

Regional Competitiveness And Regional Development Factors In The Czech Republic

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ABSTRACT

The paper is aimed at the competitiveness of the Czech Republic and its regions. The author describes the main factors surrounding the Czech Republic's regional development: human resources (education structure, social infrastructure, settlements, housing), economic efficiency, (Gross Domestic Product, unemployment, wages, firms and enterprises, foreign direct investment and export, research and development, innovation – knowledge economy, technical and transport infrastructure, tourism). The author briefly comments on the main regional disparities. At the close of the paper, the author characterizes the development trends in the Czech Republic's regional structure.

Key words: Regional competitiveness, regional development, regional structures.

JEL Classification: O18, R11

1. INTRODUCTION – REGIONAL COMPETITIVENESS IN THE CZECH REPUBLIC

Economic efficiency and regional competitiveness are key factors of regional development. Regions, towns and municipalities compete in creating, maintaining and promoting economic entities. Such economic entities help generate and stabilise new jobs and new opportunities, affecting to a major extent the welfare, well-being and standard of living in regions and municipalities. Regional competitiveness shows a region's ability to generate revenue and sustain its employment level both in national and international competition.

The competitiveness of the Czech Republic and its regions is essentially a function of the following:

- a) The competitiveness of the economy (the competitiveness of the entrepreneurial environment, how modern the economic structure is, e.g. progressive industries, sophisticated services, research and development bases, innovative application centres, a modern system of research and development and innovative activities, and how likely they will be used in business, and an inclusive and flexible labour market with a qualified and flexible labour force).
- b) An open and flexible society (a society that actively uses opportunities generated both at the global and European levels, a society that continuously increases its education potential, actively solves its own problems such as migration, aging, social exclusion, and builds an efficient system of public administration).
- c) A quality physical environment (protection and development of the environment, a sustainable and usable landscape potential, an accessible territory, the existence of transportation and communication connections and links).
- d) A balanced regional development within the Czech Republic (development parity throughout the Czech Republic and a reduction of the existing disparities, stimulation

of the regions' development potential, strengthening of the role of cities as centres of regional growth and the development and sustainable development of rural areas).

It is obvious that regional development factors change over time and this is related to the degree of knowledge of socio-economic processes on the one side, and how the regions are affected by the development of structures and their interactions on the other side.

2. THE KEY FACTORS OF REGIONAL DEVELOPMENT IN THE CZECH REPUBLIC

The basis for an efficient regional policy is the analysis of factors relevant to regional development, i.e. the identification of key determinants that stimulate regional development.

These factors represent the development potential of the regions and include:

- ❖ Natural resources and natural environment as long-term determinants of regional development;
- ❖ Tangible factors in the form of their production potential and infrastructure ;
- ❖ Intangible factors, namely innovation and the ability to create and spread it, the availability and effective use of information and communication technologies (ICT), environmental sustainability, the institutional environment;
- ❖ Human resources with a relevant level of skills and professional education.

The stage of development of Czech society and the knowledge of socio-economic processes that is on par with the most developed countries of the world, especially the empirical knowledge from the past few years, confirm that human resources are a basic factor for regional development in post-industrial societies.

Another factor affecting regional development is the structure of settlements, including their development trends. This is closely related to the issue of housing availability, which affects the mobility of the labour force and becomes another major factor of regional development.

Economic efficiency and regional competitiveness are undoubtedly essential factors of regional development. A competitive region is attractive (for investors and know-how; a characteristic feature is the presence of business and immigration).

Selected basic indicators for comparing regional competitiveness and socio-economic levels

A basic indicator for comparing regional competitiveness and socio-economic levels is Gross Domestic Product, which represents the value of goods and services that were produced in a given region. For example, we can use the GDP development in the regions of the Czech Republic and divide the regions into several groups depending on GDP variances.

Table 1: Development of the regional GDP (constant prices), 1995=100%

Region	2000	2001	2002	2003	2004	Average rate of growth 1996-2004
Prague	122.8	134.0	130.8	129.8	136.4	4.0
Central Bohemia	119.1	121.5	125.6	128.4	133.5	3.7
South Bohemia	106.5	105.0	111.7	114.5	119.1	2.1

Plzeň	104.4	105.6	104.4	110.4	114.5	1.6
Karlovy Vary	94.5	91.4	96.8	100.2	102.0	0.3
Ústí	92.1	89.7	91.5	97.8	103.1	0.3
Liberec	106.2	107.1	112.0	110.8	114.4	1.6
Hradec Králové	108.9	108.0	113.4	119.3	122.1	2.5
Pardubice	104.0	103.9	107.3	114.1	118.7	2.1
Vysočina	108.9	113.4	111.5	115.8	122.1	2.6
South Moravia	103.7	106.6	110.8	115.5	121.0	2.3
Olomouc	102.1	101.8	106.5	111.0	116.4	1.8
Zlín	98.9	100.1	98.7	107.2	110.6	1.2
Moravia-Silesia	96.1	97.2	98.8	104.1	112.4	1.4
Czech Republic	107.5	110.3	112.0	115.5	121.0	2.3

Source: Regionální účty 2004

Based on the accumulated GDP changes, the regions can be divided into the following categories:

❖ Regions with GDP growth markedly exceeding the Czech Republic's GDP growth. The capital city of Prague was the most dynamic region in the period in question with an efficiency growth which almost doubled the Czech Republic's average. The metropolitan character of regions with significantly different economic structures allows for substantial growth acceleration which can continue in the period to come. Prague's significant development also has positive effects on the neighbouring Central Bohemia Region, namely because Prague does not dispose of large areas suitable for further extensive expansion. There are differences in the prices of labour and land between Prague and the Central Bohemia Region and a certain improvement of infrastructure around Prague can result in investment and capital deconcentration and the opening of a new transportation corridor might result in a higher number of people commuting to Prague. The Central Bohemia Region whose efficiency used to be negatively affected by Prague in the long run has benefited from Prague's dynamic development. The GDP growth in the period in question ranked second right after Prague. Areas in close proximity of Prague are becoming attractive for people from the entire Czech Republic.

❖ Regions with GDP growth comparable to the Czech Republic's growth. The dynamics of most other regions is closely correlated with the Czech Republic. In spite of that we can distinguish two groups of regions. First are those whose dynamics is several points higher; these include the Vysočina and Hradec Králové Regions. The South Moravia and South Bohemia Regions are at the Czech Republic's average. The regions whose dynamics falls slightly behind include the Plzeň, Liberec and Pardubice Regions. The Olomouc and Moravia-Silesia Regions have started to break their stagnation over the past year.

❖ Regions with GDP growth markedly below the Czech Republic's average. The worst dynamics which has been decreasing in the long term can be observed in the Karlovy Vary and Ústí Regions. The critical development of these regions is also reflected in negative average growth rates of the regions. These regions have been undergoing a deep social and economic restructuring which has not finished yet. However, the latest data show a growth acceleration potential in these regions. Together with the Moravia-Silesia, Olomouc and Zlín Regions, which have stagnated (an average growth of approximately 1.5%), they form a group characterised by insufficient economic growth of the entire regions or their parts, accompanied by negative unemployment trends. The unemployment rate in these

regions is far above the national average. The above-mentioned areas include structurally affected regions and a significant part of economically weak regions of the Czech Republic.

Table 2: Regional GDP per capita, Czech Republic = 100 (%)

Region	2000	2001	2002	2003	2004
Prague	199.4	210.9	206.5	203.1	201.8
Central Bohemia	97.8	95.9	96.3	94.9	93.6
South Bohemia	89.3	86.7	90.6	89.8	89.0
Plzeň	95.3	94.3	91.5	93.4	92.6
Karlovy Vary	83.0	78.8	81.5	80.7	79.9
Ústí	83.4	80.6	81.3	83.2	84.5
Liberec	86.1	84.2	86.5	82.2	81.5
Hradec Králové	91.3	88.4	90.8	91.9	90.2
Pardubice	85.5	83.4	84.4	85.5	85.1
Vysočina	88.6	91.8	87.1	86.3	86.5
South Moravia	90.2	90.3	92.9	93.8	93.9
Olomouc	77.7	75.6	77.2	77.9	78.0
Zlín	84.3	83.1	80.1	82.8	82.2
Moravia-Silesia	78.0	77.6	77.9	78.7	82.1
Czech Republic	100	100	100	100	100

Source: Regionální účty 2004

The above table compares regional GDP generated per capita and the Czech Republic's average. Different dynamics of GDP growth in the regions is also reflected in the efficiency ratio changes of different regions compared to the national level. Overall, we can say that the ratio of different regions compared to the national average is rather stable. However, certain trends can be detected that will eventually result in different positions for some regions. If we disregard the phenomenon of Prague, these include regions in which efficiency has been improving over the long term, in other words the gap between any given region's efficiency and the country's efficiency has been decreasing. A good example is the South Moravia Region, where the gap decreased by more than 3.5% between 2000 and 2004.

We can say that GDP per capita is a suitable comprehensive gross indicator for comparing regional competitiveness and socio-economic levels.

Different indicators can measure the socio-economic level of regions, in this case the standard of living, where the average wage per worker indicator seems to be one of the most suitable.

When evaluating the regions according to gross average wages and their development from 2000 to 2004, we can again see Prague's leading position. The significant difference between Prague and the other regions means that the average value of the Czech Republic is slightly deviated upwards, meaning that the national average is significantly better than individual regional averages.

The level of wages is influenced by the employment structure, the number of entrepreneurs, the unemployment rate, the education of labour force, and the beginning level of wages (e.g. the Moravia-Silesia Region). Regional differences between price levels are also important as they modify the actual level of wages.

There are two current reasons for the growing export efficiency of the Czech economy. First is the Czech Republic's entry into the single EU market, and second is the export effect of direct foreign investment.

If we follow the export efficiency of the regions, then we can say that their order according to the share in the total Czech Republic's export significantly differs from the order of regions measured by export per capita. For example the Moravia-Silesia and South-Moravia Regions, which are in the top half of the list according to the total export, ranked much worse when measured by export per capita. Regions that ranked better according to export per capita compared to the aggregate Czech Republic's export include the Karlovy Vary, Liberec, Hradec Králové and Vysočina Regions. The export efficiency is not really related to the economic efficiency measured by GDP per capita; however, it is closely related to direct foreign investment.

As far as the export structure is concerned, we can say that the export covers all SITC categories. The fact that category 7 "Machines and Means of Transport" accounts for the biggest portion of export in most regions is certainly positive. Exceptions were the Karlovy Vary, Ústí, Zlín and Moravia-Silesia Regions where the biggest share of exported goods included semi-finished products and materials (SITC 6), which also ranked second in the Central Bohemia, Liberec, Hradec Králové, Pardubice, Vysočina, South-Moravia and Olomouc Regions. In the South-Bohemian and Plzeň Regions, industrial consumer goods (SITC 8) ranked second; in the capital city of Prague it was mineral fuels, lubricants and similar materials (SITC 3).

There are significant difference among the regions of the Czech Republic as to the territorial distribution of export. The goods structure reveals some "surprises", e.g. the share of fuels in the aggregate Prague's exports is naturally caused by the fact that many organisations have their registered offices in Prague (statistical effects). Both the above goods structure and the territorial structure largely support the hypothesis that the export efficiency of regions is not the most important criterion, as the efficiency is based on the historical causes of the distribution of the Czech Republic's export capacity into regions modified by direct foreign investment.

3. MAIN REGIONAL DISPARITIES

Based on the differentiation of factors affecting regional development and according to different initial conditions, locations and levels of urbanisation, the development of the different regions of the Czech Republic showed different dynamics and different changes in territorial economic structures.

If we compare the key factors of the regional development, we can see clear a worsening of interregional disparities, which can be described as follows:

- ❖ Gaps in the economic efficiency among different regions get substantially bigger for a number of indicators relevant to the living standard of the population (GDP/capita, average wages, unemployment rate, etc.);
- ❖ There are major differences in the unemployment rates and income per capita among different districts;
- ❖ Regions which have to undergo an extensive industry restructuring (mainly the Ústí and Moravia-Silesia Regions) continue showing a high unemployment rate and required structural changes cannot be implemented fast enough;

- ❖ The gap between rural and urban areas is getting bigger, bringing further disadvantages for rural areas. Municipalities in rural areas dispose of unfavourable conditions for businesses and have to deal with aging rural population;
- ❖ The economic level of cross-border districts along the north-east border of the Czech Republic is falling behind;
- ❖ Continuing insufficient connections of north-east Moravia and Silesia to trans-European communication corridors and to the capital, which results in a lack of interest by investors, namely foreign investors, in this region;
- ❖ Differences in the number of people with university degree in two biggest cities (Prague and Brno) and the other regional cities;
- ❖ Bad environment due to former industrial activities, namely in north-west Bohemia and north Moravia, as well as in Prague and other big cities because of growing traffic.

4. DEVELOPMENT POLES

The competitiveness of regions is not affected only by production indicators, but also by the overall structure of production and production capacities, innovative features, the quality of labour force, and, last but not least, by the settlement structure as the economic growth is closely related to urbanisation.

Big conurbations with diversified economic structures and industries that are able to generate growth in their surroundings establish development poles. The importance of cities as growth poles is based on the following factors:

- population and its growth,
- competitiveness,
- communication connections.

Not every city reaches such results as to act as a pole and its external influence is therefore limited. Development poles are currently characterised by their involvement in knowledge-based economy.

The only development pole in the Czech Republic, measured by European standards, is the capital city of Prague which has been constantly reinforcing its position and deepening the gap between other regions. Thanks to the advantages of a conurbation, a growth centre can absorb innovations more quickly than other areas, which dynamically differentiates the city from its surroundings. Other development poles are Brno (the GDP per capita in the South-Moravia Region in 2001 was at 90.8% of the Czech Republic's average) and Plzeň (the Plzeň Region was at 96.9% of the Czech Republic's GDP).

The development poles face specific problems that should not be omitted, such as a transportation infrastructure the quality and quantity of which does not correspond to the growing traffic and related environmental damage, brownfields, a functional use of the territory that is far from being optimal, complex housing problems (the regeneration of panel housing estates), a lack of greenery, etc.

In the 1990s the settlement (regional) hierarchy became stronger and the position of regional centres (namely urban centres, mezoregional and some microregional centres) that constitute the backbone of settlement (regional) systems stabilised, generating an ever growing share of production in the Czech Republic, reinforced. These centres have a distinct hierarchy:

- urban centres of supranational importance – Prague (the main development centre of Bohemia and the entire Czech Republic);

- 1st class regional urban centres – Brno (the main development centre of Moravia);
- 2nd class regional urban centres – Ostrava (the development centre of North Moravia);
- 1st class mezoregional centre – Plzeň (the development centre of South-west Bohemia),
- 2nd class mezoregional centre – Olomouc (Central Moravia), Liberec (North Bohemia), Hradec Králové and Pardubice (East Bohemia), Ústí nad Labem (North-west Bohemia), České Budějovice (South Bohemia), Zlín (East Moravia) and Karlovy Vary (West Bohemia);
- Significant regional development centres – Mladá Boleslav, Kolín, Opava, Uherské Hradiště, Jihlava, Cheb, Jablonec nad Nisou, Tábor – Sezimovo Ústí, Prostějov and others.

5. FINAL COMMENTS

The analysis of the key factors of the regional development shows that one of the strengths of the Czech Republic's regional development is qualified and still relatively cheap labour force. Nevertheless, certain professions (based on qualification) are becoming scarce in some parts of the regions due to the development of new entrepreneurial activities related to the influx of direct foreign investment, which is a negative trend both for competitiveness and for regional development in general.

Other key factors of the growth of regional competitiveness include the above development of production capacities, related to direct foreign investment, which is closely connected to the actual existence of areas for business development in the regions. This development creates conditions for establishing new links among domestic entrepreneurs and their potential future entry into foreign markets. This fact also helps to identify one of the reasons for the dynamic development of SME in the Czech Republic.

Identified weaknesses include mainly those that continue slowing down the development of business activities, e.g. complications related to the very start of business activities. Second, there are weaknesses related to the insufficiencies in different infrastructure areas, e.g. transportation and communication. Third, there are weaknesses related to the functioning of the labour market, e.g. low labour force mobility, housing problems, etc. A generally low support of the development of science and research, cooperation between research institutions and entrepreneurs and knowledge-based economy in general constitute a specific issue, which is negatively reflected in the regions' competitiveness in today's global environment.

REFERENCES

- Hampl M. a kol.: Regionální vývoj: specifika české transformace, evropská integrace a obecná teorie. Univerzita Karlova v Praze, 2001, 328 s.
- OECD Territorial Reviews - Czech Republic. Organisation for Economic Co-Operation and Development, Paris, 2004, 141 s. ISBN 92-64-10639-1.
- Skokan K.: Konkurenceschopnost, inovace a klastry v regionálním rozvoji. Repronis, Ostrava, 2004, 160 s. ISBN 80-7329-059-6.
- Viturka M.: Konkurenceschopnost regionů, možnosti jejího hodnocení a stimulace. In: X. Mezinárodní kolokvium o regionálních vědách. Masarykova univerzita v Brně, 2007, s. 44-55. ISBN 978-80-210-4325-1.
- Wokoun R.: Readiness of the Czech Republic for the EU regional policy. In: Readiness of the candidate countries for the EU regional policy. Conference Almanac. Bratislava, 2003. s. 147-156. ISBN 80-89041-73-6.

Wokoun R.: Fundamentals Problems of Regional Development in the Czech Republic and New Challenges. In: Local Development as a Driver for Growth in Central and Eastern Europe. Organisation for Economic Cooperation and Development (OECD), MMR, 2007, s. 13-17. ISBN 978-80-87147-03-0.

Wokoun R.: The Preparation of New Strategic Framework for Cohesion Policy in the Czech Republic. In: Local Development as a Driver for Growth in Central and Eastern Europe. Organisation for Economic Cooperation and Development (OECD), MMR, 2007, s. 49-50. ISBN 978-80-87147-03-0.

Wokoun R., Kouřilová J., Macháček J.: Regional and Environmental Aspects of Urbanization in the Czech Republic. p. 187-204. In: Šauer P., Nankervis A., Mensik S.: Sustainability in Global Services: Selected Essayes. Prague, 2004. Prague, 2004. 236 s. ISBN 80-86709-04-3.

Wokoun R. a kol.: Regionální rozvoj a jeho management v České republice. Oeconomica, VŠE, Praha, 2007, 250 stran. ISBN 978- 80-245-1301-0.

Wokoun R., Malinovský J. a kol.: Regionální rozvoj. Linde Praha a.s., 2008, 322 s. ISBN 978-80-7201-699-0.

Národní rozvojový plán České republiky 2007-2013. MMR ČR, leden 2006 (version approved by the Czech Government).