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COMPETITIVENESS AND REGIONAL DISPARITIES IN SLOVAKIA: SELECTED ECONOMIC INDICATORS[2]

Abstract
The transformation of Slovak society since 1989 is reflected in the development of Slovak regions, whether in the economic, political, cultural or social spheres. This change is taking place in each of the Slovak regions in a different way and with a different intensity. Various reforms have been adopted at the national level to help activate development activities in the regions and thus strengthen Slovakia's position in a united Europe. The concept of regional development covers the problems of political, economic, social and environmental development of the regions. There are several indicators used to compare the differences between regions, but in this paper, we have focused on economic indicators. Almost all economic indicators, as well as the functioning of the economies of most countries, have been dramatically affected by the still ongoing pandemic COVID-19. The impact of the pandemic on individual indicators is beginning to be quantifiable these days, and the data that give us room to assess the situation and predict future developments are available.

Key words: regional disparities, economic indicators, competitiveness, FDI

1 INTRODUCTION

The entry of large foreign firms into the market of a foreign country largely affects the competitiveness of regions and has a quantifiable impact on

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regional development. FDI can multiply other investments in the host country, and therefore, examining the correlations between FDI and other indicators of regional economic success is a way to know what direction FDI policy should take. Competitiveness decision-making is no longer a topic only in the private sector, but is also increasingly being discussed in the environment of cities, regions and nations. The perception of the EU as an association of regions opens up new avenues for exploration and the issue of differences between regions is becoming more important. Slovakia's accession to the EU has brought with it new opportunities for resource allocation and the multiplier effect caused by the spill-over of foreign direct investment. In this paper, we identify selected economic factors at the level of NUTS3 regions, such as foreign direct investment, regional gross domestic product, registered unemployment rate and average nominal wage, compare them and use correlations to establish the dependence of individual indicators, which will allow us to find the links between them and the competitiveness of the regions.

The competitiveness of regions, which is primarily based on profit maximisation, competitive struggles and the desire to become a market leader, to gain the best market position in comparison with competing regions and territories, is the subject of study of many experts, as well as one of the main topics in political and public circles in the last decade. This topic is closely linked to regional development and regional disparities, particularly in the context of the perception of the European Union as an association of 27 regions. (Martin 2005)

2 COMPETITIVENESS OF REGIONS

In the environment of the European Union as a whole, as well as at the level of individual Member States, increasing competitiveness is becoming a key policy objective, which is explicitly declared in the Lisbon Strategy of 2000 and in many other important documents. Competitiveness has thus become a commonly used term, but one that hides many phenomena. (Korec, Rusnák, 2020)

Competitiveness decisions are now not only about companies and organizations, but also about regions, which brings with it a lot of controversy among experts. One of the authors who deals with the issue and disagrees with measuring the competitiveness of regions is Viturka (2004), who points out in his works that if a company is unsuccessful in the competitive struggle, it is naturally pushed out of the market and disappears. However, if a region is unsuccessful, it stays in the market and the reduced standard of living of the region's population begins to show

Another opponent of measuring regional competitiveness is Krugman (1994), who argues that the term should not be used in the context of regions because competition can only exist between firms and not between nations or regions. He justifies his claim by arguing that competition for the best market position itself usually weakens one of the firms, while the success of one region does not weaken the remaining regions, on the contrary, it produces new opportunities for the remaining territorial units.

In contrast, prominent authors who support the theory of regional competitiveness are Mojžiš (2008) and Camagni (2002). Mojžiš argues that competitiveness is no longer just a struggle between firms, but it is any struggle for resources or market position, and thus competition between cities and regions exists. Camagni, for his part, argues that itself brings with it competition between countries and regions that compete with each other for factors of production and compete to produce.

The perception of regions, cities and states as economic entities, even with a certain degree of centralisation and dependence, is crucial because they can largely influence the performance and quality of their economies. Among the first authors to consider regional competitiveness at all are Freeman, Porter or Lundvall, connecting it to the ability to gain a competitive advantage. (Cook 2004)

Porter (2004), on the other hand, in his extensive work did not talk about regional competitiveness, but about national competitiveness, but since we also recognise regions at the national level, we can unify these two concepts. He understood national competitiveness as the ability of a nation to innovate and consequently to gain a competitive advantage over other countries or nations. The basis of competition, according to Porter, is thus the ownership and exploitation of the factors of production. The share of a nation‘s production in the world market is actually the productivity of the nation.

In this context, we consider it important to define the region. There are many definitions in the literature that share several common features, but two of them stand out. The first is that a region is a territory that is delimited by certain boundaries and is internally consistent (with respect to predetermined criteria). The second characteristic is that the criteria for selecting a region largely correspond to our intention or aim of the research. (Korec, Rusnák, 2020)

From this perspective, we can define a region as a spatially contiguous territory that has well-defined boundaries, is internally consistent with respect to a set of criteria, and is externally distinct from other territories, while assuming that this set of criteria is meaningful and corresponds to our research objective. (Bezák 2014)

According to Enyedi (2009), in the first decade of the 21st century a very intense debate on regional competitiveness started and it became a kind of magical concept under which to plan for economic success at the microeconomic level, that is, at the level of firms, but also at the macroeconomic level, that is, at the national scale. The debates that the author describes in his writings took place in this period in terms of several simplifications:

- Regions do not represent competing entities; they compete primarily with firms and institutions that operate both within the borders and in the vicinity
- The existence of prosperous firms in non-prosperous regions and vice versa confirms the theory of the absence of regional competitiveness
- The concept of ‚regional competitiveness' reflects the phenomenon where a region has a number of endogenous factors favourable to the economic success of firms and organizations operating in that region
- Competitiveness is not only based on economic theory, but is based on a strong socio-cultural dimension that takes shape in the region over a longer time horizon

Danilov (2007) also brings a very interesting perspective on the issue and considers it important to define the levels of interregional competition, which is the essence of regional competitiveness. Danilov defines two types of international competition, namely vertical and horizontal:

- Vertical represents competition between levels of government (central, regional, local) and is characterised by different competencies and possibilities of redistribution of financial resources
- Horizontal is seen as competition between regions at one hierarchical level. In this case, everything that can be used as a potential source of development is subject to competition, such as labour, education, economic resources, investment, etc.

According to the European Union (©2003), regional competitiveness is defined as the ability of a region to produce products or services that can be sold on international markets and thus generate high levels of employment and sustainable high incomes. The European Commission's definition is based on the understanding of regional competitiveness as equivalent to the ability of a region's economy to raise the standard of living of its citizens, with high employment at a sustainable level. A parallel can be drawn between the European Commission's and Porter's perception of regional competitiveness, as both definitions see productivity growth and high employment at a sustainable level as the basis of competitiveness. The Lisbon Strategy, on which the EU is based, also works with these premises.

The Finnish researcher Huovari (2001), who with his team defined competitiveness as the ability of regions to attract economic activities to the region in order to raise the standard of living of the inhabitants of the region, also deals with the issue of competitiveness of regions. According to Huovari, to compete with other regions means to be economically active.

On the basis of the above definitions, we can thus simplistically say that regional competitiveness is actually the ability of a region to attract and support economic activities in its territory so as to raise the standard of living of its population. The essence of this view of regional competitiveness is actually the search for a way to compete with other regions in terms of economic activity. It is precisely the ability to exploit competitive advantage and thereby increase a region's economic activity that causes and widens the differences between regions. This side effect is a natural part of the existence of competitiveness, not only between firms but also between regions, it resonates in our society and, paradoxically, by trying to reduce these disparities, they are exacerbated. (Slaninová, Bobenič, Seňová, 2014)

3 MEASURING THE COMPETITIVENESS OF REGIONS

Measuring competitiveness has several approaches. The competitiveness of regions is itself determined either by the so-called indicators, which determine the ability of a region to compete with other regions, or by the results that the competitiveness of the region itself has produced. Since it is not always clear in which category we can classify each variable, we consider it appropriate to deal with a combination of both groups of variables. As an example, we can take foreign direct investment. On the one hand, they act as an indicator and therefore a source of competitive advantage; on the other hand, they come to the region mostly when the region has the potential to grow and its level of competitiveness is significant.

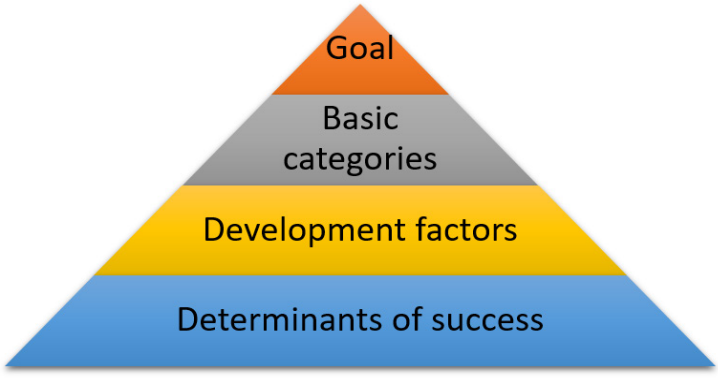
One of the authors who also prefers to combine both groups of variables is Lengyel (2004). He combines the indicators and results of regional competitiveness into the so-called competitiveness pyramid (Fig.1). Lengyel divided the competitiveness variables into the following categories:

- Basic categories, the so-called „ex post" indicators - used to measure competitiveness. These categories measure competitiveness and include, for example, income, labour productivity, employment and openness.
- Competitiveness development factors, the so-called ‚ex ante' factors - used to improve competitiveness. These include factors with an immediate impact on the core categories. These are used to improve the competitiveness of regions with institutional help in the short term.

• Determinants of the success of regional competitiveness, the so-called "social and environmental conditions" - used to explain competitiveness. These include factors with an indirect impact on the basic categories and competitiveness development factors, these determinants are formed over a longer period of time and their importance goes beyond economic policy making.

When the characteristics determining competitiveness are placed on a diagram, a pyramid model of regional competitiveness is obtained. The components of long-term success are at the bottom, the middle layer is made up of development (programming) factors, the basic categories included in the standard definition of competitiveness are placed one level higher, while the standard of living and well-being of the region's inhabitants (the ultimate goal) forms the top of the pyramid.

Figure 1 Pyramid model of regional competitiveness



Source: own elaboration based on Lengyel

Given the ambiguity of categorization of individual variables and the overlapping and interacting nature of indicators and outcomes, it is very difficult to define which factor influences the competitiveness of regions and to what extent. Professor Martin and his research team at Cambridge Econometrics have identified 3 categories of regions based on their competitiveness:

• Supply-side regions
• Regions with rising incomes
• Technology regions

Martin introduced seven primary (core) factors that define a region's competitiveness:

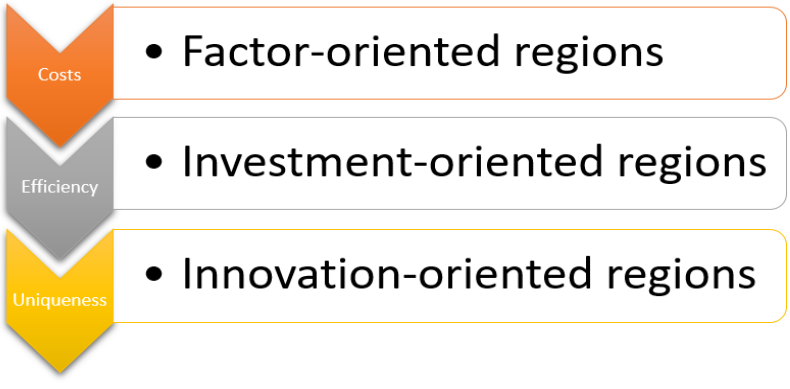
1. Clusters and population
2. Migration and localization
3. Business environment and networks
4. Level of regional and local public administration institutions
5. Industry and its structure
6. Innovation and the regional innovation system
7. Ownership structure (Ručinská 2008)

Based on the above, and based on Porter's (2004) work, we can claim that the competitiveness of regions can be classified from several perspectives. In the context of economic theories, three models of competitive advantage are the source of the competitiveness of nations, which divide national economies into:

1. cost-oriented or factor-of-production-oriented economies,
2. investment-oriented economies,
3. innovation-oriented economies

Cost-oriented regions compete with other regions through low costs or cheap factors of production. Investment-oriented regions compete on the basis of costs of scale and productivity improvements and thus efficiency gains; innovation-oriented regions seek to produce new technologies and all activities are mainly focused on the production of new, innovative goods and services.

Figure 2 Regional economies by competitive advantage orientation



Source: own elaboration

As mentioned above, the measurement of regional competitiveness has several categories and factors that intersect and influence each other. For the purpose of this paper, we have focused on economic indicators that substantially cause disparity between regions in Slovakia. Foreign direct investment is one of the indicators and outcomes of regional competitiveness and can be considered as an important driver of the economy. Together with other economic indicators such as GDP, unemployment rate and average nominal salary, they form a picture of the health of the Slovak economy. The large inflow of foreign investment over the past 25 years has placed the Slovak Republic among the countries that have successfully integrated into the global economy and undergone a successful social transformation. Slovakia's regional development strategy has acquired clear contours with the increasing volume of foreign direct investment in the highly export-dependent automotive industry.

Due to the agglomeration mechanism, economic activities are spatially concentrated in regions where large subsidiaries of multinational companies are located, as well as in regions with good access to markets. Within the Slovak Republic, this interest is concentrated in the western part of the country and in the metropolitan regions, where wages in the manufacturing sector and in trade are consequently increasing, thus deepening the differences in the economic performance of the individual regions of the country. In the more developed regions, we observe the phenomenon that their competitiveness and economic efficiency grow faster in times of expansion and slower in times of recession. The less developed regions are more dependent on state support and display a lower degree of dynamism, which can cause them to lose contact with the real market environment and, although they are protected during the recessionary period, they lose their competitive strength during the economic expansion. (Rodríguez-Pose, Fratesi, 2007)

The concept of regional competitiveness was developed in Slovakia mainly during the Social and National Party governments between 2006 and 2020. During this period we can identify two tendencies. The first tendency consists in an enormous effort to apply the welfare state policy, balancing regional disparities through aid to less developed regions, raising the minimum wage, etc., which are the natural outcome of the localisation behaviour of firms and the neoclassical approach. Economic activities are naturally concentrated in developed regions. The second tendency points to the fact that the same governments support with generous subsidies sector-specific industries that are precisely the recipients of FDI. According to Balko (2004), the beginning of the 21st century can be called a race to attract FDI.

The authors Pavlínek (2004) and Baláž (2017) criticize in their works the sophisticated policy managed in this way, and this criticism can be

summarized in three points:

1. Low support for the integration of small and medium-sized enterprises
2. Deficit of innovation policies
3. Deepening global dependence on the automotive industry

Foreign direct investment as a factor of competitiveness

As mentioned above, FDI is a factor that affects the competitiveness of regions in both directions. It is therefore both an indicator and a consequence of such regional competitiveness. It is one of the economic indicators on the basis of which the paper compares the differences in the competitiveness of Slovak regions.

Foreign direct investment is one of the fastest-growing forms of entry into foreign markets. It brings with it a number of advantages, but of course also disadvantages, which could be collectively divided into two categories. The first category represents those that have a direct impact on the host country and the second category includes those that have an indirect impact on the host country. Direct impacts are based on the higher productivity of the entering firm compared to firms in the host country, while indirect impacts are multiply important for the economies. They are more complicated, multi-component, quantifiable, less studied, but their impact is more multifaceted. In this case, we are talking, for example, about the impact on the environment or other positive externalities that FDI brings with it. (Fifeková 2006)

Dunning (1993), who is known for his eclectic paradigm of FDI in his later works, divides FDI according to its objective:

1. FDI „resource seeking“ - the objective is the acquisition of a key factor of production
2. FDI „market seeking“ - the objective is to dominate the market, e.g. in overcoming import quotas, etc.
3. FDI „efficiency seeking“ - the objective is more efficient production linked to lower labour costs for the host country
4. FDI „asset seeking“ - the objective is to acquire key assets

FDI is then examined according to the purpose with which it enters the international business environment and the variables that define the particular type of FDI are selected. (Kareš 2007)

FDI contributes to the economic growth of a particular territory, produces jobs and is a component of international business. The OECD (Organisation for Economic Co-operation and Development) and IMF (International Monetary Fund) define FDI as an investment in a foreign

country made by a firm based in another economic environment with the aim of creating a long-term relationship or dependency. (Dulupçu et al. 2009)

According to the International Monetary Fund's Balance of Payments Manual, foreign direct investment is a category of international investment that declares the intention of an entity/investor resident in one economy to acquire a permanent interest in a direct investment enterprise, and thus in an enterprise located in another economy. Such a permanent shareholding ensures a permanent relationship between the two entities, i.e. between the investor and the direct investment enterprise. Foreign direct investment is a vehicle for regional disparities and, at the same time, an accelerator of economic growth and related regional development. FDI can eliminate regional inequalities by allocating its interest to less competitive regions or more backward regions, but this requires the so-called absorptive capacity of the economy of this underdeveloped region to receive such investment and to locate it efficiently. (Slaninová, Bobenič a Seňová, 2014)

GDP as an indicator of competitiveness

One of the most important and widely monitored factors for measuring regional disparities and economic performance is Gross Domestic Product (GDP), which provides important input information on regional performance and is also a measure of economic activity. It is defined as the value of all goods and services produced less the value of all goods and services used in their production.

For the comparison of regions, the conversion of GDP per capita or, for example, its relative growth rate is relevant. Regional GDP per capita is the ratio of two variables - regional GDP and the average number of people permanently resident in the region under consideration. Here we encounter a problem related to the fact that the two indicators being compared are based on a different principle. While the regional gross domestic product applies the criterion of the place of work, the average population is based on the principle of the permanent residence of the population. In regions with higher commuting from neighbouring regions, this indicator is overestimated, but in most regions, comparing the two indicators, based on different principles, does not cause problems. In various academic discussions, Eurostat is looking for solutions to improve the predictive value of this indicator, but we will use the ‚regional GDP per capita' indicator in its usual form. (Michálek 2013)

Average nominal monthly wages as an indicator of competitiveness

The development of nominal, but also real wages is an important economic indicator that largely influences the competitiveness of enterprises at the microeconomic level, and at the same time the stability of the whole economy at the macroeconomic level.

The average nominal wage is a regularly examined indicator in various statistical surveys. It is compared in the context of supranational observations, but also in the context of regions in Slovakia at NUTS 3 level. The most important functions of the wage are the social function and the economic function. The economic function can be observed at two levels, the national economic and the enterprise economic; the social function of wages is mainly related to the living standards of the population and to ensuring social reconciliation. At the same time, the wage provides an incentive for labour performance and has a significant impact on the competitiveness of the region. The objectives of the organisation, but also the state and the social partners play a role in setting the wage level. Nominal wages represent the amount of money a worker receives as remuneration, whether it is a „task wage" or a „time wage". The second indicator is the Real Wage, which represents the number of goods and services that a worker can buy with his nominal wage. In order to express the disparities between countries, it is useful to compare the real wage. For the purpose of comparing disparities between regions in a small country such as Slovakia, it is more appropriate to use the average nominal wage. (Ištvániková 2002)

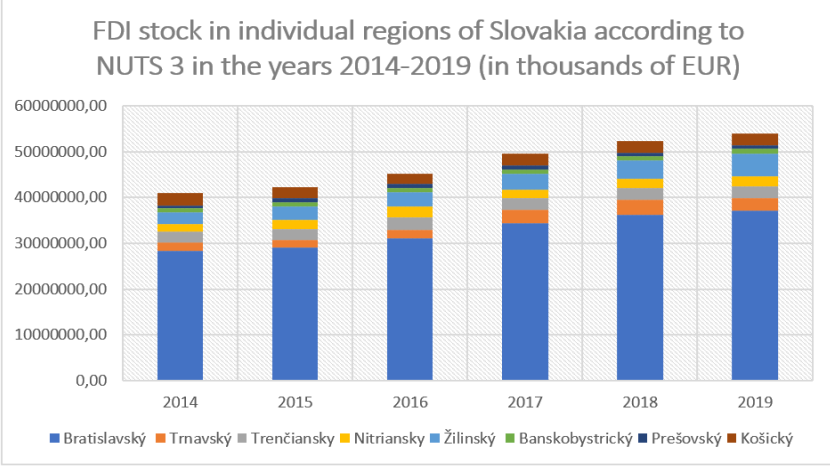
Unemployment became one of the phenomena that significantly influenced the development of Slovakia after 1989.As a relatively unknown phenomenon in Slovak society for a long time and its sharp rise in the early 1990s, it foreshadowed the collapse of the Czechoslovak federation and influenced, and continues to influence, a number of social and political processes. Unemployment is not so much a problem for the economy as its structure. Regional unemployment has a significant impact on the competitiveness of the regions and therefore we have also worked with this economic indicator in our work.

The economic indicators we have presented represent a broad framework for assessing and comparing economic disparities across regions, based mainly on the level, nature and dynamics of regional economic disparities. The economic policy of the European Union puts particular emphasis on economic convergence and competitiveness of regions and is based on detailed analyses of the above indicators.

4 RESULTS OF THE ANALYSIS

The distribution of FDI is not uniform in Slovakia. As in other countries, FDI tends to be directed to more developed regions. We have focused on the period 2014-2019, as more recent data are still only estimates. Graph 1 shows the status of FDI in Slovakia during the period analysed.

Graph 1 FDI stock in regions of Slovakia according to NUTS 3



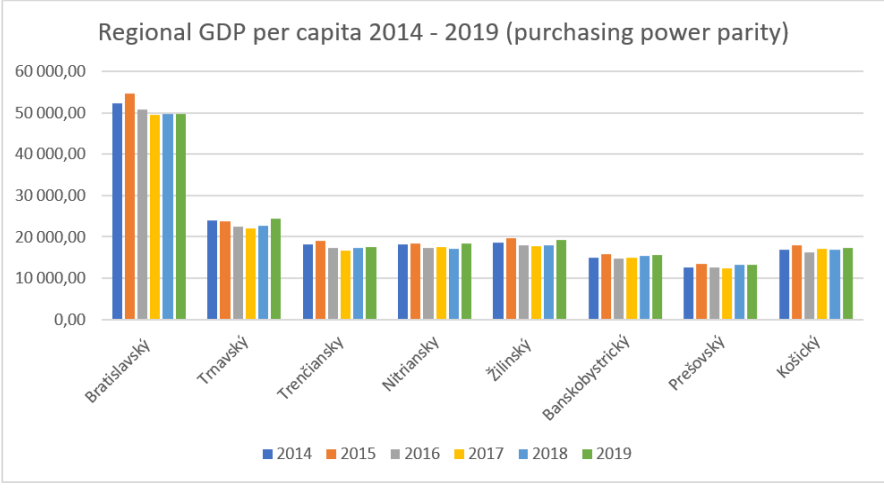
Source: own processing based on NBS data

In the analyzed period, we have seen economic growth, which corresponds with the increase in FDI, as can be seen in Graph 1. As we expected, most FDI is coming to the Bratislava region, widening the gap between Bratislava and other regions of Slovakia, especially in the eastern part of the country. Multinational companies heading to the western regions of Slovakia take advantage of the favourable conditions for creating a business platform for entering the CEE market, while at the same time taking advantage of the opportunities arising from the strategic location of the Bratislava region towards the west and the market of other EU countries.

In order to analyse the economic performance of individual regions, we decided to use, in addition to the analysis of foreign direct investment, the economic indicators that we have presented in the previous sections of the paper - regional gross domestic product (GDP) per capita (in purchasing power parity), average nominal wage and the registered unemployment rate, and we decided to investigate the dependencies between them.

In Graph 2, we present the economic performance of each region over the same period through regional GDP per capita, in purchasing power parity (PPP).

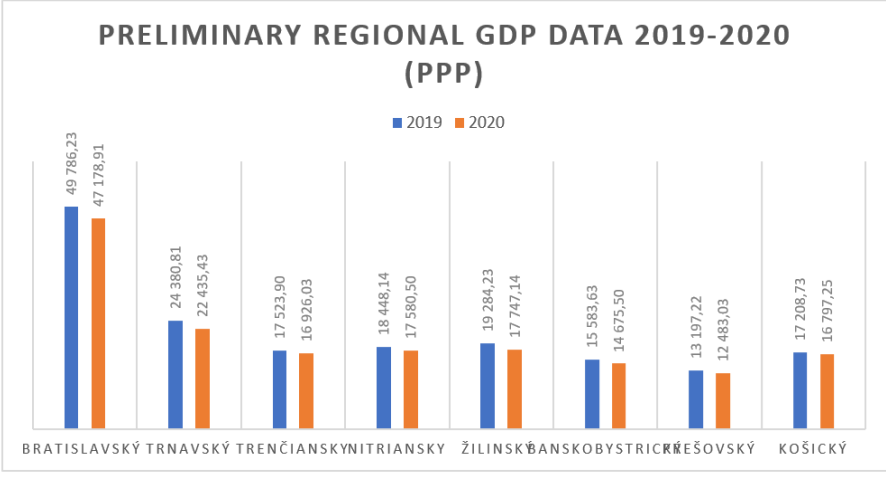
Graph 2 GDP per capita in purchasing power parity by region (NUTS 3)



Source: processing from data available from the public database Public database

In the analysed period, we observe a stabilisation of regional GDP in almost all regions of Slovakia. The most significant year of this period is 2015, which was a very successful year for the regions in terms of regional GDP. Interestingly, between 2018 and 2019, there was an increase in regional GDP in all regions, except region of Prešov, which indicates the direction in which individual regions could go in the following periods. Of course, the global health crisis and the COVID-19 pandemic that will cripple the world in 2020 (in China at the end of 2019) have an impact on this economic indicator, as well as on overall economic growth and FDI spillovers. The data for 2019 are preliminary, balanced on the basis of Eurostat's calculations. At the time of writing, we can similarly balance the regional GDP per capita at purchasing power parity data for 2020 (Graph 3). It is clear from the data that regional GDP for 2020 has fallen in all regions of Slovakia. Whether or not this decline was caused by the COVID-19 pandemic will only be analysed in subsequent periods.

Graph 3 Preliminary regional GDP data for 2019 and 2020 (PPP)



Source: processing from data available from the public database Public database

Table 1 GDP per capita and FDI in the Slovak Republic at NUTS 3 level in 2019

Region	FDI (in thousands EUR)	Population*	FDI per capita (in thousands EUR)	Ranking	GDP per capita (in PPP)	Ranking
Bratislavský	36288649,59	664595	54,60	1	49786,226	1
Trnavský	3237724,13	564254	5,74	3	24380,814	2
Trenčiansky	2534897,96	585225,5	4,33	4	17523,904	5
Nitriansky	1965874,99	675489	2,91	6	18448,142	4
Žilinský	3999453,28	691438,5	5,78	2	19284,23	3
Banskobystrický	1052216,94	646575	1,63	7	15583,628	7
Prešovský	736968,5	825633	0,89	8	13197,22	8
Košický	2463610,51	800937	3,08	5	17208,727	6

* Average permanent resident population in the region

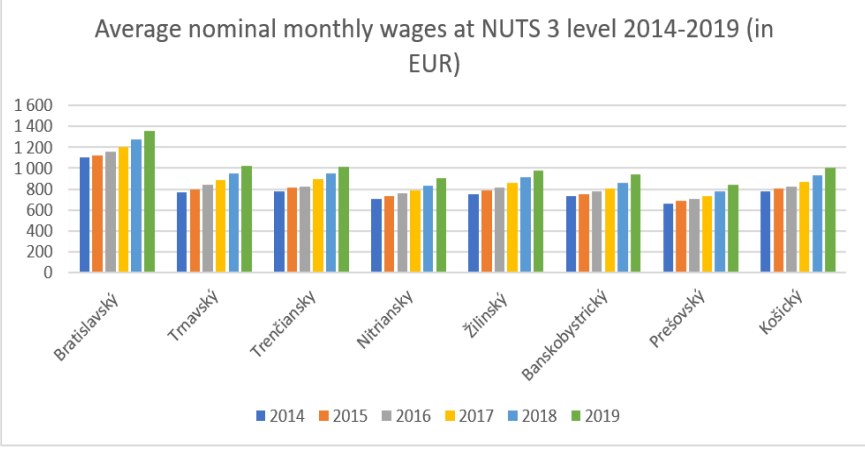
Source: processing from data available from the public database Public database

When analysing FDI and GDP in individual NUTS 3 regions, it is not possible to identify a direct correlation (Table 1). A direct positive correlation can be seen only in the case of the Bratislava, Banská Bystrica and Prešov regions. The highest stock of FDI per capita is shown by the Bratislava region, where the highest level of GDP per capita is also recorded. In the Trnava and Trenčín regions, we observe a disparity between the level of GDP per capita and FDI per capita in such a proportion that we can conclude that in these

regions GDP per capita grows inversely to the growth of FDI. In fact, in both regions, FDI has declined in 2019 (compared to 2018), but GDP per capita is growing in the compared period.

One of the economic indicators that reflect the competitiveness of a region is the nominal monthly wage. As in other economic categories, the Bratislava region dominates here, while the lowest nominal wage of all regions in each of the monitored years is in the Prešov region. All regions show an increasing tendency and thus nominal monthly salaries are increasing in all municipalities. A comparison of the average nominal monthly wage in individual regions of Slovakia at NUTS 3 level is presented in Graph 4. To determine the correlation between FDI and nominal monthly wages, we use cross-correlations.

Graph 4: Average nominal monthly wages in Slovakia in 2014-2019



Source: processing from data available from the public database Public database

The Pearson correlation coefficient (PCC) measures the strength of the statistical relationship between two numerical variables, regardless of the scale at which the variables were measured. The cross-correlation values confirm the strong relationship between FDI and nominal wage growth in almost all regions. The coefficient is highest in the case of the Bratislava and Žilina regions. Based on the above, a direct positive dependence between FDI values and the level of monthly nominal wages can be established. In the Košice region we found a negative correlation, which means that the relation that exists between the two variables is negative. Thus, the development of nominal wages in this region is not dependent on FDI, but is influenced by other factors. The values of this Pearson correlation coefficient are presented

in Table 2.

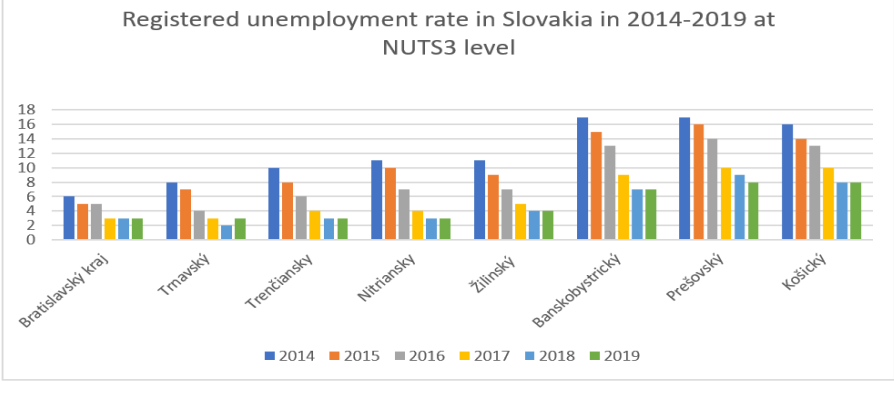
Table 2 Pearson correlation coefficient values for the relationship between FDI and average nominal wages in 2019

Regions at NUTS 3 level	PCC
Bratislavský	0,92
Trnavský	0,74
Trenčiansky	0,68
Nitriansky	0,59
Žilinský	0,98
Banskobystrický	0,61
Prešovský	0,53
Košický	-0,19

Source: own calculations

The last economic indicator analysed is the registered unemployment rate, which expresses the ratio of the unemployed to the economically active (i.e. the employed plus the unemployed). The highest unemployment rates during the analysed period were recorded in the Košice, Prešov and Banská Bystrica regions, but all regions showed a high decrease in the analysed indicator. During the analysed period, the Bratislava region has the lowest unemployment rate, which has been replaced by the Trnava region in this top position in 2016 and 2018. The comparison of individual regions is presented in Graph 5.

Graph 5 Registered unemployment rate in Slovakia 2014-2019



Source: processing from data available from the public database Public database

We decided to measure the dependence between FDI and the registered employment rate by cross-correlations, similar to the previous analysis. We report the values of the Peason's coefficient in Table 3.

Table 3 Pearson correlation coefficient values for the relationship between FDI and the registered unemployment rate in 2019

Region at NUTS 3 level	PCC
Bratislavský	-0,95
Trnavský	-0,83
Trenčiansky	-0,63
Nitriansky	-0,32
Žilinský	-0,83
Banskobystrický	-0,9
Prešovský	0,01
Košický	0,24

Source: own calculations

The values of cross-correlations confirm a strong relationship between FDI and the registered unemployment rate in all regions except the Prešov region, where the coefficient is close to 0, which means that there is no linear dependence between the variables under study. The coefficient reaches the highest value in the case of the Bratislava, Trnava and Žilina regions. Here the coefficient is close to -1, which expresses a strong dependence between the variables, but in an inverse dependence. Thus, if FDI inflows to the region were to decrease, the registered unemployment rate would increase and vice versa. In the Košice region we register a direct correlation, albeit to a small extent, but again it is outside the rules observed in the rest of the regions (similar to the measurement of the correlation between FDI and nominal wages).

Since preliminary estimates and data on the development of the registered unemployment rate for 2020 and 2021 are already available, i.e. the years marked by the COVID-19 pandemic, we have also looked at these statistics, which show that in 2020 there will be a huge increase in the registered unemployment rate in all regions. In 2021, the situation has improved slightly in all regions except Prešov, where it remains unchanged.

5 CONCLUSION AND FUTURE RESEARCH DIRECTIONS

By analysing the economic factors of competitiveness and looking for correlations between FDI and individual economic indicators of regional

development, we have found that even in such a small country as Slovakia, there is a significant disparity between regions and that the impact of FDI is not equally significant in all regions. In this paper, we focus on the period between 2014 and 2019, analysing all NUTS 3 regions of the Slovak Republic. First, we compared the most important economic drivers of regional competitiveness in each region, confirming our assumption that the most developed region in Slovakia is Bratislava. While based on analyses, comparisons and correlations we have shown a strong relationship between nominal wage growth and FDI as well as between FDI and the registered unemployment rate in most regions, in the Košice region the correlations deviate from the standard. Thus, we can conclude that FDI does not have such a significant impact on other indicators of economic competitiveness in the Košice region. In the Prešov region we even register almost zero dependence of the registered unemployment rate on FDI inflows. The unequal significance is also shown in the correlation between FDI and GDP per capita growth. However, the results of the analyses clearly identify the influence of regional competitiveness, which gives scope for additional research that could identify the causality between FDI and regional competitiveness also at the LAU 1 level. On the basis of estimates and figures that are balanced on the basis of Eurostat estimates, we have outlined the trend in which the individual indicators will evolve and how they are affected by the still ongoing COVID-19 pandemic. So far, we have seen a decline in all the estimated indicators, but only the future will show the real cause of the changes and the real state of these economic variables.

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