

**20TH INTERNATIONAL COLLOQUIUM ON REGIONAL SCIENCES
Kurdějov, June 14–16, 2017**

**Development potential of the European territory:
A literature review**

EVA POLEDNÍKOVÁ

**Faculty of Economics, Department of European Integration
VŠB-TU Ostrava, Czech Republic**



CONTENT

- MOTIVATION AND AIM OF PAPER
- METHODOLOGY OF PAPER
- RESULTS
- CONCLUSION
- REFERENCES

MOTIVATION AND AIM OF PAPER

- European regions – key internal and external challenges.
- The EU's diversity and inequalities.



- No uniform theoretical approaches and consensus on the evaluation of territorial development potential in the EU.

MOTIVATION AND AIM OF PAPER

- The **aim of the paper** is to analyse the existing approaches to development potential, specialization and performance of the European territory and to identify the factors, indicators and methods used to development potential evaluation.
- The initial and essential phase of the further research under specific research project.
- **Hypothesis:** Territory with lower levels of disparities and a high level of cohesion achieve higher levels of development potential and competitiveness.

MOTIVATION AND AIM OF PAPER

ACKNOWLEDGEMENT

Regional Specialization and Diversity of the EU 28 NUTS 2 regions: Analysis of Regional Dynamics Determinants

Project registration number:	SP 2017/111 (Ing. Michaela Staníčková, Ph.D.)
Period of research:	1. 1. – 31. 12. 2017
Recipient:	VŠB – Technical University of Ostrava, Faculty of Economics, Department of European Integration

Impact of Economic Shocks on Efficiency and Competitiveness of the European Union in Terms of Regional and International Levels: Nonparametric Approach

Project registration number:	SP 2015/106 (Ing. Michaela Staníčková, Ph.D.)
Period of research:	1. 1. – 31. 12. 2015
Recipient:	VŠB – Technical University of Ostrava, Faculty of Economics, Department of European Integration

METHODOLOGY OF PAPER

- The method of literature review – territorial unit, factors/indicators, methods and results.
- Citation databases of Web of Science, Scopus and EBSCO, internet search engine Google and Google Scholar.
- Keywords, e.g.: indicators/factors of development potential, regional development, socio-economic development, growth, performance, specialization, inequalities.
- English and Czech languages, the period 2000–2017.

RESULTS OF LITERATURE REVIEW - Territorial level, Factors

Author (Year, Title of paper)	Territorial focus	Factors/Indicators of development potential/growth
Berea, R. C., Otoiub, A., Bucurzan (Precup), I., (2014). <i>Determinants of economic growth in cities acting as growth poles in regions from Romania.</i>	cities (growth poles)	university students, unemployment, R&D expenditure, population, migration
Boryczko, A., (2007). <i>Economic Development Potential Of The Krakow Region.</i>	region	high technology, spirit of the place, tangible assets, regional strategy
Capello, R., Perucca, G., (2015). <i>Openness to Globalization and Regional Growth Patterns in CEE Countries: From the EU Accession to the Economic Crisis.</i>	NUTS 2 regions, global, regional, local players	regional degree of openness to globalization, structural characteristics
Crescenzi, R., Rodríguez-Pose, A., (2012). <i>Infrastructure and regional growth in the European Union.</i>	regions	infrastructure, R&D investment, GDP per capita, structural characteristics
Cheymetova, V.A., Nazmutdinova, E.V., (2015). <i>Socio-Economic Potential of the Region and Its Evaluation.</i>	regions	local potential, labour potential, potential socio-economic readiness
Čingule, S., (2009). <i>Regional Development and Economic Potential of the Counties of Latvia.</i>	states, municipalities	infrastructure, entrepreneurship, innovation, intellectual capacity
Dańska-Borsiak, B., Laskowska, I. (2014). <i>Development: An Analysis Of Spatial Relationships.</i>	NUTS 3 subregions	GDP per capita, human and social capital
Đurková, K., Čábyová, L., Vicenová, E., (2012). <i>Regional development in economic core regions.</i>	economic core regions, metropolitan, peripheral and rural regions	localization of enterprises, population, technical and social infrastructure, the available natural resources, impacts of the state economic policy
Ezcurra, R., Gil, C., Pascual, P., (2005). <i>Regional welfare disparities: the case of the European Union.</i>	NUTS 1 regions	national component, the spatial location, the productive structure, R&D expenditure
Gods, U., Gode, N., Serjogina, A., (2007). <i>Regional Development and Economic Potential of the Counties of Latvia.</i>	rural regions	natural resources, economic environment, human capital
Harmaakorpi, V., Pekkarinen, S., (2003). <i>Main Directions of Influencing the Endogenous Regional Development in Latvia.</i>	subregions	regional innovation environment: innovative, learning, networking capability, etc.
Kalnina-Lukasevica, Z., (2003). <i>Development of Regions in Latvia - Growth Factors, Policy Alternatives, Synthesized Development Model.</i>	NUTS 3 regions	innovations, knowledge, human capital, learning, export, infrastructure geographical location, distance from the centre of economic activities, etc.
Mitek, D., Nowak, P., (2015). <i>Regional Specialisation as an Endogenous Factor in the Development of Poland's Provinces.</i>	NUTS 2 regions	the employees, GVA
Safiullin, M. R., Sarach, L. V., Prygunova, M. I., (2016). <i>An evaluation of the regional resource potential as a part of cluster system analysis.</i>	region	environmental, social and economic potential
Smętkowski, M., Wójcik, P., (2010). <i>Regional Development in Central and Eastern Europe.</i>	NUTS 3 regions	economic structure, labour productivity, labour market situation, condition of enterprises, R&D sector, human capital, infrastructure and external attractiveness
Rivera, P.P., (2012). <i>Crisis and Regional Distribution in the European Union: Considerations of Economic Policy.</i>	NUTS 2 regions	population, work activity, unemployment rate, activity rate, production, income
Viturka, M., (2014). <i>Integrative model for evaluation of development potential of regions and its application on an example of the Czech Republic.</i>	administrative districts, NUTS 3 regions	economic, social and environmental factors, spatial perspectives

RESULTS OF LITERATURE REVIEW – Methods, Results

Author (Year, Title of paper)	Method	Results
Ezcurra, R., Gil, C., Pascual, P., (2005). <i>Regional welfare disparities: the case of the European Union.</i>	examine the dynamics of the distribution over time, the non-parametric approach, welfare index	Regional differences in productivity are the main explanatory factor behind observed welfare inequality in the European context. Empirical evidence highlights the importance of variables such as the national component, the spatial location, the productive structure and the percentage of GDP devoted to investment or to R&D expenditure, in explaining the dynamics of the regional welfare distribution in the European Union.
Kalnina-Lukasevica, Z., (2003). <i>Development of Regions in Latvia - Growth Factors, Policy Alternatives, Synthesized Development Model.</i>	the Synthesized Model of regional economic development	Synthesized Model confirm the assumption set in the model about the factors advancing and preventing development.
Milek, D., Nowak, P., (2015). <i>Regional Specialisation as an Endogenous Factor in the Development of Poland's Provinces.</i>	the Krugman dissimilarity index	Regional specialisations, calculated on the basis of the structure of employees and produced GVA, result from historically formed structure of regional economy. The results of calculations differ depending on the method.
Smętkowski, M., Wójcik, P., (2010). <i>Regional Development in Central and Eastern Europe.</i>	beta and sigma convergence analysis, to kernel density estimation, transition matrices, spatial autocorrelation and multi-dimensional comparisons	Differences in the economic structure proved to be a critical dimension of the disparities between the CEE regions. The modern market services sector played a crucial role. The level of industrialisation proved to be far more important.
Rivera, P.P., (2012). <i>Crisis and Regional Distribution in the European Union: Considerations of Economic Policy.</i>	analysis of the variation in the level of spatial concentration of production and per capita income, index of regional potential	Implementation of policies to promote environmental sustainability, economic competitiveness, innovation, learning, knowledge and information as well as their measurements, the strengthening of cultural values, regional networks and development planning, all become necessary to make up territorial cohesion. Regional integration policies should promote regional cooperation to counter the definition of center-periphery development schemes which are generators of spatial disparities.
Viturka, M., (2014). <i>Integrative model for evaluation of development potential of regions and its application on an example of the Czech Republic.</i>	main components of the model are business environment quality (BEQ), innovation potential of companies (IPC) and use of human resources (UHR).	The created model allows for their system identification: BEQ values above in the case of development poles and significant positive deviations of BEQ real values from theoretical values in the case of development axes. Spatial model of the economic development of the Czech Republic, whose foundation stones are 14 poles and 8 developed axes of national significance. Creation of development axes represents an excellent opportunity for an effective orientation of regional policy as the spread of positive effects from development poles contributes to both decreasing regional disparities and increasing regional competitiveness.

RESULTS OF LITERATURE REVIEW – Methods, Results

Author (Year, Title of paper)	Method	Results
Berea, R. C., Otoiub, A., Bucerzan (Precup), I., (2014). <i>Determinants of economic growth in cities acting as growth poles in regions from Romania.</i>	panel models	R&D expenditures have a positive effect, and that unemployment diminishes economic growth
Boryczko, A., (2007). <i>Economic Development Potential Of The Krakow Region.</i>	description	The region possesses unmatched internal assets and valuable framework of education and business. The regional strategy should be modified in order to achieve better connections between the resources and enhance the network of relationships between the participants of economic development.
Crescenzi, R., Rodríguez-Pose, A., (2012). <i>Infrastructure and regional growth in the European Union.</i>	two-way fixed-effect (static), GMM-diff (dynamic) panel data regression estimation methods	There is little evidence of an impact of the transport infrastructure endowment of any given region or of its neighbouring regions on economic growth. Once innovation, social conditions, and migration are taken into account, the coefficients for transport infrastructure endowment become insignificant, while, by contrast, local R&D capacity, local social conditions, and migration are much better predictors of economic performance.
Cheymetova, V.A., Nazmutdinova, E.V., (2015). <i>Socio-Economic Potential of the Region and Its Evaluation.</i>	methods of systematic and comparative analysis, abstraction, induction, deduction, methods of situational and logical framework analysis, expert assessments, the principal component analysis, statistical treatment and synthesis of information, methods of economic-mathematical modeling	Socio-economic potential reflects the complex, multidimensional, aggregated and consolidated processes, communication and relationships. Socio-economic potential of the area is a potential of the region with the use of the whole complex of its resources, the use of the features of the existing and future structure of the economy, geographical location.
Dańska-Borsiak, B., Laskowska, I. (2014). <i>Development: An Analysis Of Spatial Relationships.</i>	Global spatial autocorrelation was tested using the Global Moran's I statistic, and local autocorrelation by calculating the LISA statistics.	The importance of intangible factors is emphasised: human capital and social capital. The relationships between these factors and economic development on the regional level may differ from their interdependence in the national economy. The studies confirm the large diversification of human and social capital measures in the subregions of Poland.

RESULTS OF LITERATURE REVIEW

Proposal of dimensions for Composite Development Potential Index

- Total of 57 literature resources, the period 2000–2017 (2012-2015).
- EU regions at different territorial level (11 NUTS 2).
- Some common dimensions/indicators of development potential:
 - exogenous x endogenous
 - economic x social (x environmental)
 - development potential of demography; infrastructure (social, economic, technical); natural resources; economic structure; research and development; innovation and creativity; entrepreneurship; human capital; regional specialisations; geographical proximity; socio-economic readiness etc.

CONCLUSION

- Most of the authors point out NUTS 3 regions or rural areas, apply the statistical method/ econometric models, show different results.
- No one of the theories, available methods and indicators can be considered as universal.
- Each state, region or rural areas has its own history, current level of development, present potential and future opportunities, which makes it impossible to implement common development strategies.
- Some common dimensions of indicators for construction of Composite Development Potential Index can be identified.

MAIN REFERENCES

- ANTONESCU, D., (2015). Theoretical approaches of endogenous regional development. *MPRA Paper No. 64679*.
- BERNARD, J., (2011). Endogenní rozvojové potenciály malých venkovských obcí– obtížné hledání a měření jejich vlivu. *Sociologický časopis /Czech Sociological Review*, vol. 47, no. 4, pp. 745–775.
- BOHÁČKOVÁ, I., HRABÁNKOVÁ, M., (2004). Development potential in regions and its monitoring. *Agric. Econ. – Czech*, vol. 50, no.6, pp. 261–265.
- BORYCZKO, A., (2007). Economic Development Potential Of The Krakow Region. *SPNA Review*, vol. 3, no. 1, pp. 1–16.
- CAPELLO, R., PERUCCA, G., (2015). Openness to Globalization and Regional Growth Patterns in CEE Countries: From the EU Accession to the Economic Crisis. *Journal of Common Market Studies*, vol. 53, no. 2, pp. 218–236.
- CHEYMETOVA, V. A., NAZMUTDINOVA, E. V., (2015). Socio-Economic Potential of the Region and Its Evaluation. *Asian Social Science*, vol. 11, no. 7, pp. 74–81.
- ČINGULE, S., (2009). Regional Development and Economic Potential of the Counties of Latvia. *Economic Science for Rural Development*, no. 19, pp. 294–306.
- DAŇSKA-BORSIAK, B., LASKOWSKA, I., (2014). Selected Intangible Factors Of Regional Development: An Analysis Of Spatial Relationships. *Comparative Economic Research*, vol. 17, no. 4, pp. 23–41. .
- ĎURKOVÁ, K., ČÁBYOVÁ, L., VICENOVÁ, E., (2012). Regional development in economic core regions. *Review of Applied Socio- Economic Research*, vol. 4, no. 2, pp. 87–92.
- GODS, U., GODE, N., SERJOGINA, A., (2007). Main Directions of Influencing the Endogenous Regional Development in Latvia. *Economic Science for Rural Development*, no. 12, pp. 92–97.
- KALNINA-LUKASEVICA, Z., (2003). Development of Regions in Latvia – Growth Factors, Policy Alternatives, Synthesized Development Model. *Shape and be Shaped: The Future Dynamics of Regional Development Regional Studies Association European Conference 2013*. pp. 1–27.
- MIŁEK, D., NOWAK, P., (2015). Regional Specialisation as an Endogenous Factor in the Development of Poland's Provinces. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, vol. 10, no. 2, pp. 115–135.
- NIEBUHR, A., (2003). Spatial Interaction and Regional Unemployment in Europe. *European Journal of Spatial Development*, no 5, pp. 1–26.
- SAFIULLIN, M. R., SARACH, L. V., PRYGUNOVA, M. I., (2016). An evaluation of the regional resource potential as a part of cluster system analysis. *Journal of Economics and Economic Education Research*, vol. 17, no. 2, pp. 430–432.
- SMĘTKOWSKI, M., WÓJCIK, P., (2010). Regional Development in Central and Eastern Europe. *Regional and Local Studies*, Special issue, pp. 77–105.
- STRAKA, J., TUZOVÁ, M., (2016). Factors Affecting Development of Rural Areas in the Czech Republic: a Literature Review. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, vol. 64, no. 6, pp. 2141–2150.
- VITURKA, M., (2014). Integrative model for evaluation of development potential of regions and its application on an example of the Czech Republic. *Ekonomie E+M*, vol. XVII, pp. 4–19.

THANK YOU FOR YOUR ATTENTION!

eva.polednikova@vsb.cz



Questions/suggestions...?