# ASSESMENT OF UNEMPLOYMENT IN THE REGIONS OF SLOVAKIA

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#### **Abstract**

Unemployment is currently a global problem, the high unemployment rate affects the overall social climate in the country as well as worsening the economic situation and the development of regions in Slovakia. Unemployment rate as a basic macro-economic indicator reflects the real situation in the Slovak economy. It depends on some other factors, determining the macro-economic and regional development. High employment rate is to maintain regional development, since increased demand is a catalyst of the economic growth. As a part of the evaluation, attention was addressed to economic indicators as GDP per capita and unemployment in different regions. The evaluation was realized at the level of self-governing regions and based on the severance data a correlation analysis of economic indicators on the territory of Slovakia was conducted. Our paper is examining the correlation between the unemployment rate and development of the regions. We have processed the data of the Slovak Office of Statistics and papers published in scientific journals and databases. Potential directions in the development are indicated in the conclusion of our paper.

Key words: unemployment, unemployment rate, regional unemployment, Slovakia

**JEL Code:** E24, P25, R11

## Introduction

The issue of unemployment has been discussed and faced as an economic, social and cultural problem worldwide. A very high unemployment rate has negative impact on social life, while it is worsening the economic output, and at the same time, it triggers discomfort and worries of people about their health and the national health system. According to Bajzik (2017), the current situation on the labour market is influenced by many factors, resulting in imbalance between demand and supply on the labour market. Unemployment is not only influenced by economic but further factors as well. The labour market is closely connected to the development of industries, and thus providing work facilities to the population (Volek, Novotna, 2017). In open

economies, unemployment is a highly discussed issue, included in the election programmes of the political parties. The attitude of public towards the issue of employment and unemployment, education and qualifications cannot be ignored. Our paper is focusing on the indicator of unemployment and its impact on regional development. The macro-data processed is gained from statistics of the Slovak Office for Statistics and papers published in scientific journals and registered in databases.

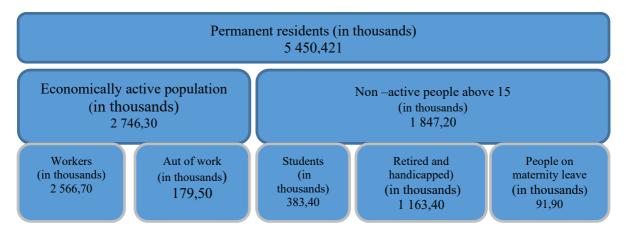
# 1 Unemployment in Slovakia

Unemployment is faced by countries all over the world. Development of the unemployment is influenced by some factors. A very high unemployment rate has an impact on the national economy. It is the most serious economic problem each country has to resolve (Mura, Svec, 2018). The unemployment rate, inflation rate and the Gross Domestic Product are ranked among the most important macro-economic indicators that are measured and analysed the most frequently (Mura, et al., 2019). These indicators mirror the situation in the national economy. In many countries, the issue of unemployment is defined as an economic and social problem but also as a serious political problem societies have to deal with. Unemployment rate reflects the lack and loss of assets and services that could have been offered by workers if they were employed. The issue of unemployment has become a problem to be resolved by modern societies. If the unemployment rate is high, the resources and assets are not utilized, which results in decrease of pensions of retired people. Especially these are the cases when poverty has impact on family life of people, their income and other factors (Spirkova et al., 2019; Salama, Oláh, 2019; Kubak et al., 2015). Unemployment rate is a complex social problem in the society. Being out of work, having no job or losing a job is very stressful for all the people concerned, and to a certain extent, it may have negative impact on their lives. It may also result in decreased standard of living, job insecurity, and a loss of personal relations and contacts at workplaces (Pauhofová et al., 2018; Mura, Svec, 2018).

Work is an activity of people who use their physical or mental effort during their active years and a source of pension they might benefit from after retiring (Pauhofova, Stehlikova, 2018; Nosková, Peráček, 2019). When people lose their jobs they consider it as their personal failure, feel uncertain about their skills and knowledge, and underestimate themselves as members of the society (Kádár, 2017). There are three institutions in Slovakia dealing with the issue of unemployment. These are the National Labour Office (NÚP), registering jobless people

looking for a job and District Offices for Labour, operating in compliance with the Slovak Act No.387/1996 Coll. The data on unemployment are published on regular basis monthly. The unemployment rate is calculated in compliance with two methodologies and is controlled by the National Labour Office (NUP).

Table 1. Economic activity of the population by December 31st, 2018



Resource: based on the data by DataCube

The Slovak National Office for Statistics gathers the data on labour force selectively, and the data are published regularly once in three months. The methodology applied has been developed according to the instructions published by the International Labour Office. The unemployment rate calculated according to the methodology is lower by 1.5 per cent than the unemployment rate calculated in compliance with the methodology of Central Office of Labour, Social Affairs and Family.

The Slovak National Office for Statistics publishing the data on unemployment always clearly states the type of the methodology applied. In terms of economic activity, employment and unemployment, the population of Slovakia can be divided into two categories. The economically active population is formed by all of those employed, but also unemployed who want to work and are active job seekers. Inactive part of the population does not look for a job. They either do not need or do not want to work. The inactive part of the population involves pupils, students and retired people. The following table provides data about the population in terms of economic activity. The economically active share of people is higher than the ratio of the inactive population. The rate of the economic activity in Slovakia reached 59.8 per cent in 2018. At the end of this year, the unemployment rate was 6.6 per cent and the number of jobless

was about 179.5 thousand. Table 1 shows the division of people according to their economic activity.

The unemployment rate is calculated as the follows:

- 1. The number of unemployed people represents the difference between the number of active labour force and the number of people employed in every season.
- 2. The unemployment rate in percentage represents the ratio of the number of jobless people to the number of labour force representing the sum of all employed and unemployed.

## 1.1 Unemployment in Regions

The overall unemployment rate in Slovakia is not alarming, but the unemployment figures in some regions result in a huge development gap of the Slovak regions. Due to this fact, there is a problem of implementing different minimum wage in some Slovak regions.

Minimum wage is the lowest wage that must be paid to employees for their work and represents a social-economic tool applied by the countries as welfare states. The European Union countries are responsible for their own minimum wages. According to data by Eurostat 20, the European countries have already implemented their national minimum wage. Minimum wage is considered to be an obstacle. It is considered to be a burden by the employers since it has increased their operation costs. The trade unions representing employees have been promoting it as a sort of social insurance for the employee. The minimum wage in Slovakia does not represent such a burden to the national economy because only 1% of working people are paid the minimum wage. The amount of the minimum wage is variable. It is increasing slowly, having impact on the increase of average wage. The Slovak population mostly live in densely populated areas around the cities in the south-west of Slovakia, especially on lowlands. The cities are located in the self-governing regions of Bratislava, Trnava and Trenčín. More than half of the active population in the economy are employed in the service sector, and more than one third of the people work in industries, whereas the national agriculture employs only 5% the active population. The unemployment in some Slovak regions is caused by the closure of mechanical engineering companies. These changes resulted in widening gap of living standard of people living in cities and countryside.

A discussion on minimum wage differentiation was initiated by the Slovak Ministry for Labour. Low minimum wage should be paid to people living and working in the Central and Eastern Slovak regions, since their economy is less efficient, and the unemployment rate in these regions is rather high. The costs of living in the regions is low and the minimum wage paid in these regions should be low as well. In our opinion, low minimum wage in less developed Slovak regions is not an option for the future development of the region. The Slovak economy should apply effective tools in the regional economy and economic policy that can be utilized reasonably. The unemployment in Slovakia is a serious problem that needs an effective approach. Table 2 shows figures for total unemployment in Slovakia in years 2009-2019, while Table 3 presents the unemployment rate in the Slovak regions.

Table 2. The economic activity of the population and the unemployment rate in years 2009 -2019

Slovak Republic							
Year	Unemployment rate (in %)	Unemployment (in thous)	Economic activity of population (in thous)	Permanent residents by Dez. 31.12. (in thous.)			
2009	12.1	324,2	2 690,0	5 424,9			
2010	14.4	398,0	2 706,5	5 435,3			
2011	13.6	364,6	2 680,0	5 404,3			
2012	14.0	377,5	2 706,5	5 410,8			
2013	14.2	386,0	2 715,3	5 415,9			
2014	13.2	358,7	2 721,8	5 421,3			
2015	11.5	314,3	2 738,3	5 426,3			
2016	9.7	266,0	2 758,1	5 435,3			
2017	8.1	224,0	2 754,7	5 443,1			
2018	6.6	179,5	2 746,3	5 450,4			
2019	5.8	157,7	2 741,4	5 457,9			

Resource:based on the data by DataCube

Table 2 shows that in 2009 the figures of unemployment went up by 66.7 thousand compared to year 2008. The employment rate decreased and resulted in lowering the purchasing power The social benefits paid by the Slovak government increased. This situation was a reaction to the world financial crisis. Another important milestone was 2009, when the single currency was introduced in Slovakia. The economic crisis in 2008 caused an increasing unemployment in 2010. The crisis had negative impact especially on the development of the country and the number of jobless people reached 389 thousand that represented the interim increase by 64.8 thousand of unemployed. In the same year, the unemployment rate increased

to 14.4 per cent. The situation in 2011 calmed down resulting in decrease in unemployment rate to 13.6 per cent. Although the total population number decreased, the unemployment rate levelled off at 7%. The same tendency was detected with the ratio of the economically active population, where the total number of active population levelled off at 50%. The ratio remained the same from 2010 to 2014. The falling economic activity in Western Europe resulted in decrease of the export-led economy of Slovakia in 2012. The European debt crisis caused by a balance-of-payments crisis had impact on the future prospects of the European economy. The slow European economic growth had an impact on the Slovak economy, which resulted in the increased number of unemployed by almost 13000 people compared to data from 2011. The Slovak unemployment rate reached 14%. The Slovak unemployment fell to 13,2% in 2014, which means that the total number of people out of work decreased by 27.3 thousand compared to the previous year. The unemployment rate and the number of jobless people was falling on annual basis and reached 10 per cent in 2016. The Slovak unemployment rate stood at 9.7%. The lowest level of unemployment was achieved in 2019. The ratio of jobless was only 3% of the total number of people permanently residing in Slovakia and reached the number of 157.7 thousand of unemployed.

Table 3. The unemployment rate in Slovak self-governing regions

Region	Year										
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Banska Bystrica	19.19	18.86	19.83	20.81	18.26	17.22	14.94	12.8	8.67	7.03	6.69
Bratislava	4.36	4.63	5.41	5.72	6.17	6.13	5.34	4.51	3.05	2.62	2.83
Košice	17.3	16.78	18.76	19.58	17.23	15.92	14.39	12.76	9.94	8.17	7.57
Nitra	11.72	11.76	13.27	14.08	12.52	11.21	9.71	6.96	4.05	3.12	2.93
Trenčin	10.13	9.51	9.95	10.89	10.74	9.56	7.71	5.85	3.53	2.93	3.2
Trnava	8.37	8.17	8.88	9.43	9.16	8.03	6.71	4.41	2.6	2.31	2.63
Prešov	18.29	17.75	18.95	20.66	19.35	17.45	15.5	13.91	9.68	8.61	8.19
Žilina	10.89	10.86	11.91	12.79	12.51	10.91	8.86	6.92	4.7	4.04	3.96

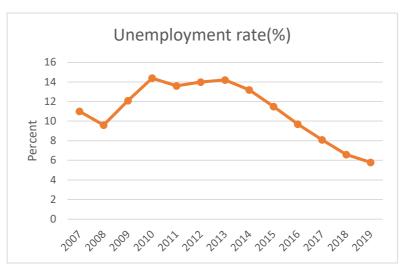
Resource:based on the data by DataCube



Table 4. The unemployment rate in Slovak self-governing regions

Resource:based on the data by DataCube

We focused on the analysis of the possible dependence of unemployment, inflation rate and GDP per capita in Slovakia. The following graph presents the development of the Slovak unemployment rate in the period of 2007-2019.



**Graph 1. Unemployment rate (%)** 

Source: Own processing based on data from DataCube

The graph shows that unemployment rate in Slovakia was at the lowest level in 2019 during the examined period. Graph 2 presents that the inflation rate reached negative value in the period of 2014-2016.

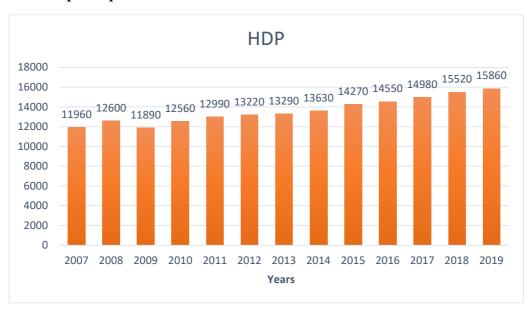
Graph 2. Inflation rate (%)



Source: Own processing based on data from DataCube

Graph 3 shows the development of GDP per capita in Slovakia for the period of 2017-2019.

Graph 3. GDP per capita



Source: Own processing based on data from DataCube

Based on the available data, a correlation analysis of the examined econimic indicators was conducted. The correlations are presented in the correlation matrix.

Table 5. Correalaiton matrix

	Year	Unemployment rate	GDP	Inflation
Year	1			
Unemployment rate	-0.595907828	1		
GDP	0.974691129	-0.719259847	1	
Inflation	-0.212667786	-0.11230657	-0.087536237	1

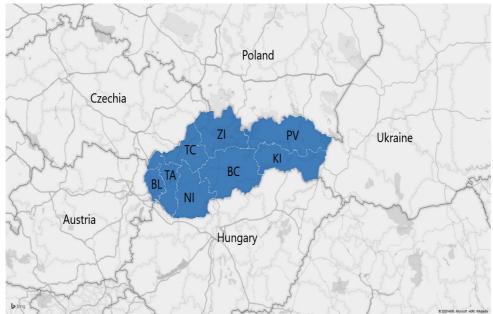
Source: own processing

Figure 1. Regions in Slovakia

The conducted correlation analysis shows that the only statistically significant positive dependence can be detected in the case of development of GDP per capita and time. The GDP per capita had been increasing in the examined period. Statistical correlation had not been detected in the case of other economic indicators.

Graph 4 presents the development of unemployment rate in different regions of Slovakia. The development of unemployment rate in individual regions of Slovakia is presented in Graph 4. In the examined time interval, long-term unemployment could be detected in Banská Bystrica and Prešov region, followed by Košice region. These regions can be characterized by weak infrastructure.

Poland



Source: Own processing based on data from DataCube

UNEMPLOYMENT OF THE REGION

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25
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2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

Graph 4. Unemployment in the regions of Slovakia

Source: Own processing based on data from DataCube

## Conclusion

It can be summarized that entering the labour market requires improvement of skills, qualifications, knowledge as well as experience. In order to get a new job, the market trends and demand should be followed, if necessary, get qualification and learn skills to remain on the labour market. Based on the theory and the up-to-date data of statistics, some recommendations have been worked out to support the development of the Slovak labour market. These are the following: promoting and supporting the development of public services supply; creating and promoting flexible patterns of employment; preventing the labour market from rigidity and deformations; promoting and supporting businesses and enterprises; implementing industrial system of measures to trigger business activities in the given region, while cooperating with all participating businesses to develop social enterprises; promoting the process of training or requalifying the employees; diminishing the administrative burden in the field of founding and starting new businesses funding active employment policy on larger scale and assisting handicapped people to enter the labour market.

The output of the analysed data can be summarized as the follow: The high unemployment rate of Slovakia reported from 2010 and 2013 was caused by the global economic crisis of 2008 and the financial crises in 2012. The correlation analysis shows that the only statistically significant dependence can be detected in the case of development of GDP

per capita and time. There is no statistically significant dependence in the case of other economic indicators.

The unemployment rate in Slovakia reached its historically lowest level in 2019 since its establishment. The lowest unemployment rate was reported in the self-governing regions of Trenčín and Bratislava, where the capital city of Slovakia is located, which is attracting the workforce also from the less developed regions of the country. Bratislava self-governing region offers not only well-paid and attractive jobs but also offers higher standard of living. In the last year of the researched period (2019), the figures lower than the Slovak unemployment rate (5.8%) were reported in the self-governing regions of Bratislava (2.3 %), Trnava (4.6 %), Trenčín (2.9 %), Nitra (4.6 %), and Zilina (4.5 %). The self-governing regions Banska Bystrica (7.9 %), Presov (10.1 %) and Kosice (7.9 %) reported higher unemployment rate than the Slovak average is. These three regions reported the highest unemployment rate during the researched period. The unemployment rate in the self-governing region Bratislava was the lowest compared to other regional unemployment rates. The highest unemployment rate was and still can be detected in East Slovakia, where the largest ratio of the Slovak population with the lowest or no qualifications and lack of work experience live. The Eastern Slovak regions have never offered many job opportunities, and a lot of people have been out of work for a long time. The development of unemployment in 2020 is also determined by the pandemic situation. Due to the pandemic caused by COVID-19, an increase in unemployment rate may be expected in most of the Slovak regions.

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