

# COMPARISON OF DEVELOPMENT OF SELECTED MACROECONOMIC INDICATORS IN SLOVAKIA AND SLOVENIA

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**Abstract:** *Every country and its economy has undergone some historical development and is going through it even nowadays, constantly evolving. Today, however, individual changes occur more frequently, are dynamic and have a larger dimension. Technology has accelerated processes and information exchange. The economies of states can no longer function in isolation, because we are at a time where the division of labour is not only of European but also of global character. This work focuses on the development of selected macroeconomic indicators, mainly employment and unemployment of two Slavic states of Slovakia and Slovenia. The size of the area and the number of inhabitant's ranks among the small states of Europe, they have similar geographical and demographic conditions. However, the development of the economy seems different, which is the subject of this paper. To compare the development of macroeconomic variables of the above-mentioned states, the data were drawn from the published data of the Statistical Office of the Slovak Republic, the Statistical Office of the Republic of Slovenia and Eurostat. To evaluate the year-on-year changes in selected indicators, the relative indices were used.*

**Keywords:** *Employment, Unemployment, Gross domestic product per capita, Average nominal wage.*

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## 1. INTRODUCTION

Looking at the history of any country in the world, we find that the historical events associated with it and its economic development continues to affect the people of that country today. Past decisions and action in the present affect our daily lives. The same is true of the economy and the national economy. In today's world of sudden changes and the interconnectedness of states' economies, it is necessary to closely monitor changes in macroeconomic indicators. We have to monitor the changes in the gross domestic product, which shows us the development of the economy, but we must not forget other indicators, such as employment and unemployment, since all indicators are related and we must not forget either indicator when managing the economy to grow the country's economy. The aim of economic governance is to keep GDP growth and employment rates or unemployment rates at an acceptable level. The development of macroeconomic indicators in the Slovak Republic is largely influenced by its historical development too. In the 1990s Slovakia underwent a major economic transformation from a centrally managed economy to a market-oriented economy. Like most countries in the former Eastern bloc, the country had to go through a development that the countries of the western world had long since passed.

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Slovenia and Slovakia were part of Austria-Hungary until 1918. It then formed a union with neighbouring Slavic states called the Kingdom of Serbs, Croats and Slovenes, which was subsequently renamed in Yugoslavia in 1929. In 1953, Yugoslavia broke up with the Soviet Union, which meant it was built outside the eastern and western blocs. In the 1970s, there were internal conflicts, the Slovenes point to economic and political inequalities. They make the most contribution to the common construction and development coffers, but they make the least decisions on important matters. In 1991 Slovenia declared independence following a referendum. Subsequently, Slovenia became a member of the UN, NATO and the European Union. Since 2007, Slovenia has been a member of the European Monetary Union – the Eurozone. Throughout its existence, Slovenia has shown the greatest economic development over other members of the former Yugoslavia.

## 2. ANALYSIS OF SELECTED MACROECONOMIC INDICATORS IN SLOVAKIA AND SLOVENIA

Slovenia, like Slovakia, has undergone a transformation process after 1989, from a centrally managed economy to a market economy. This was not possible without the rise in unemployment, which was a natural development of transformation, since unemployment in the former regime was virtually non-existent because every citizen had to work. Work efficiency was low, part of the employees was paid for their participation in the workplace. After the change of regime, work efficiency began to grow, but there were more people out of work. In later years, the unemployment situation gradually began to improve, new jobs were created and productivity increased.

The development of employment is not only a consequence of the causes and factors affecting employment in a given year. Employment is the result of factors mainly from the period preceding the reference year, as these factors influence the economic development of the country in the future and hence the employment indicator. Other factors that will affect employment are the current labour market conditions and the expected assumption of economic development. The economic development of a state that has a market-oriented, open economy is not linear and unidirectional. Every year there may be some slight or widespread variation in its development, which is predictable or, in the worst case, unexpected and all the more devastating (e.g. economic crisis). The unemployment rate is mainly influenced by the economic development of the country. If the value of gross domestic product decreases, production is declining, as many workers are not needed as at full production and unemployment.

**Table 1.** Development of employment rate between 2008 and 2018  
 in the Slovak and Slovenian Republics

Slovakia											
Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
MZ (%)	68,8	66,4	64,6	65,0	65,1	65,0	65,9	67,7	69,8	71,1	72,4
Δ (%)	---	-2,4	-1,8	0,4	0,1	-0,1	0,9	1,8	2,1	1,3	1,3
Slovenia											
Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
MZ (%)	73,0	71,9	70,3	68,4	68,3	67,2	67,7	69,1	70,1	73,4	75,4
Δ (%)	---	-1,1	-1,6	-1,9	-0,1	-1,1	0,5	1,4	1,0	3,3	2,0

**Legend:** MZ (%) – employment rate in %; Δ (%) – year-on-year change in %

**Source:** Eurostat, own processing

In the Slovak Republic, since 2009 and 2010, we have observed a decline in the employment rate (Table 1). The labour market was delayed in responding to the financial crisis that our economy had already anticipated in 2008. In 2009, the employment rate fell by 2.4% year-on-year and by a further 1.8% in 2010. These years can be described as the years when the first wave of the financial crisis, which affected our economy, came to our territory. As a result of unfavourable development on foreign markets and uncertainty for the future, exports decreased, which resulted in a decrease in production volume and a decrease in the number of employees. The largest decline in exports was recorded in the products of the vehicle manufacturing and electronic and electrical industries (Okáli et al., 2011). In 2011 and 2012, the Slovak economy began to recover from the financial crisis, the employment rate rose, but at a slow pace. The low increase in employment was due to the expectation of the second wave of the financial crisis, and the future of production and demand for individual goods was unclear (Morvay et al., 2013). The second wave of the financial crisis at the level of the employment rate was signed in 2013. The employment rate of 67.7% represented a year-on-year decline of 1.1%. The labour market again reacted with a lag, and to a lesser extent to economic developments. The number of employees did not decrease rapidly, as it was assumed that the financial crisis was already overcome and that the economy of the Slovak Republic would grow in the following periods (Morvay et al., 2014).

In the following years, the economy and employment in the Slovak Republic had a favourable development and increase. In 2014, employment increased year-on-year by 0.9%, in 2015 by a further 1.8%. The highest year-on-year increase occurred only in 2016, when the employment rate increased by 2.1% compared to 2015. The employment rate was 69.8%. 2016 was the first year of the reference period in which the employment rate equalled the employment rate in the pre-crisis period of 2008 and even increased by 1% from it. The main factors behind the increase in employment were the favourable situation on foreign markets, the increased demand for products of our economy, especially the production of industry and the increase in jobs in the services sector. The population was also motivated by rising wage levels, and even a large proportion of the long-term unemployed found employment (Morvay et al., 2017). 2017 and 2018 were also characterized by an increase in the employment rate, but growth slowed. Employment increased by 1.3% year-on-year and stood at 72.4%. The economy and production growth were doing well, and job creation also had a positive development. However, there was a problem with insufficient workforce, either unqualified but mainly qualified. The influx of labour from abroad, notably from Ukraine and Serbia, which occupied some of the vacancies (Morvay et al., 2018) was clearly visible.

At the beginning of the period under review, in 2008 the employment rate in Slovenia was 73.0% (Table 1). In 2009, the employment rate fell to 71.9%. Although it was a slight decline, it was a harbinger of the beginning of the financial crisis. Demand for export commodities decreased slightly. The number of people in employment has decreased, the number of small private entrepreneurs and self-employed persons has slightly increased. In 2010, employment fell by 1.6% year on year. Companies continued to be cautious in recruiting new employees; The necessary production volume was not obtained through the recruitment of new employees, but through timeless hours. The worst situation with employment occurred in the production sphere. The largest decline in employment occurred in the second half of 2010. Unemployment decreased in all sectors, with the exception of social work, where there is a slight increase. This was mainly about long-term care for the elderly, funded by private funds. Real estate trade was another exception in employment growth (Lindič, Kraigher, 2011). The year 2011 was marked by a further decline in employment, particularly in construction, real estate and agriculture. In

some kinds of services there has been an increase – professional, scientific and technical activities. However, when looking at total employment in services, it was lower than in the previous year (Kraigher, Perko, 2012).

In 2014 there was a slight increase in employment. Although the performance of the economy has progressed in a positive direction, employers remained cautious in recruiting, hence preferring to hire workforce from recruitment agencies and also preferred to work not on a full-time basis but on contracting to use work as needed (Perko, 2015). Employment continued to grow in 2017. Its year-on-year increase was 3.3%. Also, this year, the increase in total employment was driven by demand from abroad, which caused production for export needed additional workforce. Employment also grew in domestic services, as well as in science and research. The improved situation of the national economy has allowed a slight increase in the number of employees in public administration. We also saw an increase in employment in the construction sector after the implementation of foreign investment. Employers began to favour direct employment over contracted employment or employment. Foreign workers, mainly Serbia, predominantly in the construction industry (Perko, 2018) accounted for a significant share of employment growth.

During the period under review, employment in Slovenia was influenced by the State, in particular in mitigating the effects of the financial crisis. Employment support measures were taken to curb unemployment growth. The state supported certain groups of jobs. It also supported the growth of the number of self-employed and private entrepreneurs in the implementation of employment policy through legislation, various financial concessions and subsidies. On the basis of the above, it can be stated that the development of employment in both countries had similar character, causes and consequences. Slightly better results can be observed in the Republic of Slovenia.

**Table 2.** Development of the unemployment rate in the years 2008 to 2019 in the Slovak and Slovenian Republics

Slovakia												
Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
MN (%)	9,5	12,0	14,4	13,6	14,0	14,2	13,2	11,5	9,7	8,1	6,5	5,8
Δ (%)	---	2,5	2,4	-0,8	0,4	0,2	-1,0	-1,7	-1,8	-1,6	-1,6	-0,7
Slovenia												
Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
MN (%)	4,4	5,9	7,3	8,2	8,9	10,1	9,7	9,0	8,0	6,6	5,1	4,6
Δ (%)	---	1,5	1,4	0,9	0,7	1,2	-0,4	-0,7	-1,0	-1,4	-1,5	-0,5

**Legend:** MZ (%) – employment rate in %; Δ (%) – year-on-year change in %

**Source:** Eurostat, own processing

From Table 2 it can be concluded that at the beginning of the period under review the level of unemployment was more favourable for Slovenia. The unemployment rate compared to Slovakia was halved by 4.4%, while Slovakia had an unemployment rate of 9.5%. This difference was due to the development of the economy from previous years. It can be said that Slovenia has better managed its role of building a market economy with an open economy. Slovakia was influenced by the transformation of the command economy into a market economy and subsequent turbulences in the 1990s, which were years of imperfect legislation and privatization. Slovenia has developed its economy, especially its openness to trade with neighbouring countries and the world gradually. In both countries, the unemployment rate fell in 2008 thanks to foreign investment, but GDP growth started to slow due to the coming financial crisis.

In 2009, the openness of the economy and dependence on foreign demand in both countries manifested itself. If we break down the economies of both countries by industry, the leading role in both cases is in manufacturing and manufacturing. The financial crisis brought a decrease in foreign demand mainly for the commodities of this sector, which caused a decrease in production already in 2008, but due to labour market imperfections, the number of employees adjusted almost 9 months later, only in 2009, where the unemployment rate in Slovakia increased. year-on-year by 2.5% and in Slovenia by 1.5%. In the following years we see an annual increase in the unemployment rate in both countries, until in 2013 they reached their highest level in the monitored period, in the case of Slovakia 14.2%, in the case of Slovenia 10.1%. The unemployment rate in Slovakia increased by 4.7% compared to 2008 and in Slovenia by 5.7%. Despite lower unemployment growth in five years, unemployment in Slovakia was still higher than in Slovenia by 4.1%. Both countries tried to mitigate the increase in the unemployment rate by state intervention, various business support, trade concessions, subsidies. According to the table, when looking at the development of the growth of the unemployment rate from 2008 to 2013 the role of solving the problem of unemployment, namely slowing its growth, was better addressed by the Slovak Republic, but the historical development of the economy played in favour of Slovenia. Since 2014, after the situation on foreign markets has been satisfied, we have seen an improvement in economic development in the countries under review as well as in the area of unemployment. The unemployment rate fell until the end of the period under review. In 2019, the unemployment rate was 5.8% in the Slovak Republic and 4.6% in the Republic of Slovenia. The Republic of Slovenia had 0.2% higher unemployment rate in 2019 than in 2008, the Slovak Republic improved by 3.7%, compared to Slovenia it had a higher unemployment rate of 1.2%, which is a positive improvement compared to the beginning of the period under review. The gradual decline in the unemployment rate was due to various factors, namely an increase in foreign demand for the aftermath of the financial crisis and investment by foreign investors who sought to reduce production costs. The development of the unemployment rate in the period under review was of a similar nature in both countries under review, mainly due to the impact of the financial crisis and state intervention in support of employment. Slovenia had a lower unemployment rate in the period under review, due to the economic development already mentioned, but also because of its location by the sea and mountains. Slovenia has a well-built infrastructure of destination holiday destinations, which contributes to high employment in accommodation, catering, recreation, spa and the like.

**Table 3.** Development of GDP per capita in the years 2008-2018 (in €)  
in the Slovak and Slovenian Republics

Slovakia											
Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
GDP/inhabitant	12 200	11 800	12 400	13 100	13 400	13 700	14 000	14 600	15 000	15 600	16 500
Δ (%)	---	-3,4	4,8	5,3	2,2	2,2	2,1	4,1	2,7	3,8	5,5
Slovenia											
Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
GDP/inhabitant	18 800	17 700	17 700	18 000	17 500	17 600	18 200	18 800	19 500	20 800	22 000
Δ (%)	---	-6,2	0,0	1,7	-2,9	0,6	3,3	3,2	3,6	6,3	5,5

**Legend:** Δ (%) – year-on-year change in %

**Source:** Eurostat, own processing

As can be seen in Table 3, GDP per capita in Slovakia gradually increased over the whole period under review, but at a much slower pace. In the case of Slovenia, some fluctuations occurred in times of financial crisis, but nevertheless it had substantially higher GDP per capita than Slovakia in the whole period under review.

**Table 4.** Development of average monthly wage in the years 2008-2018 (in €)  
 in the Slovak and Slovenian Republics

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Slovakia	723	745	769	786	805	824	858	883	912	954	1013
Slovenia	1391	1439	1495	1525	1525	1523	1540	1556	1585	1627	1682

Source: ŠÚ SR, SiStat, own processing

The average monthly wage in Slovakia gradually increased throughout the period under review. (Table 4.) At the beginning of the period under review, it was at EUR 723, reaching EUR 1 013 over 11 years. On the one hand, the increase in the average wage was caused by the inflow of foreign investment and by an increase in labour demand. The second reason was the annual increase in the statutory minimum wage, which allowed the average wage to rise even in times of financial crisis. The employers tried to slow the growth of the average wage by employing a cheaper workforce mainly from Ukraine and Serbia, especially in the second half of the period under review.

The average wage in Slovenia was better in absolute terms than in Slovakia. At the beginning of the period under review, the average wage was EUR 1 391 per month, gradually increasing annually, until 2011 and the following two years stagnated, respectively. decreased. The decline was due to reduced demand for labour due to the uncertainty in foreign markets caused by the financial crisis. Since 2014, after the economy started, wages in Slovenia have risen. In 2018, the average monthly wage reached EUR 1,682. During the period under review, Slovenia had a level of average monthly wage relative to Slovakia, owing to its economic results, labour demand and also the statutory minimum wage. However, if we compare the increase in the average monthly wage at the beginning and at the end of the period under review in both countries, we get a surprising result. The increase in Slovakia was by € 290, and in Slovenia by € 291, in absolute terms, almost the same. We can state that despite the difference of one euro, the average wage in Slovakia was more positive than in Slovenia in terms of the growth rate of this indicator.

### 3. CONCLUSION

Both Slovenia and Slovakia are mainly dependent on foreign demand for production and manufacturing, and therefore its employment development is closely related to the situation on foreign markets. In the case of Slovenia, the financial crisis would have a very high impact on employment and unemployment rates. However, Slovenia used employment support instruments similar to those of Slovakia, thereby significantly mitigating the impact of the financial crisis on employment. Throughout the whole employment and unemployment survey, Slovenia performed better than Slovakia. In 2008, the unemployment rate in Slovenia was 5.1% lower than in Slovakia and at the end of the period under review the difference between the unemployment rates of these countries was 1.2%. Both countries were marked by the already mentioned financial crisis. Although the unemployment rate has improved in recent years, Slovakia has been better at tackling the unemployment rate, and Slovenia's employment gap has eased at the end of the reporting period. Slovenia has achieved a better labour market situation, in particular in terms of employment rates, on the basis of various factors. First of all, it was a larger volume of GDP per capita compared to Slovakia. In 2008, Slovenia had a GDP per capita by more than 50% higher than Slovakia, by 25% at the end of the reporting period. The volume of production per capita and the efficiency of work were in favour of Slovenia, therefore it also had better employment results, as the volume of GDP significantly affects labour demand. The higher efficiency of work in Slovenia was due to the higher technological level. The willingness to work at a given wage also influences

the employment and unemployment rates to a large extent. In comparison with Slovakia, Slovenia has a stronger social policy, more protecting its people on the labour market. In 2008, the minimum wage in Slovakia was set at EUR 241 per month, in Slovenia EUR 539. The minimum wage gradually increased annually in both countries, reaching only EUR 435 in Slovakia and EUR 805 in Slovenia in 2017. During the whole monitored period the minimum wage was almost twice as high in Slovenia as in the Czech Republic. The average monthly wage in the country also derives from the statutory minimum wage. In 2008 the average wage in Slovakia was EUR 723 per month, in Slovenia EUR 1 391. Until the end of the period under review, it grew, until 2018 the monthly average wage was EUR 1,013 in Slovakia and EUR 1,682 in Slovenia. During the whole monitored period the average monthly wage was in Slovenia as in Slovakia. The amount of wages, as the main factor of motivation to perform dependent gainful activity, i.e. employment considerably influenced the rate of employment and unemployment in these countries. When comparing the development of employment and unemployment in Slovakia and Slovenia, we conclude that GDP and labour efficiency affect employment rates and wage levels. Looking at the fluctuations in the employment and unemployment rates of these countries as a result of changes in foreign demand gives us a picture of the dependence of economies on the world economy. A suitable recommendation for both countries would be to extend their production portfolio to other spheres. Not only concentrate on the processing and manufacturing industry of certain commodities (cars), but also build production focused on other types of goods. They should also focus on the development of services and tourism, as these spheres have the potential to build new jobs. Distributing employment across the economy would mitigate the negative impact on employment in the future in times of unfavourable development in individual foreign markets.

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