). After data collection, primary analysis of information was carried out - the relative frequency of the certifications in the Czech firms has been found out. The secondary analysis was targeted the finding of the relationship between the proprietorship of ISO 14000 and the performance of company. The cluster analysis was used for this purpose. The respondents were divided into three clusters based on the economic performance. Cluster A included the most successful companies and in cluster C were the economically weakest respondents. The relative frequency of certification in individual cluster was examined. On the basis of the undermentioned foreign surveys, it was possible to assume that:

- in cluster A, there should be a higher frequency of certifications then in cluster B and C and
- in cluster B, there should be a higher frequency of certifications than in cluster C.

RESULTS

The results of the actual surveys are mentioned in brief. Then the selected results of the mentioned research are presented.

Background

Some surveys in former times were concerned with the searching for the various reasons for the implementation of Environmental Management System to the enterprises. These studies feature a lot of advantages – the most significant are financial benefits, marketing opportunity and law-abidingness. I would like to mention in the paper some of the most important researches in the area of environmental management and the related results.

In 2001, the survey in Chinese enterprises was done. One of the aims of the survey was to find the basic reasons for introducing the EMS into operation. The biggest plants mention a

pressure from the domestic and foreign consumers, export and endeavour to keep the environmental legislation.¹

The another research was carried out in the same period. It confirms some of the findings of previous study. The other benefits resulting from the EMS implementation might be the cost reduction that can be visible and „invisible“ (author means e.g. prevention of penalties). The companies also suppose that the environmental management improves the competitiveness of a company.²

Research done in 2005 in the countries of the Central Europe worked with the sample of 286 Polish, Czech and Hungarian enterprises and it examined the relationship between implementation of environmental standards and competitiveness of a company. The authors of the study mention following benefits of environmental management. The environmental standards can result in increasing export occasions, better access to finance (the investors require a certain level of environmental activities in the enterprises that would like to gain some financial resources). This research confirms the positive impact on cost too³.

The aim of a study carried out in 2005 is to provide a guide of the implementation of EMS – concretely ISO 14000 certificate and to show the positive impacts of this standard on competitiveness. The paper also gives an overview of the potential benefits of implementation of the environmental certificates:

- Growth in market share on domestic and foreign markets
- Improvement of the corporate climate
- Improvement of product quality and the growth of product credibility
- Growth in efficiency of production and administrative processes, cost reduction
- Improvement of corporate image etc.⁴

It is evident that the listed above aspects influence positively the competitiveness.

Reasons for implementation of EMS were showed up to now. Further it is necessary to mention the researches that examined specifically the relationship between environmental management and corporate performance.

In 2003, the big survey in 1510 american enterprises was carried out. The survey confirmed the positive impact of some environmental activities on a performance of the companies. The relationship was statistically significant.⁵

Another research, realized in USA in 2008, examined the impacts of ISO 14000 on a company. The authors stated that the implementation of the certificate increases the value of the company. The ISO 14000 certificate is well known for a public and understandable for consumers. The companies with certified ISO 14000 reached the better output compared to companies with only formally established system of environmental management. Raines

¹ QINGHUA, Z., YONG, G. Integrating Environmental Issues into Supplier Selection and Management. *Greener Management International*. 2001, str. 27.

² MEBRATU, D. Environmental Competitiveness: 'Green' Purchasing. *International Trade Forum*. 2001, str. 11.

³ WYSOKINSKA, Z., WITKOWSKA, J. International Business and Environmental Issues – Some Empirical Evidence from Transition Economies. *Polish Journal of Environmental Studies*. 2005, str. 269-279.

⁴ cit. dle: KORUL, Vildan. Guide to the Implementation of ISO 14001 at Airports. *Journal of Air Transportation*. 2005, str. 49.

⁵ SROUFE, R. Effects of environmental management systems on environmental management practices and operations. *Production & Operations Management*. 2003, str. 416.

conducted research in 131 companies and also has shown significant savings achieved by introducing ISO 14000.⁶

Further, it is possible to mention also the research whose results are not totally clear. Kurt A. Strasser presents in his article an overview of researches that aimed to confirm or disprove the relationship between environmental management system and environmental performance of the companies. Individual studies showed very different results.⁷

The another actual research was carried out in 96 Taiwan companies that have introduced ISO 14000. On average, overall effectiveness of surveyed firms increased. The volume of sales per employee has grown. On the other hand, the companies after certification reached the decrease of the margins, the growth rate of sales and profitability.⁸

Results of the Research of the Competitiveness of the Czech firms

In this part of the paper I would like to present the partial results of the Research of the Competitiveness of the Czech firms (realized by the Centre of the Research of the Competitiveness of the Czech firms). In the research, the question of the relationship between implementation of ISO 14000 and competitiveness has been examined too.

We targeted in this research the relationship between proprietorship of ISO 14000 and the economic performance of the company.

A number of ISO 14000 certifications in the Czech Republic is growing. The primary data analysis of the empirical survey showed that the standard ISO 14000 is currently implemented in 44% of companies from the sample. Moreover, a lot of companies in the sample that have not yet the certificate, seek to introduce it in the near future. Especially in the construction industry, the certificate is widely represented – about 85% construction companies introduced the environmental management through the certificate ISO 14000.

In the next stage, the secondary analysis was carried out. The aim of this stage was to find the connection between the company performance and selected factors. We have reached the following conclusions.

The companies whose economic performance is higher, dispose of the certificate in a higher rate. Vice versa the economically weaker companies dispose of the certificate in a lower rate in comparison with the more successful companies. The frequencies distribution is statistically significant.

Further the averages of the clusters has been studied and it confirmed the previous data. The clusters of the stronger companies have the higher averages. The averages decline with the decreasing performance of the company. The differences between the averages of the individual clusters are statistically significant too.

⁶ cit. dle: WHITE, G.B., van ALST, L., LEDBETTER, J. Environmental Management Systems: Benefits of adoption and proposed tax incentives. *Cost Management*. 2008, str. 35.

⁷ STRASSER, K. A. Do voluntary Corporate Efforts improve Environmental Performance? The Empirical Literature. *Boston College Environmental Affairs Law Review*. 2008, str. 533.

⁸ YAO-CHUN, Lee, JIA-FU, Ko, JIN-LI, Hu. The Effect of ISO Certification on Managerial Efficiency and Financial Performance: An Empirical Study of Manufacturing firms. *International Journal of Management*. 2008, str. 166.

Similarly the data correlation confirmed the positive relationship between the proprietorship of certificate and performance of a company.

On the basis of above-mentioned results, it is possible to accept following hypothesis: Relative frequency of the companies that dispose of the certification ISO 14000 is increasing with the increasing economic performance of the companies.

CONCLUSION

The aim of the paper is to find the relationship between the environmental management in a company and its economic performance. The overview of the actual surveys in the area is mentioned. Then the selected results of the Research of the Competitiveness of the Czech firms are presented.

The conclusions of foreign surveys indicate that the environmental management brings numerous benefits to the enterprise and has the positive impact on a performance of company.

The Research of Competitiveness of the Czech firms deals among others with the relationship between proprietorship of ISO 14000 and economic performance. The positive relationship has been confirmed.

The most important reason for implementation of Environmental Management System is to meet the requirements of various stakeholders – customers, public, legislation etc. However, the enterprises already have learned that the environmental management can become a competitive advantage and it brings to the firm financial and other benefits.

BIBLIOGRAPHY

- [1] QINGHUA, Zhu, YONG, Geng. Integrating Environmental Issues into Supplier Selection and Management. *Greener Management International*. 2001, is. 35, s. 27. Dostupný z WWW: <<http://web.ebscohost.com/ehost/pdf?vid=22&hid=106&sid=389f4d5b-0cea-407c-8cdd-147b9edd9eb8%40sessionmgr103>>.
- [2] MEBRATU, D. Environmental Competitiveness: 'Green' Purchasing. *International Trade Forum*. 2001, is. 2, s. 11. Dostupný z WWW: <<http://web.ebscohost.com/ehost/pdf?vid=41&hid=103&sid=389f4d5b-0cea-407c-8cdd-147b9edd9eb8%40sessionmgr103>>.
- [3] WYSOKINSKA, Z., WITKOWSKA, J. International Business and Environmental Issues – Some Empirical Evidence from Transition Economies. *Polish Journal of Environmental Studies*. 2005, vol. 14, no. 3, s. 269-279.
- [4] KORUL, Vildan. Guide to the Implementation of ISO 14001 at Airports. *Journal of Air Transportation*. 2005, vol. 10, no. 2, s. 49.
- [5] SROUFE, R. Effects of environmental management systems on environmental management practices and operations. *Production & Operations Management*. 2003, vol. 12, is. 3, s. 416. Dostupný z WWW: <<http://web.ebscohost.com/ehost/pdf?vid=47&hid=105&sid=389f4d5b-0cea-407c-8cdd-147b9edd9eb8%40sessionmgr103>>.
- [6] STRASSER, K. A. Do voluntary Corporate Efforts improve Environmental Performance? The Empirical Literature. *Boston College Environmental Affairs Law Review*. 2008, vol. 35,

is. 3, s. 533. Dostupný z WWW:

<<http://web.ebscohost.com/ehost/pdf?vid=62&hid=106&sid=389f4d5b-0cea-407c-8cdd-147b9edd9eb8%40sessionmgr103>>.

[7] WHITE, G.B., van ALST, L., LEDBETTER, J. Environmental Management Systems: Benefits of adoption and proposed tax incentives. *Cost Management*. 2008, vol. 22, no. 4, s. 35.

[8] YAO-CHUN, Lee, JIA-FU, Ko, JIN-LI, Hu. The Effect of ISO Certification on Managerial Efficiency and Financial Performance: An Empirical Study of Manufacturing firms. *International Journal of Management*. 2008, vol. 25, no. 1, s. 166.

Ing. Eva Karpissová
KPH ESF MU
Lipová 41 a
Brno

CLUSTER ANALYSIS IN MARKETING INFORMATION SYSTEM

Martin Kovářik, Michal Kovářik, Petr Klímek

ANNOTATION

The aim of this article is to define marketing information system from the perspective of processing marketing information with an emphasis on cluster analysis. The introductory part contains a definition of the marketing information system and the position of the processing and analysing of data in this system. What follows is a methodical view of cluster analysis and detailed theoretical description of this conception, the purpose of which is to find similar properties and differences among objects and to cluster (group) them in groups (segments). The concluding, practical part will contain practical application of this analysis to specific data using Matlab 2007b programme environment.

KEY WORDS

Marketing information system, processing of marketing information, cluster analysis, clusters, metric, correlation size, methods of clustering, proximity, dendrogram.

INTRODUCTION

This article focuses on cluster analysis used during assessment of marketing data and its position in the marketing information system. The internal information system records and provides information about what happened in the previous period in relation to the use of a company's resources and placement of a company's production on the market. The creation of an internal information system is based on assessment of requirements of a selected group of management members, especially product managers, sales managers, marketing staff etc. according to their specific needs for information and suitable records. Building a proper internal information system is a prerequisite for the creation of a marketing information system.

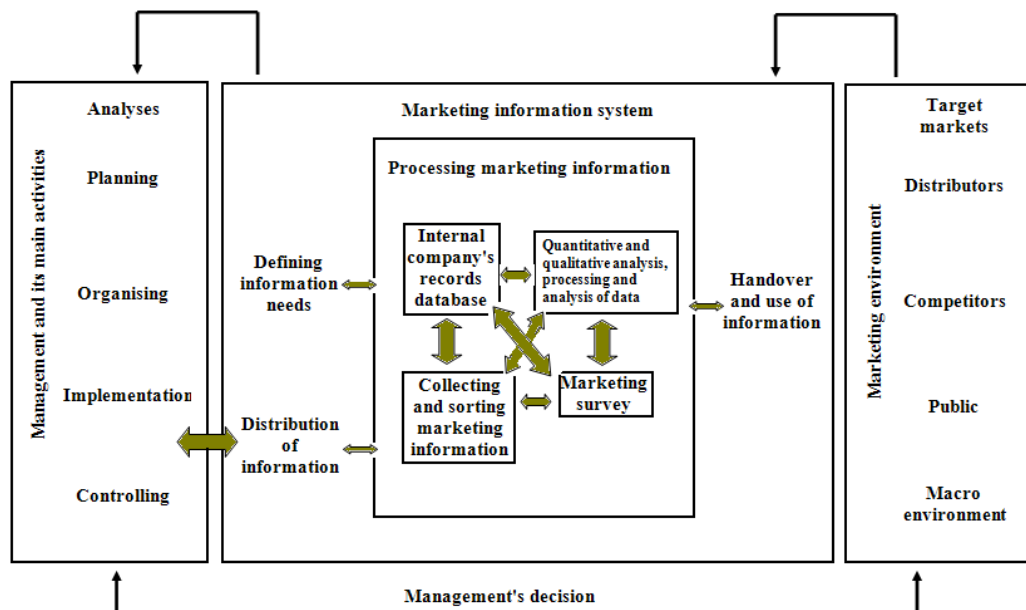


Fig. 1. Marketing information system

Source: own processing

Marketing information system

This is a system created for the purpose of collecting, analysing and assessing information about the market, which is necessary for a better quality of planning, organising, managing and controlling marketing activities. The company should build a MIS which facilitates the collection and continuous processing of necessary information. Its importance grows especially in times of insecurity. If one feels secure, it is usually sufficient to rely on previous experience and to project it into the future; controversies are usually resolved using the theory of games. Many important as well as less important Czech companies faced the same problems in the 1990s. At the period, businesses that had been successful for years lost their way and took a relatively long time to find their course again in the conditions of economic competition which require that they react as quickly and purposefully as their foreign rivals and that they be able to take correct and quick decisions. Every company is a part of an environment that can be characterised by constant changes. The quantity and speed of changes of the current environment is growing. The purpose of marketing is to ensure a harmony between this ever changing environment and effective utilisation of the company's resources. In order to take a decision, the company must have information. The system enabling the work with information is referred to as marketing information system, which is supposed to provide for:

- Collecting information,
- Sorting information,
- Analysing information,
- Distributing information,
- System of utilisation,
- Keeping the information for later use.

Regarding the sources of information, the marketing information system consists of at least three basic groups, namely:

- The company's internal records,
- Marketing reporting system,
- Marketing surveys.

The marketing information system is only effective if it provides the company with answers to all marketing related questions. In addition to the three necessary parts of the marketing information system, as mentioned above, it is further essential to solve the issue of forecasting, i.e. creating temporal sequences and subsequent application of prognostic or simulation methods. A system can only be described as a marketing information system on condition that it provides regularly updated data for analysis, synthesis and prognosis of future development and thus enables the management to take decisions on a qualified basis.

[2]

Analysis of data

One need not be familiar with complex definitions and formulas in order to analyse and interpret the results of calculations and tests properly. It is much more important to know what the acquired data entail in relation to our future work. The currently available statistical software only requires correctly prepared data and ensures that its calculations comply with defined requirements. This section will not deal with statistical procedures, but with measurement of dependences, where we will deal with cluster analysis in some detail including a practical demonstration.

AIM AND METODOLOGY

CLU cluster analysis

Substance of the method

The cluster analysis (CLU) is a method used to examine similarities of multidimensional objects, i.e. objects with large number of features, and to classify these objects in clusters, subsequently. It is especially suitable wherever objects manifest a natural tendency to group. The way of clustering divides procedures into hierarchical and non-hierarchical. The hierarchical procedures are further divided into agglomerative and divisive procedures.

Hierarchical procedures

These are based on step-by-step linking of objects and their clusters into larger clusters. First, it is necessary to calculate the basic matrix of distances between objects. The method of agglomerative clustering clusters two objects with the smallest distance and thus creates cluster one; subsequently a new distance matrix is calculated and the objects that form cluster one are excluded from the calculation and are classified as a whole. This procedure is repeated until all objects form a single large cluster or until they form a certain, predefined number of clusters. The divisive procedure is reverse. This procedure begins at the set of all objects conceived as a single cluster whose gradual division through a system of clusters ends at the level of individual objects. The advantages of hierarchical methods include the fact that one does not need to know the optimum number of clusters within the clustering process; this number is determined subsequently. There are two basic problems related to clustering:

- a) The method of measuring distances between objects. Although there is a wide range of distance measurements (multidimensional metrics), the Euclidean distance is by far the most frequent as it is a natural generalisation of the common notion of distance.
- b) Selection of suitable clustering procedure according to the selected method of measurement.

Methods of clustering metric.

- a) Average method
- b) Centroid method (Centroid)
- c) Nearest neighbour method (Single, Nearest)
- d) Furthest neighbour method (Complete, Furthest)
- e) Median method (Median)
- f) Ward's method

Non-hierarchical clustering methods. The typical point method (referred to as Seeded in programmes) requires the user to identify, on the grounds of his or her knowledge of facts, which objects will be the "typical" representatives of newly formed clusters and the system will divide the objects into clusters according to their Euclidean distance from these typical objects. The number of clusters is usually known in advance in the case of non-hierarchical, although it may change during the calculation. If the number of clusters is preserved, it is a non-hierarchical method with constant number of clusters; the contrary case is usually described as a non-hierarchical method with optimised number of clusters. Non-hierarchical methods involve two basic variants - optimisation methods and analysis of modes, medoids. [4, 5, 6]

RESULTS

Matlab Algorithm Description

To perform hierarchical cluster analysis on a data set using Statistics Toolbox functions, follow this procedure:

- 1) Find the similarity or dissimilarity between every pair of objects in the data set.
- 2) Group the objects into a binary, hierarchical cluster tree. In this step, you link pairs of objects that are in close proximity using the linkage function.
- 3) Determine where to cut the hierarchical tree into clusters.

Similarity Measures

You use the *pdist* function to calculate the distance between every pair of objects in a data set. For a data set made up of m objects, there are $m \cdot (m - 1) / 2$ pairs in the data set. The result of this computation is commonly known as a distance or dissimilarity matrix. There are many ways to calculate this distance information. By default, the *pdist* function calculates the Euclidean distance between objects; however, you can specify one of several other options.

Practical illustration of cluster analysis

For example, consider a data set, X , made up of five objects where each object is a set of x, y coordinates.

- Object 1: 1, 2
- Object 2: 2.5, 4.5
- Object 3: 2, 2
- Object 4: 4, 1.5
- Object 5: 4, 2.5

Distance Information

The *pdist* function returns this distance information in a vector, Y , where each element contains the distance between a pair of objects.

```
Y = pdist(X)
Y =
Columns 1 through 5
    2.9155    1.0000    3.0414    3.0414    2.5495
Columns 6 through 10
    3.3541    2.5000    2.0616    2.0616    1.0000
```

To make it easier to see the relationship between the distance information generated by *pdist* and the objects in the original data set, you can reformat the distance vector into a matrix using the *squareform* function. In this matrix, element i, j corresponds to the distance between object i and object j in the original data set. In the following example, element 1,1 represents the distance between object 1 and itself (which is zero). Element 1,2 represents the distance between object 1 and object 2, and so on. [1, 3]

```
squareform(Y)
ans =
     0    2.9155    1.0000    3.0414    3.0414
    2.9155     0    2.5495    3.3541    2.5000
    1.0000    2.5495     0    2.0616    2.0616
    3.0414    3.3541    2.0616     0    1.0000
    3.0414    2.5000    2.0616    1.0000     0
```

Linkages

Once the proximity between objects in the data set has been computed, you can determine how objects in the data set should be grouped into clusters, using the *linkage function*. The linkage function takes the distance information generated by *pdist* and links pairs of objects that are close together into binary clusters (clusters made up of two objects). The linkage function then links these newly formed clusters to each other and to other objects to create bigger clusters until all the objects in the original data set are linked together in a hierarchical tree. For example, given the distance vector *Y* generated by *pdist* from the sample data set of *x*- and *y*-coordinates, the linkage function generates a hierarchical cluster tree, returning the linkage information in a matrix, *Z*. [1, 3]

```
Z = linkage(Y)
Z =
    4.0000    5.0000    1.0000
    1.0000    3.0000    1.0000
    6.0000    7.0000    2.0616
    2.0000    8.0000    2.5000
```

The hierarchical, binary cluster tree created by the linkage function is most easily understood when viewed graphically. *Statistics Toolbox* includes the *dendrogram* function that plots this hierarchical tree information as a graph, as in the following example.

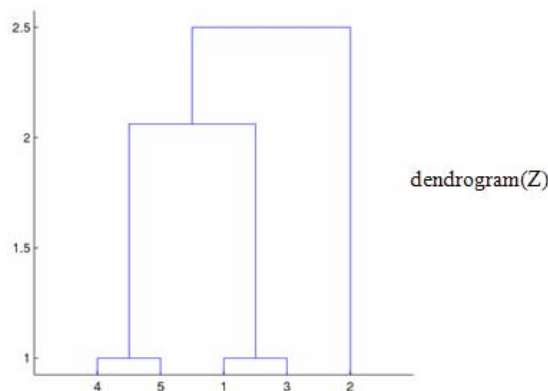


Fig. 2. Hierarchical tree information as a graph

In the figure 1, the numbers along the horizontal axis represent the indices of the objects in the original data set. The links between objects are represented as upside-down U-shaped lines. The height of the U indicates the distance between the objects. For example, the link representing the cluster containing objects 1 and 3 has a height of 1. The link representing the cluster that groups object 2 together with objects 1, 3, 4, and 5, (which are already clustered as object 8) has a height of 2.5. The height represents the distance linkage computes between objects 2 and 8. [1, 3]

Creating Clusters

After you create the hierarchical tree of binary clusters, you can prune the tree to partition your data into clusters using the *cluster* function. The *cluster* function lets you create clusters in two ways, as discussed in the following sections:

- *Finding Natural Divisions in Data*
- *Specifying Arbitrary Clusters*

Finding Natural Divisions in Data

For example, if you use the cluster function to group the sample data set into clusters, specifying an inconsistency coefficient threshold of 1.2 as the value of the cutoff argument, the cluster function groups all the objects in the sample data set into one cluster. In this case, none of the links in the cluster hierarchy had an inconsistency coefficient greater than 1.2.

```
T = cluster(Z,'cutoff',1.2)
T =
    1
    1
    1
    1
    1
```

The cluster function outputs a vector, T, that is the same size as the original data set. Each element in this vector contains the number of the cluster into which the corresponding object from the original data set was placed. If you lower the inconsistency coefficient threshold to 0.8, the cluster function divides the sample data set into three separate clusters. [1, 3]

```
T = cluster(Z,'cutoff',0.8)
T =
    1
    3
    1
    2
    2
```

This output indicates that objects 1 and 3 were placed in cluster 1, objects 4 and 5 were placed in cluster 2, and object 2 was placed in cluster 3.

Specifying Arbitrary Clusters

To help you visualize how the cluster function determines these clusters, the following figure shows the dendrogram of the hierarchical cluster tree. The horizontal dashed line intersects two lines of the dendrogram, corresponding to setting 'maxclust' to 2. These two lines partition the objects into two clusters: the objects below the left-hand line, namely 1, 3, 4, and 5, belong to one cluster, while the object below the right-hand line, namely 2, belongs to the other cluster. [1, 3]

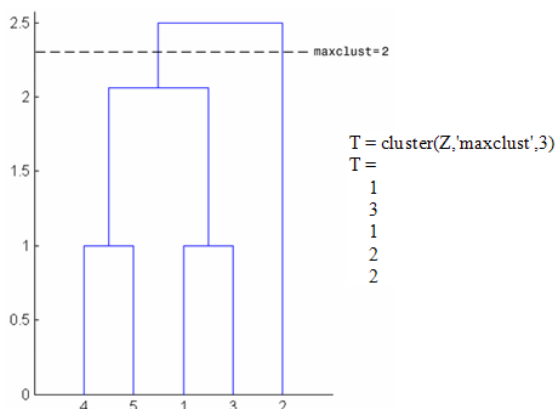


Fig.3. Dendrogram of the hierarchical cluster tree

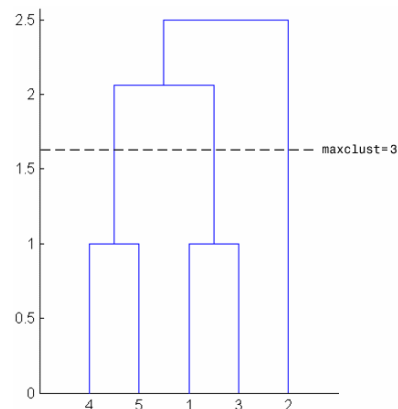


Fig. 4. The cluster function cuts off the hierarchy at a lower point

On the other hand, if you set 'maxclust' to 3, the cluster function groups objects 4 and 5 in one cluster, objects 1 and 3 in a second cluster, and object 2 in a third cluster. The following command illustrates above. This time, the cluster function cuts off the hierarchy at a lower point, corresponding to the horizontal line that intersects three lines of the dendrogram in the figure 3. [1, 3]

CONCLUSION

The aim of this article was to define marketing information system from the perspective of processing marketing information with an emphasis on cluster analysis. The introductory part contained a definition of the marketing information system and the position of the processing and analysing of data in this system. What followed was a methodical view of the cluster analysis and detailed theoretical description of this conception, the purpose of which is to find similar properties and differences among objects and to cluster (group) them in groups (segments). The concluding, practical part contained practical application of this analysis to specific data using Matlab 2007b programme environment. The up-to-datedness of the topic and the emphasis on the use of mathematical-statistical methods for assessment of marketing data represent the crucial contribution of this article.

BIBLIOGRAPHY

- [1] [Hogg, R. V., and J. Ledolter, Engineering Statistics, MacMillan, 1987.].
- [2] [KOZEL, R. a kol. Moderní marketingový výzkum. 1. vyd. Praha: Grada Publishing, a.s., 2006. 280 s. ISBN 80-247-0966-X].
- [3] [Matlab - Help].
- [4] [MELOUN, M., MILITKÝ, J. Kompendium statistického zpracování dat. 2. vyd. Praha: Academia, nakladatelství Akademie věd České republiky, 2006. 982 s. ISBN 80-200-1396-2.].
- [5] [MELOUN, M., MILITKÝ, J., HILL, M. Počítačová analýza vícerozměrných dat v příkladech. 1. vyd. Praha: Academia, nakladatelství věd České republiky, 2005. 450 s. ISBN 80-200-1335-0.].
- [6] [MELOUN, M., MILITKÝ, J. Statistická analýza experimentálních dat. 2. vyd. Praha: Academia, nakladatelství Akademie věd České republiky, 2004. 953 s. ISBN 80-200-1254-0.].

Ing. Martin Kovářik
Department of
Informatics and Statistics
mail:
kovarik.fame@seznam.cz,

Ing. Michal Kovářik
Department of Enterprise
Economics
mail:
mkovarik@fame.utb.cz

Ing. Petr Klímek, Ph.D.
Department of
Informatics and Statistics
mail:
klimek@fame.utb.cz

Faculty of Management and Economics
Tomas Bata University in Zlín, Mostní 5139, Zlín 760 01, The Czech Republic, European
Union.

COOPERATIVE IMAGE THROUGH WEB PRESENTATION

Michal Kozub

ANNOTATION

The article focuses on a Web page as one of the forms of communication and communication mix. It's analyzed 60 websites of production cooperatives, which already have established such sites. Analysis divides into two parts. The first part contains an analysis of the content, which monitors the number of fundamental factors. The second part is to analyze the technical processing websites. For the evaluation is used benchmarking.

KEY WORDS

Benchmark – cooperative– web page – image – communication

INTRODUCTION

Enterprise image can be considered in quite big variety and this image is placed under a wide myriad of functions and concepts. One of the approaches to identify the image the company delivers J. Gregory¹, developing corporate image as one of the components of the promotion of enterprise (corporate advertising). According to Gregory just by the image company may disclose your stakeholders who it is by using a corporate identity, what it is by using the corporate image and also to communicate its values through the corporate culture.

The opposite approach is point of view of P. Němec², who sees the corporate image as a result of four factors, the design, communication, culture and others. According to Němec, image is based on corporate identity; the image is only a reflection of the identity of the company.

Also Pelsmacker³ understands image as a relationship of the public (stakeholders) to the company. Two basic elements that distinguishes Pelsmacker in creating the image of the company is identity and communication, which aligns itself with the corporate identity of culture. This is reflected in the image, how employees perceive it, and it carried over to its surroundings. We can therefore understand the image as a result of both internal communication and external communications of a company.

Corporate Communications

Corporate communications is according to Pelsmacker thus derived from the identity, and in principle should be homogeneous with its elements. Communication has three basic objectives⁴:

1. Define corporate identity, which is in line with its strategy
2. Narrow the gap between desirable identity and the identity of perceptions of the target group
3. Manage and organize the implementation of all communication company activities.

As a fundamental tool for managing corporate communication identifies Van Riel⁵ as follows:

1. The use of visual identity (unity)

¹ GREGORY, James, WIECHMANN, Jack. *Marketing Corporate Image : he Company as Your Number One Product*. 2nd edition. [s.l.] : McGraw-Hill Professional, 1999. 288 s. ISBN 9780844233079.

² NĚMEC, Petr. *Public relations : praxe komunikace s veřejností*. Praha : Management Press, 1996. 167 s. ISBN 8085943204.

³ PELSMACKER, Patrick De, GEUENS, Maggie, BERGH, Joeri Van den. *Marketingová komunikace*. Praha : Grada, 2003. 600 s. ISBN 80-247-0254-1.

⁴ Pelsmacker, p.32

⁵ VAN RIEL, Cees, FOMBRUN, Charles. *Essentials of Corporate Communication : Implementing Practices for Effective Reputation Management*. [s.l.] : Routledge, 2007. 408 s. ISBN 9780415328265

2. The use of integrated marketing communication (communication mix)
3. Reliance on coordinated teams
4. Communication planning system - CPS

The importance of web pages

Web pages are one of the key factors in communicating with the company stakeholder. This proves the survey of the Czech Statistical Office⁶. According to this survey is 76% of respondents accessed the Internet at home and 42% at work, respectively 19% of them at school. It is evident, as a significant proportion of the population is able to be connected to the Internet and able to search for relevant information. According to this research respondents are also capable of using the Internet to communicate, the whole 82% of respondents replied that it also used to write e-mails.

In terms of obtaining information from the research shows that 51% of user searches for information on travel and 76% of searches for information about goods and services. This figure is the highest in the category of "information retrieval" and the second highest in the use of the Internet.

METHODOLOGY

For the purposes of analysis website, as one of the elements of the communication mix, the analysis was divided into two separate parts. The first part deals with content sites, the second part of the technical.

Content includes part of the most wanted information stakeholder. On the other hand, the technical part focuses on quality of execution, in the form of errors or content of certain elements.

All recorded information, according to the categories is classified and evaluated using a benchmark. The contribution of individual factors on the overall assessment is shown below. The results of this benchmark for both categories, and overall are then presented.

In the sample included a total of 60 production cooperatives operating in the Czech Republic, which have their own personal web page. This choice was made randomly.

Content elements of the Web

In the first group is rated content features of companies Web sites. The purpose of this category is to evaluate how the enterprise provides specific information about themselves to stakeholders and in what extent.

The first category is the number of languages, which can display the page. Basic language is Czech, and then is added up a fully-fledged translations of a site. For the full mutation is considered only those that provide the same level of information as the version created in the Czech language.

The second category is contacts. It can also distinguish whether the enterprise provides their postal address, GPS address, a map of the arrival of the office, contact phone and e-mail. These values are for the opportunity to contact by their stakeholders. Individual items are also evaluated separately.

The third part is about the presentation of products. As the sample consists of production cooperatives, it is expected to lunch some of their products on the market. Therefore, this category is also divided on entire description of the products, for example with the possibility reach technical specifications, and images (pictures) of products.

⁶ *Činnosti prováděné prostřednictvím internetu : vývoj 2003 až 2007* [online]. 2008 [cit. 2008-12-28]. Dostupný z WWW: <[http://www.czso.cz/csu/2007edicniplan.nsf/t/7000286BE1/\\$File/97010743.pdf](http://www.czso.cz/csu/2007edicniplan.nsf/t/7000286BE1/$File/97010743.pdf)>.

The fourth category is the presentation of the history of cooperatives. There was evaluated whether the production cooperative gives the history of their business on the website. This category is not divided.

The last category is the category of identification numbers. There were monitored, whether at the presentation is stated Identification Number (ICO) and the Tax Identification Number (VAT).

Last categories in the section of content, it was examined whether it is on the website stated organizational structure of cooperatives, eg. Chairman of the Board and other authorities. The weights were allocated as follows:

- Language - max 15b
- Address - 9b
- GPS - 5b
- Phone - 10p
- E-mail - 10p
- The description of the products - 10p
- Image products - 10p
- History - 5b
- No. (ICO) - 8p
- VAT (DIČ) - 8p
- Authorities cooperatives - 3b

Technical elements of the Web

The second part, which is assessed according to the Web presentation of individual cooperatives, deals with the technical aspect of implementation. Here is a follow-up 8 different categories.

The first area is the ability to show the site map. This option is suitable mainly for large Web sites, which are usually complicated. In this category is also included the ability to search on the site where these two instruments can be used to easily find the information requested.

The second category, which has been technically evaluated, it is checking whether the website located at the site of first order or not. The reason for such a survey and subsequent evaluation is largely an effort to relieve users remember and paste the address into their browser. Other category that has been studied is the ability to change the text size. This option is valued primarily users with the visual impairment, for which the font in the screen too small. At the same time allow the browser to change the font size between small, medium and large. During the verification of this factor was taken into account not only the ability to change the font size, but also to whether further text display correctly with regard to the page layout.

The fourth category is according to the weighting second most important. This is the match of rendering pages in different browsers. To validate were used three most popular current browsers - Firefox 3.0.3 (Gecko core rasterization), Internet Explorer 8 Beta (Trident) and Opera 9.6 (Kestrel rendering core). This category assesses whether the site displayed correctly in all three different browsers.

The following three categories are some very similar. Quantitatively measures by the number of reported errors in three different tests. The first is CSS test. CSS or Cascading Style Sheets is a summary of the procedures for the layout of web pages. To determine the number of errors in the CSS code was used Web Developer Tool that automatically returns the number of errors. The higher number of errors, much less high-quality treatment and less likely to view the site.

The second part is the evaluation of errors in the HTML code by using same tool.

The third part of the validation errors is a test for the links. There was once again used the Web Developer, which tested whether at the web site are valid operational links. Return back the number of hits. This criterion is regarded as the most serious.

Last rather minor criterion is one about page views without style, so-called no style. This option is again page views for visually impaired users who are unable to distinguish, for example the text colour from the background. This feature displays plain text on a white background.

The weights were allocated as follows:

- Site map - 10p
- Domain first order - 5b
- Text Size - 10b
- Compliance in browsers - 20p
- CSS - 10p
- HTML - 15b
- Links - 25b
- No style - 5b

RESULTS

When analyzing the results of benchmarking the content of the websites cooperatives it is a mean value of 64 points. This value cannot be taken as sufficient, the quality of the presentation is considered one that reaches a minimum value of 80 points. At the same time, median value is 67, which also cannot be considered an optimal outcome.

The minimum amount of points in the benchmark is only 10 points, or web potential client does not close any of the information, but the maximum value is 92 points, which can be considered excellent.

Sharpness in the analysis of data it is worth 0.26. The distribution is slightly sharper than the normal distribution. On the other hand, takes the value of obliqueness -0.603, which means that the distribution is skewed right.

Histogram display will be an important with showing frequency in each group. Information for the class was divided into groups. The highest group is evaluating sites with more than 90 points. Such page can be considered excellent. That site content is fully sufficient and brings stakeholders maximum information. It contains most of the basic contact information and information about the cooperative and its production and products.

The second group are the sites of the evaluation points in the range of 80 to 90. This Web site can be considered sufficient, which contains the basic information elements, but not exhaustive. It is appropriate to supplement, but still meets the basic criteria for the provision of information. The third group are those pages that are scoring in the range of 70 to 80 points. You cannot be considered no longer be sufficiently informing, it is appropriate to add a lot of information. The fourth group assessed 60 points to 70 points with a small group of potential information. Contains only the minimum information, and does not provide enough for all users of any information. The fifth group of 50 to 60 points is quite inadequate. In general, the site provides information only about the existence of cooperatives, gives little likelihood of contact cooperative stakeholder and forcing it to seek further information elsewhere. A group with fewer than 50 points may be considered extremely poor. These sites are content to the scant level.

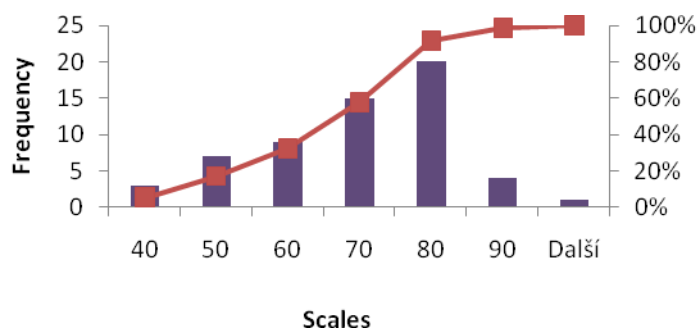
Fig.: 1

<i>Scales</i>	<i>Frequency</i>	<i>Accrued %</i>
0-40	4	6,67%
1-50	7	18,33%
51-60	9	33,33%
61-70	15	58,33%
71-80	20	91,67%
81-90	4	98,33%
91-100	1	100,00%

Source: author

As can be seen from Figure 1, excellent evaluations reached only one website. It is a mere 1.67% of investigational sites. This figure shows a lack of very low development of websites in the cooperatives. Rating between 81 and 90 points gaining only 4 presentations, as the overall quality is therefore is considered only 5 presentations. It is therefore a less than 10%. Significantly higher proportion is in a group of 71 to 80 points, which includes 20 Web sites cooperatives. This group is the largest one. Make up the 33% of all investigational sites. The second largest group is a group of Web pages investigational points between 61 and 70 It covers 15 websites.

Fig.: 2



Source: author

When analyzing the technical aspects of websites of individual production cooperatives have been evaluating a range of the same as for the content pages. The highest category again falls into the range of 91 to 100 points. The following categories were similar.

Highest value in the technical area is a mere 90 points. On the other hand, the minimum value reached 27 points. Median value is 63.75 points, which is a similar number as in the case of content sites. The median is 65.5 points. Sharpness here was reaching -0.4, which means the division after the flatter range. It can therefore be concluded that the distribution points will be divided into several different groups of scaling. Obliqueness is the same as in the case of content sites is negative, -0.46, which once again demonstrates the displacement of more than one right, then to higher values meaning more quality.

Division into different classes shown in the following table:

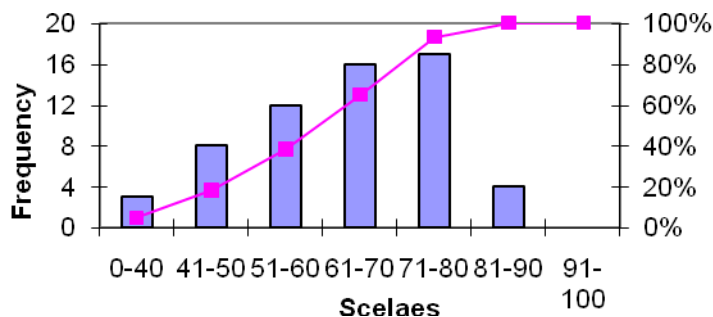
Fig.: 3

<i>Scales</i>	<i>Frequency</i>	<i>Accrued %</i>
0-40	3	5,00%
41-50	8	18,33%
51-60	12	38,33%
61-70	16	65,00%
71-80	17	93,33%
81-90	4	100,00%
91-100	0	100,00%

Source: author

Table 2 shows the distribution of the different groups and the number of sites contained therein. It should be noted the negative effect when none of the monitored sites did not reach higher than 91 points. As well as the second highest group reported only four website. The biggest third group is represented with 17 pages that reached 71 to 80 points in the benchmark. Almost as large a group is in the range of 61 to 70 points, which contains 16 different Web sites of production cooperatives. The two groups together as biggest include 33 representatives, which is 55%. At the same time, their average value is 71 points. Overall mark the implementation of technical aspects of web pages for less, as opposed to content.

Fig.: 4



Source: author

Finally, web analytics of production cooperatives is to find a mutual dependency between the two categories. This is covariance and correlation coefficients.

Covariance, which determines the interdependence of variables, the value of -13,725, between them, therefore there is a negative addition. This negative dependence can be explained by, for example, with a higher range of information provided on the website of the growing sophistication of their structure, which is technically negative in their assessments.

At the same time, but the correlation coefficient is equal to -0.0639, which is among the variables is not a linear relationship.

BIBLIOGRAPHY

1. GREGORY, James, WIECHMANN, Jack. *Marketing Corporate Image : he Company as Your Number One Product*. 2nd edition. [s.l.] : McGraw-Hill Professional, 1999. 288 p. ISBN 9780844233079
2. NĚMEC, Petr. *Public relations : praxe komunikace s veřejností*. Praha : Management Press, 1996. 167 p. ISBN 8085943204

3. PELSMACKER, Patrick De, GEUENS, Maggie, BERGH, Joeri Van den. *Marketingová komunikace*. Praha : Grada, 2003. 600 p. ISBN 80-247-0254-1
4. VAN RIEL, Cees, FOMBRUN, Charles. *Essentials of Corporate Communication : Implementing Practices for Effective Reputation Management*. [s.l.] : Routledge, 2007. 408 p. ISBN 9780415328265
5. *Činnosti prováděné prostřednictvím internetu : vývoj 2003 až 2007* [online]. 2008 [cit. 2008-12-28]. Available at WWW: <[http://www.czso.cz/csu/2007edicniplan.nsf/t/7000286BE1/\\$File/97010743.pdf](http://www.czso.cz/csu/2007edicniplan.nsf/t/7000286BE1/$File/97010743.pdf)>.

Ing. Michal Kozub
Masarykova Univerzita
Lipová 41a
602 00 Brno
99579@mail.muni.cz

INDUSTRIAL ECOLOGY AND CEMENT MANUFACTURE

Andreia Minulescu

ANNOTATION

Industrial ecology has increasingly gain importance over the last decades by becoming a new business strategy, which provides unconventional methods for lowering costs and gaining additional earnings.

Cement represents one of the most important construction materials. Along with traditional raw materials that are used to produce cement, other materials have been recently used as substitutes. These substitutes are by-product from manifold production processes, which would have normally been discarded in landfills and treated as waste. Cement manufacturers have started reusing and recycling materials, as a way to reduce costs, protect the environment, and reduce the depletion rate of raw materials. This article explores symbiotic linkages between cement manufacturers and other industries in the state of Kentucky, USA and its surroundings. Encouraging findings showed that industrial symbiosis has emerged in the region.

KEYWORDS

Industrial ecology, industrial symbiosis, the cement industry

INTRODUCTION

For the last decades, industrial ecology has gain increasingly attention not only from managers, but also from researcher groups or governmental agencies. Industrial ecology has become a new business strategy, and the firms applying this strategy seek to optimize the use of their resources, increase revenues through recycling, remanufacturing and reusing of resources, and view waste as a new source of benefits. Research, the integration of customers and suppliers in the production process, and business process reengineering [21] are the key features of industrial ecology. The concept of autopoiesis, meaning “recycle within the system, recycle within the organism” [21], is the pillar of the theory of industrial ecology.

Industrial symbiosis was defined as engaging “traditionally separate industries in a collective approach to competitive advantage involving physical exchange of materials, energy, water and by-products” [6]. Cooperation between firms, in terms of sharing resources, energy, or information has become reality with the first example of an eco-industrial park, located in Kalundborg, Denmark. More examples of industrial symbioses are: Montfort Boys Town Integrated Biosystem, Suva, Fiji [5], Joensuu city, Finland [10], Barceloneta, Puerto Rico [2], or the Austrian province of Styria [7].

Businesses from diverse industries created eco-industrial linkages, as in the case of the cement manufacturers and other industries, and win-win-win (business-business-environment) outcomes have emerged. The first information regarding the manufacture of hydraulic cement comes from the Roman Empire, when the product was a mix of lime and certain volcanic ashes or similar pozzolans¹ [18]. The cement industry itself generates a small amount of greenhouse gas emissions - about 5% of global carbon dioxide emissions [20], but the intense use of raw materials and energy in the production process are the reasons for which this field has received great attention from researchers and business people. Cement manufacturers

¹ Pozzolan = a siliceous natural or synthetic material that develops hydraulic cementitious properties when interacts with free lime and water

have been trying to reduce greenhouse gases emissions, and industrial ecology has proved to be appealing due to the benefits it offers for companies and the environment.

AIM AND METHODOLOGY

The research objective was to explore symbiotic linkages between companies from the cement industry and manufacturers from other sectors. The research was conducted over a period of two months in 2008 by the author of this paper from the University of Thomas Bata in Zlin. Kentucky, U.S.A. and its surroundings were selected as the location to conduct this research, as the region exhibits a diverse mix of firms in terms of industrial sectors, and, at the same time, numerous Portland cement manufacturers being present in the region. In order for the concept of industrial ecology to be clearer, the chemical composition of Portland cement must be presented. It is an important step in revealing the eco-linkages that might emerge. The conducted research was divided in the following steps:

1. The first step was to identify the composition of Portland cement based on existent literature [8], [4], [16]:

a) Very finely grinding Portland cement clinker. Fuels used for clinker manufacture are, for instance: coal, coke, petroleum coke, fuel oil, or natural gas [16]. Ground clinker is an intermediate product, composed mostly of :

- calcium oxide (rocks like limestone, marble, cement rock, coral), representing the major raw material
- Siliceous: sand and san dstone.
- Aluminous: clay, shale, other
- Ferrous: iron ore, millscale
- Miscellaneous: slags, fly ash, bottom ash, other

b) Approximately 5% of calcium sulphate in the form of gypsum, and/or

c) Anhydrite.

2. The second step involved the identification of by-product as possible substitutes for the above raw materials, based on existent literature. Knowing some alternative materials not only for producing Portland cement but also for other products is of great importance. These substitutes can be obtained from two different sources: first, from nature, as raw materials which are replacing other raw materials, and second, as waste, which is entirely or partly replacing specific raw materials. The latter makes the subject of industrial ecology. The findings allowed the designing of a new composition model for the Portland cement and blended cements manufacture based on alternative materials, which resulted from different sectors and are classically perceived as waste products:

- Burned rice husk ash is a waste from agriculture [17]
- Cement kiln dust is a waste from cement kiln exhaust gas [17]
- Copper slag is a waste from copper industry [15]
- Corn bob ash is a by-product obtained from corn or maize [1]
- Deinking sludge and shredded fines are wastes from pulp and paper plants [17]
- Ferrous slag, synthetic gypsum, fly-ash and bottom ash are waste products from coal-fired plants [17]
- Granulated blast furnace slag is a waste from iron manufacture [3]
- Meat and bone-meal (MBM) is an animal by-product [19]
- Metakaolin is a waste from porcelain manufacture [17]
- Red and white ceramic wall tiles are ceramic wastes [14]
- Silica fume is a waste from silicon production [17]
- Spent volcanic soil that results from the treatment of wastewaters [13]

Alternative fuels can also be used for cement manufacture. For instance, used motor vehicle tires, municipal bio-wastes, refuse derived fuel [9], animal powder, bark, paper, rubber wastes, plastics, fluff [12], solvents, greases, waste oils, or pasty wastes [17]. These fuels, along with alternative materials, offer the possibility for developing eco-linkages among multiple actors from the business environment.

3. After proposing a new model for the cement industry, the next task was to identify symbiotic linkages between cement manufacturers and other companies. The identification was made according to the previously designed model. Information available from the Kentucky Cabinet for Economic Development was used to determine manufacturing establishments in the region. A number of 34 companies were categorised according to their three-digit North American Industry Classification System codes and placed in 9 groups (see Figure 1 for groups, North American Industry Classification System codes, and number of firms):

Fig. 1 Company groupings according to NAICS² categories

Group	NAICS	No. firms
Cement manufacturing	327	7
Paper and paper product wholesale manufacturing	424	12
Power generation, fossil fuel, electric	221	6
Refinery, petroleum construction, and Petrochemical manufacturing	237 and 325	2
Animal fats rendering	311	1
Steel manufacturing	331	2
Timber and timber products merchants wholesalers	423	2
Silicone rubber manufacturing	325	1
Water supply systems	221	1

RESULTS

Evidence of emerging industrial symbiosis was found. A number of seven cement suppliers were studied. From this group, only three plants are using by-products as raw materials for cement manufacture:

- Lafarge plant from Silver Grove is using waste (gypsum) brought downriver by barge from Cinergy's Zimmer power plant at Moscow, Ohio, and has recently signed an agreement with Ispat Inland Inc. The latter company manufactures iron and has started to reap revenues from its waste instead of paying taxes for depositing it in landfills, by becoming a supplier of blast furnace slag for Lafarge.
- The second plant, located in Louisville and owned by Ash Grove uses different by-product (fly ash and scrap derived fuel) in the production process.
- A subsidiary of Cemex, located in Louisville, buys 180,000t/y of waste (fly-ash) from Kentucky Utilities, a coal-fired power plant and owned by EoN-US.

These are encouraging findings, and even though industrial ecology is not a widespread practice in the area, its presence shows that companies are willingly engaging in exchanges of materials and use it as a business strategy.

² NAICS = North American Industry Classification System

CONCLUSIONS

There is potential for enhanced symbiotic linkages in the region, due to the presence of companies that can act as suppliers of alternative materials and fuels for the cement industry, some of which being already involved in industrial symbioses, in the region, United States or across the globe. Great opportunities in terms of economic gains and reduced impact on the environment can be achieved by businesses from different sectors of industry. Examples of existing emerging industrial ecology in the cement industry should be intensively exploited, as they offer great benefits for firms, in terms of reduced costs and taxes for depositing waste in landfills, increased economic gains from selling waste, and an improved public image from becoming environmental-friendly companies. Besides the economic benefits, there are environment benefits that results from a decreased rate of depletion of raw materials and increased life span of these materials.

The concept of industrial ecology may be brought forth only in a circular management system, where suppliers, producers, and customers are parts of the production process. Classic management systems are linear, and the production process belongs solely to its manufacturer, where the inputs are obtained from suppliers and outputs are sold to customers. In this view, there is no connection between suppliers and customers. Within the field of industrial ecology one-direction supply chains have transformed into reverse supply chains, where customers are acting as suppliers and vice versa. Industrial ecology is a new business strategy that creates benefits for companies and environment. In order for this strategy to be applied in practice, managers must disclose information regarding their products to different parties, in other words the production process needs to be more transparent. Some managers might find it risky, while others might choose to go on with this strategy. Coordination is the keyword for industrial ecology. Coordination includes cooperation and competition, and companies engaged in exchanges of materials and energy must, first of all, coordinate their actions.

BIBLIOGRAPHY

- [1] Adesanya, D.A. and Raheem, A.A. (2008) 'Development of corn cob ash blended cement', *Construction and Building Materials*, pp.1-6
- [2] Ashton, W. 'Understanding the Organization of Industrial Ecosystems', *Journal of Industrial Ecology*, 2008, Vol. 12, No.1, pp.34-51
- [3] Chandra, S. (1997) *Waste Materials Used in Concrete Manufacture*, William Andrews Publishing/Noyes
- [4] Chen, I.A. and Juenger, M.C.G. (2008) 'Incorporation of Waste Materials into Portland Cement Clinker Synthesized from Reagent-Grade Chemicals', *International Journal of Applied Ceramic Technology*, pp. 1-9
- [5] Chertow, M.R. (2000) 'INDUSTRIAL SYMBIOSIS: Literature and Taxonomy', *Annual Review of Energy and the Environment*, Vol. 25, pp.313-337
- [6] Chertow, M.R. (2007) "Uncovering" Industrial Symbiosis, *Journal of Industrial Ecology*, Vol. 11, No. 1, pp.11-30
- [7] Desrochers, P. (2002) 'Cities and Industrial Symbiosis: some historical perspectives and policy implications', *Journal of Industrial Ecology*, Vol. 5, No. 4, pp.29-44
- [8] Gartner, E. (2004) 'Industrially interesting approaches to "low-CO₂" cements', *Cement and Concrete Research*, Vol. 34, 1489-1498
- [9] Genon, G. and Brizio, E. (2008) 'Perspectives and limits for cement kilns as a destination for RDF', *Waste Management*, Vol. 28, pp.2375-2385

- [10] Korhonen, J., Niemeläinen, H. and Pulliainen, K. (2002) 'Regional industrial recycling networks in energy supply – the case of Joensuu city, Finland', *Corporate Social Responsibility and Environmental Management*, Vol. 9, pp.170-185
- [11] McManus, P. and Gibbs, D. (2008) 'Industrial ecosystems? The use of tropes in the literature of industrial ecology and eco-industrial parks', *Progress in Human Geography*, Vol. 32, No. 4, pp.525-540
- [12] Mokrzycki, E. and Uliasz-Boche, A. (2003) 'Alternative fuels for the cement industry', *Applied Energy*, Vol. 74, Issues 1-2, pp.95-100
- [13] Navia, R., Rivela, B., Lorber, K.E. and Mendez, R. (2006) 'Recycling contaminated soil as alternative raw materials in cement facilities: Life cycle assessment', *Resources, Conservation and Recycling*, vol. 48, pp.339-356
- [14] Puertas, F., Garcia-Diaz, I., Barba, A., Gazulla, M.F., Palacios, M., Gomez, M.P. and Martinez-Ramirez, S. (2008) 'Ceramic wastes as alternative raw materials for Portland cement clinker production', *Cement and Concrete Composites*, Vol. 30, pp.798-805
- [15] Shi, C., Meyer C. and Benhood, A. (2008) 'Utilization of copper slag in cement and concrete', *Resources, Conservation and Recycling*, Vo.52, 1115-1120
- [16] van Oss, H.G. and Padovani, A.C. (2002) 'Cement Manufacture and the Environment. Part I: Chemistry and Technology', *Journal of Industrial Ecology*, Vol. 6, No. 1, pp.89-105
- [17] van Oss, H.G. and Padovani, A.C. (2003) 'Cement Manufacture and the Environment. Part II: Environmental Challenges and Opportunities', *Journal of Industrial Ecology*, Vol. 7, No. 1, pp.93-126
- [18] van Oss, H.G. (2005) *Background Facts and Issues Concerning Cement and Cement Data*, Open-File Report 1152, U.S. Department of Interior, U.S. Geological Survey
- [19] Wilks, N., (2005) 'Throw nothing away', *Professional Engineering*, Aug. 17, p. 27
- [20] World Business Council for Sustainable Development
<http://www.wbcsd.org/templates/TemplateWBCSD5/layout.asp?type=p&MenuId=NzY&doOpen=1&ClickMenu=LeftMenu>
- [21] Zeleny, M. (2005) *Human System Management: Integrating Knowledge, Management and Systems*, World Scientific Publishers

Andreia Minulescu, M.Sc.
 Tomas Bata University in Zlin
 The Faculty of Management and Economics
 T.G. Masaryka 3050, U12, 317
 760 01 Zlin
andreia_minulescu@yahoo.com

MANAGEMENT IN EDUCATION OF EMPLOYEES IN PUBLIC ADMINISTRATION

Jitka Pěkná

ANNOTATION

This contribution will be connected to my disertation thesis and will be oriented to management of employees within public administration and their motivation of continuance in their office. I would like to introduce briefly historic excursus to understand the chains of events from the past with the nowadays situation or with the future. It is necessary to mention some historic data that influenced the development in public administration, especially in Civil Service. And moreover the basic law should be stressed. Then some paragraph will be devoted to the relation of the employees in public administration with connection to the management of employee's education and their motivation. Issues concerning the remuneration from the point of view of legislation and from the point of view of the set system within the society will be introduced. I will try to propose some improvements to preclude more momentous complication in the field of management or subjective evaluation. The article will also describe the necessary and possible conditions for being employee in public administration, respectvelly Civil Servant. The comparison of the management among the member states (or among the groups of member states) of the European Union will be presented in this contribution.

KEY WORDS

Management, education, state administation, motivation, remuneration

INTRODUCTION

I would like to present some main part from the sphere of personal management, choice of human resources, remuneration of employees, their motivation in different systems of civil service, historic explanation of civil service within the European Union., creatin working positions.

AIM AND METODOLOGY

My aim is to describe briefly some problems resulting in public administration, resapectively in civil service and to show some problems or improvements. I observed situation in public administration especially through books, television and journals.

RESULTS

In this chapter, I will introduce very shortly some facts which has resulted from studying of books or TV emission.

Personal management

A personal departement deals with the personal management both in private sector and public administration. Its establishment, formation and functioning depends on will and on the importance. The main aim is to ensure within the institutions of public administration, so that all its employees contribute with their work to achieve their goals and tasks, and so that they work with great performance. It is necessary to manage them and to establish good conditions and presumptions. The activities of management of human resources contain organization of human resources (i.e. establishment, development and creation of working positions or roles),

ensuring of human resources (like planning of human resources, obtaining and choice of employees), development of human resources, management of remuneration including evaluation of the work, wage scales and wage structures and other benefits, and relations of the employees. Each personal department has to observe the personal agenda, plan human resources, set the necessary number of the employees, obtain and choose the employees, evaluate the employees and their performance, educate, remunerate, ensure the work conditions and the protection during working etc. Personal conditions are all the factors influencing the employees in positive or negative way.

Remuneration

Remuneration does not mean only wages or salaries, but it also includes other forms of benefits. Next to the money benefits non-cash benefits are also used. By remuneration it is meant wage or salary, which is given for the work. Employee's wage must be set in written form and before starting the work. The amount and the kind of remuneration is set by law. From the year 2007 the remuneration is directed by Act No. 262/2006 Coll., Labour Code. The difference is between the terms "wage" and "salary". Wage is given by the employer whose main goal is achieving the profit. Salary is given by employer, which use money for remuneration from public sources.

Wage is formed by fixed and non-fixed part. The basis for determination of the wage is salary range in the tariff structure which means the fixed part of the wage. For creating the tariff structure it is necessary to have the catalog of functions within the organization. Those functions are ranged according to their difficulty, responsibility and work kind. By this the register of working positions is defined. The last step means the assignment of the wage tariffs to the functions or to the groups of functions. These groups are named as tariff classes. Within public administration 16 tariff classes exist. The additional part (non-fixed) of the wage is setting the wage supplement. These wage supplements are given to the employee on the base of Labour Code and of the decision of the organization.. The exact amount of wage is formed in connection to the performance of the employee.

Working positions

Each working position includes the description and specification. In the description of the working position, it is necessary to mention the name of the place, exact place of doing work, assignment within the organizational structure, competency and responsibility of the employee, obligations of employee. Because of providing the services in public administration from the part of the employees, it is useful to set the specification of the working position that determines their qualifications for performance of their work. It should contain the requirements for knowledge, abilities, skills, characteristics of personalities, education, qualification, necessary work experience.

Within the European Union, two fundamental systems of obtaining and choosing the employees within public administration are developed. There are the career system and merit system.

Career system deals with the establishment of Civil Servants relations. This relation means relation guaranteed by law and means whole-life professional career within state administration and ensured service and wage advancement. It is set that it is advantageous to stay in public service like the whole-life profession. New employees are taken into the organization on starting position at the beginning of their career. They are advanced progressively if they have necessary requirements for advancement set by law. The advantage of this system is quite professional, loyal and experienced structure. In this system, the state service is divided into several levels which are next divided into stages. Each of the stage

define own requirements for qualification. The service advancement is ensured to higher service classes on the basis of effluxion of service years. The choice of the aspirants for civil service is diriged by strict rules. Obtaining of new civil servants is through selection procedure only on the lowest stage. The employee can be advanced for higher stage. There are some restrictions of civil servants, for example significant limitation or prohibition of external gain activity, restriction to the right on strike, limitation of the political activity during the performance of the service. The compensation for this means automatical functional and wage advancements within the service or different benefits (like for clothing etc.). This system is used in France, Austria, Germany or Poland. The positive side of this system is mainly stability of the performance of the service, its professionalism and independence on the political environment. The negative side is especially closeness, stiffness of civil service which is set by the certainty of advancement according to the service years. Civil servants in most cases usually lack any motivation for higher performances, self-education and their activity falls down. The next disadvantage can be seen in the fact, that persons of higher age achieve the highest working position. It is due to the progressive advancement from lower stage to higher stages according to the service years.

Merit system (or positional system) comes from the catalog of service positions. It is certain review of the employee positions which are classified with the description of the individual activities. By this it is established the wide register of the individual working positions and the descriptions of the work are defined in detail. Each adept for the work can ask for work set by the catalog within the selection procedure. Only the abilities, qualification and work results are the factor for choosing the employee. It does not depend on the previous employee's work experience or work position. The employee is advanced according to his merits, not automatically according to the law. The term "position system" originates from the fact that the adept was chosen on the base of demanded qualifications (i.e. abilities, knowledge). No guarantees of the career are set. The advantage of this system is its dynamism, flexibility during obtaining and choosing the employees, management of remuneration on base of the merits and lower financial cost. No compensation measures exist. Disadvantages can be seen in hard changing of the catalog of the working positions and their descriptions, low stability and higher connection with the political environment and higher fluctuation of employees across the working sphere. This system is established for example in the Netherlands, Denmark, Finland, Sweden.

Civil service in other countries

References to the civil service can be seen in the constitutions of each states, but the difference is in the defined extent and content. Closer conditions of the performance of the service of civil servants are set by laws. It is common that the civil servants have higher obligations and restrictions during the performance of their service. Within the European Union it is not defined towards the member countries the unique system of the civil service. The key pillar set as the fundamental element of defining the civil service within the countries of the European Union is efficient state service oriented to the nationals.

Civil service in the Czech republic

In our Constitution in the article 79, we can find the definition that legal relations of the civil servants within the ministries and other administrative bodies are set by law. It deals with the institutional definition and personal competency which is the key goal of the service law (see below). It is connected only to the ministries, central bodies of state administration and other administrative bodies and to the civil servants and employees who performance in them state administration like service for public. Next constitutional principles of public service can be set (equal access to public functions, using of public power like service to all persons, etc.).

Public service is regulated especially by the Act on the service of civil servants within administrative bodies and remuneration of these employees and other employees in administrative bodies (service law) – Act. No. 218/2002 Coll. This law is the basic element of public service. It mentions service relations of the civil servants, organizational tasks of civil service, preparation for the service, directing in the field of the services and remuneration of these employees. Service relation of civil servant is, according to this law, relation to the Czech republic, not to the concrete body. This relation has the character of public-law relation on basis of the nomination on the service position. Our law means civil service like the service within the career system. This statement can be proved by some facts – existency of specific law (service law) and the whole conception of this service in practice. The subjects of service relations are civil servants and state. State is legal entity represented by service bodies or other persons on the base of the law which act as in the name of the state. The law sets the obligations, due observance of service discipline. Service law is valid from the end of May 2002, but its force was put off several times, lately to year 2012.

CONCLUSION

Modern personalist in public administration should have good education in the sphere of human resources, have good theoretical and practical knowledgement. He should be interested in the task actively and be an inovator and full of iniciative of changes in the organization. He should be a partner of leading persons and use new personal ways and processes. He should be also psychologist to help during the planning of choice of employees.

The analysis depends on obtaining the quality information on the working position. It is important to choose the trustfulness sources. The most often used method within the organizations of public administration is interview. The analysis of working position also serves to other personal activities. It is important for obtaining the employees, because we can know, what requirement on the applicants will be demanded.

Concerning proposal for the solution for improvement of the individual problem spheres I think it would be useful to try to motivate the present employees in more way and to attract the qualified specialists and young experts who could be able to stir up the fusty system, to reorganize it and to improve in more way. I do not mean like motivation only wage or salary, but richer system of empoleees' benefits, non material incentives or interestingcareer advancement. I do not agree with the fact that only employee's qualification, his age and how many years has he worked within state sphere. The system evaluates in minimum quality and quantity of the work and it is not very objective.

BIBLIOGRAPHY

- [1] Armstrong, M.: Řízení lidských zdrojů. Praha: Grada Publishing, 2007, ISBN 978-80-247-1407-3
- [2] Kocourek, J.: Odměňování zaměstnanců ve veřejných službách a správě. Praha: C. H. Beck, 2007, 132 str., ISBN 978-80-7179-615-2
- [3] Lacina, K.: Evropské systémy veřejné správy. Praha: Vysoká škola finanční a správní, 2005, 123 str., ISBN 80-86754-37-5
- [4] Trykar, L: Služební poměr státních zaměstnanců. Praha: Leges, 2008, 176 str., ISBN 978-80-87212-05-9
- [5] Trylč, L., Kocourek, J.: Mzda, plat a jiné formy odměňování za práci v ČR, nakladatelství Anag, 2001, ISBN 80-7263-039-3
- [6] Veselá, M.: Státní služba. Brno: Masarykova univerzita, 1997, 115 str., ISBN 80-210-1660-4
- [7] Wright, G., Nemeč, J.: Management veřejné správy – teorie a praxe. Praha: Ekopress, 2003, 419 str., ISBN 80-86119-70-X

Next references:

[8] Zákon č. 218/2002 Sb., o službách státních zaměstnanců ve správních úřadech a o odměňování těchto zaměstnanců a ostatních zaměstnanců ve správních úřadech

[9] Zákon č. 262/2006 Sb., zákoník práce

[10] Nařízení vlády č. 564/2006 Sb., o platových poměrech zaměstnanců ve veřejných službách a správě

Full name: Jitka Pěkná

Institution: University of Economics Prague

Street: place W. Churchill

City: Prague

Email: peknaj@vse.cz

TALENT MANAGEMENT AS A MAINSPRING FOR SUCCESSFUL DEVELOPMENT OF A COMPANY

Michal Pilat

ANNOTATION

In this paper the author proves that every human being possesses talents. However many people are not aware of that fact. On the other hand even the most gifted among us tend to find it hard to achieve success, as far as professional career is concerned. This is why it is being more and more important for the modern enterprise to help employees out in finding and developing their talents for the good of both – the company and the employees themselves.

KEY WORDS

management, human resources, talent, enterprise, motivation,

AIM AND METODOLOGY

The aim of the article is to demonstrate the importance of talent management in contemporary business and to analyze its repercussions. The author also presents a few ways to stimulate and develop talents among workers.

This article is based upon analysis of various approaches presented in the literature.

RESULTS

Talent management is a very new approach that is becoming more and more popular, especially in the developed countries. It targets at getting the best out of every single employee and stresses the importance of human resources as the most valuable asset in a company. This approach motivates people better and may prove to be a very potent remedy to constantly toughing competition, especially in the gloomy period of the global crisis.

1. The notion and features of a talented person

The notion of “talent” takes its origin from the Greek “talenton”. Initially it described a weight that human was capable of lifting [1]. However one does not know how much he can lift without taking a try first. It could be 30 kg, could be 40 kg or even as much as 100 kg. As a result we may surprise ourselves about how talented we are, but still it is only a halfway to go. In order to get the full answer one ought to embark upon a proper training and then see how the talent has been developed. Thus every person carries talents which must be revealed and developed to ensure success. Otherwise all we have is just the potential.

It’s fairly easy to squander the talent. There are much more people on Earth who actually destroyed their potential rather than those who managed to comprehend and develop it. A person who does not make efforts to develop their talents recklessly grave it. As a result not only himself but the whole population suffers from this loss.

Talent constitutes a natural potential of intrinsic values and goods that every human being is a holder of. Hence one is able to carry out various activities much above the average. Talent is not to be created but to be recognized. In this way the key issue is to discover our innate ones and develop them [4].

In contemporary psychological sciences many ways of understanding talent can be selected. However most of them are based on certain continuum where outstanding gifted people are placed on one side of the extreme while the remaining population of those who carry their talents but are not aware of them on the other.

Psychology defines a talented person as an individual characterized by [1]:

1. above-average intrinsic capabilities in a certain field most often recognized by higher intelligence potential,
2. creativity, originality, newness and flexibility in terms of thinking; taking new and unconventional problems, boldness and deep emotionality,
3. activity and job-devotion (much above the expectations, passion, fascination, ability to sacrifice, faith in one's capabilities),
4. self-esteem driven by superior motivation, leading to constant development of qualifications and knowledge,
5. extraordinary emotional quotient (self-awareness, empathy, self-control, self-motivation) as well as charisma which enables a person to make others work for the common objective,
6. sense of mission to fulfil and self-discipline while aspiring for its fulfilment.

2. The role of talented people in the development of a company

In general an entrepreneur seeking for talents demands from people [2]:

- analytical capabilities in order to properly diagnose complex situations and make right decisions,
- interpersonal capabilities based on emotional quotient covering cooperation with other people, diminishing conflicts, self-motivation and team motivation,
- technical capabilities i.e. ability to practically exploit specialized knowledge and tailor it to specified expectation of a company,
- political capabilities leading to strengthening own position,
- ability to make use of information for efficient decision-making process,
- constant care for self-esteem through day-by-day learning at work and outside work.

Despite many entrepreneurs tend to be aware that talent management may be a source of competitive advantage only a few started to run authentic programs for identification and development of talents among workers. Others still base their judgements upon intuition and concentrate on current actions. On the other hand increasing competitiveness and process of globalization slowly change that rigid approach towards employees. However talented workers are more and more aware of their value and hence present greater mobility, ready to switch firms whenever better conditions are provided.

An individual perceived as a "talent" is a person who significantly contributes to company value, characterized by above-average potential to develop, which makes him appropriate candidate for R&D units or for holding most prominent managerial posts. A talent usually scores extraordinary results, represents unique skills and essentially strengthens competitiveness of a company on the market. That is why for such people individual motivation system must be designed. It should be based on individual career path, additional trainings, coaching, post-graduate studies, cross-border internships and so on. There are special "talent management" type programs aimed at discovering unique talents among workers and provide conditions to develop them. Mostly it is being done through "on the job" style where selected individuals are empowered to take part in key projects and business processes such as: planning, budgeting, decision-making, key problem-solving [4,5].

Nowadays knowledge innovation and effectiveness of workers seems to be more important than ever. This fact is more and more often clear for the employers if they want to gain competitive advantage. Hence the most important success factor seems to be: to select retain and develop a talent. Although money and equipment is still considered to be significant, much bigger importance is attributed to talented people. In this way their development, motivation, talent abuse rises to the most key issue for a company [3]. Apart from pure

obviousness coming from this statement unfortunately those factors still present merely declarative value.

In some most developed economies new recruits are, according to new approach treated as potential, not yet determined and still asleep talent. As a result every new member on board is hoped to reveal his talents for the common good – himself and the company. In accordance with that philosophy [3]:

- a company should not focus only on sparse, fairly talented employees,
- proper help in the process of identification of unique, positive capabilities ought to be provided,
- every employee is to be supported in order to develop his talents,
- focus on the best could have very negative results as it would worsen efforts of the remaining part of the neglected crew,
- level of stress coming from talent development should be reduced,
- an atmosphere must be created, where people believe in themselves and feel proud about their talents.

Having put this philosophy into practise many companies in most developed countries often replace the term “human resources management” with more accurate one – “talent management”. Management boards on those companies already come to realize that the employees and their hidden talents happen to be their most valuable assets. Hence their identification and development determines well-being of a company as whole. Most resources are subjects for a use up and thus their value decreases in time. On the other hand human resources can expand through creativity, constant development and life-long learning. This expansion is observed by increased competitiveness of the company operating on more and more demanding global market.

The notion of talent management stresses the importance of talent release among all the employees, not individuals. If the company wants to achieve significant market position it must make use of all the available workforce. Thus it is crucial to exploit the potential of every person as a building material for the common values and endeavours. Talent management is then a philosophy of release asleep talents and reserves which are the domain of most of workers and so far have not been used.

Discovered talents turn out to be company’s great value, and even greater when development potential is exploited. This can be done through self-education, trainings, post-graduate studies (e.g. MBA) employees face new challenges, solve interesting problems and so on. The job designed for them must be demanding but not burdensome. It should be interesting and intellectually attractive through which they meet their needs and prove original ideas. Moreover those people benefit from special care coming from best managers, mentors and trainers. In addition individual careers paths are also set. Contrary the lazy ones not wanting to exploit their potential are dismissed [5].

3. The core of talent management

Hunting for talents begins as early as in collages where most promising students are searched for. They are usually offered participation in Assessment Centres or Development Centres where they are evaluated according to the competences key for the company cooperating certain project. During that time they receive feedback in order to develop their talents and modify behaviours to meet expectations better. Those candidates also face various exercises, case studies and simulations which can be expected while working for a certain company. Moreover they are trained in such fields as: self-presentation, negotiations, discussions, teamwork, project management, psychological tests and so on. During those tests they are assessed by highly professional assessors and psychologists based upon their competences, ability to work in a team, special knowledge and so on. Even the emotional quotient (EQ)

which more determines success that IQ is a subject for examination. Normally those skills are not thought at the universities but could be developed through cooperation with companies under optional courses for selected candidates [3].

In high-tech industries first 3 years are generally invested in training of a new employee. Especially in the USA and Japan those periods are usually internships after which an intern becomes a specialist. To make sure that a firm will benefit from invested both time and money it often make a new employee to sign a declaration, which stands that if he leaves the company within e.g. 5 year's time he must give back all the money that has been invested in the training. For those wanting to meet additional challenges e.g. learn new languages the company covers the expanses and even sponsors a foreign trip [6].

Some enterprises embark upon hiring the so called "talent managers", whose task is to select most talented, promising and ambitious people. As a next step they jointly design their future career and set all requirements to promote. In this way young talents visualize their career path and thus become more motivated to constant hard work [6].

Motivation monitoring pays a very significant role in the process of selection and shaping of talents. A talented person is driven and motivated not by other people's orders but himself i.e. objective needs and his own mission. The goals of a talented person are a result of self-esteem needs and the objectives of a company that person works for. Naturally those goals need to be controlled by the managers but still ought to be set individually. The more similar company and employee objectives, the stronger both motivation and involvement of an employee.

In the process of talent selection there should be an assumption that in every company there is a certain number of people to bet on. Hence it is important to fairly soon identify "young talents" and take good care of them. On that basis designed programs reconcile enterprise capabilities with individual career plans of selected workers in order to tailor their professional development specially for them [2].

Talent selection practise usually takes place in the firms which execute talent management programs on a serial basis – mostly once a year. Sometimes the programs cover all the workers (e.g. in project office or R&D laboratories, IT companies and so on) which constitute the so called knowledge workers. However generally the process is aimed at 15-20% of the crew. The most decisive factor is usually a result of periodic assessment, unusual achievements, personal and leadership predisposition, initiative, degree of task fulfilment and devotion as well as supervisor's opinion. Often external consultants are being hired to carry out the whole process. The key words for selection of talents are "extraordinary performance", "brightness", "activity" and "above-average potential". Response for the process is shared and taken by HR department, and top management [3].

In order to efficiently win, retain and develop talents a company should ensure:

- interesting, most often individualized trainings and opportunities for constant professional development,
- learning via specially designed educational programs tailored for individual needs,
- participation in individual coaching, mentoring and access to professional literature,
- possibilities for self-development in the fields that the employees choose themselves and which cover their special interests,
- participation in special international programs and projects,
- participation in various business processes in the capacity of observers, consultants or even executors of selected tasks,
- continuously new and ambitious challenges,
- friendly atmosphere at work,
- attractive remuneration both in cash and in kind,
- promising career path offering opportunities for fast promotion,

- participation in “search and match” programs which target at internal recruitment for the key posts.

It seems that not many firms have a strategy for employer image building which would be attractive for most talented persons. Those defects companies try to eliminate through serial satisfaction research where employees evaluate the firm, its culture and even the managers.

Tough global competition requires from the employees above all innovation to ensure a constant development of a firm. However there is no innovation without talented personnel. Thus companies aspiring for a constant development create the atmosphere of absolutely free development of talents. To reach this goal a firm [1]:

- provides wide-ranging help in order to identify its strengths and weaknesses,
- efficiently motivates to constant development,
- helps out in designing personal development plan,
- stimulates the needs of self-acceptation and self-esteem,
- projects career paths at very early stage.

Those companies which execute talent management program should observe the talented employees, especially their efforts in terms of self-actualization. It is worth to know whether self-actualization is a spontaneous addiction (kind of habit) and a challenge or just a temporary enchantment. It is also important to assess a degree of determination in the process of learning and check if this phenomenon is natural or staged. Those answers are significant as no real development is possible without a constant learning.

In the most developed countries job is being more and more complex and interesting. To make it possible employees ought to present better and better qualifications and competences. Through this process jobs is getting more creative and thus full of joy and passion instead of drudgery as in the past. Hence many strategies of great companies are based on 3 criteria: talents, technologies and creativity. In this way in modern companies talent management is stimulated to create innovative technologies and increase competitiveness.

CONCLUSION

In the contemporary business one of the most distinguishing feature is talent management. It can be a very important source of competitive advantage, especially in more and more complex global environment. Unfortunately still many employees complain about lack of interest in that form of motivation from the employers side. As there is no improvement in competitiveness without hiring most talented people a successful company must provide authentic conditions for self-actualization and constant development of their talented workers. Their individual development is company's most valuable asset so both the employees and the company benefit from such approach.

BIBLIOGRAPHY

- [1] Borkowska S. (ed.): Zarządzanie talentami. IPiSS, Warszawa 2005.
- [2] Koźmiński A.K., Piotrowski W. (eds.): Zarządzanie. Teoria i praktyka. WN PWN Warszawa 1996
- [3] Sadler Ph.: Jak znaleźć i zatrzymać ludzi najzdolniejszych? Biznes. Zarządzanie zasobami ludzkimi. Tom 5, WN PWN Warszawa 2007.
- [4] Bolton B., Thompson J.: Entrepreneurs: talent, temperament, technique. Elsevier, Amsterdam 2005
- [5] Solimano A. (ed.): The international mobility of talents: types, causes and development impact. Oxford University Press, Oxford 2008
- [6] Pocztański A. (ed.): Zarządzanie talentami w organizacji. Wolters Kluwer Polska, Kraków 2008

Full name: Michał Piłat
Institution: The Karol Adamiecki University of Economics in Katowice
Department of Management Systems and Methods
Faculty of Management
Street: 1 Maja 50
City: Katowice
Email: michal.pilat@ae.katowice.pl

INFLUENCE OF CONTEMPORARY IT TRENDS ON STRATEGIC MANAGEMENT AND ORGANIZATIONAL STRUCTURES

Natálie Presová

ANNOTATION

Contemporary situation is calling for IT manager to become a part of the management team and his responsibility to move from cost saving to fulfilment of strategic goals via usage of various technologies. The responsibility for the alignment of IT services with the company strategy should lie with the whole management team. There are several techniques and best practices how to measure and improve the adjustment of IT outcomes to the strategic goals. How companies will manage this adjustment is of the essence nowadays.

KEY WORDS

IT Governance, strategic management, effectiveness

INTRODUCTION

The growth and changes appearing in the IT area have requested a new way of thinking about the IT usage and its impact on the strategic and operational management. Most of the companies started using IT because of benefits such an automatization could bring. It was recognized that thanks to the IT several additional information sources can be made available what can finally increase effectiveness of the decision process. Great investments into information and communication technology were done in order to work more effective than the competitors. However the investment is usually concentrated on hardware or maintenance of current software. In most cases the companies use IT to make the current processes and procedures faster. But is anybody considering that the heightened usage of IT could cause such a dramatic internal change that the existing processes have to be aligned or rethought? The IT has changed dramatically but the mindset of most of the managers hasn't so far. Most of the companies are stuck with existing systems and forget to ask themselves: Does our IT infrastructure support our strategy in an appropriate way? Does the way we use the IT in our company impact or bring the necessity to change the way we are organizing the tasks? Application of the modern trends requires restructuring and change in the leadership style too. Also the strategic planning is changing from a simple hardware renewal to be more focused on possible future tasks.

AIM AND METODOLOGY

The aim of my study is to create an overview of the courses and methods related to IT management and business strategy alignment. The prerequisite is to understand the relations between these two areas and to try to find some elements in the real life also. Empirical observation followed by the deduction based on contemplated phenomenon as well as on acquired knowledge is going to create my papers. Collection of the literature and other sources is where the current phase of my study lies.

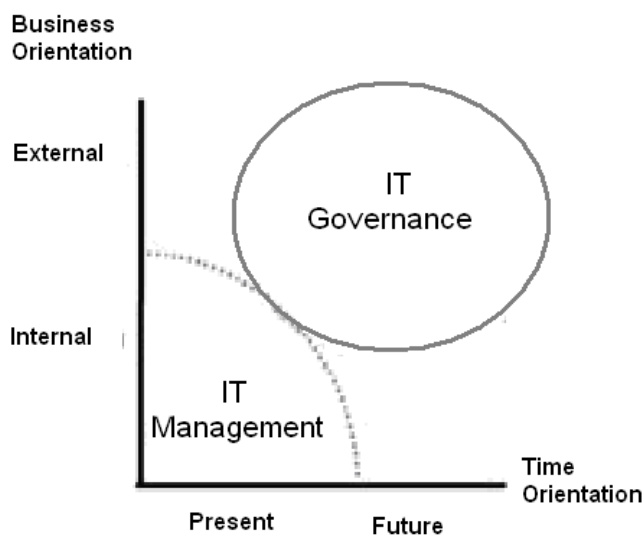
RESULTS

IT management versus IT governance

The growth on the IT industry implies that companies started to use the opportunities IT could offer. So the dependency of companies on the information and communication technology has grown extremely. If there has been focus on the cost optimization in the past the current trends show that this can be groundwork of the modern IT management only.

While IT management tries to achieve provision of IT services internally in an effective way strategic approach of IT coordination is oriented on the alignment of IT services with company strategy supporting the company in fulfilling the present as well as future customer needs. Weill and Ross [2] define the basis of IT Governance as follows: ‘Specifying the decision rights and accountability framework to encourage desirable behavior in the use of IT’. The relationship between company strategy and IT governance shows the following picture:

Fig. 1 IT management and IT governance in time



Source: Van Grembergen and Haes (2008)

In short term an organization can be focused on IT management more then on IT governance. However this needs to be changed considering the long-term company goals. Related to the overall management of IT activities the approach is to be dividend clearly into short-term IT management and the strategic IT governance. This separation helps to understand the differences their management should be aware of.

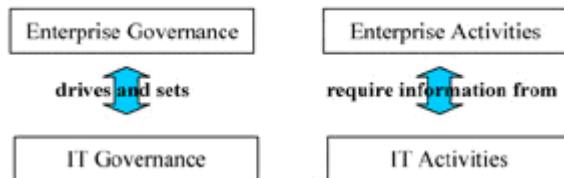
Fig. 2 IT as Service Provider or as Strategic Partner

Service Provider	Strategic Partner
IT is for efficiency	IT for business growth
Budgets are driven by external benchmarks	Budgets are driven by business strategy
IT is separable from the business	IT is inseparable from the business
IT is seen as an expense to control	IT is seen as an investment to manage
IT managers are technical experts	IT managers are business problem solvers

Source: Venkatraman (1999)

Information became the most important source crucial for a business operations. There is no further isolation of any company process or activity from the IT influence supposable. The effects and associations between the enterprise and IT governance can be seen on the following picture:

Fig. 3 Enterprise Governance and IT Governance



Source: Van Grembergen and Haes (2008)

Focus on IT governance

Several contributions of appropriate IT governance have been identified:

- IT governance is worth to manage – it has been researched that company managing IT governance in a good way can get more profit with the same strategy than the company without any focus on this IT governance area. Good IT governance usually goes together with a good level of company governance
- Costs of IT – IT governance brings visibility and clearness into the structure and costs of IT related objects
- IT is connected with everything – it is becoming harder to manage IT as a separate part of the company management. Investment into the IT can be hidden in whatever item. IT governance can help to distribute the responsibility to those responsible for the desired outcomes.
- IT value is hardly recognizable – on one hand the IT shall support internal processes and activities on the other hand should provide the ability to respond to customer current and future needs. IT governance can help to establish mechanism for better understanding and learning of IT values.
- Good IT governance is more then good technology – most of the IT projects does not bring a satisfactory result for the shareholders. The main reason seems to be the organizational stiffness in the process improvement area. In general is simpler for a company to implement an IT change then to suit the processes to the transition.

Appropriate IT governance has potential to increase company competitiveness and to prepare the processes and structures for the coming challenges. The shift from the original concept of the IT governance to a new paradigm is shown on the following picture:

Fig. 4 Emerging IT Governance Paradigm



Source: Van Grembergen and Haes (2008)

IT Governance concept

As a reference model presented by Weill and Ross [2] will be taken. This model strives to form attributes of IT management and governance in a structured way. The focus is on the decision-making area with respect to the roles, responsibilities and types of the decision. These relations can be easily drawn in the arrangements matrix.

Fig. 5 Governance arrangements matrix

DECISION ARCHE- TYPE	IT Principles	IT Architecture	IT Infrastructure Strategies	Business Application Needs	IT Investment
Business Monarchy					
IT Monarchy					
Feudal					
Federal					
Duopoly					
Anarchy					
Don't Know					

Source: Weill and Ross (2004)

The archetypes are shown in the table on the left-hand side. The levels represent:

- Business Monarchy – the top managers making decisions
- IT Monarchy – IT specialist are in charge of the decision
- Feudal – each business unit making independent decisions
- Federal – combination business units and company management
- Duopoly – IT groups and one other group (top management or business unit leaders)
- Anarchy – isolated individuals are involved

The decision levels are investigated from different points of view:

- IT Principles – clarify the role of IT

- IT Architecture – define integration requirements
- IT Infrastructure Strategies – represent shared and enabling services
- Business Application Needs – specify the business requirements for IT applications
- IT Investment – choosing which action is to be taken and how much is to be spent

The five key decisions are linked together – moving from left to right in the matrix. One decision enables the following (e.g. IT Principles determine IT architecture).

Research

The research is going to be based on the model presented. There have been several recommendations and conclusions made with respect to this model. After finishing my research in chosen international companies located in the Czech Republic the effectiveness of the IT Governance in these companies is going to be seen in comparison with the results and propositions presented together with this model.

CONCLUSION

In many organisations, information technology became crucial in the support, the sustainability and the growth of the business. This pervasive use of technology has created a critical dependency on IT that calls for a specific focus on IT governance. IT governance consists of the leadership, organisational structures and processes ensuring that the company IT sustains and extends its strategy and objectives. The Board as well as the business and IT management have to play an important role in assuring the governance of IT. The possibility of effective governance over the IT is also determined by the way the IT function is organised and where the IT decision-making authority is located in the organisation. Therefore a further analysis of the company structures and approaches related to IT management is recommended with the focus on the reciprocal relations between them.

BIBLIOGRAPHY

- [1] Venkatraman, N.: Valuing the IS Contribution to the Business. Computer Sciences Corporation, 1999
- [2] Weill, P., Ross, J. W.: IT governance. Boston: Harvard Business School, Idea Group Publishing, 2004.
- [3] Van Grembergen, W., Haes, S.: Implementing Information Technology Governance: Models, Practices and Cases , IGI Publishing, 2008
- [4] Online source www.itgi.org, used 20th December 2008
- [5] Van Grembergen, W.: Strategies for Information Technology Governance, Idea Group Publishing, 2004

Natalie Presová
 University of Economics in Prague
 Palackého třída 80
 Brno
natalie@presova.com

SPONSORSHIP EFFECTIVENESS AND ITS IMPACT ON CONSUMERS' ATTITUDES

Kamila Rubaninska

ANNOTATION

The key objective of this paper is to investigate if the consumers can really feel the sponsorship influence, if they accept such initiatives and which economic sectors they think the sponsorship should come from. The goals the sponsors follow have been proposed for consumers' evaluation to determine and quantify their attitudes towards sponsorship companies. Our conclusions show that there is almost a 50 % positive impact of sponsorship and the most accepted sponsors come from the banking, media and telecommunications industry. The most important reasons for doing sponsorship according the consumers given a number of goals are addressing the people attending the event or watching it on TV, followed by showing the companies also support non-profit areas and they would like to promote their products at the event. The article is a part of the research project No. 2316063/08 „Marketing application in selected sectors of economy“.

KEY WORDS

corporate sponsorship, sponsorship effectiveness, consumer's attitudes, sponsorship influence

INTRODUCTION

Sponsorship as a tool of marketing communication is experiencing a fast growth in the companies located in Slovakia. Moreover, it has received the attention of academic researchers as well as corporations directing increasing large amounts of money towards this medium. Recent publications and researches from all over the world [Grohs et al. 2004; Harvey et al. 2006; Mason 2005 etc.] show it can be used as an alternative medium to the traditional communication tools especially in those areas in which advertising loses its power. A very similar trend has been observed in Slovakia as well and therefore we decided to investigate various aspect of the sponsorship influence on the young consumers.

AIM AND METODOLOGY

The aim of this paper is to examine three main aspects:

- a) if the consumers can really feel the sponsorship influence, i.e. how the consumers are consciously aware of how the sponsorship influences them and if they accept such initiatives;
- b) which economic sectors they think the sponsorship should come from and
- c) the goals the sponsors follow have been proposed for consumers' evaluation to determine and quantify their attitudes towards sponsorship companies.

The survey has been limited to the attitude to the sponsors only, not towards the sponsored entities. In order to achieve representative sample as well as results, we reached out to 725 randomly selected respondents (mostly university students) and achieved 70,48 % response rate [n = 511, at the age of 18-26]. The market survey started on November 15th, 2008 and was closed on December 5th 2008. The evaluation process was completed in December 2008. The results have been appended by another exploratory survey conducted in 2007 [Rubaninska 2007a, 2007b] comprising of a smaller sample [N=75, at the age of 18-30].

The methodology employed was a distribution of paper questionnaires among the respondents. Before the final collection of the questionnaires started a pre-test on a sample of randomly selected 20 respondents had been conducted which helped to identify possible bias

and irrelevant responses (within the months September to mid-November 2008). The questionnaires used word association test, multiple choice questions (with limited and unlimited number of answers), monadic variable scale, dichotomy questions and Likert scale.

RESULTS

In both consecutive years we were examining three key areas important for the sponsorship investments. These can be summarized and defined as follows:

- a) sponsorship perception
- b) consumer perception of good fit
- c) perceived goal of the sponsors by consumers

In order to find out the answers for the above mentioned questions and guide the analysis of the data, we have developed a number of hypotheses.

According to various sources the sponsorship activities are considered to positively influence audience either in comparison with advertising [Bloxham 1998] or by creating positive publicity [Schmader and Jackson 1997]. *Hypothesis 1* has been based on these statements and defined followingly: 70 % of respondents notice corporate sponsorship and feel positively influenced by these activities.

Hypothesis 2 is based on the results from the previous survey [Rubaninska 2007a, 2007b] and the Irish National Arts Sponsorship Survey conducted [Business2Arts 2006] – young people think the sponsorship should mostly come from the banking, telecommunication and media industry.

Hypothesis 3 and also the third expected result deals with the consumers' perception about the corporate sponsorship – the companies use sponsorship in order to get closer to people (address the people attending the sponsored event) and build regional relationship (create image).

Sponsorship perception

We asked respondents how they feel about the companies doing sponsorship activities and how they think it influences them. Results of the exploratory study showed sponsorship as a communication tool highly perceived where only 6 % of respondents adopted negative or completely indifferent attitude. Almost half of them admitted they notice sponsorship and it influences them positively. Another 45,6 % stated, they do not care about the sponsorship activities, but on the other hand they notice them which shows sponsorship as a tool not very easy to be overlooked.

Fig. 1 Perception of sponsorship

Perception of sponsorship	Number of answers	%	Cumulative %
positive, consumers notice sponsorship	249	48,73	48,73
none, consumers notice sponsorship	233	45,60	94,32
negative, consumers notice sponsorship	13	2,54	96,87
none, consumers do not notice sponsorship	16	3,13	100,00

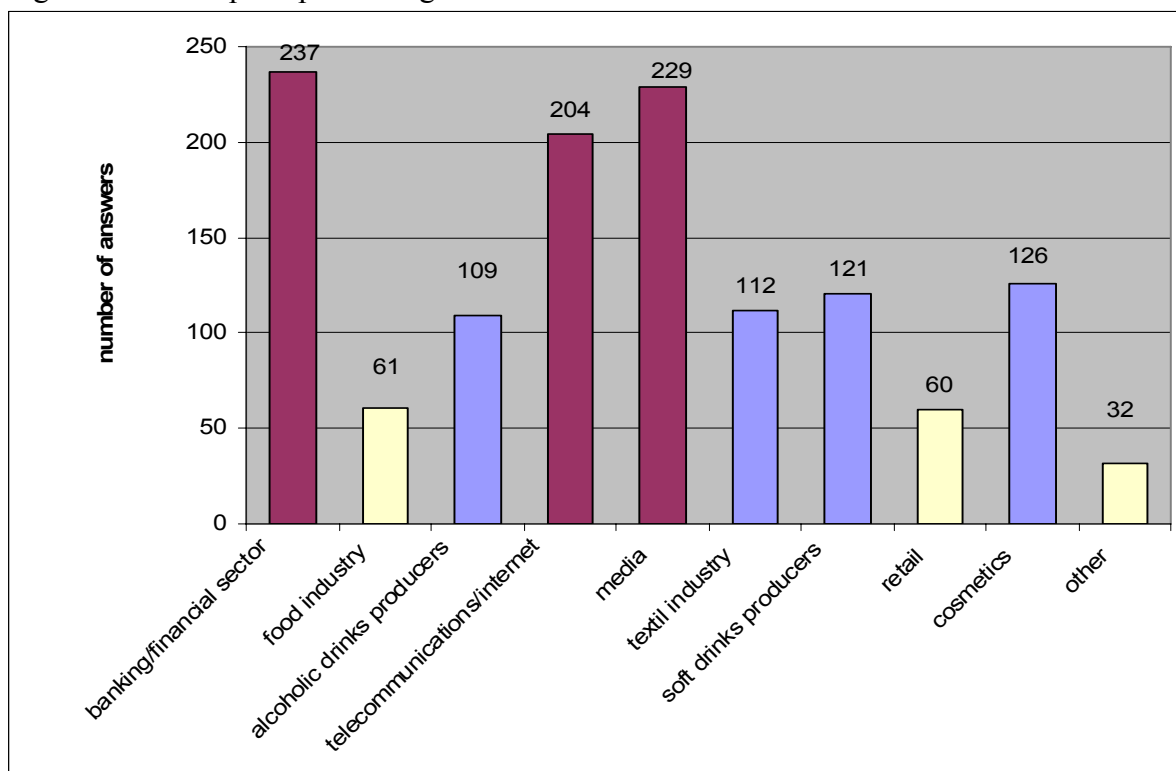
Source: exploratory study 2008

As our hypothesis was there will be 70 % respondents having a positive attitude towards sponsorship, we had to disprove it. Looking at this problem from different view we are able to state there is a minor negative impact on the consumers' perception which proves the strength of sponsorship as a communication tool.

Consumer perceptions of good fit

According to the exploratory study conducted in 2007, the most consumers perceive there is a best fit with sponsorship of the companies from the banking (24,2 %), telecommunication (16,5 %), IT (13,4 %) and media (13,9 %) industry. The producers of alcoholic drinks (2,1 %) would have the weakest influence on them as well as the companies from the food (2,1 %), textil (4,6 %) industry and retail (5,2 %). After receiving the results from the first study we decided to verify them consecutive year – in winter 2008 with a bigger randomly selected sample of 511 respondents. The results are shown in the figure below:

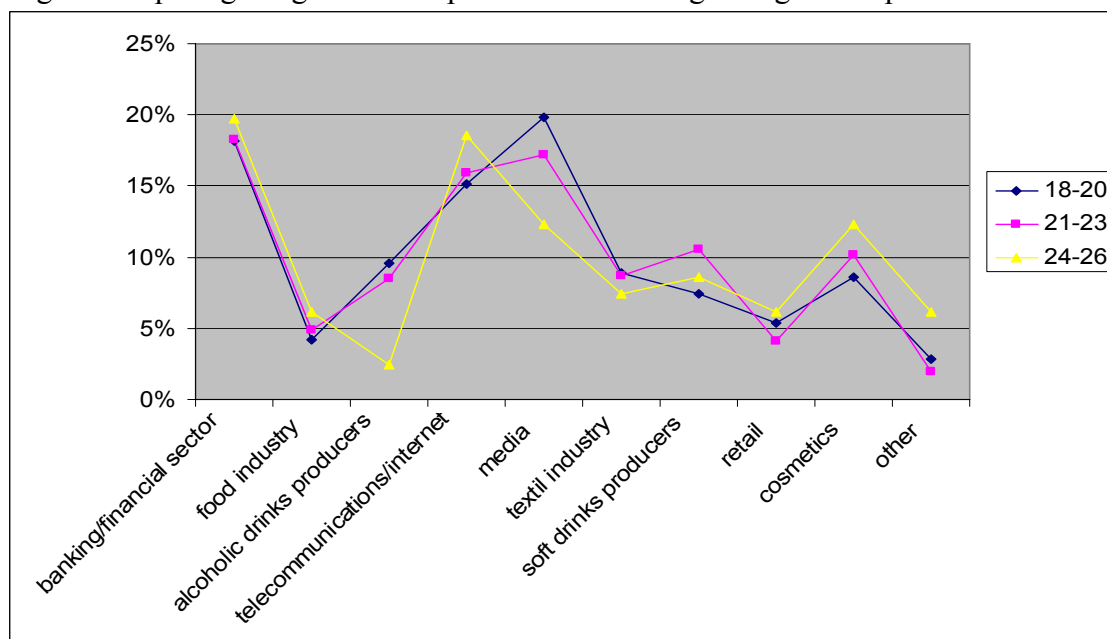
Fig. 2 Consumer perceptions of good fit



Source: exploratory study 2008

The supplementary findings of the second exploratory study lend credence to the first ones and we can approve our hypothesis. We observed the best fit of the companies from the banking and financial sector (18 %), media (18 %), telecommunications and internet (16 %) again, although in different order. The least respondents pointed sponsors from the area of retail (5 %) and food industry (5 %) despite the fact there were multiple answers allowed (the total amount of all answers was 1291, i.e. 2,5 answers per one respondent). Comparing the age of the respondents we found out the only controversial point was accepting the producers of alcoholic drinks as sponsors by respondents as well as considering media good sponsor fit at the age of 24-26. All other responses appeared to have very consistent responses with the lines almost reaching the same percentage levels, especially when comparing the groups 18-20 and 21-23. The very high perception of influential sponsors from the media sector by these groups might be caused by different interests such as watching the TV shows currently so popular among teenagers and very young people (shows such as Superstar I., II., III., Slovakia's got Talent having their own exclusive sponsors, etc.).

Fig. 3 Comparing the good fit of sponsors – according the age of respondents



Source: exploratory study 2008

Perceived goals of the sponsors by consumers

We have used two methods for evaluation and definition of the consumers' sponsor goals perception. In both of them the question was "Why do you think the companies utilize sponsorship (they sponsor)?" It was an open question in the study 2007 and we collected numerous answers with prevailing opinion the main motivation factor is the aim to:

- *demonstrate the company/products* and
- *increase its own publicity.*

Another reasons from the consumers' point of view were "support of a good thing", "building a fellowship image" or "gaining the tax advantages and influence". We also found a statement that the tobacco companies feel guilty although the tobacco sponsorship was banned a in 2003¹.

Another study, conducted in 2008, was focused on selected goals of the sponsors and the customers' identification with them. We used Likert scale in this case – measuring the level of agreement with the stated possible goals of sponsors accomplishing sponsorship activities. The only condition was to evaluate each objective by the consumers.

The offered options, number of answers, their percentage of the acceptance and the cumulative percentage can be seen in the following figure:

¹ Directive 2003/33/EC of the European Parliament and of the Council of 26 May 2003 on the approximation of the laws, regulations and administrative provisions of the Member States relating to the advertising and sponsorship of tobacco products

Fig. 4 Answers of the respondents to the specific sponsorship goals/motivation

Why do you think the companies utilize sponsorship (they sponsor)?

	strongly agree	agree	disagree	strongly disagree	undecided
they want to show that they also support non-profit areas	85	300	84	12	30
	17%	59%	16%	2%	6%
	17%	75%	92%	94%	100%
they have personal relationship with the sponsee (the executive personally knows the event organizer)	52	258	116	16	69
	10%	50%	23%	3%	14%
	10%	61%	83%	86%	100%
they react to the sponsorship of the competition	78	296	69	7	61
	15%	58%	14%	1%	12%
	15%	73%	87%	88%	100%
they are regionally interconnected to the sponsee, they want to be closer to people in the specific city	60	258	107	16	70
	12%	50%	21%	3%	14%
	12%	62%	83%	86%	100%
they want to address people attending the event/watching the event on TV	177	266	39	5	24
	35%	52%	8%	1%	5%
	35%	87%	94%	95%	100%
they want to sell their product at the event	139	244	83	11	34
	27%	48%	16%	2%	7%
	27%	75%	91%	93%	100%

Source: exploratory study 2008

Individual as well as cumulative results show the most frequent opinion regarding the goals of the sponsors is addressing the people attending the event or watching it on TV (cumulative percentage of strong agreement and agreement 87 %). Another very often stated reason is to show that they also support non-profit areas and they would like to promote their products at the event (cumulative percentage of both of them 75 %). We find the view on the product promotion and sale very interesting. 383 respondents identified this objective as the most important for sponsors, but only 55 have ever had a direct experience with the products of the sponsor sold at the event. We see the main reason of these results as the experience with the free distribution of the products and the sale is a secondary objective. The primary goal of the sponsors usually is to gain the loyalty of their existing customers, stimulate the product trial and strengthen either the image of the company or of its specific product.

Based on the results we disapprove the hypothesis the companies use sponsorship in order to get closer to people (address the people attending the sponsored event) and build regional relationship (create image) as the only statement which has been confirmed was the first one. The lower level of building the regional relationship shows the strength of the big companies/sponsors having their influence on the consumers all over Slovakia and addressing mass market with a much slighter regional orientation and activities. Regional closeness might be more visible and notable in case of smaller companies with a very limited budget. These companies operate locally in order to create/reinforce image in specific area(s) only and not in so great scale.

DISCUSSION AND CONCLUSION

From this study we deduce that sponsorship has a very strong influence on the segment of young consumers (aged 18-26) who have a high acceptance level. The conducted studies indicate that the sponsorship activities can cause audiences exposed to increase their positive attitude towards sponsors. Moreover, the new trends such as digital television, set top boxes, constantly increasing number of commercials and product placement (which causes zapping or complete avoidance) are factors supporting the influence of this vehicle.

Our analysis confirms there is a minor group having a negative feeling about sponsorship which might be caused from bad experience or any other reasons. Responses such as “I am not interested in any sponsorship activities”, “I do not notice them”, “I do not care about sponsors” or “I have a negative feeling about the sponsorship/sponsors” could be a possible subject of future research in order to explain the reasons in more detail, improve sponsorship activities or attract more audience in the future.

Through our study we came to a conclusion the most accepted areas with the highest perceived fit are in general the companies from banking, media and telecommunications industry and it seems the effects of the sponsorship can be observed independently from sponsors' industry sector. On the other hand we have to point out each sponsor has to plan and find the most appropriate sponsorship for them and the consumer response depends on several factors such as event-sponsor fit, event involvement and exposure.

Moreover, future research is necessary to validate the proposed results, use alternative measures such as more undirected thoughts and open questions. This could help in interpretation of the data which might be always biased because of subjective judgments.

BIBLIOGRAPHY

- [1] Agency TNS Slovakia and magazine STRATEGIE: Bilancia reklamného trhu za rok 2007. [online]. [cit. 29.11.2008]. Available on internet: <http://www.radia.sk/spravy/1695_bilancia-reklamneho-trhu-za-rok-2007.html>
- [2] BLOXHAM, M.: Brand Affinity and Television Programme Sponsorship. In: International Journal of Advertising, vol. 17, 1998, no 1, pg. 89-98
- [3] GARDNER, M. P., SHUMAN, P.: Sponsorship and Small Businesses. In: Journal of Small Business Management, vol. 26, 1988, no 4, ABI/INFORM Global, pg. 44. Available on Internet in the electronic database PROQUEST
- [4] GROHS, R., WAGNER, U., VSETECKA, S.: Assessing the effectiveness of sport sponsorships – an empirical examination. In: Schmalenbach Business Review: ZFBF, vol. 56, 2004, no 2, ABI/INFORM Global, pg. 119. Available on Internet in the electronic database PROQUEST
- [5] HARVEY, B., GRAY, S., DESPAIN, G.: Measuring the Effect of Sponsorship. In: Journal of Advertising Research. vol. 46, 2006, no 4, pg. 398-409. Available on Internet in the electronic database EBSCO
- [6] MASON, K.: How Corporate Sport Sponsorship Impacts Consumer Behaviour. In: Journal of American Academy of Business, Cambridge, vol. 7, 2005, no 1; ABI/INFORM Global, pg. 32. Available on Internet in the electronic database PROQUEST
- [7] QUESTER, P., FARRELLY, F.: Brand association and memory decay effects of sponsorship: the case of the Australian Formula One Grand Prix. In: Journal of Product and Brand Management, vol. 7, 1998, no 6, pg. 539–556. Available on Internet in the electronic database EBSCO
- [8] RUBANINSKÁ, K.: Sponzoring a jeho pôsobenie na mladú generáciu. In: Merkúr 2007: výsledky vedeckej práce mladých vedeckých pracovníkov. Bratislava : Vydavateľstvo EKONÓM, 2007. ISBN 978-80-225-229-08. pg. 387-393

- [9] RUBANINSKÁ, K.: Vnímanie sponzoringu očami mladého spotrebiteľa. In: Mladá Veda 2007 [elektronický zdroj]: Medzinárodná vedecká konferencia mladých vedeckých pracovníkov a doktorandov. Nitra: Slovenská poľnohospodárska univerzita v Nitre, 2007. ISBN 978-80-8069-969-7. pg. 98
- [10] SCHMADER, S. W., JACKSON, R.: Special Events: Inside and Out. vol. 2. Champaign, IL: Sagamore Publishing. 1997. ISBN 1-57167-128-5

Kamila Rubaninska
University of Economics in Bratislava
Dolnozemska cesta 1
Bratislava
kamila.rubaninska@gmail.com

PRINCIPLES OF CORPORATE GOVERNANCE AND CORPORATE GOVERNANCE CODE

Pavel Taraba

ANNOTATION

The aim of this paper is to introduce main idea of Corporate Governance as an important factor of competitiveness in current companies and to describe the situation in Czech and Slovak companies. The term Corporate Governance and purpose of Corporate Governance (relations between owners and managers) is shortly specified. This paper deals with the basic conception of Corporate Governance based on document published by Organization for Economic Co-operation and Development (OECD) Principles Corporate Governance (1999) and updated Principles of Corporate Governance (2004). Based on these documents national specialists created National Corporate Governance Code. Corporate Governance code in Czech Republic and Slovak Republic are highlighted.

KEY WORDS

Principles of Corporate Governance, Corporate Governance Code, national Corporate Governance models, Corporate Governance authorities

INTRODUCTION

Corporate governance is about fairness, transparency and accountability in the company. It is very important nowadays for a company to have clearly defined relations between owners, managers and different participants in the corporation. Different participants can be the board, shareholders and other stakeholders, customers, employees etc. Good corporate governance is important for efficiency of financial markets. If companies are well governed, they appeal to venture capitalists and are able finance their further growth. Corporate Governance is an important factor of competitiveness in current companies. Research of Corporate Governance in Czech and Slovak Republic is based on a document which was published by Organization for Economic Co-operation and Development (OECD) Principles Corporate Governance (1999) and updated Principles of Corporate Governance (2004). "The Principles are intended to assist OECD and non-OECD governments in their efforts to evaluate and improve the legal, institutional and regulatory framework for corporate governance in their countries and to provide guidance and suggestions for stock exchanges, investors, corporations, and other parties that have a role in the process of developing good corporate governance."¹

Main parts of Principles of Corporate Governance and Corporate Governance Code are:

- Responsibilities of board of directors
- Protection of shareholders` rights
- The shareholders` need of being sufficiently informed and to inform
- Information for investors
- Responsibilities of investors and shareholders
- Rights, duties and responsibilities of shareholders
- Equal dealing with shareholders
- Cooperation with interest groups

¹ OECD Principles of Corporate Governance [online.] [12-10-2008]
<<http://www.oecd.org/dataoecd/32/18/31557724.pdf>>

AIM AND METODOLOGY

This paper should describe expected situation in Czech and Slovak companies in Corporate Governance area. The first step was to conduct a systematic literature review. The second step was to identify relevant OECD documents (Principles of Corporate Governance). The third step was to compare Principles Corporate Governance with National Corporate Governance Code and to identify main ideas in these documents. The fourth step was to form a hypothesis. The fifth step was to prepare questionnaire with these main subjects: 1. Responsibility, 2. Membership, 3. Meeting, 4. Register of Interests, 5. Performance Measurement. The questionnaire will be redistributed (February/2009) to respondents. Respondents will be companies in Czech and Slovak republic (500 respondents) and correspondence class students of Management at Tomas Bata University (150 respondents).

RESULTS

The questionnaire will be distributed to the respondents in February 2009. This paper describes expected results.

- There is a transparent and clear structure of responsibility in companies, which differentiates between what the Board can do, and what managers and employees can do.
- The background of the potential board members is investigated.
- There are regular meetings of the Board and sub-committees.
- Companies don't hold a register of interests reviewed on an annual basis.
- The performance of the board and its subcommittee's is not reviewed.

This paper describes expected situation in Czech and Slovak companies in Corporate Governance area. After conducting the research expected results will be compared with actual results.

CORPORATE GOVERNANCE

What is Corporate Governance? Different people have different definitions of Corporate Governance. Some of these definitions were mentioned in the beginning. OECD's definition presented in 1992 by Cadbury: "Corporate governance is the system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as, the board, managers, shareholders and other stakeholders, and spells out the rules and procedures for making decisions on corporate affairs. By doing this, it also provides the structure through which the company objectives are set and the means of attaining those objectives and monitoring performance".²

Other definitions are: "Corporate governance - which can be defined narrowly as the relationship of a company to its shareholders or, more broadly, as its relationship to society."³ "Some commentators take too narrow a view, and say it (corporate governance) is the fancy term for the way in which directors and auditors handle their responsibilities towards shareholders. Others use the expression as if it were synonymous with shareholder democracy. Corporate governance is a topic recently conceived, as yet ill-defined, and consequently blurred at the edges...corporate governance as a subject, as an objective, or as a regime to be followed for the good of shareholders, employees, customers, bankers and indeed for the reputation and standing of our nation and its economy."⁴

²*The Financial Aspects of Corporate Governance*, Cadbury [1992, page 15]

³*Corporate Governance*, Financial Times [1997]

⁴*Maw on Corporate Governance*, Maw et al. [1994, page 1]

NATIONAL CORPORATE GOVERNANCE MODELS

Different countries have different legal systems and different traditions of interpreting corporate governance. Prof. Porvazník used these “five national Corporate Governance models:

- German model
- American model
- British model
- Swiss model
- Japanese model.⁵

Some experts use the term term Anglo-American instead of American and British model, and add a Danish model. It is very important for our research to know legal and empirical characterizations of large firm decision systems. Czech and Slovak national Code of Corporate Governance are based on German model. Fig. 1 described characterizations of legal and empirical state of large firm decision systems in Germany.

Fig.1 Characterizations of legal and empirical state of large firm decision systems in Germany

<i>A) Laws on self-dealing among top-managers.</i>
Legal state: Tough regulation: Self-dealing by management is impeded in the two-tier system.
Empirical state: Self-dealing does not appear to be a problem. For example, executive remuneration is far more modest than in the Anglo-American system.
<i>B) Laws on outright theft by top-managers.</i>
Legal state: Tough regulation and the crime is typically easier to prove in court when it accounts for a significant amount of money.
Empirical state: Outright theft by top-managers in large firms is a very seldom phenomenon.
<i>C) Laws on corruption.</i>
Legal state: Tough regulation and corruption is typically easier to prove in court when it accounts for a significant amount of money.
Empirical state: Corruption by top-managers in large firms is probably a seldom phenomenon.

Source: Characterizations of legal and empirical state of large firm decision systems in Germany [online.] [12-10-2008] <<http://www.encycogov.com>>

⁵*Holistic Management: Pillars of Competence in Management, Porvazník at. al.[2007, page 265]*

RESEARCH

Respondents will be companies in Czech and Slovak republic (500 respondents) and correspondence class students of Management at Tomas Bata University (150 respondents – Faculty of Management and Economics) and correspondence class students of Management at Bratislavská Univerzita Práva (50 respondents - Faculty of Law).

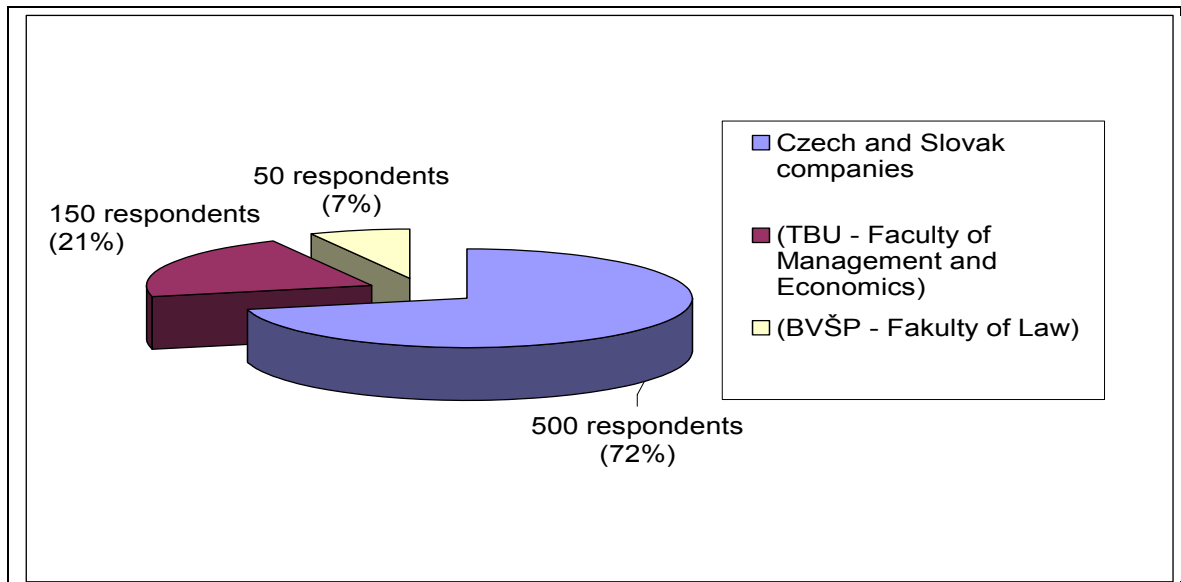


Fig. 2 Structure of respondents

Source: Own design

Companies will be from both profit (70%) and non-profit sector (30%). Philosophy of Corporate Governance is very important for non-profit sector, too. The right definition of Corporate Governance should be a key factor of competitiveness for every company.

Correspondence class students of Management will be from Czech and Slovak republic. We decided to choose this type of respondents because these students have work experience and we can ensure high return rate of questionnaires. (90% - results from last years)

Hypotheses are based on documents: Principles of Corporate Governance (2004) and Code of Corporate Governance which is used in Czech Republic (2008) and Code of Corporate Governance which is used in Czech Republic (2008). Let us assume these five hypotheses:

- In companies there is a transparent and clear structure of responsibility, which differentiates between what the Board can do and what managers and employees can do.
- The background of the potential board members is investigated.
- There are regular meetings of the Board and sub-committees.
- Companies hold a register of interests reviewed on an annual basis.
- The performance of the board and its subcommittees is reviewed.

Questionnaire will have 30 questions in 5 main areas based on hypotheses:

1. Responsibility

Do members of the Board understand their responsibilities?

Responsibility of different participants as the board, shareholders and other stakeholders, customers, employee should be clearly defined. We asked respondents if all participants in the company know what they can do.

2. Membership

Who is responsible for selecting Board members?

Selecting Board members and other participants should be transparent and clear. In this part respondents answer following questions: How does the Board ensure that members are suitable? Is there any training provided for members? They'll try to define membership in the main parts of the company. Corporate Governance authorities are General meeting, Board of Directors, Supervisory board, Board committees for decisions arrangement, Controller, Auditor etc.

3. Meeting

Respondents answer whether company set a quota for meetings and try to characterize their meeting of Board of Directors, Supervisory board, Board committees for decisions arrangement.

4. Register of Interests

What is the procedure for recording an interest?

A conflict of interest is a situation in which an executive or director of a [corporation](#) has competing professional or personal interests. It can make it difficult to fulfil his or her [duties](#) in company properly. Respondents answer questions to describe environment in the company.

5. Performance Measurement.

How is the performance of the board and its subcommittees reviewed?

Respondents are asked to describe to performance indicators which can be used to measure the level of Corporate Governance in the company.

EXPECTED RESULTS

The questionnaire will be distributed to the respondents in February 2009. This paper describes expected results. After conducting the research expected results will be compared with actual results.

Predicted return rate of questionnaires is 44%. (See Fig. 3)

Fig. 3 Expected return rate of questionnaires

	Respondents	Expected return rate	Exp. return rate (%)
Czech and Slovak companies	500	125	25%
Correspondence class students (TBU - Faculty of Management and Economics)	150	135	90%
Correspondence class students (BVŠP - Faculty of Law)	50	45	90%
Total	700	305	44%

Source: Own design

We assume that first, second and third hypotheses will be positive and fourth and fifth hypotheses will be negative. (See Fig. 4)

Fig. 4 Expected results

Hypotheses	Result
In companies there is a transparent and clear structure of responsibility, which differentiates between what the Board can do and what managers and employees can do	positive
Background of the potential board members is investigated.	positive
There are regular meetings of the Board and sub-committees.	positive
Companies hold a register of interests which is reviewed on an annual basis.	negative
Performance of the board and its subcommittees is reviewed.	negative

Source: Own design

The expected results indicate, that in companies there is a transparent and clear structure of responsibility of managers and employees, the background of the potential board members is investigated and there are regular meetings of the Board and sub-committees.

The companies are expected to need to improve these two important factors of Corporate Governance: **Register of Interests** and **Performance Measurement**.

CONCLUSION

The right skills and the right attitudes of the Board are needed. Principles Corporate Governance (1999) and updated Principles of Corporate Governance (2004) should be implemented by every company. Nowadays the world economics experiences a global crisis. Transparent and clear structure of responsibility in the company is even more important than in the past. Some Czech and Slovak companies implement these principles and some of these companies are in the middle of the process. They should improve measurement of results. Implementation of Corporate Governance principles (Code of Corporate Governance in Czech Republic – 2008 and Code Corporate Governance in Slovak republic – 2008) can be very useful for Czech and Slovak companies.

BIBLIOGRAPHY

- [1] PORVAZNÍK, J. *Holistic Management: Pillars of Competence in Management*. - 1. - Bratislava : IRIS, 2007. ISBN: 978-80-89256-11-2
- [2] *Corporate Governance at Toyota Motors Corporation*. [online]. [11-10-2008] <http://www.toyota.co.jp/en/ir/library/cg/corporate_governance_reports_e.pdf>
- [3] *Corporate Governance Principles*. [online]. [12-10-2008] <<http://www.ecgi.org/codes/documents/grscogr.pdf>>
- [4] *Corporate Governance standards*. [online]. [10-10-2008] <http://www.riotinto.com/documents/corpPub_Corporate_Governance_English.PDF>
- [5] OECD Principles of Corporate Governance [online.] [12-10-2008] <<http://www.oecd.org/dataoecd/32/18/31557724.pdf>>
- [6] *One Hundred Seventh Congress of the United States of America* [online]. [11-07-2007] <<http://download.mpo.cz/get/26403/26370/293364/priloha002.pdf>>
- [7] *What is Corporate Governance?* [online.] [12-10-2008] <<http://www.encycogov.com>>

Ing. Pavel Taraba
Tomas Bata University, Faculty of Management and Economics
Mostní 5139
Zlín
pavel.taraba@gmail.com

NEW TRENDS IN CRM: CALL-CENTRES

Kamila Tišlerová

ANNOTATION

Customer relationship management is a comprehensive business and marketing strategy. This paper aims to show the most efficient ways of this strategy implementation in small and medium sized businesses.

There is stressed a decision making on the forms of sales forces, especially between dealers in the real market and telephone operators in a call-center. This paper deals with advantages and possibilities of both above mentioned forms of sales forces and most of the arguments are based on own search and assistance in implementation.

Due to lower operating costs of call-centre in comparison with market dealer there are suggestions how to strengthen the role of the call-centers. This article should help to encourage small businesses to use the call-centre to be more efficient and to be more competitive without investing and taking a risk.

KEY WORDS

call-centre, dealer, customer relationship management, sales forces, CRM implementation, increasing sales

INTRODUCTION

Three companies with some similar features were chosen to implement CRM strategy. The main goal was to transform their call-centers from back-office only proceeding regular orders into front-line sales forces (using CRM tools).

The common features of the companies are: they provide B2B, they focus sale effort mostly in dealers operating in the real market, they fight with unsatisfied efficiency of their sales forces, they are small or medium sized with regional importance.

The field of their business is different, as the proven results should be valid for large spectrum of small and medium sized companies. The first company is a regional wholesale FMCG company, the second one is tire distributor, retailer and service provider and the third one provides logistic services.

AIM AND METODOLOGY

The aim of my search and following real implementation is to strengthen the role of current client centre (call-centre) and to prove that the call-centre can serve as well as dealers in the real market. The call-centre can operate even better with substantial less portion of costs than dealers.

The real implementation was done and these results were proved. This paper is based on my own search and assistance with the CRM implementation.

RESULTS

The CRM in the call-center was implemented successfully in all the three companies. The call-centers made transformation from administration back-office to valuable sales forces with great potential. Customers are able to accept the call-center, they don't insist on a personal contact with a dealer. Sales volumes were increased.

The common situation and the goal

These companies concentrate their sales effort mostly into dealers operating in the real market, they fight with unsatisfied efficiency of their sales forces. Due to stronger competition there was a demand of cutting cost of sale forces – dealers. There was an idea to strengthen the role of current call-center and to transform as much activities as possible. There was attempt to turn the call-centre operators from back-office into the front-line staff.

Unfortunately, there were information from the market that customers are satisfied with personal contact with dealers and they aren't willing to replace it by telephone contact. It was necessary to persuade owners of mentioned three companies to accept the idea of call-center as a front-line staff.

The sales force and its potential was analyzed and it was structured into four main fields of activities. Then every part was separately searched from the point of view – to replace dealers activity by the call-center operators.

The most important activities of dealers

Owners (e.g. managers) consider four most important activities of their dealers as follows:

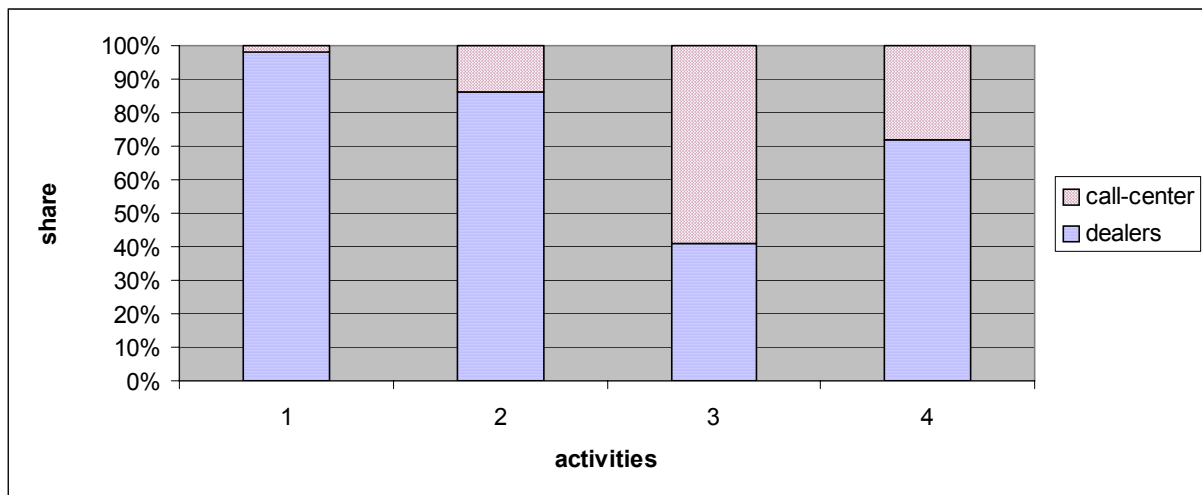
1. acquisition of new customers
2. presentation of new products and promotions to current customers in order to ensure increasing sales, cross-selling
3. collecting regular orders
4. providing customer service (claims, terms and conditions)

Original condition – ratio dealers/call-centre

In all the three companies the ratio was very similar: because the call-center serves mainly as a back-office and administration center, it was involved only in the proceeding regular orders. Owners of the companies were sure that other 3 activities require the personal contact of the dealer and that the customer would never accept „handling by phone“. In one company the call-center was playing an important role in procedure of claims.

On average the ratio can be demonstrated as follows: (new customers - number, sales of new products and regular orders - sale volume, claims - number of cases)

Fig. 1 – Original ratio dealers/call-center



Source: own search

1) Acquisition of new customers

Changes in this area were based on the idea that keeping existing customers is much less expensive than winning new ones. It's a big mistake to focus so much on the costly business of persuading new customers to sign up that the company forgets all about keeping its existing customers happy.

The second important point was the change of the source of new customers. Dealers used to persuade customers who were mostly satisfied with their current situation, current supplier, current conditions and they had no reason to make any changes. That was the segment dealers were focusing on.

The aim of the call-center was settled in different way: To procedure all the impulses coming from potential customers – requires, questions and other contacts received by phone, mail, web sites and promotional activities. To administrate this impluls from its very beginning to became a regular and loyal customer.

2) Presentation of new products and promotions to current customers in order to ensure increasing sales, cross-selling

The activity of a dealer is scheduled, on average one dealer does 20 visits in one day. The number of the visits and the time spent with the customer is limited, too. Better motivating of dealers to increase the sales didn't bring the required results.

It was decided to strengthen the call-center in this field. The average call-center operator speaks to 120 customers per day. The idea was to make the phone operators to increase a customer's value – „up-sell“. The call-center was equipped by the same information as dealers and even by the authority to offer something extra. It was a reaction to the fact that today's consumers aren't shy in pushing providers into offering them better deals and moving on if they are not satisfied.

It was very important for the call-center to profile itself in the role of advisor to the customer. It has to introduce customers to ideas they might not have previously considered, ideas that will spark their interest because they could potentially save them time, save them money,

deliver better results, appeal to their personal aspirations, give them peace of mind, safety and security.

In a very short time the perceiving of the call-center by customers was very positive. The original task of the call-center operators was to proceed the order as quickly as possible and not to waste the time of the customer. Stressing the role of advisors instead of time-wasters was crucial and it brought required results.

3) Collecting regular orders

In the terms of all the three companies the customers usually prefer to consult their order before placing. It was the reason why they were waiting for the personal visit of dealer instead sending the order by mail for example. But dealers weren't equipped by real-time information about stocks (situation might change during the day) and their speed of recording the order is very limited, too. Furthermore, dealers can't have good conditions for the order creating due to limited working place, noise and many other negative influences.

The call-center is very good alternation to personal visit, sometimes even better. That is why the original share was so high.

Customer's definitions of availability are also changing. 24/7 service is no longer a luxury, but a requirement. Businesses have an added pressure to deliver fast, effective service – so the order must be proceeded as soon as possible. In this field the possibilities of dealers in the real market are already exhausted.

4) Providing customer service (claims, terms and conditions)

As was mentioned above, dealers usually don't have appropriate working conditions and very often the meeting and negotiation with the customer is done in a customer's retail shop (or in an office with other people). It isn't convenient surrounding to solve any problems. That is why dealers tend to solve customer claims as fast as possible and don't want to discuss it with the customer.

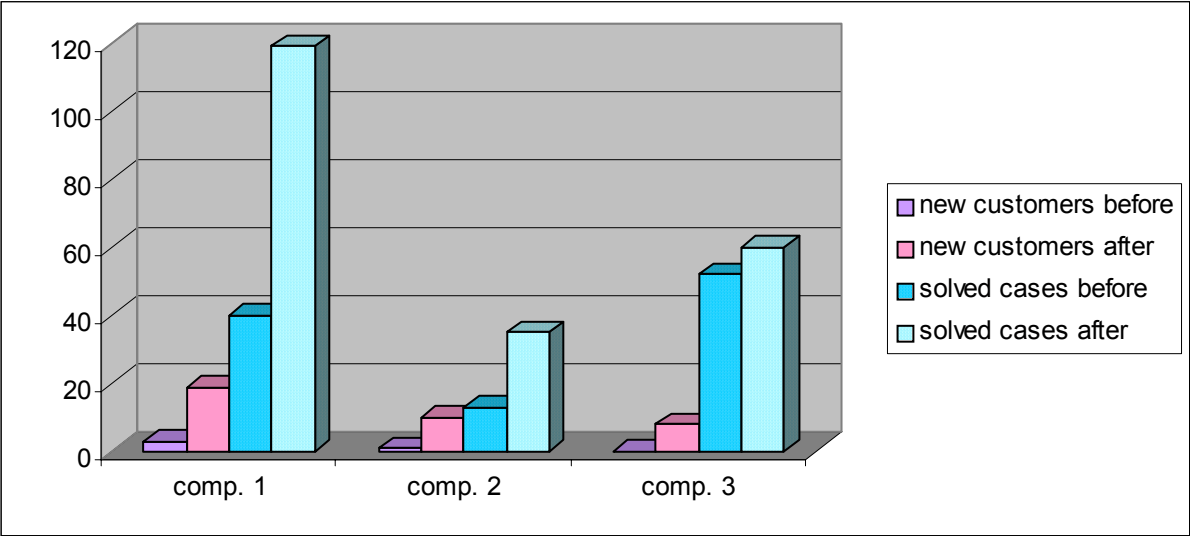
But the key to effective complaint handling is listening: only when customer can precisely define the problem, dealer/operator can consider how to remedy it. Therefore all front-line staff need to let the customer guide the conversation and only interrupt when further clarification is needed. Sometimes customers are aggressive but they will feel a lot better simply by venting their frustration. For these three companies it is important to be done without a crowd of another people.

Once the nature of the complaint has been understood, careful judgement is required to evaluate its validity. It needn't be the company's fault. The telephone operators have many possibilities to check through previous complaint records any precedents: has this problem occurred before and how it was dealt with it. The operator can consult the problem with colleagues and then get back to the customer with a decision. Dealers usually are expecting to solve it immediately. The emotions associated with complaining don't disappear when the act of complaining ends. As a result, some sort of follow-up contact is crucial in maintaining relationships and ensuring any problems have been resolved. The call centre software allows customers to be kept for future contact. This is too difficult task for dealer in the real market.

Results after 12 months

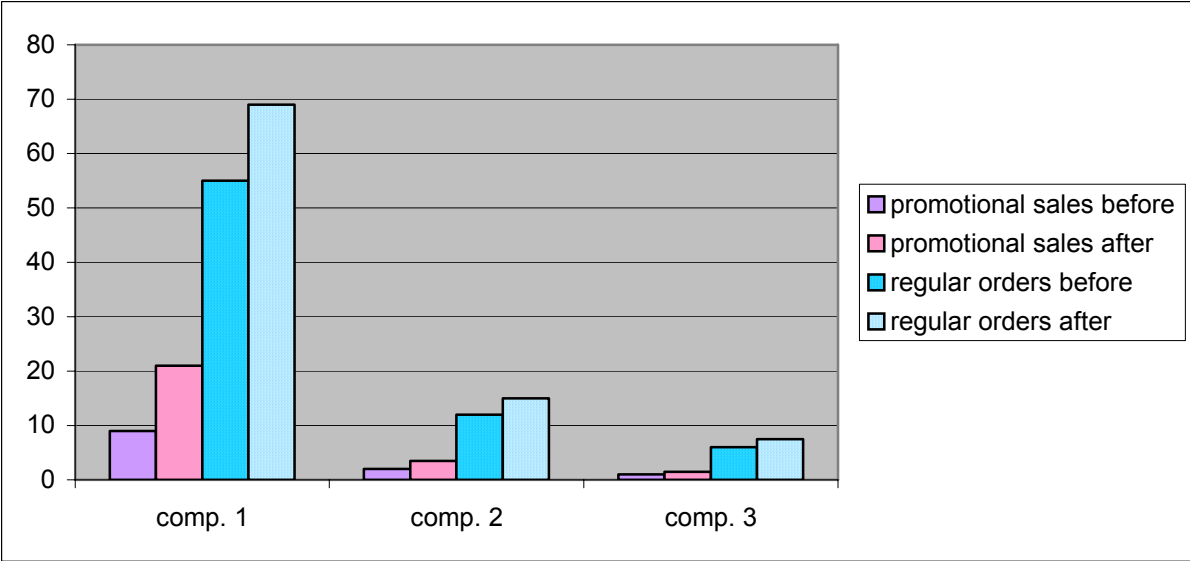
The implementation was doing during 2 month trial period. This comparison consider original situation and the situation after 12 months. There are 1 month results compared in this figure.

Fig. 2 Comparison of original and final call-centre performance: new customers before/after and solved cases before/after in number



Source: own search

Fig. 3 Comparison of original and final call-centre performance: promotional sales before/after and regular orders before/after in milion CZK



Source: own search

CONCLUSION

It was a mistake of owners of above mentioned companies not to trust the call-center and to keep it only in the function of back-office to proceed only regular orders. Although they had information collected by their own research that their customers prefer personal contact of dealer to a telephone contact, the real situation after implementation CRM and after redesign of sales force structure in favour of the call centre clearly proved that it is the call center what have a great potential to help the business to grow.

BIBLIOGRAPHY

- [1] STORBACKA, K., LEHTINEN J.R.: *Řízení vztahů se zákazníky*, Grada Publishing, Praha 2002, ISBN: 80-7169-813-X
- [2] KASHANI, K.: *Proč už neplatí tradiční marketing*, Computer Press, a.s., Brno 2007, ISBN: 978-80-251-1536-7
- [3] TRACY, B.: *Jak mnohem lépe prodávat*, Computer Press, a.s., Brno 1999, ISBN: 80-7226-152-5
- [4] GEFFROY, E.K.: *Zákazník náš protivník nebo partner*, Management Press, Praha 2001, ISBN: 80-7261-034-1

Kamila Tišlerová
Univerzita Jana Evangelisty Purkyně
Moskevská 54
Ústí nad Labem
kamila.tislerova@ujep.cz

FUTURE OF TOURISM

Andrea Vačková

ANNOTATION

Tourism is according to many experts one of the dominant sectors in economy. Importance of this sector increased in the last years extremely. The result of dynamic growth in this industry caused that tourism is an important part of international trade and the key moving power in socio-economic progress and also main source of income for many countries. There are many reasons for constant tourism development. One of the most dominant reasons is growth of demand that caused the supply extension of tourism products and growth in number of tourism destination. Another reason is appreciation of tourism value for the economy. Beneficial effect for tourism development in the world had also technology development and globalisation. There are also many other trends and factors that will reshape the tourism in the twenty-first century. Changes in tourism behaviour, environmental awareness, crises and disasters, actual financial crisis are only few trends these days. The tourism has developed through time and many current trends will reduce as a new ones rise. One of them could be the space tourism, expected to expand in the next 50 years. Prediction of future trends is very useful for all subjects in tourism. Organization concerned with this issue is the World Tourism Organization that elaborated the Tourism 2020 Vision and prepares new project into future.

KEY WORDS

Tourism, outbound tourism, international tourism, tourism trends, factors affecting tourism, tourism prediction.

INTRODUCTION

The beginning of the 21st century was accompanied with many shocks affecting tourism. The terrorist attacks on New York, tsunami in Asia, the Iraq War and global financial crisis has caused decline in tourism activity. Therefore we need to understand how tourism sector reacts to change and what implication has this change. However there are many other changes, such as new technologies or changes in consumer behaviour. All the subjects in tourism sector should have been concerned about understanding the future of tourism to benefit not only their wellbeing but also sustainability of the environment.

AIM AND METODOLOGY

Main goal of this article is the description of some trends in tourism. The main goal is divided into partial goals:

- Presentation of actual situation in tourism
- Factors and trends that influence the tourism
- Prediction of future trends

In this article were used general scientific methods such as analysis, synthesis, induction, deduction and comparison.

RESULTS

This article offers integrated view on the actual situation in tourism, trends and factors affecting tourism and answers on questions like what will tourism be like in the future and which new products or innovations will be related with tourism.

Definition of tourism

Tourism is one of the dominant sectors in economies all round the world. There are many approaches of tourism definition. A *system approach* [4] affords opportunity to understand the wider issues and factors which affect tourism. Leiper identified „the elements of a tourism system: a tourist; a traveller generating region; tourism destination regions; transit routes for tourists travelling between generating destination area and the travel and tourism industry (accommodation, transport, the firms and the organizations supplying services and products to tourists)“ . This system includes the entire tourist experience of travelling.

The World Tourism Organisation (UNWTO) developed *technical definition* and according to this organisation tourism means “the activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited“ [8]. There are different forms of tourism depending on travel direction, this means whether is a person travelling to, from or within a country. Residents of a specific country travelling within that country form *domestic tourism*, residents travelling to another country other than that country of origin refer to *outbound tourism* and non-residents received by a destination country compose *inbound tourism*. „Tourism also refers to the sector of the national economy with complex functions that unites a number of goods and services, offered for consumption to those people“ [8]. Practical is to know also a definition of *international tourism*, what is „temporary travel of the residents of one country, in the capacity of visitors, to another country, with the purpose of satisfying certain specific motivations and consumptions provided by income generating activities in the country of destinations“ [8].

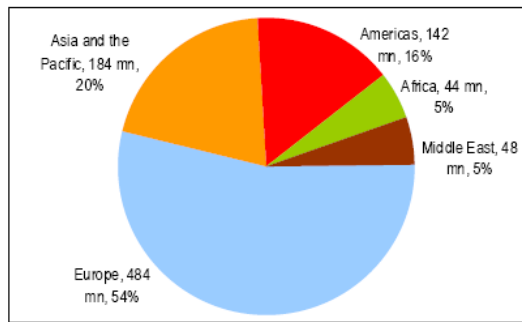
The term tourism is connected with other term – visitors. Definition of these term is described by the UNWTO as well. *Visitors* are all types of travellers linked together with tourism. It is consequently „any individual that travels to a place other than his usual residence, for less than 12 months and whose objective is not undertake paid activities at the visited place“ [8]. It is needed to distinguish between *same day visitors* and *overnight visitors* (tourists).

Actual situation in tourism

The tourism has experienced continued growth over the decades (Fig. 4). From 1950 to 2005, the international tourism arrivals grew from 25 million to 806 million travellers with the annual rate 6,5 %. During the same period the income of these arrivals grew to US\$ 680 billion with the annual rate 11,2%. Development was strong mainly in Asia and Pacific (13% a year) and the Middle East (10%). Growth of tourism in the Americas (5%) and Europe (6%) was slower and below the world's average growth. Changes can be seen also in the contribution of the top 15 destinations to international arrivals. It was 88% in 1950, 75% in 1970 and only 57% in 2005. This means the appearance of new destinations, often from the developing countries.

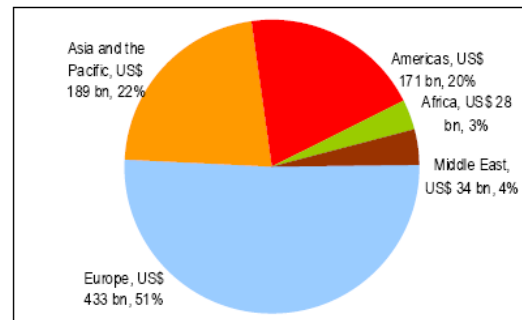
Data from last year show that number of international tourist arrivals in 2007 compared to 2006 grew up 6,6% what represent 903 milion arrivals. International tourist receipts grew to US\$ 856 billion with the rate 5,6%. Figures number 1 and 2 present the market share of the UNWTO tourism regions in international tourist arrivals and international tourism expenditure. We can see that Europe is region that is most important for world tourism. Second largest contribution to world tourism states Asia and the Pacific and third are Americas.

Fig. 1 International Tourist Arrivals (2007)



Source: UNWTO World Tourism Barometer

Fig. 2 International Tourism Receipts (2007)



Source: UNWTO World Tourism Barometer

The position of top 10 destinations in 2007 by international tourist arrivals and receipts (Fig. 3) did not show any major changes compared with year before. France is on the first position ahead of Spain and the USA in arrivals, the USA ranks first, Spain second place and France third in receipts. Italy alternate with China in fourth and fifth position, followed by UK and Germany in both rankings. Comparing numbers in both rankings, first place of the USA in receipt ranking means that the USA attracts a greater share of higher-spending long-haul tourists than European countries (they mostly rely on short-haul tourism). Interesting is that eight of the top ten countries in the arrivals ranking are also in the top receipts ranking despite of attracting different types of tourist (e. g. more business than leisure travel). The original scheme include ranking with 50 places and Slovak Republic, as only one country of V4, is missing.

Trends in tourism

Demand for both domestic and international tourism has increased and this trend will continue. However, we can say there might be some limits on the demand and also the supply side. Some countries are reaching ceilings of airport capacity and available leisure time. The threat of terrorism, natural disasters, political instability, ethnic conflicts, health risks and capacity ceilings in transport infrastructure may damp tourism growth in some areas. Examples of these are Mumbai terrorist attack last year, tsunami 3 years before but the biggest impact so far had 9/11 attacks in the USA. The effect of this is tight security and immigration procedures, crisis and risk management plans for many tourist destinations. Actual financial crisis is bad for all sectors in economies and impact on tourism will be noticeable perhaps in the middle 2009. Purchasing power of people has decreased and people will buy things satisfying their primary needs, such as food, accommodation, etc.

Reasons for rise of new generating countries are economic, political and social. These countries include Eastern Europe, where growth in outbound tourism is caused by political and economic change and Asia and Pacific (India, China) with economic growth. The continuing growth in outbound tourism is possible only if there is political stability and economic growth.

„The destination of the future will use sustainability and product differentiation based on the unique selling proposition to remain competitive.“ [1] Some destinations will undertake sustainability initiatives to leave the destination in better condition than before. These include „visitor payback“ (visitors as financial supporters of the site), „eco taxes“, „working holidays“ to clean up degraded destinations. Destinations will be affected also by climate change with rising sea levels that cause problems for coastal resorts, the erosion of the ozone layer modifying the traditional beach holiday. There is a threat that these factors will destroy some significant tourism icons such as Alpine glaciers or Great barrier Reef in Australia. But the

largest threat for destinations are the growth of tourism itself. People seek new horizons and challenges. Therefore, sustainability of tourism is main issue nowadays.

Fig. 3 The top 10 destination and position of countries V4 in arrivals and receipts (2007)

	International Tourist Arrivals by Country of Destinations (mil)		International Tourist Receipts (US\$ billion)
World	903	World	856
1. France	81,9	1. USA	96,7
2. Spain	59,2	2. Spain	57,8
3. USA	56	3. France	54,2
4. China	54,7	4. Italy	42,7
5. Italy	43,7	5. China	41,9
6. UK	30,7	6. UK	37,6
7. Germany	24,4	7. Germany	36
8. Ukraine	23,1	8. Australia	22,2
9. Turkey	22,2	9. Austria	18,9
10. Mexico	21,4	10. Turkey	18,5
17. Poland	15	22. Poland	10,6
26. Hungary	8,6	32. Czech R	6,6
35. Czech R	6,7	44. Hungary	4,7

Source: processed according to UNWTO World Tourism Barometer, Volume 6. No. 2. June 2008

One totally new destination that will perhaps emerge in the next 50 years is space. Simulated space travel experiences and tours of space research centres are already very popular, confirmation of this are millions of visitors in NASA's Air and Space Museum in Washington or Space World in Japan, etc. Space tourism might have several forms, e.g. short earth orbital flights, tourism in space hotels or even Moon and Mars tourism. The demand of space tourism in the beginning is expected to be low because of high price

Technology and new innovation in fuels will have also impact on transport system. Civil aviation will be characterized by the use of larger aircrafts with a capacity more than 700 passengers (Airbus). The application of space technology will enable to achieve hypersonic speeds, an example might be the flight from London to Sydney lasting only 2 hours without stops for re-fueling. Cost of flying will increase and this will mean the end of the truly low-cost airlines. Travelling by car inter-city and for trips within large cities will decline because of development of high speed inter-city rail links. This can be caused by congestion on the roads, perception of rail travel as a greener form of travel or speed up to 500km/hour. In the field of water transport, high-speed vessels and passenger-carrying submarines will be developed.

There are some market segments that will grow in importance. Demographic change in the USA, Japan and Europe will mean growth in the importance of the elderly or „third age“ market. Senior markets are less seasonal, have high disposable incomes in many cases and require more attention to their needs. A growth of segments sharing similar characteristics regardless of their nationality can be seen, good example of this are students and their „backpackers travelling“. Other segment with growing importance will be disabled travellers. Changes in lifestyle, such as single parents, single person households means more free time but also less money and so can impact the demand for tourism. Women are playing more

dominant role in the labour market than before, are marrying later and having their children later what leads to more disposable income and this create niche market for tourism. The tourists of tomorrow will be more discerning, seeking a quality experience, they know their rights and they will complain and seek compensation if their travel experience is dissatisfied.

A large number of tourists take more than one holiday a year and this will probably continue also in the future. The main holiday will be the longest, used for relaxation and recharging the batteries and the other holiday will be shorter, active and more oriented in nature. Generalizing that tourism demand is permanently changing has also some exceptions. There are always people that are doing the same holiday as they did 20 years ago (e.g. relaxing on the beach) and taking their holidays in the same type of destinations or even in the same destination. Some tourists simply do not wish or are not able to change their behaviour despite all factors affecting them.

The changing tastes of tourists, technological innovations and social concern can form number of types of tourism product in the future. „Political travel“ that allows tourists to visit countries that are often in the news, „volunteer vacations“, „vacation resorts that stretch the mind and change a life“ and health-enhancing holidays. Some will take holiday where they can stay in an ordinary family and „ethical holidays“ where the tourist is interested about the impact of their trip on the host community and the staff who look after them. As everyday life and work become safer, there will be demand for extreme sports and adrenalin adventure especially among youths. Many tourists will take similar types of holidays as they had before but in new locations, e.g. European tourists will take short city breaks in cities like Cape Town or Havana, beach holidays in Brazil or skiing trips in Argentina and Chile.

Big trend into the future will be local approach. Holidaymakers will be travelling much closer to home or extrem might be „staycation“ where instead of travel to destination you stay at home and you can use the time to explore your local enviroment, e.g. go to the city museum, stay in a city hotel or explore countryside close to your home. This way of travelling can be alternated with ordinary travelling and so protect the environment. Hotels will be supporters of „hyper-local“ sourcing what means getting employees, materials, services from sources within their immediate vicinity. Hotels sourced within 10-kilometre radius will be named „the 10-kilometre hotels“. These hotels will provide energy and water for guests on metered system and discounts will be offered for those who try to keep energy and water below average.

Innovations of nowadays brought also Virtual Reality Technologies, connected with a question of its ability to substitute the real tourism experience. Only the future will show if this new technology reduce the demand for traditional tourism or increase it by stimulating tourists to travel to specific destination on their own.

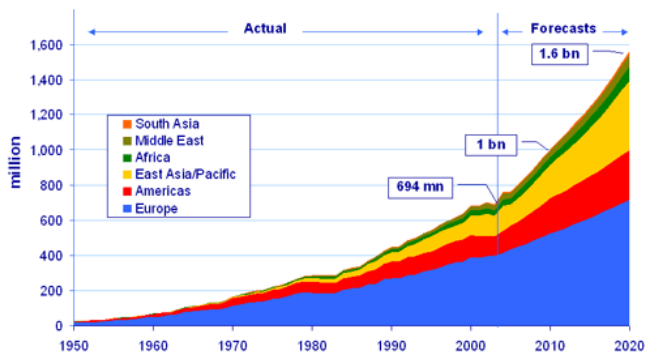
The way we purchase tourism product is a subject to change in the present and future as well. Internet and interactive television stimulate the growth of direct marketing and direct booking. People can easily access information and make bookings from their home. Situation in various countries is different because computer literacy is e. g. in Slovakia still poor and people do not trust this way of purchase. Extensing GDS (global distribution systems) will help tourists put together individual itineraries. All these new technologies will eliminate intermediaries – travel agents from the market. Other subjects will take place of sellers, such as high street retailers who will combine selling holidays with the sale of the goods needed by tourists (e.g. luggage), banks who provide loans for holidays and sell currency, etc.

Predictions into future

The World Tourism Organization developed long-term forecast named *Tourism 2020 Vision* [11] covering 25 years period with 1995 as the base year and forecast for 2010 and 2020. UNWTO is aware of fluctuation of growth, where periods of faster growth (1995,1996, 2000)

alternate with periods of slower growth (2001-2003) but believes that structural trends will not have changed significantly.

Fig. 4 Future prediction of international arrivals



Source: *Tourism 2020 Vision, UNWTO*

Fig. 5 Predictions for individual regions

	Base Year	Forecasts		Market share (%)		Average annual growth rate (%)
	1995	2010	2020	1995	2020	1995-2020
	(Million)					
World	565	1006	1561	100	100	4.1
Africa	20	47	77	3.6	5.0	5.5
Americas	110	190	282	19.3	18.1	3.8
East Asia and the Pacific	81	195	397	14.4	25.4	6.5
Europe	336	527	717	59.8	45.9	3.1
Middle East	14	36	69	2.2	4.4	6.7
South Asia	4	11	19	0.7	1.2	6.2

Source: *Tourism 2020 Vision, UNWTO*

This forecast expects that the international arrivals reach nearly 1,6 billion by the year 2020 (Fig. 4). From that arrivals 1,2 billion will be intraregional and 378 million will be long-haul travellers. Prediction for regions (Fig. 5) shows that the top three receiving regions will be Europe (717 million arrivals), East Asia and the Pacific (397 million) and the Americas (282 million).

Average annual growth rate for world is expected to be around 4,1 %, however the Americas and Europe will not reach this number and growth is expected to be under this average. On the other side, growth in other subregions will overreach the average and the fastest growth is expected to be in East Asia and Pacific and Middle East. Europe will records the highest marketshare of world arrivals, however there will be a decline from almost 60% in 1995 to almost 46% in 2020. On the other side the highest increase of marketshare will belong to East Asia and Pacific, from 14% in 1995 to 25% in 2020. Intraregional travel will grow slower (3,8%) as a long-haul travel (5,4%) and consequently the proportion between intraregional and long-haul travel will change from 82:18 in 1995 to 76:24 in 2020.

UNWTO initiate this year new long-term research programme *UNWTO Future Vision: Tourism Towards 2030* that will be an update of the previous *Tourism 2020 Vision*. This study will forecast international tourism growth through the year 2030 and identify key actual and future trends and their impact on tourism development.

„An international organization of travel industry executives promoting travel and tourism is the World Travel and Tourism Council“ [12]. According to this organization the contribution of Travel & Tourism to Gross Domestic Product (GDP) is expected to rise from 9,9% in 2008 to 10,5% in 2018 and contribution of this sector to total employment will be 9,2% in 2018 and this means increase from 8,4 in 2008.

CONCLUSION

Tourism is a phenomenon, a system and an experience. Its value is increasing as the contribution of tourism to GDP and employment is rising. For some countries is number one in economies, for other an important part. Past and actual trends help understand the future of tourism. Prediction of future trends is important for managing the destinations and businesses connected with tourism.

The future of tourism will be influenced by many trends and factors. It is impossible to resume all possible trends but the article offers at least some interesting. I think the most important factor influencing the tourism is technology. Technological innovations can be heard on the daily basis and these novelties can make tourism easier, more effective or even

more sustainable. Interesting view on the future of tourism offers also constantly changing consumer behaviour. It is very difficult to predict what really tourist will need and also if there will be still nice environment to offer them. Crisis and disaster, whether man-made or natural, are unpredictable but we should have been instructed from the previous cases to cope with the new ones. Only the real future will show if our predictions succeed or failed but everybody hopes that tourism will be still one of the live and beneficial sector.

BIBLIOGRAPHY

- [1] BONIFACE, B. – COOPER, CH.: Worldwide destinations: The geography of travel and tourism. Amsterdam: Elsevier Butterworth Heinemann, 2005. 518 s. ISBN 0 7506 5997 1
- [2] FRANCIS, J.: Travel trends and predictions. Available in electronic form.
<<http://www.futureoftourism.com/travel-trends.htm>>
- [3] LICKORISH, L. – JENKINS, C.: An Introduction to Tourism. Oxford: Butterworth-Heinemann, 1997. 244 s. ISBN 0 7506 1956 2
- [4] PAGE, S. – BRUNT, P. – BUSBY, G. – CONELL, J.: Tourism: A Modern Synthesis. London: Thomson Learning, 2001. 475 s. ISBN 1 86152 640 7
- [5] PAGE, S.: Tourism management: managing for change. Oxford: Butterworth-Heinemann, 2003. 381 s. ISBN 0 7506 5752 9
- [6] ROWE, M.: Future of tourism dossier. Available in electronic form.
<<http://www.futureoftourism.com/dossier.htm>>
- [7] SWARBROOKE, J. – HORNER, S.: Consumer Behaviour in Tourism. Oxford: Butterworth-Heinemann, 1999. 453 s. ISBN 0 7506 3283 6
- [8] Terminological database of the UNWTO TorisTerm. Available in electronic form.
<<http://www.unwto.org/WebTerm6/UI/index.xsl>>
- [9] UNWTO World Tourism Barometer, Volume 6, No.1, January 2008. Available in electronic form. <<http://www.unwto.org/facts/eng/barometer.htm>>
- [10] UNWTO World Tourism Barometer, Volume 6, No.2, June 2008. Available in electronic form. <<http://www.unwto.org/facts/eng/barometer.htm>>
- [11] <<http://www.unwto.org>>
- [12] <<http://www.wttc.org>>

Ing. Andrea Vačková
Ekonomická univerzita
Dolnozemska cesta 1
852 35 Bratislava
andreavackova@centrum.sk

SERVICE SECTOR AND THE FUTURE

Lucie Sára Závodná

ANNOTATION

The paper talks about the service sector in last years in the Czech Republic comparing other countries inside European Union and other important service market leaders. Services usually belong to the tertiary sector of economy, but in the last years they were developed new services and put to the quarternary and quinary sectors. First of all there is evaluation of current situation in the service market. The following research is focused on the space in the market and search for services, which are not so well developed and still have some potential in the Czech Republic. The article is trying to look at the services from the different perspective and search for finance support for their development in EU funds. There is also a perspective of Tomas Bata and his management of services.

KEY WORDS

Service sector, Tertiary sector, Development of services, Tomas Bata, Evaluation, EU.

INTRODUCTION

“A service is a time-perishable, intangible experience performed for a customer acting in the role of a co-producer.”

James Fitzsimmons

In spite of differences in the structure of production and employment, modern economies – does not matter, if they are developed or still developing – all share a common feature. This feature is an increasing share of services in the economy. Among OECD countries, the service sector has become the most important provider of both output and jobs. The same counts for EU countries. This sector accounted in OECD countries on average for two-thirds of total gross value added and employment in 2000. The role of services in the national economy is even more important for many European countries.

AIM AND METODOLOGY

The main aim of the paper is to make clear situation of Czech services, their quality and future development. The methodology employed is the secondary research of accessible literature, statistic reports for OECD countries, EU countries from Eurostat and other. There is also analysis of current situation in service market. Following is market research and suggestion for the future development concerning progress in other advanced countries.

RESULTS

According to WTO in 2000 the value of world trade in commercial services amounted to USD 1 435 billion which is equivalent to about 20% of world total trade. In the same year, Europe and Asia combined together accounted for approximately two-thirds of world trade in commercial services.¹ This information confirms the importance of services in the world trade. How is the overall situation in Europe? How are services in the Czech Republic?

¹ *Liberalisation and Competition in the Service Sector: Experiences from Europe and Asia* [online]. c2002, 25.6.2002 [cit. 2009-01-01]. Available from WWW: <<http://www.oecd.org/dataoecd/0/54/1933654.pdf>>

Current Situation in the Service Sector

On average, business services contributed to 39.9% of total EU-25 employment in 2004 and to 46.2% of EU-25 value added. This contribution is over twice as large as the contribution of the manufacturing sector to the EU-25 economy.

„The economic importance of services suggests that improvements in European living standards are likely to depend more on productivity improvements in business services than in manufacturing. This has been demonstrated for the United States, where business services contributed three-quarters of the increase in productivity after 1995 (Bosworth and Triplett, 2007). Much of the productivity increase is due to different types of innovation, developed both in-house by service firms and from service firms adopting productivity enhancing innovations such as ICT.“²

Looking at the four main activities (NACE Sections) that make up the EU-27 Services sector and based on employment, the activity ‘Distributive trades’ was the largest in 2005, making up 40.7 % of Services total. ‘Real estate, renting and business activities’ was the second largest activity (32.2 %), due mainly to the size of ‘Other business activities’ (23.8 %), which for example include legal, accounting and management services as well as labour recruitment. ‘Transport and communications’ ranked third while ‘Hotels and restaurants’ was the smallest activity in terms of employment.

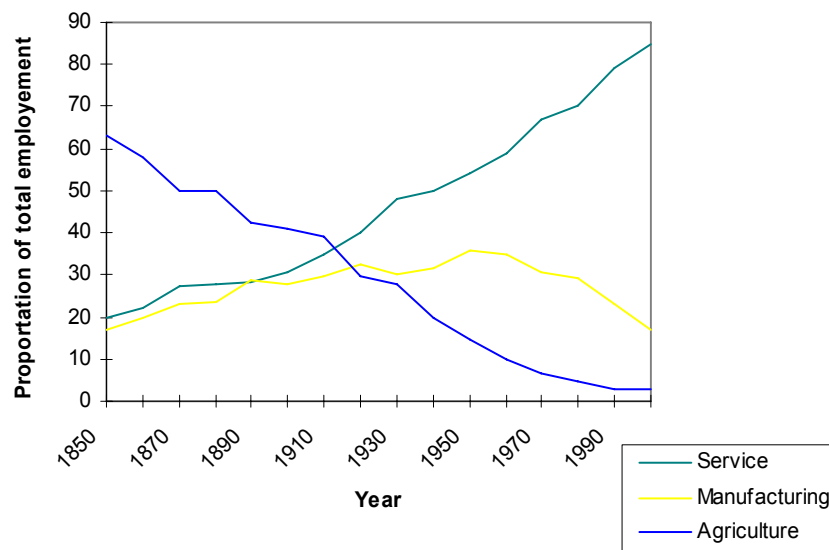
„The largest contributors to employment in EU-27 Services were the United Kingdom and Germany, accounting for 17.4 % and 15.3 % respectively. The importance of Services in the United Kingdom’s economy is highlighted by the fact that, in terms of employment, they had a share in the non-financial business economy which was 13.2 percentage points above the EU-27 average.“³

Looking in the figure 1, we can see the percentage of people employed in sectors in USA. As we can observe, the Service sector is still growing while other sectors are slowly falling down in terms of employment. Europe has still a lot to learn, because 80% of people employed in Services have no EU country.

² *Innovation Statistics for the European Service Sector* [online]. c2007, 1.5.2007 [cit. 2009-01-01]. Available from WWW: <http://www.proinno-europe.eu/admin/uploaded_documents/Innovation_Indicators_for_the_European_Service_Sector.pdf>

³ Eurostat Statistics: Main features of the EU-27 services sector

Fig. 1 People employed in sectors of economy in USA.



Source: *Service Management* by Professor James Fitzsimmons, University of Texas.

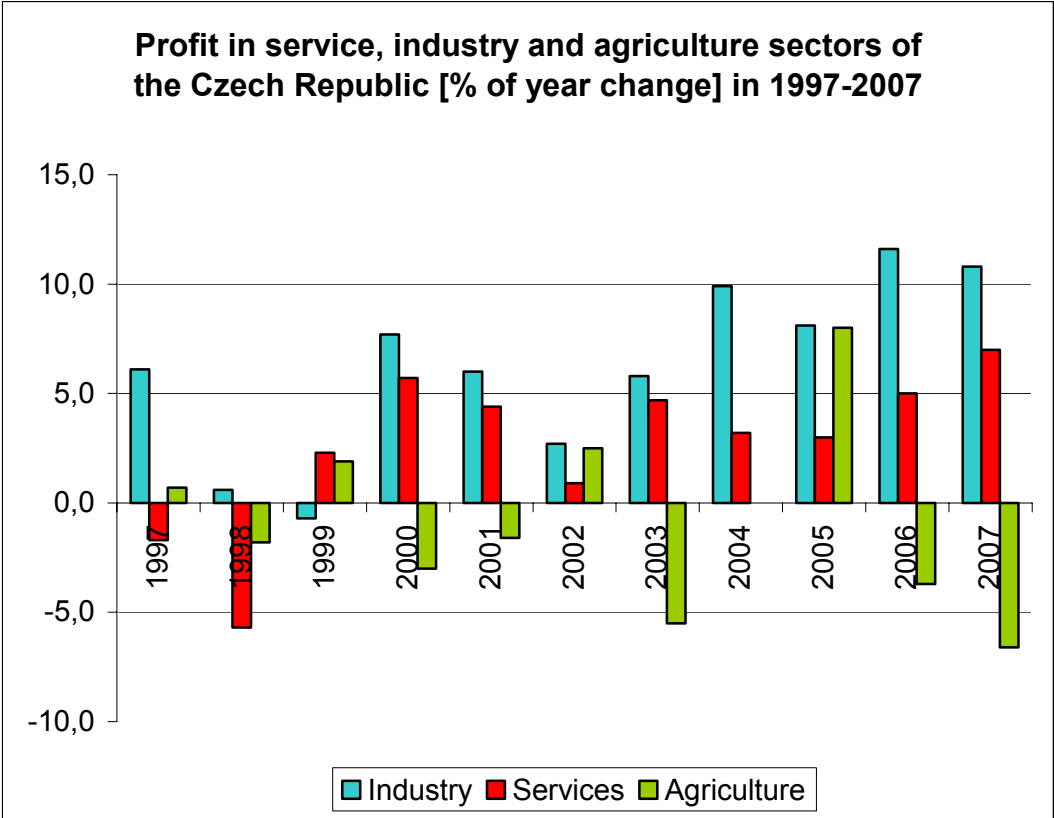
The structure of the economy changes during times as certain sectors become more important and others decline. Employment in EU-25 Services grew by 12 % overall from 2000 to 2004 compared to 6% in the non-financial business economy as a whole and -5% in Industry. The Services sector is usually seen as an engine of economic growth and employment in the EU-27, for example in the Lisbon Strategy adopted in 2000. When looking more closely at employment in Services, the sector clearly displayed a high share of women, part-time workers and selfemployed. According to the Labour Force Survey, women accounted for 44% of persons employed in Services in 2006, which was nine percentage points more than the non-financial business economy average. This share reached as much as 62% of the workforce in ‘Retail trade’.

Many changes, which is Czech Republic facing last years, have been also seen in the structural changes of the national economy. Service sector in the Czech Republic has about 1/3 in all basic economic indicators. We can observe considerable differences between business and non-business services. The business services sector includes wholesale and retail trade, hotels and restaurants, transport, storage and communication; finance and banking; and real estate, renting and business activities such as consultancy and research firms. In the year 2005 the number of service companies registered by the Czech Statistical office reached 715 000 companies, which was 32% of all economic subjects. In the same year there were together 2.25 mill. Economic subjects, from which 25.61% were business services, 6.18% were non-business services, 3.77% was agriculture, 13.25% had industry, and the rest were other services. The area of services is contributing to the overall employment. There were more than 1.5 mill people working for service companies in 2005, which is about 120 thousand more than in the year 1995. As we can see in the figure 2, the profit from the service sector is growing every year. In 2007 was the year change 7% and the prediction is planning bigger growth in next years as well as the employment should grow slowly.

One more element, which is influencing service sector in the Czech Republic and EU as whole, is the opening of the service market in EU for free trade, which means better quality, accessibility and competition in the EU service market. The services sector is responsible for

half the economic activity in the EU and 60 percent of its jobs. Free market supporters such as Britain and the EU's new east European member states have said the directive is necessary to increase competition across the union. The aim of creating the European single market for services derives from this logic. As stated by the European Commission in its communication “An Internal Market Strategy for Services”, “[i]mproving the conditions for the free movement of services should release the dynamism inherent in the Internal Market and so enhance competitiveness, growth and employment creation in our economy”.⁴ The present report reviews the progress made so far in establishing the single market in services on the basis of a sectoral approach. This approach also makes cross-country comparisons (between Europe and other regions) easier and more compatible with the ongoing multilateral negotiations under the World Trade Organisation.

Fig. 2 Profit in Service, Industry and Agriculture sectors of the Czech Republic in years 1997-2007



Source: Czech Statistical Office [1]

If we look at the Czech services market, it is not easy to compare it with other EU countries. There are no indicators, which would compare quality of services or satisfactions of costumers. Main indicators, which are followed, are GDP and other macroeconomic index numbers. We have to take every sector of services separately. In following lines I would like to focus on Czech service market and spaces for improvement in selected service areas.

⁴ European Commission: An Internal Strategy for Services [online]. c2008, 1.9.2008 [cit. 2009-01-01]. Available from WWW: < http://ec.europa.eu/internal_market/top_layer/index_19_en.htm >.

1) **Outsourcing of Services**

In the Czech Republic there are still spaces on the market with outsourcing of services. The full-service leasing is one of the outsourcing trends, which are used in some EU countries. The new tax reform in 2008 is disadvantage for financial leasing that is why companies will use more operating leasing. So it is more than expected, that the operating leasing will grow in next years. It is usual, that for example 50% of companies in Great Britain or Holland are using full service leasing. It means that all leasing services are hired out from the outsourcing company. After the leasing is finished, the object of leasing belongs to the outsourcing company. There is also positive aspect of lower risk. The fleet management is also one of the trends in the EU companies. It is outsourcing of car park and all services with cars, which belong to the company.

2) **Post Services**

In our market the Czech Post has still the primacy on the market. This post is dictating all prices and terms, how to deliver packets with consideration of government regulations. In last years companies could also choose from other post services, such as TNT, DHL, PPL, Fedex and other, but these companies usually deliver to abroad and were expensive. Sometimes they were not delivering to all places in our country. Czech post has the monopol on the market garanted from the government, because of costs, which are generated from the guarantee of delivering packages to all parts of the Czech Republic. Considering other EU countries the free market of the post services is only in Sweden and Finland. From the 2009 will be full liberated EU market, all companies will compete in delivery of packets.

3) **Energy providers**

Energy market is service sector, which has not only in the Czech Republic monopol position. Every year people are facing higher prices. This area is costs demanding from the view of provider. There is a trend in western countries (for example Switzerland), people can choose from which resources they are taking electricity. People can mix nuclear, wind and wather power and pay for the mix, they choosed.

4) **Personal services**

The reduction in business resulting from this increasing trend towards "do it yourself" is leading the personal services industry to seek to compete on quality, to diversify and to develop new niche markets such as health and beauty treatments. Personal services in the Czech Republic belong to the areas, which are still new and not fully utilized. Comparing to other Europe countries (Norway, Finland, Switzerland), this is area of services, which will most probably grow in next years. We can include to this topic also senior services, such as free time activity of seniors, which have money to spend or other luxury services for older people.

5) **Higher Education**

Education belongs also to the Service sector that is why I decided to look for the spaces in education market. In the Czech Republic we have only 13% people having university diploma. Comparing to other OECD countries, we are missing 13% more percents (as OECD countries have in average 26%). Our country is also not investing enough money to education. OECD countries usually give to universities 14,000 USD more per year per one student. There is also problem in salaries. Teachers in the Czech Republic get smaller salaries than is average in advanced countries. There is still space for private schools and universities from abroad, which are not common in our country.

Services in EU Financing

It is not a secret, that European Union is supporting many activities, which are going the same direction as is EU trend. One of the examples is Seventh Framework Program. There are missing the main policy indicators in the service market, which would compare EU countries in Service sector, so every year there are calls in Socio-economic and scientific indicators, which main goal is to improve measuring of services in EU.

„The proper measurement of productivity and growth in the services is very difficult due to the scarcity and frequently poor quality of the existing statistics. This should include looking at how to address the ways services have changed over time and, particularly with respect to the development of the internal market and the internationalisation of some service provision and markets.....Overall objective of this research area is to address the need for new, improved and more appropriate indicators for policy. This is necessary because the use of indicators for policy is complicated by the fact that some of the indicators currently available are inadequate or inappropriate for policy use or simply of poor quality.”⁵

Money in the EU available for the Czech Republic has been divided into three funds: **European Regional Development Fund (ERDF)**, **European Social Fund (ESF)** and **Cohesion Fund (CF)**. In every fund can find the service companies some support depending on their activity. **ERDF** fund involves support of capital (infrastructural) projects, such as road and railway construction, removal of ecological burdens, support for the innovative potential of businessmen, development and redevelopment of sports facilities for the tourist industry, cultural monument reconstruction, renewable sources of energy exploitation, healthcare infrastructure construction or repairs, introduction of public administration electronic services, and so on. **European Social Fund** involves support of non-capital (non-infrastructural) projects, such as retraining of the unemployed, special programmes for handicapped people, children, young people, ethnic minorities and other disadvantaged groups of the population, creation of innovative educational programmes for employees, educational programme development including forms of distant learning, improvement of conditions for ICT exploitation by pupils and teachers, increase in competencies of school and school facility heads in management and human resources policy, teachers' and scientists' short term attachments to private and public sectors etc. In contrast to structural funds, **Cohesion Fund** has been earmarked for support development of poorer countries, not regions. Just as the ERDF, capital (infrastructural) projects are being supported by it, but only aimed at larger scale transport infrastructure involving (motorways and 1st class roads, railways, water transportation, road, railway, river, naval and air transportation control) and environment protection.

Projects co-financed by EU funds are implemented through thematic and regional operational programmes. A total of 8 thematic (sector) operational programmes (OP) have been prepared within the Convergence Objective for 2007-2013. Each of these 8 operational programmes has its own specific thematic purpose and it is determined for the entire Czech Republic with the exception of the Capital City of Prague.⁶ These are thematic operational programs: OP Transport, OP Environment, OP Enterprise and Innovation, OP Research and Development for Innovation, OP Human Resources and Employment, OP Education for Competitiveness, OP Technical Assistance and Integrated Operational Program. Most of these programs are supporting just the area of services.

⁵ Directions for the call 8.6.2.1. in the Seventh Framework Program

⁶ *Strukturální fondy EU* [online]. 2003 - 2007 [cit. 2009-01-01]. Available from WWW: <<http://www.strukturalni-fondy.cz>>.

Quality of Services

Quality in the sector of services has the same importance as in other sectors. So what does it mean quality? How do we know, that this service is enough quality? Can we measure this quality? As was said before, every area of services has different factors, which influenced it. In area of social services in the Czech Republic for example exists special standards. The standards describe what a quality social service should look like. They are a set of measurable and verifiable criteria, not a draft law or regulation. Their purpose is to allow in a demonstrable way to assess the quality of the service provided, not to set forth which rights and obligations individual facilities and service users have. Quality of service is a broad term that is used in both customer care evaluations and in technological evaluations. In both applications, the quality of service has to do with measuring the incidence of errors within a process that result in the creation of issues for an end user. The goal of any quality of service evaluation is to minimize the incidence of transmission issues and the error rates that may result.

In terms of customer care, quality of service is often measured in terms of issues that have a direct impact on the experience of the customer. From this perspective, only issues that produce a negative effect on services received by the customer come for control. In general, corporations in many industries seek to have a 2% or less error rate as part of their overall customer care strategy. Evaluating the quality of service does not mean companies do not address internal problems that have yet to impact customers. In terms of technology, the quality of service usually has to do with the efficient operation of various systems. The idea of this service quality approach is to identify any potential issues of data transmission throughout the process in question. End users often participate in helping to evaluate the quality of service offered by a company. Customers may respond to customer care surveys and questionnaires as part the evaluation process. Within the company, employees and others with an interest in the success of the company may participate in evaluations of various systems and offer input on ease of use, speed, and general accuracy of the technology used in the operation of the company. In both cases, the purpose is to ensure the quality of service is maintained at the highest level possible. Now more than ever, companies must measure and manage their quality costs to compete at a high level in today's global marketplace.

Quality techniques and tools help lower the costs of people-intensive service processes and improve customer satisfaction. A process approach enables service organizations to standardize the ways they work, achieving improved consistency, faster cycle times and fewer errors. And employees are empowered to provide individualized customer service when it counts most.

Tomas Bata and Services

As Zlin is connected with the name of Tomas Bata, I decided to search for his best case practises in the area of services. We can call Tomas Bata as one of Heroes in the entrepreneurship in the Czech Republic. It is no need for further introduction. His mottos are known all over the world as Bata had his shops almost everywhere. When talking about Bata's services, we have to mark Bata's Corporate Social Responsibility (CRS) activities, which were part of service sector Bata build. Bata was amazed by the life. "The

entrepreneurship is a service for life,”⁷ he said. “The work is a service for life”⁸ or “The mission of entrepreneurship is the service”⁹ were some of his mottos, which he valued.

It is not a secret that Bata had many activities or we can say also services for his employees. As service we can count hospital and all doctors’ services, hotels, small family buildings which are still so typical for Zlin design, all culture services (cinemas, clubs) and for example also schools and bank services. It is more than clear, that Tomas Bata was sure about the power and impact services have.

The Bata’s company had the self-contained system not only in production of shoes and supplements, but also in services. It is possible to define Bata’s services as quality, cheap and available for employees, but also for other people which were living in the city. Bata had one rule in services: the company should not profit on them a lot. Services were in the area of social politics of the company. Bata’s management of services stands on the similar rules as his production management. The main idea was also in innovation, quality control and education from the tender age. We have to mention also Bata’s passion for research and development. He was focused on people’s development more than on business itself. He was sure, that time and resources he needs to put to people, will be back soon in higher productivity and outcomes.

Bata’s system seems to be perfect. But as he was a big traveller, many ideas he saw abroad and was clever enough to implement them to his excellent model. It could be really easy just to make shoes and sell them, but for him was this not enough. He realized the importance of services as supplement process of his entrepreneurship. Bata knew that brand needs to be seen in many positive situations and after that people will buy his products more. As main goal he assumed the final satisfied costumer.

CONCLUSION

The Service sector plays the most important role in economy comparing other sectors – Agriculture and Industry. It contributes to the employment, growth of GDP, export/import and other indicators, which determine economic health of countries. In the Czech Republic we still have a big potential for improvement in some Service sectors. The biggest potential shows sectors of education, post, energy, outsourcing and personal services. From the 2009 will be the free market of services in European Union and Czech people will have access to other more quality and cheaper services from abroad. Our country will use all benefits. But it will have also negative sites – for example service companies will have bigger competition. Talking about support of EU funds, service companies can use many free resources as the offer is really diverse. Most of funds are focused exactly on services area in the Czech Republic.

Service companies are very difficult to value, since they are highly dependent on the personal relationships of the management and its customers. Even small service companies can be successful in competing against large corporations in the global environment; provided that they understand very clearly the needs of their customers and that they know how to package their service concept. The measurement of service area companies depends on many indicators and is hard to compare. Till now there are no overall EU indicators, which would

⁷ VÍTKOVA, R. *Baťova soustava řízení*. Otrokovice: Hart press, 2005. 80 s. ISBN 80-7318-263-7.

⁸ The same resource as 7.

⁹ The same resource as 7.

allow to companies to benchmark themselves inside the EU market. This is also reason, why EU supports services indicators research inside EU countries.

*"Business development in services companies, regardless of the sector, must begin with the customers, not the competitors. Today's customers are very demanding and aware, which is why launching a new service requires deep insight into currently unmet customer needs and the ability to turn this knowledge into a unique customer experience. An increasing number of successful service companies are born out of an entrepreneur being able to meet customer needs that have been overlooked and unrecognised by traditional companies,"*¹⁰ says Tim Ogilvie, CEO of Peer Insight, a research and consulting firm.

*"For a new service product to be successful, it needs to be based on a novel way of producing the service: traditional value chains in business are not necessarily effective in service production. Efficient use of IT applications and employing the Internet as a distribution channel are usually part of a new service innovation, but what is most important is the experience the customer gets when buying a service,"*¹¹ says Ogilvie.

BIBLIOGRAPHY

- [1] Český statistický úřad [online]. c2008 [cit. 2009-01-01]. Available from WWW: <<http://www.czso.cz>>.
- [2] *Liberalisation and Competition in the Service Sector: Experiences from Europe and Asia* [online]. c2002, 25.6.2002 [cit. 2009-01-01]. Available from WWW: <<http://www.oecd.org/dataoecd/0/54/1933654.pdf>>.
- [3] *Innovation Statistics for the European Service Sector* [online]. c2007, 1.5.2007 [cit. 2009-01-01]. Available from WWW: <http://www.proinno-europe.eu/admin/uploaded_documents/Innovation_Indicators_for_the_European_Service_Sector.pdf>
- [4] VÍTKOVÁ, Romana. *Baťova soustava řízení*. Otrokovice: Hart press, 2005. 80 s. ISBN 80-7318-263-7.
- [5] TRNKA, František. Česká škola řízení. In *Mezinárodní Baťova konference*. [s.l.] : [s.n.], 2005. s. 87-91. ISBN 80-7318-294-7.
- [6] STŘÍTESKÝ, Miroslav. *Tvůrčí odkaz Tomáše Bati současným podnikatelům*. Otrokovice: Hart press, 2003. 231 s. ISBN 80-7318-152-5.
- [7] European Commision: *An Internal Strategy for Services* [online]. c2008, 1.9.2008 [cit. 2009-01-01]. Available from WWW: <http://ec.europa.eu/internal_market/top_layer/index_19_en.htm>.
- [8] *What is Quality of Service?* [online]. c2003 - 2009 [cit. 2009-01-01]. Available from WWW: <<http://www.wisegeek.com/what-is-quality-of-service.htm>>.
- [9] *Strukturální fondy EU* [online]. 2003 - 2007 [cit. 2009-01-01]. Available from WWW: <<http://www.strukturalni-fondy.cz>>.
- [10] LAUR, Jaroslav. *Trendy v oblasti leasingu. Moderní řízení*. 12. 12. 2008, roč. XLIII, č. 12, ISSN 0026-8720.
- [11] *Service companies who know their customers win in global competition* [online]. c2004, 22.5.2007 [cit. 2009-01-01]. Available from WWW: <http://www.tekes.fi/eng/news/uutis_tiedot.asp?id=5842>.

¹⁰ Service companies who know their customers win in global competition [online]. c2004, 22.5.2007 [cit. 2009-01-01]. Available from WWW: <http://www.tekes.fi/eng/news/uutis_tiedot.asp?id=5842>.

¹¹ The same resource as 10.

Lucie Sára Závodná
Tomas Bata University in Zlín
Mostni 5139
Zlín
zavodna@fame.utb.cz

BEHAVIOR OF CREATIVE EMPLOYEES AND METHODS OF INCREASING THEIR CREATIVITY

Jianpeng Zhang, Shuang Wang

ANNOTATION

With the globalization of world economy and the competition growing, creative employees are playing more and more important role for strengthening the competitiveness of organization. It becomes necessary to research the behavior of creative employees for improving their creativity. In this paper, we firstly researched the characteristics of creative employees from two aspects -- cognitive styles and working qualities. Then, we discuss barriers to creativity and methods of increasing their creativity, separately from the angles of individual and organization.

KEY WORDS

Creative employees; creativity; creative industries; cognitive style

INTRODUCTION

Nowadays, with the development of information and internet technology, it takes on many new characters of the world economy, such as the distribution of resources, the competence of market and the pursuit of talent, etc, which are all developing in the global market. The globalization of economy directly leads to the more fierce competition of the global economy. Organizations are facing significant environmental complexity in today's global economy. Creativity no longer belongs to the privilege of the leaders and managers; it also belongs to the employees. To be a competent organization, owner and employee will have the same importance for the organization. Especially in hi-tech industry and creative industry, more and more employees are knowledgeable and educational, which will be of importance as the driving force of creativity.

In macro level, most of countries have attached importance to innovation and creativity. For the middle and higher income economies, innovation capability rather than resource inputs will determine a significantly higher share of their overall growth. In micro level, organizations face significant environmental complexity in today's global economy. Organizations are more pursuing creativity for keeping their competitive advantage.

Therefore, both owners and employees must be competent from a manager's point of view. In the current conditions of democracy, freedom and respect for man, it is no longer possible to say that only managers control. The "real power", from the point of view of the future, is the "power of competence – the power of knowledge" (Jan Porvaznik, 2008).

In this paper, we firstly analyzed the characteristics of creative employee. Then, we explored the barriers to employee creativity and discussed the methods of increasing employee's creativity.

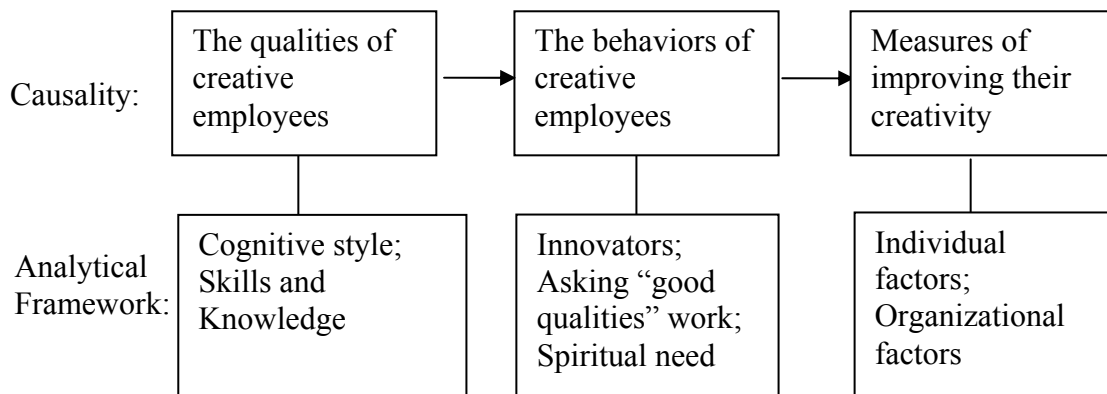
FRAMEWORK OF CREATIVITY ANALYSIS

The main purpose of this paper is how to improving creative employees' creativity. Here we have two hypothesizes:

H1. The qualities of creative employees can lead to their behavior features, which have two aspects: cognitive style; skills and knowledge.

H2. The behavior features of creative employees will lead determine what measures we should do for improving their creativity, which have three dimensionalities: innovators; "good qualities" work need; spiritual need.

We will firstly analyzed the two hypothesizes, and then discuss the measures how to improve the creative employees' creativity.



THE QUALITIES OF CREATIVE EMPLOYEES

Creativity is a quality of a person that enables them to look for new, non-traditional solutions for existing problems and to create new opportunities. Employee Creativity would be related to the following independent variables, such as job design, tolerance of freedom and consideration leadership behaviors, cultural norms of diversity, and work group relations (Kristina Jaskyte, Audrone Kisieliene, 2006). In this subsection, we analyzed the qualities of creative employees from the following two aspects:

Firstly, Cognitive style and intrinsic motivation are most of important factors that influences the individual characteristics for creativity (Amabile, 1988). According Kirton's (1976) adaption-innovation theory, individuals have different cognitive styles of creativity, problem solving, and decision making. These cognitive style preferences can be described on a bipolar continuum with adaption at one extreme and innovation at the other. Adaptors are inclined to think within the confines of the consensually agreed paradigm. Innovators are liable to direct their creativity, problem solving, and decision making extra-paradigmatically. That is, they consider the generally agreed guidelines and procedures as part of the issue and invent solutions which challenge and shift the existing paradigm.

Therefore, an innovative cognitive style, oriented toward divergent thinking, is necessary for employee creativity (Amabile, 1988; Woodman et al., 1993). A risk-taking personality and a creative problem solving style were also linked to creativity.

Generally speaking, the creative person is characterized by the following qualities (Jan Porvaznik, 2008): Refusal of routine; non-recognition of formal authority; inventiveness and curiosity; non-conformity; rebellious spirit; independence; skepticism; enthusiasm; sense of adventure; energetic approach; unyieldingness; acceptance of conflict; impetuosity; self-confidence; persistence; criticism; prudence; self-reliance; etc.

Secondly, with few exceptions, most of creative employees are skilled workers and knowledge workers. Therefore, they have the characteristics of the knowledge workers. According the definition of the work foundation, knowledge workers can be defined as all those with a degree working in the top three occupational categories (managers, professionals, associate professionals). Knowledge workers account for about 42 per cent of all employment in the UK in the first quarter of 2006, using the occupational definition of the top three occupational groups (Ian Brinkley, 2006). They have high levels skills and perform tasks that require expert thinking and complex communication skills with the assistance of computers.

Thirdly, Most of creative employees work in creative industries. Creative industries points those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property (DCMS 2001a:4).

For measuring the size of the creative economy, Peter Higgs (2008) applied the Creative Trident methodology to analyze the employment characteristics of the creative economy. They divided the creative occupation into three parts:

- The total of creative occupations within the core creative industries (Specialists);
- The creative occupations employed in other industries (Embedded);
- The non-creative (better titled business and support) occupations employed in creative industries who are often responsible for managing and technically supporting creative activity.

The total of creative occupation is that we plus the three parts. Simply put, the number of people employed in the Creative Economy is the total of Creative Industries employment plus embedded employment.

THE BEHAVIORAL FEATURES OF CREATIVE EMPLOYEES

Based on the previously analysis, we analyze the behavioral features of creative employees. Firstly, because the creative employees are also innovators, they are more likely to voice novel ideas to their supervisors and organizations compared to adaptive employees. According to Onne Janssen's etc (1998) research result, innovators indicated that they are more likely to voice novel ideas for unusual experiments and radical organizational changes as the cognitive style preferences for adaption-innovation, while adaptors reported themselves to be more likely to voice conventional ideas for further refining rules, procedures, and strategies within the confines of the generally agreed paradigm.

Secondly, for most of them either skilled people or educational people, they have stronger bargaining power. Therefore, creative employees of course could be asking "good quality" work.

According to the Work Foundation's research results (David Coats & Rohit Lekhi, 2008), good work embraces the following features:

Employment security; Work that is not characterized by monotony and repetition; Autonomy, control and task discretion; A balance between the efforts workers make and the rewards that they receive; Whether the workers have the skills they need to cope with periods of intense pressure; Observance of the basic principles of procedural justice; The strength of workplace relationships – or what some researchers have described as "social capital".

Among of the "good quality" jobs, creative employees take up the predominant ratios. They ask competitive remuneration, good working environment, high autonomy and flexible working time, etc. During the process of the labour market polarization, creative employees must be on the side of good direction.

Thirdly, attracting and coordinating creative people is not an easy thing. They are more loyal to their specialty than occupation. They could give up high salary position for pursuing their interesting. They aren't primarily motivated by money, but by their own creative urge. Therefore, organizations must cater to their "spiritual need"; the position should be helping them to improve their specialty level. It may work better to offer the opportunity to work on exciting projects where they can be creative and learn new skills.

METHODS OF INCREASING EMPLOYEES' CREATIVITY

In the previously parts, we have analyzed the behavior traits of creative employees. Now we turn to discuss the barriers to creativity and measures that we can use to overcome these barriers and how can we improve employees' creativity, individually from the perspectives of organizations and individuals.

From the angle of individual

It is now generally accepted that there are three barriers to creativity: false assumptions, habits, and emotions (Edward L., 2007). False assumptions includes: we belief that we are not

creative is self-fulfilling prophesy; the attitude that play is frivolous but unstructured play is very important to our cognitive development. Learned habits barriers means that we often think there is only one right answer when we deal with things or looking at a problem in isolation or following the rules. Attitudes and emotions includes: negative, pessimistic thinking and Risk-avoidance or the fear of failure or rejection.

From the qualities of creative employees, we know that most of them have been overcome most of these barriers. It is the reason why they are more creative than the normal employees. But anyway, if they can do according to the following rules, they will get their creativity better.

Firstly, spend time with creative people; play with ideas, analogies and metaphors; frequently exercise our imagination by asking what-if questions; practice new creative thinking and problem-solving modes! Secondly, look for a broad context and seeking different alternatives, analyzing the purpose of rules and deciding which should be. Thirdly, encourage people around us with positive feedback when they share creative ideas. Besides these suggestions, we listed some other recommendations for developing our creativity in Table1.

Table1 Tips for creativity development

- Record your ideas wherever and whenever you get them.
- Control both your verbal and non-verbal behavior.
- Define your problem again in several ways.
- Step over the problem area.
- Develop your creativity habits.
- Separate your creative thinking from evaluation judgment.
- Evaluate your ideas first all through their good and strong aspects, then write down the possibilities of their realization and summarize the problems at the end.
- Take problem to be opportunities.

Source: Jan Porvaznik and Coll. (2008). Holistic Management.

From the angle of organization

Creative employees have the good qualities of creativity and innovation, but how to make it come true greatly depends on the organizations. There are many barriers to creative employees in the organizations, such as organization culture, training, employee relationships, etc. Amabile viewed that features of an organization can be the most crucial determinants of an individual's creativity at any point in time (Amabile, 1988).

The literature has pointed that there are mainly the following barriers impact on the creativity in the organizations: ethical issues (Melissa S. Baucus etc, 2008); empowerment (David J. Paper and Jeffrey J. Johnson, 1997); culture variables (Gillian Rice, 2003).

In this part, we discussed the measures that organizations should take for improving the employees' creativity and gaining competitive advantage from the following two aspects: organization culture and employees' training.

Organization culture

Organizations must embrace change because creativity must be bringing the new ideas and behaviors, which are often destructive for the old system. The organization culture which benefit to creativity and innovation at least should have the following features: tolerance, empowerment, knowledge sharing. Tolerance means organization should be tolerant of risking failure, which decided whether employees can put forward more novel ideas; Empowerment means organization should give employees more autonomy, which can allow employees more freedom to be creative.

Knowledge sharing becomes necessary because the knowledge is becoming more and more specialty and intangible. Knowledge sharing is related to organizational structure characteristics, organizational culture, and interunit interaction. Lin (2008) found that the lower the formalization of an organizational structure is, the greater the knowledge sharing among units of an organization will be, while the higher the complexity of an organizational structure is, the lower the knowledge sharing among units of an organization will be.

Employees' training

Because creative employees are almost knowledge-based workers, they need more train for keeping the pace of knowledge development. Organization should take as much as possible training methods to improve the employee's creativity and cultivate their creative thinking.

There are many methods can be taken training methods, such as brainstorming, the Heuristic Method, creative stories, creative tasks, creative tests, and the Seamper Method. Among of them, brainstorming is one of the most frequently-used techniques for the creation of new ideas.

In addition, managers must know about the characteristics of employee. Thus, they can take appropriately training methods. For example, once managers know the cognitive styles of their employees, they will be able to tap into their creativity by matching employees to tasks that require their skills and stretch their abilities. Similarly, by assessing employees' motivational styles, administrators can find out what motivates and excites their employees and design their work in such a way that it maximizes intrinsically motivating aspects.

CONCLUSION

In this rapidly changing world, creativity has become the core competitiveness of organization, which must add their value continuously. Therefore, creative employees are getting more and more important status in organization. Creative employees belong to innovators according to cognitive style. Most of them are skilled people and knowledge workers, which decided they can ask "good quality" work.

Based on the behavior features of creative employees, we discussed the barriers to creativity and methods to improving their creativity from the perspectives of organizations and individuals. For individuals, we should overcome false assumptions barriers, learned habits barriers, attitude barriers; for organizations, they should establish organization culture which benefits to creativity, including tolerance, empowerment, knowledge sharing, etc. Meanwhile, organizations should often give training to employee according to their characteristics. In a word, it must be taking measures both organization and individual for improving employees' creativity.

BIBLIOGRAPHY

- [1]Amabile, T. M. (1988). A Model of Creativity and Innovation in Organizations. In B.M. Staw&L. L. Cummings (Eds.), Research in organizational behavior. vol.10, pp123–167
- [2]Argyris, C., & Schon, D. A. Organizational Learning: A Theory of Action Perspective. Reading, MA: Addison-Wesley, 1978.
- [3]David Coats with Rohit Lekhi. (2008). 'Good Work': Job Quality in a Changing Economy. The Work Foundation, Knowledge economy programme report. Online: <http://www.theworkfoundation.com/>
- [4]David J. Paper etc. (1997). A Theoretical Framework Linking Creativity, Empowerment, and Organizational Memory, Creativity and Innovation Management, 6(1), pp32-44
- [5]Drucker, P. F. (1969). Management's New Role. Harvard Business Review, 74, 49-54.
- [6]DCMS (2001a). Creative Industries Mapping Document, online.

- [7]Edward L. & Martin B. (2007). *Entrepreneurship from Creativity to Innovation: Effective Thinking Skills for a Changing World*, Oxford : Trafford publishing, ISBN:1-4251-0472-X
- [8]Florida, R. (2002). *The Rise of the Creative Class: And How It's Transforming Work, Leisure and Everyday Life*, 1st edition, New York □ Basic Books, 2002
- [9]Gillian Rice. (2003) *The challenge of creativity and culture: a framework for analysis with application to Arabian Gulf firms*, *International Business Review* 12, p461–477
- [10]Ian Brinkley. (2006). *Defining the Knowledge Economy*. The Work Foundation, Knowledge economy programme report. Online: <http://www.theworkfoundation.com/>
- [11]Jan Porvaznik and Coll. (2008). *Holistic Management*, Publisher: PhDr. Milan Stefanko-IRIS, Bratislava. ISBN 978-80-89256-11-2
- [12]Jaskyte, K. & Kisieliene, A. 2006, *Determinants of Employee Creativity: A Survey of Lithuanian Nonprofit Organizations*, *Voluntas*, 17:133–141.
- [13]Kirton, M.J., (1976). *Adaptors and innovators: A Description and Measure*. *Journal of Applied Psychology*, 61, 622-629.
- [14]Kristina Jaskyte & Audrone Kisieliene. (2006). *Determinants of Employee Creativity: A Survey of Lithuanian Nonprofit Organizations*, *Voluntas* (2006) 17:133–141
- [15]Melissa S. Baucus etc, (2008). *Fostering Creativity and Innovation without Encouraging Unethical Behavior*, *Journal of Business Ethics* (2008) 81:97–115
- [16]Onne Janssen, etc. (1998). *Voicing by Adapting and Innovating Employees: An Empirical Study on How Personality and Environment Interact to Affect Voice Behavior*, *Human Relations*, Vol. 51, No. 7, pp945-967
- [17]Peter Higgs & Stuart Cunningham. (2008). *Creative Industries Mapping: Where Have We Come From and Where Are We Going?* *Creative Industries Journal* Vol.1 No.1, pp. 7–30
- [18]Wen-Bao Lin. (2008). *The effect of knowledge sharing model*, *Expert Systems with Applications* 34 (2008) 1508–1521
- [19]Woodman, R.W. etc, (1993). *Toward a Theory of Organizational Creativity*. *Academy of Management Journal*, 18, 293–321.

Jianpeng Zhang, PhD student, Tomas Bata University, T.G.M.3050, 76001, Zlin. Email: zlintbu@163.com

Shuang, Wang, Master student, Shanghai University of Chinese Traditional Medicine, Huatuo Rd.280, 201203, Shanghai. Email: wangshuagntcm@163.com

Masaryk University
Faculty of Economics and Administration

New Economic Challenges

1st International PhD Students Conference

Editor: Mgr. Petr Červinek

Editorial Board: L. Bauer, L. Blažek, H. Hušková, E. Hýblová, M. Kvizda,
L. Lukášová, R. Lukášová, J. Menšík (předseda), J. Nekuda,
A. Slaný, J. Šedová, V. Žitek

Publisher: Masaryk University, 2009

1st edition, 2009, number of copies 100

Print: Tribun EU, s.r.o. Gorkého 41, Brno 602 00

Serial Number ESF-2/09-02/58

ISBN 978-80-210-4815-7

This publication has not been proofread or edited by the publisher.