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Special analysis

Erste Corporate Banking Innovation Barometer 2014

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ERSTE Corporate Banking

What is the Erste Corporate Banking Innovation Barometer?

The Česká spořitelna EU Office has prepared something called the Erste Corporate Banking Innovation Barometer, a tool, which is a guide for comparing the attractiveness of all 28 economies in the EU from the point of view of their innovative capabilities and future competitiveness. The current phase of advanced globalisation shows that if individual European economies want to succeed over the long term in the increasingly tough international competitive environment, they must focus on innovation, research and development, the information society, knowledge of economics and products with high added value.

This barometer measures how successful their efforts are. The Erste Corporate Banking Innovation Barometer consists of nine statistics, which determine a country's innovation potential, competitiveness and future prosperity.

An important part of the Innovation Barometer is its dynamic dimension, based on the results of which it is possible to evaluate whether the potential for innovation in the particular country has developed positively or instead has been dominated by negative aspects. For this purpose, the index has been calculated retroactively starting from 2010. The Barometer is not only a one-time analysis, but will be renewed each year in reaction to changing key characteristics.

More about this method and individual variables can be found in our Issue No. 122 of the Monthly of EU News.

List of included variables

Variable	Description	Unit	Source
Expenditures for R&D	Total expenditures for science and research in relation to GDP	%	Eurostat
Patents	Number of submitted patent applications per 1,000 inhabitants of the applicant's country of origin	quantity	WIPO
Graduates	Number of university graduates studying technical majors per 1,000 inhabitants between the ages of 20 and 29	quantity	Eurostat
Publication	Number of quotable scientific publications per 1,000 inhabitants	quantity	SCImago
Venture Capital	Investment of risk capital funds into seed and start-up companies in relation to GDP	%	EVCA
Broadband internet	Share of households with broadband internet access	%	Eurostat
Expenditures for education	Public expenditures for education in relation to GDP	%	Eurostat
High-tech export	Share of export of high-tech products in the country's exports	%	Eurostat
E-Government	Share of persons communicating with public administrative bodies electronically	%	Eurostat

WIFO - World Intellectual Property Organisation, SCImago = agency SCImago Journal & Country Rank, EVCA = European Private Equity and Venture Capital Association.

Overall results: dominance by Scandinavian countries

The low-cost game has no future in Central and Eastern Europe

The ongoing structural and innovation changes in the countries of Central and Eastern Europe have undoubtedly taken the right direction, and these countries' competitiveness is gradually increasing and getting closer to that of more developed EU member states. However, those more developed member states (especially in Scandinavia) are still far ahead.

However, the reduction of their leading position in the areas of competitiveness and economic performance can be attributed mainly to factors such as lower labour costs, tax incentives and opportunities to enter new markets. States in Central and Eastern Europe have reaped and are still reaping the benefits of injection of Western capital and opening of new production plants and the benefits flowing to them from more developed EU member states. However, these assembly plants will not necessarily (and often do not) have long lifespans.

We are not talking only about acquiring technology for these production lines and companies, but about a certain gaze by managers of multinational companies towards even better conditions than can be offered by Asian countries, where cost reduction offers incomparably higher savings than EU member states can offer.

Over the past 10-15 years, assembly plants opened by foreign concerns in the Czech Republic and throughout Central Europe have been a major driving force of economies and have greatly contributed to reducing unemployment. However, now, the economic model is beginning to change. It is not possible to rely only on businesses with low added value, and it is necessary to move on.

If we want to increase economic performance (and with it also living standards) and mainly to achieve faster convergence towards more developed economies, then it is necessary to move from the low-cost game to a focus on advanced technology, an educated work force, knowledge of economics, investments in research and development, etc. The long-term success of the small open economies in Central Europe will not ensure low prices, but rather will ensure the high quality of production, which will be the result of an environment focused on support for innovation.

So far, CEE countries have not managed to achieve this very well. The country doing the best among the Visegrad Four is the Czech Republic, in 17th place. And although in terms of relative growth Central and Eastern Europe are catching up, it still is not enough, which only shows how huge the differences in innovation and competitiveness among EU member states have been and still are.

Scandinavian countries' dominance

If you want to find a winner in the race for competitive dominance among EU member states, you must head north. The long-term and substantial dominance of Finland, Sweden and Denmark is clear and obvious. The success gap between those three states and other member states is very apparent, regardless of which of those three states is in the lead in the Erste Corporate Banking Innovation Barometer. They are in the lead in practically all of the monitored areas, including spending on research and development, patent applications, capital investments into start-ups, scientific publications and the share of households with broadband internet access. Their figures are average only in their share of high-tech product exports. However, these excellent results are not only by chance. If a state wants to be able to compete, it must sacrifice something, so that it returns in the future. The idea of "innovative competitiveness" is also illustrated excellently with the example of Scandinavian countries – do we want to be competitive like Vietnam or like Sweden?

Where is the strength of traditionally strong innovative economies going?

The Czech economy is strongly linked to the German economy. However, the German economy is not achieving fantastic results. It could have been expected that a country so focused on export would protrude in several areas, but the opposite is true. In most of the monitored indicators, the results of innovation potential are only slightly above average when compared to other EU member states.

Germany has gaps mainly in spending for education, which is even below average. However, quality education will be a key indicator in the future for innovativeness and competitiveness. With the development of new technologies and approaches, it will be necessary not only for those yielded by such innovation to exist, but also for those that will serve and utilise those new technologies and approaches to be available.

Businesses with very high added value and with a quality work force will determine development, especially at a time when the newest technologies are being "copied" almost immediately after their introduction onto the market. The highly qualified work force will be the driving engine for further progress in relation to mutual comparability of European and global economies.

Even other traditionally strong Western economies, such as France, Austria and the UK are not exactly standing out from the crowd, as they could have been expected to do. Their improvement of competitiveness in relative expression is very small compared to 2010, and the UK has even declined by six points since 2010, which represents a drop from fifth to ninth place on the innovation barometer. The UK has basically fallen asleep at the switch and is gradually being overtaken by other countries. One of the causes may be related to spending on research and development, where the UK has below average results.

Defeat from the Eurozone

The fact that the Eurozone is facing problems is nothing new. Several of the states that use the euro have even been referred to assistance from European rescue mechanisms. From a closer examination of some of these states, we can conclude that the excessive debts are probably only an expression of more serious problems.

In the cases of Greece, Italy and Spain, we can talk about a very problematic economic situation with a not very positive outlook for the future, unless something changes. These states have been encountering not only macroeconomic problems (Greece and Spain are the states with the highest unemployment in the EU), but with innovation potential as

well. Greece and Italy regularly rank on the tail end of the Erste Corporate Banking Innovation Barometer. (Worse positions are usually held only by Bulgaria and Romania, which is not much of a surprise.)

The innovativeness and competitiveness of these states is in very bad condition. Another certain outcome can be problems in the automotive industry in Italy, as a traditional country in that industry, where production plants are being shifted further east.

There are immediately several indicators of that situation, including capital investments into start-ups, spending on education and the small number of persons communicating with public administrative bodies electronically.

Breakthrough of the year from Estonia

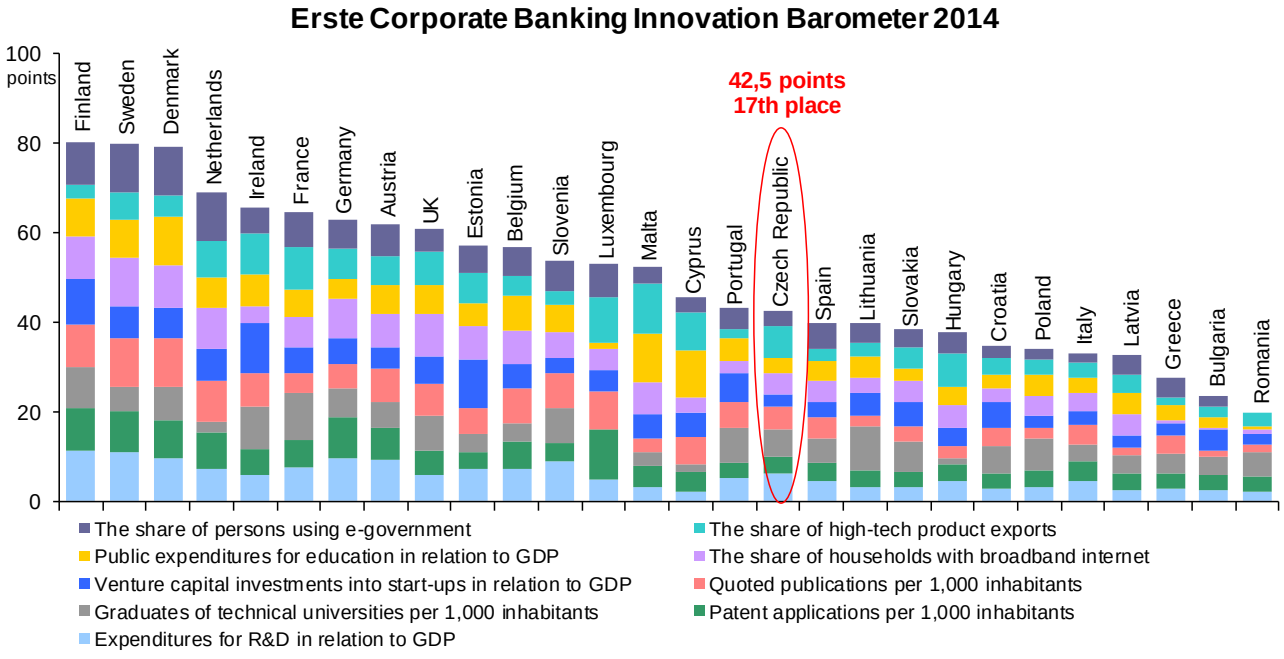
For some, it may be surprising that the Baltic states did not achieve a reputation as the technological leaders of the former Soviet republics in Europe. However, an exception is one small country, which is located just a few hundred kilometres from the overall winner Finland.

Estonia's 10th position on the ladder is a major success, which no former Soviet republic has ever achieved. Estonians are very well aware of their opportunity and are making a conscious effort to climb the technological ladder in Europe.

Change of barometer points in 2010-2014

Country	Δ points	Country	Δ points
1. Estonia	+9.7	15. France	+0.4
2. Slovenia	+6.9	16. Portugal	+0.1
3. Malta	+4.2	17. Netherlands	-0.5
4. Lithuania	+3.0	18. Poland	-0.5
5. Slovakia	+3.3	19. Greece	-1.2
6. Ireland	+2.6	20. Italy	-1.4
7. CR	+2.5	21. Hungary	-1.5
8. Bulgaria	+2.2	22. Denmark	-3.3
9. Croatia	+1.5	23. Luxembourg	-3.6
10. Austria	+1.4	24. Belgium	-5.0
11. Germany	+1.3	25. Sweden	-5.9
12. Latvia	+1.1	26. UK	-6.3
13. Cyprus	+0.9	27. Romania	-6.6
14. Spain	+0.6	28. Finland	-7.0

Source: Erste Corporate Banking Innovation Barometer - EU Office



Source: Erste Corporate Banking Innovation Barometer - EU Office

Results for the Czech Republic

Is ineffective education slowing down the Czech Republic?

The Czech Republic probably cannot currently imagine a better position than 17th place in the Erste Corporate Banking 2014 Innovation Barometer in competitiveness. We are doing better than any of the other Visegrad Four states, and we have overtaken even Lithuania and troubled Spain. The results in the individual monitored indicators of competitiveness are not staggering in any way. We are below average, except in three areas. We are above average only in the share of high-tech product export, spending on research and development in relation to GDP and the number of university graduates with technical majors per 1,000 inhabitants.

The sector of university education in the technical field has long been strong in the Czech Republic. However, unfortunately the trend in recent years shows a relative reduction in the number of technical school graduates compared to other EU states. This is the case even though support for that field should be a priority, and a thorough analysis of technological trends could show what kinds of graduates potential employers will be interested in hiring. Wages are undoubtedly also a problem. Low wages and little involvement of companies with universities are putting the brakes on further development and on increasing job applicants' experience. As a result, they often end up in positions for secondary school graduates and thus lose their growth potential. It has already become necessary to abandon the idea that we should attract for investments only companies that are coming here because of low labour costs (and that eventually will move further east for even lower labour costs) and should shift our focus on products with higher added value. However, wage amounts are also related to this. Most of the economic crisis is already behind us, and the good news in the automotive industry is an indication of better times to come. Companies should be able to appreciate their quality labour force, improve employees' skills and monitor long-term development and not only short-term profits, and such an approach which will certainly pay off for them.

There is also a certain "Achilles' Heel" of Czech competition, and it is public spending on education in relation to GDP. In this area, the Czech Republic is losing a lot compared to other member states. Although support for quality and technical fields is costly, the reward will be an increase in attractiveness for investors and companies who do not gain access to this labour force. An educated population that is open to ideas will create more room for innovative ideas. However, these are not practically supported on a large scale in any way. In capital investments into seed and start-up companies, we are among the worst performing states in the EU.

This area needs to be improved, and it is necessary to support and find a way to achieve standard financing through our own capital. Israel could serve as a model, since it is absolutely at the top in this type of approach.

Another weakness is low use of the ability to communicate with state administrative bodies electronically. In today's era of communication and information technology, this area should not be neglected, since in the past 12 months just under 30% of citizens communicated with public administrative bodies electronically, which makes us among the worst member states for this indicator. The low effective performance of the public administration in the Czech Republic is also illustrated by the following graph, which shows that according to the Doing Business Index of the World Bank we rank only in 23rd place among EU member states.

Relationship between the Erste Corporate Banking Innovation Barometer to labour costs

Link between wage amounts and competitiveness

Nowadays, the individual aspects of competitiveness cannot be neglected. This is true whether they have an innovative character or relate to the amounts of individual costs. The Erste Corporate Banking Innovation Barometer provides an overview of the innovation capabilities and the future competitiveness of each EU member state, and their comparison with average monthly labour costs also reveals certain other interesting details and mutually strong correlation.

The first group of states in the lower left corner of the graph, mostly from the regions of Central, Eastern and Southern Europe, thanks to their lower innovation potential focus mainly on production of goods with lower added value. In order for these states to remain attractive for investors, they are going the way of low labour costs (wages).

The worst off are the already mentioned overtaken states in the Eurozone – Greece, Spain and Italy. It can be said without exaggeration that these states are on a blind path of high labour costs with very low attractiveness for sophisticate investments, due to low innovation potential.

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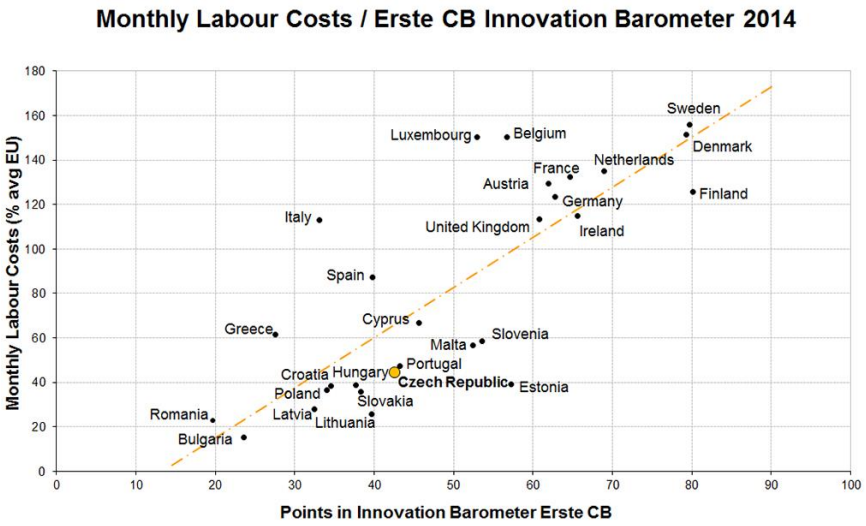
The second group of states in the upper right corner include Western and Scandinavian states, which stand out due to their higher labour costs. Due to their high innovation potential, the amount of wage costs is justified and does not pose a risk of disruption of macroeconomic stability or the labour market. After all, Germany and Austria are among the member states with the lowest unemployment levels.

Finland, as the winner of the Erste Corporate Banking 2014 Innovation Barometer, has even lower labour costs than its competitors, which for it represents a very positive outlook for the years to come.



The relationship to performance of public administration

The performance of public administration goes hand in hand with long-term stability and good conditions for innovative growth and competitiveness. Our analysis of member states' innovativeness has shown a strong relationship between the performance of public administration measured by the World Bank's Doing Business Index and innovation potential.

The relationship is positive and reveals that the states with effective public administration and low bureaucracy levels and which are most successful in the Doing Business Index are also the countries with greater innovation potential. Based on this relationship, we can state that essential conditions for increasing of a country's innovation potential and future competitiveness are effective public administration and minimisation of bureaucratic burden for the business sector.