

Magdalena MyszkowskaWrocław University of Economics
e-mail: magdalena.myszkowska@ue.wroc.pl

**THE COMPETITIVENESS LANDSCAPE
IN CENTRAL AND EASTERN EUROPE**

**KRAJOBRAZ KONKURENCYJNOŚCI
KRAJÓW EUROPY ŚRODKOWO-WSCHODNIEJ**

DOI: 10.15611/e21.2015.4.01

Summary: The aim of the paper is to present the competitiveness landscape of 10 Central and Eastern European countries: Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia (CEE). The analysis covers various interrelated competitiveness factors, including enterprise environment, education, labour market and employment, innovation, technological progress thus allowing one to identify various aspects of competitiveness and provide insights into what drives the productivity and prosperity in these countries. The performance level of each of the CEE country is compared with others from that group; additionally a comparison is made with other European regions, some advanced economies and large emerging economies. The paper analyses and measures the competitiveness of the CEE, the extent to which progress is made in terms of achieving the competitiveness goals, and points out the key reforms and investments that implementation CEE countries should consider in order to tackle the existing challenges and close the competitiveness gap between other EU countries as well as other more advanced. This could serve as a starting point for defining a widely supported competitiveness agenda aiming at a long-term and stable economic and social progress throughout the CEE region.

Keywords: Central and Eastern Europe, competitiveness, productivity.

Streszczenie: Celem artykułu jest zaprezentowanie krajobrazu konkurencyjności 10 krajów Europy Środkowo-Wschodniej (EŚW): Bułgarii, Czech, Estonii, Litwy, Łotwy, Polski, Rumunii, Słowacji, Słowenii i Węgier. Analiza obejmuje różne wzajemnie powiązane czynniki konkurencyjności – w tym otoczenie przedsiębiorstw, edukację, rynek pracy i zatrudnienie, innowacje, postęp technologiczny, umożliwiając tym samym identyfikację rozmaitych aspektów konkurencyjności oraz wgląd w czynniki determinujące produktywność i dobrobyt tych krajów. Wyniki poszczególnych krajów są porównywane z charakterystyką innych państw w regionie EŚW i dodatkowo z wynikami innych krajów europejskich, wybranych krajów rozwiniętych oraz dużych gospodarek wschodzących. Artykuł analizuje i mierzy konkurencyjność krajów EŚW, zakres w jakim uzyskano postęp w osiąganiu wyznaczonych celów konkurencyjności oraz wskazuje kluczowe reformy i inwestycje, których implementację kraje EŚW powinny rozważyć, aby sprostać istniejącym wyzwaniom i zmniejszyć lukę konkurencyjną względem innych krajów Unii Europejskiej, a także innych

bardziej rozwiniętych państw. Może to posłużyć jako punkt wyjścia do zdefiniowania programu na rzecz wzrostu konkurencyjności ukierunkowanego na długotrwały i stabilny rozwój społeczny i gospodarczy w całym regionie EŚW.

Słowa kluczowe: Europa Środkowo-Wschodnia, konkurencyjność, produktywność.

1. Introduction

The move towards globalization and regionalization – that has increased pace over the past decades – has had a strong influence on the driving forces and business landscape, which creates and shapes the strategic opportunities and requirements for economic development, growth, employment levels, and social and environmental sustainability. The Central and Eastern European countries (CEEs) play an important role in the European region as emerging markets, competitive players in manufacturing and services, and political-economic actors. Compared to Western European states and business entities, those in the CEE receive limited and sporadic coverage in business literature, although the changing dynamics in the European region makes these a captivating academic subject, a high priority policy-making arena, and an important field for international business strategic decision makers. The paper aims to contribute to the knowledge of the CEE states by means of a comparative regional study of various factors influencing their competitiveness levels.

The economic productivity is one of the most important aspects shaping the competitiveness of a state. Therefore, the most competitive economies are able to provide high (and increasing) standards of living, allowing all members of the society to contribute to and benefit from the prosperity. In addition, competitive economies also have to be sustainable – meeting the needs of the present generation while not compromising the ability of future generations to do the same.

2. Methods

The goal of the paper is to assess the competitiveness landscape of 10 CEE economies: Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia. The paper identifies various aspects of competitiveness, providing insights into what drives the productivity and prosperity of these countries. The paper has two aims. First, it provides the framework for identifying the general strengths and weaknesses that need to be taken into account when aiming to build a highly competitive CEE region, and additionally a sense of the challenges CEEs currently face. Second, the paper benchmarks the CEEs' average competitiveness performance against some highly advanced countries¹, large

¹ Such as the United States, Japan and Switzerland, which rank at the top of most comprehensive competitiveness reports.

emerging BRIC economies² and other European regions (Northern/North-Western/Southern Europe).

The Global Competitiveness Report by the World Economic Forum (WEF) is the most comprehensive annual publication in international competitiveness. Defining competitiveness as “the set of institutions, policies and factors that determine the level of productivity of a country”, Global Competitiveness Index (GCI) scores are calculated by drawing together country-level data covering 12 interconnected categories – the pillars of competitiveness – that collectively make up a comprehensive picture of country’s competitiveness. The 12 pillars are as follows: institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labour market efficiency, financial market development, technological readiness, market size, business sophistication, and innovation.

The Europe 2020 Competitiveness Report is another complementary measure of competitiveness introduced by WEF in order to assess Europe’s progress in enhancing competitiveness based on the Europe 2020 strategy³ [European Commission 2010]. The 2014 Report, the second in a biennial series, provides a timely update and review of Europe’s performance in becoming smart, inclusive and environmentally sustainable⁴, closely following the Europe 2020 seven flagship initiatives: enterprise environment, digital agenda, innovative Europe, education and training, labour market and employment, social inclusion and environmental sustainability.

Both of these tools are used in the described research.

3. The competitive strengths and weaknesses of CCEs

The CEE economies are characterised by the physical, demographic and socio-economic diversity and thus vary substantially in terms of their overall international competitiveness rankings, nevertheless a number of strengths and weaknesses that are shared between these can still be identified.

According to the WEF’s recent Global Competitiveness Report [World Economic Forum 2014b], Estonia and the Czech Republic remained the best performers in the region, ranking 29th and 37th globally, respectively; while the Slovak Republic was ranked as the least competitive CEE state (75th). It is worth noting that although the competitiveness levels of CEE have improved since the last edition of the report in 2013, over the nine-year period (since 2006 to 2014) only three countries (i.e. Bulgaria, Poland, and Romania) have improved their world competitiveness standing.

² In recent years, the BRIC countries have rapidly become global players and, in spite of their slowing growth, are still regarded as a global benchmark.

³ The EU’s 10-year growth strategy launched by the European Commission (EC) in March 2010.

⁴ The three instruments of the Europe 2020 strategy are: 1) smart growth – developing an economy based on knowledge and innovation; 2) sustainable growth – promoting a more resource-efficient, greener and more competitive economy/decoupling economic growth from resource use; 3) inclusive growth – fostering a high-employment economy delivering social and territorial cohesion.

Table 1 describing the score achieved by the CEEs in the overall GCI and its 12 pillars, allows for a more fine-grained analysis of the results. The different shadings used in the presentation of the data aid in a ready identification of strengths and weaknesses and of emerging regional patterns.

The analysis of the data presented in the table reveals that the competitive strengths of the CEEs are based on a number of common features. These countries continue to receive a relatively high-rate assessment for their health and primary education. A healthy and well-educated workforce is crucial for economies that want to move up the value chain beyond simple production processes and products by producing more sophisticated or value-intensive products.

The notable strengths include a good-quality higher education and training systems, providing the workforce with the skills allowing for a quick adaptation to the rapidly changing environment and laying the groundwork for high levels of technological adoption and innovation⁵. A continued strong focus on education would help to maintain the skill levels needed to provide the basis for the sustained innovation-led growth. The region can draw on a well-educated workforce, although the high levels of emigration observed recently suggests that the available workforce will continue to shrink in the future – which is especially true of the younger demographic.

In addition, the region continues to benefit from a number of competitive strengths in moving to a more sustainable macroeconomic situation, reflecting its relatively well-managed public finances, at a time when many (especially Southern European) countries are struggling. Sound macroeconomic conditions also contribute to a well-functioning economy that can allow, for example, for financial resources to flow to the most productive activities and investments.

Furthermore, the CEE countries rely on their strong commitment to adopting new technologies for productivity enhancements, particularly in the case of Lithuania and Estonia, although continuous technological development is necessary, given their still mediocre rank in terms of this indicator.

Notwithstanding these strengths, the rise in overall competitiveness levels continues to be hampered by some critical structural weaknesses of the CEEs economies. The labour markets remain extremely rigid, hindering employment growth; financial markets are not sufficiently developed and are unable to provide the required levels of financial support for business development be it through the equity market, loans or venture capital. Other institutional weaknesses are related to the inefficiencies of the goods markets. The CEE countries have already started to address some of the most pressing challenges by implementing a series of structural reforms to improve the functioning of their goods, labour, and financial markets. The liberalization of certain services, the implementation of a labour market reform to

⁵ Although it must be said that the quality of this education is not always in line with the productive needs of the countries.

Table 1. Performance of CCEs in the 2014–15 GCI and the 12 composing pillars, rank out of 144 economies (score 1-7)

Economy	Rank	Score	BASIC REQUIREMENTS				EFFICIENCY ENHANCERS						INNOVATION AND SOPHISTICATION FACTORS	
			Institutions	Infrastructure	Macroeconomic environment	Health and primary education	Higher education and training	Goods market efficiency	Labour market efficiency	Financial market development	Technological readiness	Market size	Business sophistication	Innovation
Estonia	29	4.71	5.0	4.8	6.0	6.3	5.5	4.9	5.0	4.7	5.3	3.1	4.3	4.0
Czech Rep.	37	4.53	3.8	4.7	5.4	6.2	5.0	4.5	4.3	4.5	5.0	4.5	4.5	3.7
Lithuania	41	4.51	4.0	4.7	5.3	6.2	5.3	4.6	4.3	4.1	5.4	3.6	4.3	3.6
Latvia	42	4.50	4.1	4.6	5.5	6.3	5.1	4.7	4.8	4.6	5.1	3.2	4.1	3.3
Poland	43	4.48	4.0	4.2	4.8	6.2	5.0	4.5	4.1	4.6	4.5	5.1	4.1	3.3
Bulgaria	54	4.37	3.3	4.1	5.4	6.0	4.5	4.4	4.2	4.2	4.7	3.9	3.6	2.9
Romania	59	4.30	3.6	3.7	5.2	5.5	4.6	4.2	4.0	4.1	4.5	4.4	3.8	3.3
Hungary	60	4.28	3.7	4.6	4.8	5.8	4.7	4.4	4.2	3.9	4.4	4.3	3.8	3.5
Slovenia	70	4.22	3.8	4.9	4.3	6.5	5.3	4.4	3.9	2.9	5.0	3.5	4.1	3.6
Slovak Rep.	75	4.15	3.3	4.2	5.2	5.5	4.6	4.4	3.9	4.5	4.4	4.0	4.0	3.2

Note: colour coding according to maximum and minimum scores of the sample.

Source: own compilation based on [World Economic Forum 2014b].

mitigate its rigidities, and the restructuring of the financial system are all measures aimed at improving the efficiency in the allocation of resources, the full effects of which are likely to become more visible in the medium term.

Going forward, the CEE economies should also look into more effective ways of supporting the growth of highly competitive and effective markets, which would lead to the emergence of the right set of incentives aiding in quicker transformation of the knowledge assets into new products and services with higher added value. Additionally, it is also highly advisable for the CEEs⁶ to increase the trade openness and foster the scale opportunities provided by the large (domestic and foreign) markets, as these two elements continue to receive a poor rating.

Continuing the development of competitiveness levels requires a significant upgrade of transport infrastructure, which is considerably underdeveloped in terms of international standards. Although some progress has been made over the past few years in this area, it is not sufficient to create the step change necessary to reduce the effect of distance between regions, integrate the national markets and create economically-viable connections to the markets in other countries and regions.

On the other hand, the competitiveness of the CEEs would be boosted by reinforcing the efficiency and transparency of their public institutions, which influences the investment decisions and the organization of production and plays a key role in the ways in which societies distribute the benefits and bear the costs of development strategies and policies.

As CEE economies transition to the innovation-driven stage of development, they have to focus more strongly on fostering innovation possibilities and business environment in order to ensure that product and process innovations continue to drive their productivity. Stronger R&D orientation of companies, increased government procurement of advanced research products, and intensified collaboration between universities and the private sector would help the countries to move toward a more future-oriented development path. In order to strengthen their competitiveness, CEEs must also improve on the state of cluster development as close geographical proximity of companies and suppliers from a particular sector heightens the efficiency, creates greater opportunities for innovation in processes and products, and reduces barriers to entry for new firms.

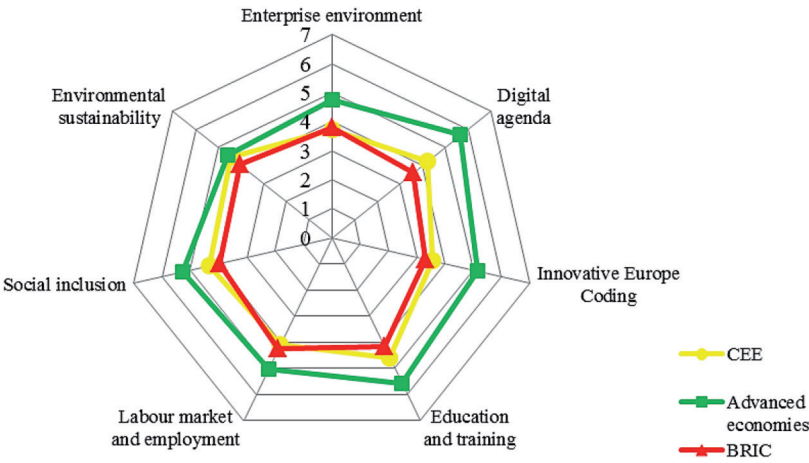
All in all, the assessment of the competitiveness landscape of the CEEs is very mixed. Much remains to be done, if these countries want to become a more competitive, prosperous, and harmonious group. Although CEE economies have enjoyed brisk economic growth over the past decade, the foundations remain relatively shaky for a number of countries. Thus, addressing their weaknesses is crucial for bridging the competitiveness gap between CEEs and other European regions as well as some well-developed economies elsewhere.

⁶ Except Poland, which has by far the largest market in the region.

4. The efforts of the CEE countries aimed at ensuring smart, inclusive and sustainable competitiveness

Overall, according to the WEF’s recent The Europe 2020 Competitiveness Report [World Economic Forum 2014a], the CEEs continue to underperform in comparison to Northern and North-Western European countries and other advanced economies in terms of laying the foundations for smart, inclusive and sustainable growth.

Figure 1 provides a more detailed analysis using the seven pillars of the Europe 2020 Competitiveness Index. It shows the comparative competitiveness profiles of the CEEs, eight advanced, and four BRIC economies.



Note: Advanced economies: Canada, Hong Kong SAR, Japan, Korea Rep, Norway, United States, Singapore, Switzerland; BRIC economies: Brazil, China, India, Russian Federation.

Figure 1. Performance of CEEs in Europe 2020 Competitiveness Report 2014 against comparator economies by pillar, (score 1-7)

Source: own compilation based on [World Economic Forum 2014a].

As expected, with an average value of 4.01 on the smart growth sub-index⁷, the CEEs are significantly outdistanced by the advanced countries in developing an economy based on knowledge and innovation that can help facilitate the transition to higher value added and more productive activities. The gap in terms of creating a knowledge-based economy is particularly wide in comparison to Singapore (5.58) and Switzerland (5.47) and is evident in all four pillars.

CEEs, offering less favourable conditions for business development than other countries and driven by less competitive markets, have more regulatory obstacles

⁷ Smart growth sub-index covers four pillars: enterprise environment, digital agenda, innovative Europe Coding, education and training.

and fewer funding opportunities aiding in establishing a company and supporting its growth. In addition, the CEEs fall behind other economies in promoting a digital agenda with integrated digital markets and higher levels of ICT. Similarly, the data indicates that the innovative capacity of CEEs is lower than that of the advanced economies. In addition, comparatively low patent application numbers not only indicate a low level of innovation, but also may be a reflection of the lack of knowledge and capacity of small and medium enterprises to efficiently deal with the process of filing patents. Given the critical role of intellectual property in attracting investment, protecting against competitors and distinguishing businesses from one another, policies and information-sharing to facilitate patent filing – particularly for young companies – could help close the gap. Moreover, the CEEs also show weaker links between academia and business, which hinders the translation of fundamental research into high-value-added products. More also needs to be done to improve the overall quality of the educational system, through leveraging education and training activities, to provide the skills needed to build and strengthen the knowledge-based economy.

The declining performance of CEEs on the overall inclusive growth sub-index as measured in 2014 can also be thought of as the consequence of the economic crisis⁸. The region registers an average value of 4.21 compared with 5.74 for Switzerland and 5.64 for Norway. Figure 1 points to the region's labour market as the cause of its setback in laying the foundations for inclusive growth. The CEEs' comparatively low score of 4.08 reflects a difficulty to provide gainful employment and their labour markets are characterised by strong rigidity. Most worryingly, the CEEs are significantly outdistanced in terms of ensuring social cohesion, meaning the situation where the benefits of growth and jobs are widely shared, and people experiencing poverty and social exclusion are enabled to live in dignity and take an active part in society.

In terms of sustainable growth, the CEEs perform relatively well. They continue to fare better in promoting a more resource-efficient, greener and more competitive economy compared with the Republic of Korea, Hong Kong and the USA. However, the region is trailing far behind Norway, Switzerland, Canada and Japan, suggesting that more can be done towards achieving a high-quality and well-managed natural environment.

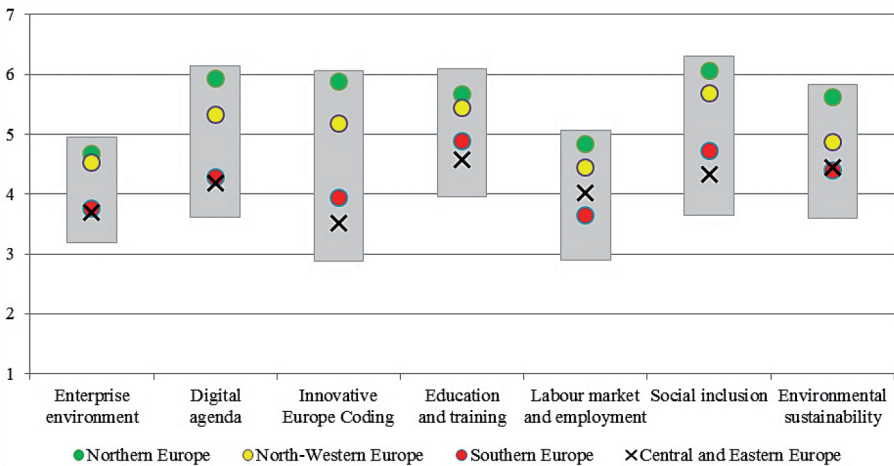
Overall, the CEEs and the BRIC economies perform in a similar fashion, most notably in terms of enterprise environment, framework conditions and access to finance for research and innovation and labour markets' efficiency and flexibility. The biggest difference among the two groups appears in terms of the development of ICT and environmental sustainability, where the emerging BRIC economies still face a considerable gap.

⁸ Inclusive growth sub-index covers two pillars: labour market and employment and social inclusion.

The comparison of the competitiveness levels among the EU member states reveals large differences in terms of innovation, ITC development and social inclusion. The differences are particularly evident in such areas as innovation, where the “innovation gap” separates the best performers – headed by the Nordic countries – from the worst – the CEEs (Hungary, Latvia, the Slovak Rep., Bulgaria and Romania). Overall, Central and Eastern Europe is falling behind North-Western and Northern Europe in terms of innovation. The number of patent applications, for instance, is 16 times higher in the Nordic countries compared with the CEE, and the collaboration between the industry and academia aimed at facilitating the translation of research into marketable products is critically higher in the former. Similarly, Europe is divided digitally, with an extremely well-performing north, led by Finland, Sweden and the Netherlands, compared with a trailing centre and east. Here, the notable exception is Estonia, which compares well with such countries as Germany and France, and is well ahead of its fellow Baltic countries (Latvia and Lithuania).

The competitiveness gap also reflects a divide in building more inclusive societies at the national level. Countries with a long tradition in consensus-based decision-making do well, as do those economies with strong social safety nets such as Denmark and Belgium. This stands again in stark contrast to the less-inclusive societies in Europe’s south-east and east, where the ranking ends with Poland, Romania and Bulgaria.

More also needs to be done in terms of training and educating the CEEs young demographic, since a highly skilled and educated workforce is the backbone for



Note: The length of each bar is determined by the score of the best and worst performing EU member state.

Figure 2. Europe 2020 Competitiveness Index – score dispersion among EU regions, (score 1-7)

Source: own compilation based on [World Economic Forum 2014a].

smart growth. Moreover, the quality of education and ability of the educational system to provide the necessary skills to find gainful employment is also crucial.

The dispersion in performance across the European countries is plotted in Figure 2 in the seven distinguished dimensions.

5. Conclusions

Following their political and economic independence in 1989, ten Central and Eastern European countries have embarked on major institutional reforms facilitating their integration into the regional and global economy with significant effects and implications for their competitiveness levels [Chadee, Kouznetsov, Roxas 2014, p. 1].

Although the CEE countries have made important steps toward addressing some of the challenges, a stronger commitment – in a few closely interconnected areas – is critical for boosting the region's competitiveness and helping bridge the competitiveness divide between the CEEs and the Northern and North-Western European countries as well as other well-developed economies.

The ability of CEE economies to shift towards more knowledge-intensive, higher-value-added activities depends as much on their capacity to generate new knowledge through better-performing innovation and educational systems, and the effective use of technologies, including ICT, as on the conditions for entrepreneurship facilitating or hindering the ability to bring this new knowledge into the market in a timely and effective manner. The CEEs should not neglect strengthening their innovation potential through efficient investments in research and development and innovation in a broader sense, i.e. in education and training or other intangible assets, such as advanced management techniques. With continued efforts toward growth-enhancing reforms, there is every reason to believe that these countries will continue to improve their competitiveness in the coming years.

Furthermore, the changes aimed at increasing competitiveness and productivity of the CEEs require the combined support of government, business and civil society. Decisive measures are needed in order to raise the competitiveness levels in these countries and, as a result, support higher levels of productivity, employment and prosperity, today and in the future. The CEEs need to put the competitiveness agenda at the centre of their economic policies and attempt to influence the factors that determine their level of productivity and increase the prosperity of their citizens. It is clear from the large national disparities that paths towards a highly innovative, knowledge-driven region and priorities for improvement require differentiated strategies, taking into account the comparative and competitive advantages of individual countries. However, for all the CEE economies, investments in knowledge-generating assets will translate into important drivers for future productivity growth – those drivers being a common focus on education, information and communication technologies, the digital agenda and reforms to improve the overall enterprise environment across the region.

References

- Chadee D., Kouznetsov A., Roxas B., 2014, *Institutional Reform and Export Competitiveness of Central and Eastern European Economics*, [in:] *Geo-Regional Competitiveness in Central and Eastern Europe, the Baltic Countries, and Russia*, eds. A. Zhuplev, K. Liuhto, IGI Global, Hershey, pp. 1-31.
- European Commission 2010, *Europe 2020: a Strategy for Smart, Sustainable and Inclusive Growth*, European Commission, Brussels.
- World Economic Forum 2014a, *The Europe 2020: Competitiveness Report Building a More Competitive Europe*, World Economic Forum, Geneva.
- World Economic Forum 2014b, *The Global Competitiveness Report 2014–2015*, World Economic Forum, Geneva.