## Specification of research activities carried out in the Centre

## Basic specification of the subject of research activities

Within the basic specification of the subject of research activity, the Centre is outlined as an analytical establishment concentrated on the application of social and scientific knowledge in the field of **competitiveness** evaluating its preconditions and results in the Czech Republic and its economico-political implications referring to achieving the goals of *Lisbon strategy*. Competitiveness is analysed and evaluated with regard to key conditions of a successful transition to the knowledge-based economy on the basis of trends of macroeconomic development (growth performance and stability) of the CR in international comparison (within EU-25). Analysis and evaluation of competitiveness of the Czech economy is focused in this context on three mutually interconnected qualitative factors of long-term sustainable growth performance as well as the attitudes to their development. The first factor includes institutional quality of company environment, as the principal condition of effective functioning of company sphere and development of qualitatively based activities with a longterm output, i.e. investing particularly in innovations and human resources, infrastructural conditions for the development of innovations and human resources. The second factor includes resources and results of innovation performance as the main condition of the development of quality-based competitive advantage and qualitatively (high-tech and skills) demanding economic activities. The third factor includes quality of human resources, which is both the condition and the reflection of the level of innovation performance, particularly in relation to the supply of high and specialized qualification and generally in relation to the ability of labour to be adapted to the faster and faster moving qualification requirements. The growth performance sustainable in the long term in the macroeconomically stable, institutionally established framework is the condition and simultaneously the reflection of quality-based competitiveness of domestic economy.

The qualitative factors are crucial for the growth performance sustainable in the long term and the ability to compete. At present, however, the Czech Republic is still lagging behind most EU member countries and has a lower growth performance as compared with other acceding countries. Moreover in the periods of revival it is accompanied by an increasing macroeconomic imbalance (in the form of growing deficits of the public finance and the balance of payment current account). This state is caused not only by the extent of inadequate resources for growing competitiveness, but also by their distribution. The change in the distribution is blocked by inadequate institutional structure. The change will require <u>longterm coordinated economico-political support</u>, whose efficiency is also greatly dependent on the quality of objective analysis of existing state as well as development trends in individual areas. Therefore the aim of the Centre is such an analysis, whose results will be used by a <u>wide spectrum of users</u> for designing development strategies, formulation and implementation of appropriate economico-political measures and for evaluation of success rate of their implementation from the viewpoint of their performance and qualitative shift in the international position of the Czech Republic.

### Specific features characterising the subject of research activities

Specific features characterising the subject of research activities of Czech economy competitiveness can be seen especially in <u>three aspects</u> – in the emphasis put on its qualitative factors and their specific character reflecting the attained level of economic development as well as in the application of complex methodological approaches. The stress on **qualitative factors of** competitiveness is in harmony with an intensive attention paid to these problems in the new millennium. It can be stated that in the context of accession of new

members to the EU, research establishments shift their focus from so far accented aspects of transformation of planned economy to market economy to the issues of transformation to the <u>knowledge-based economy</u>. The processes thus pose a double challenge for transition countries aspiring to overcome the backwardness of economic level – *economic and technological* (or in the present concept knowledge) catching up. The sources of existing competitive advantage (especially low production costs) are gradually disappearing and the outlook of development of qualitatively new resources are still limited as a result of continuing economic and technological gap (or a low level and inappropriate institutional structure of our own innovation capabilities). The possibilities and a more marked economico-political support for changing this state are curbed by the existing fiscal imbalance, as well as the inefficiency of the supporting system, which is due to its incompleteness, sectored structure of regulatory organs and prevailing short-term horizon of development strategies.

The second aspect of the new approach of the Centre is that is takes into account **special characteristics of Czech economy competitiveness** related to key qualitative factors of its development and in relation to the declared growth performance as well as to the macroeconomic stability. The emphasis put on qualitative factors reflects the fact that the low <u>growth performance</u> of Czech economy is attributed particularly to the low growth of aggregate productivity, which is in line with low estimates of the growth in potential product. The role of qualitative factors is considered as decisive for increasing the aggregate productivity.

In the field of institutional quality of company environment, the problem is mainly caused by corruption behaviour and a low quality of public administration and political process. It can be traced especially in the fact that applied approaches have a non-systemic character, political strategies are only short-lived and impacts of partial measures on the decisionmaking of economic subjects are insufficiently taken into account. Therefore, corporate environment is characterized by instability and non-transparency, which impede the conditions for long-term investment decisions. At the same time, the low quality of corporate environment increases the costs of economic activities for individual subjects (and economic losses for the state) and reduces utilization efficiency of available resources. This long-term and structurally based problem can be solved by creating the environment of trust, which ensures that productive contacts are established between corporate, financial and research communities and that cooperative links are created even in the environment of competitive and innovation based markets. Innovation performance provides challenges of a low level of own innovation capabilities and high demands put on the quality of economic activities. Furthermore, structural and performance deformations as well as those of the national innovation system continue to exist (particularly isolation of its key sectors). A big issue of further development will be the ability of domestic factor endowment to offer specific assets for the development of knowledge-intensive activities and for utilization of the technological potential of direct foreign investment transfer. Qualitative sophistication of services and its future potential are still absolutely unmapped, particularly in the light of falling employment in processing industry. The most urgent aspect of human resources quality is considered besides the growing scope of initial education at tertiary level (especially in shorter programmes) also the adaptability to changing qualification requirements during professional life. i.e. the development of new forms and boosting of intensity of continuing education within life-long learning strategies. Conceptual support of talented students is vital for being able to offer highly qualified workers and to use the research potential of university researchers and student and also to establish and develop intensive links between the higher education sector and the corporate sphere in the framework of national innovation system and regional infrastructure supporting innovations.

In relation to economic and political support of competitiveness development, the third generation policies is gaining importance. They are based on a *comprehensive approach* that overcomes the traditional resort concepts. Furthermore, it is necessary to generate new *incentive mechanisms*, which are primarily based on indirect tools stimulating an active approach in the economic subjects themselves (instead of their passive role in the system of directs governmental support). The stress is rightly put on making provision for the attained economic level as well as the level of institutional environment in conceiving and implementation of supporting measures. Absence of this must lead to a low efficiency of implemented measures and ineffective spending of public resources.

The third aspect of centre's research activity involves creation of application of **complex methodological approaches** to the analysis and evaluation of competitiveness, which relate to theoretical basis (in the field of microeconomic or regional competitiveness) and foreign applications in the form of international surveys. However the surveys must be modified and developed to take into account specific features of Czech economy in the integrated European economic space. Context analysis represents the conceptual framework of research. Using the *secondary data* it comprehensively rates the position and development trends in the Czech Republic in the monitored qualitative factors within EU-25 (benchmarking). Context analysis identifies strengths and weaknesses of our position in relation to construction of monitored indicators while critically assessing their informative value. Analysis and evaluation of competitiveness significantly relies on *primary data* acquired from representative and periodically repeated corporate surveys at national, branch and regional level. Their results are interpreted using the results of context analysis and discussion in focus discussion groups.

Implications drawn from the analysis are formulated for the related research as well as the recommendations for appropriate areas of economic policy with emphasis on attaining the set goals. The facts from contextual analysis in combination with evaluation of company surveys so forms <u>a unique interconnection</u> starting from theoretical basis to concrete applications, from international and national level to microeconomic level. The interconnection represents a <u>principal precondition</u> for reaching a qualitatively higher level of research activity and benefits of their results at theoretical , methodological and application level.

# Specification of the research goals of the Centre

### Goals, output and their applications

The aim of the centre's research is a comprehensive analysis of the sources and results of competitiveness of the Czech Republic, and an identification of corresponding policy economic implications for the support of successful transition to knowledge-based economy. The analysis is structured in four components covering the key (and mutually intertwined) aspects of the subject: (1) The component of *growth performance and stability* analyzes the economic growth in CR in an international context, differentiating between the supply and demand factors, including their impact on macroeconomic balance. The analysis of convergence, as compared to other EU members, will explain the observed differences and the causes of the Czech economy falling behind. (2) The component of *institutional quality* assesses the quality of governance and business environment in terms of comprehensive cluster indicators and results of international company surveys, and identifies their relation (and that of other qualitative indicators) to the company performance. (3) The component of *innovation performance* focuses on the evaluation of the qualitative level of economic activities (in terms of exploitation of the own innovation capabilities, or the dependence on

external sources of technology knowledge), and on the identification of their inter-industry differences related to the performance characteristics. (4) The component of *human resource quality* evaluates the level and structure of supply and demand for skills, and preconditions for their improvement, which reflect the characteristics of education and training opportunities and their exploitation in life-long learning, as the precondition of adaptability to changing skill requirements of economic activities. In all the components, the stress is particularly being put on the generation and application of adequate analytical approaches (related back to theoretical starting points), which enable the evaluation of the Czech Republic position in a broader international comparison (within the enlarged EU), and explanation of the causes of the present state and development trends in the indicated growth and qualitative characteristics.

Meeting the research goals over the horizon of five years (with the perspective of continuous development of centre's research activities) reflexes complexity and simultaneously analytical depth of selected approaches. A longer period of time will enable to exploit basic analytical sources that are published over longer intervals (particularly the results of international surveys and comparative projects), and implementation and assessment of own company or expert surveys. Partial outputs are specified for every year (in the form of evaluated and published reports) and over the five year horizon the final output will be produced (in the form of a complex report on competitiveness of the Czech economy). In terms of the type of research activities are in the case of context analysis identified the implications of so far unrealized research activities of the research team and the results of available international and national surveys for proposed analytical approaches, especially the information value of their results and the need to specify the content orientation in more detail. The context analysis will be published annually with a gradually more precise methodology. Five stages of <u>company surveys</u> are distinguished over the horizon of five years. Their outputs will be partly incorporated into the context analysis, partly presented separately. Company survey will be realized starting from outlining their methodology, a pilot survey, a representative survey, evaluation of its results at national and inter-industry level and methodology of survey at regional level and finally it will be carried out and the results will be evaluated. Economico-political implications will be formulated based on the results of context analysis and company surveys. They will be related to a sustainable growth competitiveness in individual monitored areas.

The final output will be represented by the methodology of analyzing and evaluating competitiveness of Czech economy and its application in the form of a *comprehensive report*, which will include four parts. An updated context analysis of Czech Republic's position in a broader international comparison, cross-sectional results of company surveys at national level, their specification according to partial qualitative factors and industry level and according to regional viewpoint (with a broader scope of surveyed subjects). The resulting methodology and the results of its application after five years will enable *periodical* repetition of individual rounds of research in the next period of the centre's existence and thus the evaluation of development trends of monitored qualitative factors and the reflection of identified strengths and weaknesses in the concept and practice of related areas of economic policy. Over a longer time horizon we plan that the comprehensive report will be published with a *three year period*. An updated context analysis will be published annually. In the first year, it will be complemented by the analysis and evaluation of overall results of the company survey, in the second year with their specification according to partial qualitative factors and industry level and in the third year with a regional aspect (a higher number of included regions will depend on available resources provided by regional users).

From the viewpoint of **application the centre's outputs**, the comprehensive report on Czech economy competitiveness is considered to be a flagship of the centre's research activities. It will be important with regard to both external presentation of its results (for institutional users and a wider general public), and with regard to organization and strategy of its solution and conceptual character of doing the research proper (including a tight interconnection of inputs of individual subjects participating in the centre's activities). Research activities leading to implementing this type of output will be interlinked by <u>methodological expertise</u> (based on theoretical bases of the monitored concepts) and by <u>analytical expertise</u> using qualified systemization of available secondary data (benchmarking) and evaluation of primary data acquired by own surveys.

This combination enables to create the output that represents a <u>unique information source</u> for *a wide pro spectrum of subjects* (at both national and regional level) – for the public sector (administration or local authorities) when strategic and implementation documents are prepared to meet the goals of the Lisbon strategy and implemented measures are evaluated. The private sector will use it in the area of business consultancy especially when evaluating the investment climate and development and information agencies or professional unions and associations will use it to identify a desirable bearing of backing and development programmes. Educational institutions of initial and continuing education will be able to identify perspective segments offering educational opportunities and desirable forms of their realization. Last but not least the report results are designed for businesses to *identify own position* according to competitiveness and approaches to its increase in the domestic business sector. These types of users are completely represented at *regional level*, where the report's results can be used to formulate and implement regional development programmes.

A continuous interaction between the research and users of its outputs is represented by focus groups expert surveys to interpret analytical results and formulate economico-political implications and recommendation. An interaction with institutional users will be enhanced by participation of their representatives in *focus group* in key stages of centre's research activities. The interaction will become an integral part of the research and at the same time will provide the participants with the platform, on which they can confront the information from their own practice. Thus, the users will be able to immediately influence the scope of investigated aspects of competitiveness. The spectrum of users will be systematically enhanced according to the outputs of individual stages of solution and according to the content diversification of topics in individual focus groups. At the same time the offer to implement partial analyses will be enhanced according to the recipients needs. The broader public will be informed by regularly released reports on competitiveness of Czech economy and from related *partial outputs* focused on specific areas of investigated issues in the form of working papers of the research centre, specialized seminars and workshops organized by the centre as well as in the form of external individual publication and conference activities. Special web pages will be designed to present centre's activities and their results. The pages will also contain a regularly updated database of references to point to information sources and home and foreign activities in the research of the centre. International conferences will be organized in the third and fifth year of the project's existence. They will be attended by foreign research institutions, institutional users and representatives of collaborating professional public. The conference will review the results of research activities of the centre and discuss their implications for analytical work and economic policy in the monitored areas.

### Foreign activities

In attaining its research goals, the Centre is supposed to collaborate with foreign institutions with similar orientation, namely: in the field of growth and stability - WIIW (Wiener Institut für Internationale Wirtschaftsvergleiche), Vienna; IER (Institute of Economic Research), Ljubljana; UNECE (United Nations Economic Commission for Europe), Geneva; ICEG EC (International Center for Economic Growth European Center), Budapest; CES (Center for Economic Studies), Ludwig-Maximilians-University, Munich; in the field of governance -IRES (Department of International Relations and Political Studies), Central European University, Budapest; EBRD (European Bank for Reconstruction and Development), London; TI (Transparency International), Berlin; FH (Freedom House), Budapest; INEKO (Institute for Social and Economic Reform), Bratislava; in the field of innovation performance SSEES (School of Slavonic and East European Studies), Center for the Study of Social and Economic Change in Europe, University College London; SPRU (Science and Technology Policy Research), University of Sussex; CASE (Center for Social and Economic Research Foundation), Warsaw; OECD – Directorate for Science, Technology and Industry, Paris; TIGER (Transformation, Integration, Globalization Economic Research), Warsaw; in the field of human resources quality - OREF Burgundy (Observatoire régional de l'emploi et de la formation), Dijon; ROA (Research Centre for Education and the Labour Market), Maastricht University; ESRI (Economic and Social Research Institute), Dublin; ILO (International Labour Office), Geneva; National Institute for Adult Education, Budapest; University of Twente, Faculty of Behavioural Sciences, Department of Educational Organization and Management, Enschede.