

The Importance of Macroeconomic Analysis of Regions in the Slovak Republic in the Context of Regional Development

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Abstract

In today's rapidly changing world the representatives of the Slovak Republic's regions need exact macroeconomics analyses. We can even say that their importance is increasing. Why are there strong fluctuations in economic development? Why there are significant differences between regions of the Slovak Republic and what is the cause? If we want to know the answers, we must examine economic development of regions on more regular basis and in more detail. The importance of autonomous macroeconomic analysis of Slovak regions is that it is the source for identifying strengths and weaknesses of these regions. The aim of this article is to show the importance of macroeconomic analysis of Slovak regions in the context of regional development. The introduction of the article presents the theoretical apparatus of macroeconomic analysis. In the second part of the paper we present results of macroeconomic analysis of eight regions of the Slovak Republic; we focus on the level of regional GDP, foreign direct investment and the economic activity rate of the population.

Introduction

Today consolidation of the financial and debt crisis is one of the most recent challenges for Europe—to terminate the accumulation of insolvency of certain member states of the European Union and to reform existing rules so that a balance can be found between true solidarity and the responsible management of public funds (Šuplata 2011, 5). Economic financial moral crisis, increasing interdependence, complexity and mutual conditionality cause increasing insecurity for development in a globalized world. On the other side, for today's society the problem is not lack of information, but its overload. Complexity of not only macroeconomic analysis but any analysis is the result.

The aim of this article is to show the importance of macroeconomic analysis of Slovak regions in the context of regional development. Making macroeconomic analysis at the regional level has importance for the development of the region. At the end of the article we present specific macroeconomic analysis of eight regions of the Slovak Republic (Bratislava, Trnava, Trenčín, Nitra, Žilina, Banská Bystrica, Prešov and Košice), this part of the article is based on regional databases of the Statistical Office of the Slovak Republic.

1 Theoretical definition of macroeconomic analysis

Before the definition of macroeconomic analysis we present a general description of the concept of this analysis. According to Lesáková (2007, 7) analysis is a basic method of scientific knowledge, the subject of examination in the analysis is divided into individual parts. Knowledge of the relations of individual components leads to a deeper understanding and determination of the object of examination (a process or phenomenon). Economic phenomena and processes are research objects of economic analysis. At this point it is appropriate to ask: "What is the subject of macroeconomic analysis?" Vincúr (2000, 7) in his publication says that the subject of macroeconomic analysis is

the analysis of the overall course of the reproduction process in a country. According to Vincúr, the economy is a system with a specific behaviour and a system of targets which is designed by economic policy decisionmaking. Macroeconomic analysis, unlike microeconomic analysis, deals with the examination of the development of macroeconomic aggregates. It is analysis of gross national product, gross domestic product, national income, consumption, investment and so on. Macroeconomic analysis examines data on the development of the national economy, and tries to explain them in a manner that may allocate the main factors (factors that had the greatest influence on the development of the national economy).

The conclusion from the above text is—in macroeconomic analysis we are looking for an answer to this question: what can the macroeconomic analysis tell us about the final effect of various fiscal, monetary and other measures on the value of these macroeconomic variables whose growth and movement are the criteria of economic performance (for example income, output, employment, economic growth, prices, the balance of payments deficit, and so on)?

At this point it should be recognized that macroeconomic analysis is not made only for the sake of macroeconomic analysis itself, but the existence of macroeconomic analysis is based on its relevance for the future. We agree with the opinion of Professor Ing. Vojtěch Spěváček, DrSc. (we asked this professor the question about the importance of macroeconomic analysis): “In the current, rapidly changing environment we have to make analysis. We can say the importance of it is increasing. Why are there strong fluctuations in economic development? Why are there significant differences between regions of the Slovak Republic and what is the cause? If we want to know the answers, we must examine economic development of regions on more regular basis and in more detail. We can see it in the analysis of international organizations such as the International Monetary Fund, European Commission, OECD, and the World Bank, which regularly publishes detailed analyses and their frequency has even increased lately. Analyses are interesting. But they do not serve only for knowledge of economic development. Their importance lies in the fact that they are starting point for the creation of economic policy. Economic policy must be based on analyses of previous development. This is true today and it was true in the past as well. The importance of economic policy in times of crisis is greater than in times of positive growth. This argument can be proved by the growing state interference in times of crisis. Economic policy should respond in advance. Measures of economic policy that are late to be accepted are less effective measures. Therefore it is necessary to elaborate forecasts of future developments. However, Currently, this is becoming a more difficult task regarding the significant uncertainty and risk characteristic in the current era.”

The above shows that macroeconomic analysis is particularly important for macroeconomic prognosis. These two areas are interdependent. We are inclined to the opinion that the relation between macroeconomic analysis and macroeconomic prognosis has only a conditional character, because each prognosis of future development must be based primarily on an analysis of existing development.

2 Macroeconomic analysis of the regions of the Slovak Republic

In this part of the article we will make specific macroeconomic analysis of eight regions of the Slovak Republic. Regional databases of the Slovak Statistical Office have been our primary sources of information. Results of macroeconomic analysis can help the representatives of the regions, because they can identify the strengths and weaknesses of the regions. These data are of great importance for regional development of the regions, because they are sources for determining its opportunities in the future.

2.1 Bratislava Region

In terms of the evaluation of the level of gross domestic product the Bratislava region is first compared to other regions of the Slovak Republic. Regional gross domestic product of Bratislava region in current prices in the year 2010 was EUR 18 296,581 million¹, it means in percentage

1. In the journal (in both Polish and English texts) European practice of number notation is followed—for

term 27,78% of the regional gross domestic product of the Slovak Republic. Gross domestic product per capita is a basic expression of the economic efficiency of a region. The value of this indicator in the Bratislava region was at current prices EUR 29 241,218—it is more than twice the value per capita for the entire Slovak Republic (EUR 12 130,721). In 2011 Bratislava region achieved the largest inflow of foreign direct investment—in this year EUR 693,888 thousand (82,03% of the total inflow of foreign direct investment in the Slovak Republic in 2011).

Regarding the socio-economic analysis of Bratislava region it is important to examine the level of economic activity of the population. In 2011 the registered number of the economically active population in Bratislava region was 338 088 persons (12,67% of the total economically active Slovak population—2 667 708 persons—the proportion of men and women was relatively balanced. In the year 2011 the number of the economically active population of Bratislava region decreased by 2,00% (6 892 persons). In the year 2011 the number of the economically inactive population in Bratislava region was 190 300 persons and in the year 2012 it was 184 000 persons. In 2011 in Bratislava region the number of job seekers (persons actively searching for work) was 19 417 persons, 4,86% of the total job seekers in the Slovak Republic. This low number is due to the fact that in Bratislava region in the year 2011 the lowest rate of registered unemployment from all eight Slovak regions was recorded. In the year 2011 the number of job seekers increased by 12,92%, the number of job seekers rose significantly in the year 2009 (increase 95,23%). This negative situation was caused by the global economic crisis, because a consequence of the crisis is reducing the number of jobs.

2.2 Trnava Region

In 2010 regional gross domestic product of Trnava region in current prices was EUR 7 665,981 million—11,64% of the regional gross domestic product of the Slovak Republic in the year 2010. In 2010 in Trnava region gross domestic product per capita was EUR 13 633,695 (the second highest value of all eight regions of the Slovak Republic). Foreign direct investment is an important indicator of the development of a region. Trnava region is an attractive region for foreign investors; foreign direct investment inflow to the region demonstrates this fact. Inflows to the region rose gradually (significant inflow was recorded in the year 2004). In the year 2011 in Trnava region foreign direct investment inflow was 141 835 thousand EUR (this region achieved the second position which is evaluated very positively.)

In macroeconomic analysis examining the economic activity rate of the population is very important as well. In the year 2011 in Trnava region there were 294 996 persons (including 162 310 men and 132 686 women), which can be understood to represent the economically active population. It was 11,06% of the total economically active population of the Slovak Republic in the year 2011. In this year in Trnava region the economically active population decreased by 1 603 persons (0,54%). The number of economically inactive persons was 185 300 persons in the year 2011 and 182 500 persons in the year 2012. In the year 2011 the number of job seekers in Trnava region was 7,28% of the total candidates in the Slovak Republic (399 800 persons), in absolute expression 29 086 persons (the proportion of men and women was relatively balanced). In the year 2011 the number of candidates was increased by 1 147 persons (4,47%). This negative situation was caused by the global economic crisis (and in the year 2011 in Trnava region four large companies ceased to exist).

2.3 Trenčín Region

In the year 2010 regional gross domestic product of Trenčín region in current prices was EUR 6 434,892 million—it is less than the average value of gross domestic product of all eight Slovak regions in this year (in current prices EUR 8 233,686 million). In relative expression the value of the regional gross domestic product of Trenčín region was 9,77% of the total Slovak gross domestic product in 2010 (EUR 65 869,489 million). In the year 2010 in Trenčín region gross domestic product per capita was EUR 10 744,4824; it is less than the Slovak regional gross domestic product

example, 36 333,33 (European style) = 36 333.33 (Canadian style) = 36,333.33 (US and British style). Furthermore in the International System of Units (SI units), fixed spaces rather than commas are used to mark off groups of three digits, both to the left and to the right of the decimal point.—Ed.]

per capita (EUR 12 130,721) by EUR 1 386,239. In the year 2011 in Trenčín region foreign direct investment inflow was minus EUR 10 915 thousand (in this year only Trenčín region and Nitra region achieved negative value of foreign direct investment inflows). It is a negative fact for Trenčín region and its development.

Socio-economic analysis of Trenčín region is very important for its development as well. In the year 2011 the registered number of the economically active population in Trenčín region was 303 223 persons (167 218 men and 136 005 women). It was 11,36% of the total economically active Slovak population (2 667 708 persons). In this year in Trenčín region the number of economically active people increased only slightly, by 0,80% (2 400 persons). Currently, in Trenčín region circa 50% of employed persons work in industry. In the year 2011 the economically inactive population in Trenčín region was 221 900 persons and in the year 2012 it was also 221 900. In the year 2011 there were 33 203 persons looking for work (8,31% of the total job seekers in the Slovak Republic, 399 800 persons). The largest number of job seekers (9 929 persons) were 35–49 years old. The number of job candidates in Trenčín region increased significantly in 2009 (105,51%). In this period we can see an increase of job candidates in all Slovak regions. This is a consequence of the global economic crisis.

2.4 Nitra Region

In the year 2010 regional gross domestic product of Nitra region in current prices was EUR 7 105,257 million (10,79% of the total Slovak gross domestic product, EUR 65 869,489 million, in the year 2010). This value was the fourth largest value of all eight Slovak regions in the year 2010. In the year 2010 in Nitra region gross domestic product per capita was EUR 10 077,564. In the year 2011 information about foreign direct investment inflow to Nitra region was negative as factor for development of the region. The value of this indicator was negative, –21,561 million euro.

In terms of socio-economic analysis of Nitra region it is important to examine the level of economic activity of the population. In the year 2011 the registered number of the economically active population in Nitra region was 343 685 persons (192 767 men and 150 918 women). It was 12,88% of the total economically active population of the Slovak Republic in the year 2011. In this year the economically active population decreased only slightly, by 0,58% (1 990 persons). In Nitra region the most employees work in industry and in services. In the year 2011 the economically inactive population in Nitra region was 257 800 persons and in the year 2012 it was 250 100 persons. In the year 2012 18 800 persons from Nitra region worked abroad. It is the second highest number among all Slovak regions (Prešov region is the first). In the year 2011 in Nitra region the number of applicants (persons looking for work) was 50 344 (12,59% of the total job candidates in the Slovak Republic). The number of men and women was relatively balanced. The largest number of job seekers (16 669 persons) was 35–49 years old. In the year 2011 in Nitra region the number of job seekers was increased by 4 675 persons (10,24%).

2.5 Žilina Region

In the year 2010 regional gross domestic product of Žilina region in current prices was EUR 7 499,632 million — 11,39% of the regional gross domestic product of the Slovak Republic in the year 2010. In the year 2010 in Žilina region gross domestic product per capita was EUR 10 746,398; less than the Slovak regional gross domestic product per capita (EUR 12 130,721) by EUR 1 384,323. Foreign direct investment is an important factor of economic development of the region. In the year 2011 in Žilina region foreign direct investment was EUR 2,818 million (it represented only 0,33% of the total Slovak foreign direct investment). In foreign direct investment Žilina region was the fifth among all Slovak regions.

In the year 2011 the registered number of the economically active population in Žilina region was 324 992 persons (185 561 men and 139 431 women). It was 12,18% of the total number of economically active Slovak persons (2 667 708 persons). In the year 2011 the economically active population decreased by 2,01%, in absolute expression it represented 6 654 persons. In the year 2011 economically inactive population in Žilina region was 247 600 persons and in the year 2012 it was 244 000 persons. In Žilina region the number of job seekers was 42 637 persons (22 037 men

and 20 600 women). In percentage expression it was 10,67% of the total number of Slovak job seekers (399 800 persons) in the year 2011. In Žilina region a significant increase in the number of job seekers occurred in the year 2009. In this period this situation is similar for all regions of the Slovak Republic. In the year 2009 the negative impact of the global economic crisis began to show (for example, the number of sole proprietorships in Žilina region has declined since 2008).

2.6 Banská Bystrica Region

In the year 2010 regional gross domestic product of Banská Bystrica region in current prices was EUR 5 856,881 million. It was the second lowest value of all eight Slovak regions. In relative expression the value of regional gross domestic product of Banská Bystrica achieved 8,89% of the total Slovak gross domestic product (EUR 65 869,489 million) in the year 2010. In the year 2010 in Banská Bystrica region gross domestic product per capita was EUR 8 973,670, it was less than the Slovak regional gross domestic product per capita (EUR 12 130,721) by EUR 3 157,051. In the year 2011 foreign direct investment recorded low inflow to Banská Bystrica region, in absolutely expression it was EUR 1 303 000 (the third lowest of all regions of the Slovak Republic).

In the year 2011 the registered number of the economically active population in Banská Bystrica region was 316 501 persons (169 374 men and 147 127 women). It was 11,86% of the total economically active Slovak population (2 667 708 persons). In the year 2011 the number of economically active persons did not change significantly (an increase only of 0,09%, 294 persons). In the year 2011 the economically inactive population in Banská Bystrica region was 224 700 persons and in the year 2012 it was 222 600 persons. In Banská Bystrica region the number of job seekers was 68 064 persons (the number of men and women was balanced). In percentage expression it was 17,03% of the total Slovak job candidates (399 800 persons) in the year 2011. In the year 2011 the number of job seekers was increased by 1 220 persons (1,83%). Between the years 2008 and 2009 a significant increase was observed (34,94%). This is a consequence of the global economic crisis again.

2.7 Prešov Region

In the year 2010 regional gross domestic product of Prešov region in current prices was EUR 5 546,036 million—8,42% of the regional gross domestic product of the Slovak Republic in the year 2010. Regional gross domestic product of Prešov region was the lowest regional gross domestic product among all Slovak regions in the year 2010. In the year 2010 in Prešov region gross domestic product per capita was EUR 6 860,713 (56,56%). Prešov region achieved the lowest value in this indicator as well. Based on this information (information about level of gross domestic product) we can say that Prešov region is the weakest among all Slovak regions. The negative situation of Prešov region can also be observed in the area of foreign direct investment. In the year 2011 in Prešov region foreign direct investment inflow was EUR 3 million.

Level of employment/unemployment is an important indicator in the macroeconomic analysis. In the year 2011 the registered number of the economically active population in Prešov region was 386 586 persons (219 912 men and 166 674 women). It was 14,49% of the total economically active Slovak population (2 667 708 persons). In the year 2011 the economically active population increased by 1 661 persons (0,43%). In the year 2011 the economically inactive population in Prešov region was 279,600 persons and in the year 2012 it was 281 800 persons. The highest number of job seekers follows from the previous indicator. In Prešov region in the year 2011 the number of job seekers was 81 880 persons. In percentage expression it was 20,48% of the total Slovak job seekers in the year 2011. In this year the number of candidates in Prešov region was increased by 3 296 persons (4,14%). This increase of those seeking employment is related to the decrease in the number of sole proprietorships in the year 2011.

2.8 Košice Region

In the year 2010 regional gross domestic product of Košice region in current prices was EUR 7 464,229 million (11,33% of the total Slovak gross domestic product, EUR 65 869,489 million, in the year 2010). In the year 2010 in Košice region gross domestic product per capita was

EUR 9 580,628; less than the Slovak regional gross domestic product per capita (EUR 12 130,721) by EUR 2 550,093. Foreign direct investment flowing into the region is important for the economic development. In the year 2011 in Košice region foreign direct investment inflow was EUR 35 538 thousand (the region achieved the third position among the eight regions of the Slovak Republic).

In terms of the socio-economic analysis of Košice region it is important to examine the level of economic activity of the population in the region. In the year 2011 in Košice region there were 359 637 persons (including 195 684 men and 163 953 women), which can be understood as representing the economically active population. It was 13,48% of the total economically active population of the Slovak Republic in the year 2011. In the year 2011 the economically active population decreased by 6 556 persons (1,79%). In the year 2011 the economically inactive population in Košice region was 278 500 persons and in the year 2012 it was 278 400 persons. In the year 2011 in Košice region the number of job seekers was 75 169 persons (18,80% of the total job seekers in the Slovak Republic). The largest number of job seekers was in the 35–49 years old age bracket. In the year 2011 the number of job seekers increased by 3 296 persons (4,59%).

Conclusion

In the article we focused on macroeconomic analysis of Slovak regions. In the introduction of the article we defined basic terminology of macroeconomic analysis. In the second part of the paper we performed macroeconomic analysis of eight Slovak regions (Bratislava, Trnava, Trenčín, Nitra, Banská Bystrica, Žilina, Prešov, Košice region). We focused on gross domestic product, foreign direct investment and economic activity rate of the population in the regions. Based on the results of the analysis, the Bratislava region is the most important among all Slovak regions and this region has a positive position in the Slovak average of the indicators examined. In terms of the comparison of the regional economy, the Bratislava region has a potential to become one of the most important regions in Central Europe.

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