

# The Relationship Between Unemployment and the Risk of Poverty in the Slovak Republic

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**Abstract.** Unemployment is a factor that affects the economic security of individuals and society as a whole. The poverty risk rate is one of the main factors related to social inequality and social protection. Unemployment and long-term unemployment can increase the poverty risk rate because individuals have limited or insufficient income and employment opportunities. The relationship between unemployment, long-term unemployment and poverty rates is currently the subject of various research topics. This paper focuses on these interrelationships in Slovakia. The aim is to analyse the data and explore the correlations between these variables. The thesis mainly used statistical data provided by the Slovak Statistical Office and other relevant studies. The methods of analysis, synthesis and correlation were used. These data highlight the relationship between unemployment, long-term unemployment and poverty. The results of the article are intended to provide information for reducing unemployment, limiting long-term unemployment, and reducing the risk of poverty in Slovakia.

**Keywords:** Unemployment Rate, Poverty Risk Rate, Long-Term Unemployment Rate, Correlation.

**JEL classification:** E21, E27

## 1 Introduction

Unemployment is understood as a relationship in which individuals seek work but cannot find it. This phenomenon can be caused by various factors such as the state of the economy, recession, demographic changes and many other factors. (Stiglitz, 2012) In order to explain the phenomenon of unemployment, the theory of supply and demand is often used. This theory describes the process by which individuals seek employment and the labour market adapts to changes. According to this theory, unemployment arises due to mismatches and incompatibilities in the labour market as employers look for the best person for the job and individuals look for jobs that match their skills and ideas. In recent years, the theory of 'hidden unemployment' has been developed, suggesting that there are large numbers of people who are not officially registered as unemployed but are still interested in full-time work, or are looking for work and working part-time. These people are known as the 'hidden unemployed'. The theory states that official unemployment statistics may be distorted and that the measurement of unemployment should take into account several factors. Berg, Kucera, and Lena-Nozal (2016), "Hidden unemployment: An Analysis of Contingent Employment in Europe", examines hidden unemployment in Europe in the context of precarious employment. In doing so, they highlight the importance of studying hidden unemployment and its impact on the labour market. Prolonged unemployment can cause people to develop passive habits, which can hinder future employment. In addition, this form of unemployment can have a negative impact on society by reducing productivity and forcing governments to increase spending on social assistance." A step forward on unemployment is the study by Andrei Kupak et al. (2019), which focuses on analysing unemployment data for Slovakia and comparing it with unemployment rates in EU countries. The study found that unemployment in Slovakia has distinct regional differences, with the southern and eastern parts of the country having the highest number of unemployed people. They also found a negative correlation between unemployment and regional economic growth. This study suggests that regional factors should be taken into account when estimating unemployment rates. (Klube, 2010) Rayard, Nickel, and Jackman (1991) in "Unemployment: Macroeconomic Performance and the Labour Market" refer to the "lagging unemployment" theory, which states that long-term unemployment has long-term effects on the labour market. These consequences are that the unemployed lose skills and experience, making them less attractive to employers and therefore less likely to be hired. This can also lead to lower productivity as the unemployed do not use their skills and experience in the labour market.

Poverty is characterised by a number of indicators such as low income, poor housing conditions, social exclusion and limited access to education and health services. This article focuses on the UK and shows that poverty is still a problem even in developed countries. (Bramley et al., 2016) Author Martin Ravallion (1994) defines poverty as the inability to meet basic needs such as food, shelter and clothing due to lack of financial resources. In *Measuring Poverty in Developing Countries*, Ravallion discusses different ways of measuring poverty in developing countries, stressing that the definition and

measurement of poverty should depend on context and culture. The 'income structure' theory is a theory of the relationship between income inequality and the risk of poverty, according to which people with lower incomes are at greater risk of falling into poverty. It also looks at factors that influence income inequality, such as education, gender, race and ethnicity. The paper "Income Inequality, Income and Poverty in OECD Countries" by Ivan Kuhn and Leri Singel Jr. (2015) demonstrates this theory. Based on data from successful OECD countries, the authors conclude that income inequality is an important factor affecting the risk of poverty. The paper also looks at factors that influence this relationship, such as education, gender, and other social factors. The theory of relative deprivation examines how an individual or family feels in relation to the rest of society and how this affects their level of poverty risk. In *Relative Deprivation and Poverty in the United States and Canada* (2010), Lars Osberg and Andrew Sharp use this theory to understand poverty rates in the United States and Canada. The authors test their hypotheses using data from a variety of sources and find that feelings of relative deprivation have a significant impact on the risk of poverty in both countries. The cultural theory of poverty argues that poverty is not only a matter of economic resources, but also a matter of culture and values passed down from one generation to the next. According to this theory, people in poor communities can be influenced by certain attitudes that perpetuate poverty. This theory is often used in academic papers on poverty. One paper that mentions the culture of poverty theory is Diane Purvin's "The Culture of Poverty: A Critical Review" (2016). In this paper, Purvin critically analyses and evaluates the culture of poverty theory and considers its implications for poverty research and social policy. Another paper on culture of poverty theory, "Poverty Theory and Pro-Poor Programmes in Social Development" (2016) by Mark Brennan and Julie Ann Golbowski, focuses on poverty theory and pro-poor programmes in the context of social development. In this article, Brennan and Golbowski discuss various theories of poverty, including cultural theories of poverty, and consider the implications for various anti-poverty programmes. The authors argue that poverty theories can help identify the causes and factors that contribute to poverty in a particular community and help design and implement effective anti-poverty programmes.

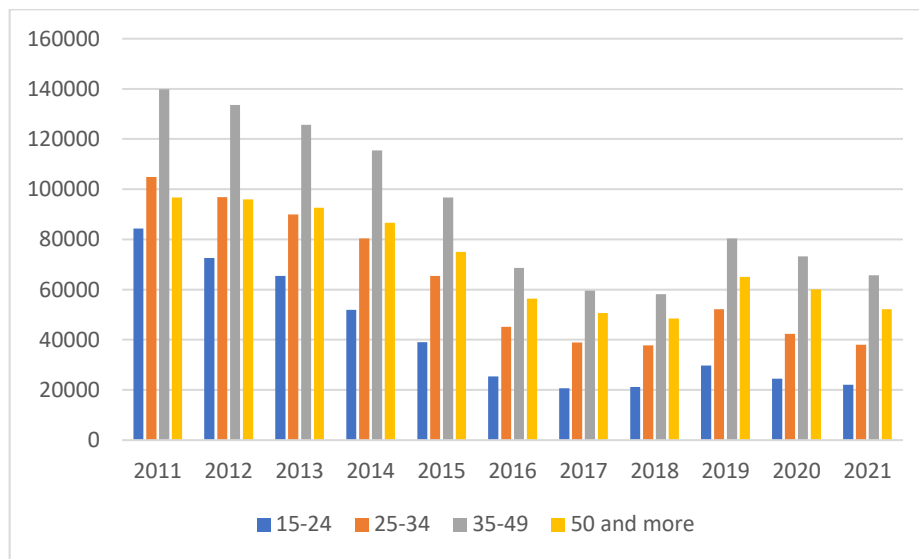
Baldwin and Bepp (2015) focus on the effect of unemployment on poverty risk in the EU. According to the authors, unemployment has a significant negative effect on a country's socio-economic development, especially in terms of poverty risk. The authors argue that unemployment is one of the main factors that increase the poverty risk in the EU; therefore, the authors are interested in how to reduce this negative effect. The study highlights the importance of social measures and policies to reduce the negative effects of unemployment. The authors argue that EU countries should implement active labour market policies, including training and retraining programmes, to improve employability and reduce unemployment. They should also implement social measures, such as housing assistance, social assistance and job search assistance, to support families and individuals in need. The findings of this study will have important implications for the design of EU policies and strategies to reduce the risk of poverty. The authors highlight that despite the critical unemployment situation, there are policies and measures that can help reduce the negative impact of unemployment on the risk of

poverty. Gregg's (2018) study examined the relationship between unemployment and poverty in the United States. The aim of the study was to determine how strong this relationship is and whether it varies across different population groups. The data used showed that there is a strong relationship between the two variables, with higher unemployment increasing the risk of poverty. The authors also suggested that this relationship may be stronger for certain demographic groups, such as African-Americans and immigrants. The authors also examine the impact of various factors on this relationship in different states in the US and find that the relationship between unemployment and poverty varies from state to state, which may be due to the different economic and labour market structures in different regions. Overall, this study highlights the importance of the relationship between unemployment and poverty in the US and attempts to debunk the myth that poverty is solely due to a lack of employment. A study by Bazzoli and Fiori (2017) examines the relationship between unemployment and poverty risk in Italy. The authors use several factors to measure poverty, such as material deprivation, social exclusion and material well-being. Their study shows that unemployment significantly increases the risk of poverty in Italy, especially for young people and low-skilled professionals. They also found that geographical and social factors influence the relationship between unemployment and poverty. The study also reveals regional differences in the risk of poverty in Italy. For example, employment opportunities are limited in some regions and high in others. There are also differences in the risk of poverty between urban and rural areas. These results suggest that the relationship between unemployment and poverty risk in Italy is indirect and depends on several factors. The study by Gunderson and Shaw (2018) focuses on the relationship between unemployment and poverty in Canada. The authors examine several indicators of poverty, such as material deprivation and lack of social ties, and show that unemployment has a negative impact on these indicators. In other words, the unemployed are at greater risk of material deprivation and have more limited access to social contact.

The authors also analyse the impact of geographical and social factors on the relationship between unemployment and poverty. They find that this depends on the geographical and social context, i.e. the impact of unemployment on poverty differs in different regions of Canada. This suggests that policies to reduce unemployment and poverty may only be effective in certain regions or for certain groups, and that Gunderson and Shaw's findings have important implications for unemployment and poverty policy in Canada. The relationship between unemployment and poverty varies across regions and it is important that policies take these differences into account and are tailored to the needs of different regions and populations. The study also suggests that policies should include not only measures to improve labour market conditions, but also measures to improve the living conditions of people living in poverty, for example by providing social services and support to those most vulnerable to poverty.

## 2 Unemployment and poverty in the Slovak Republic

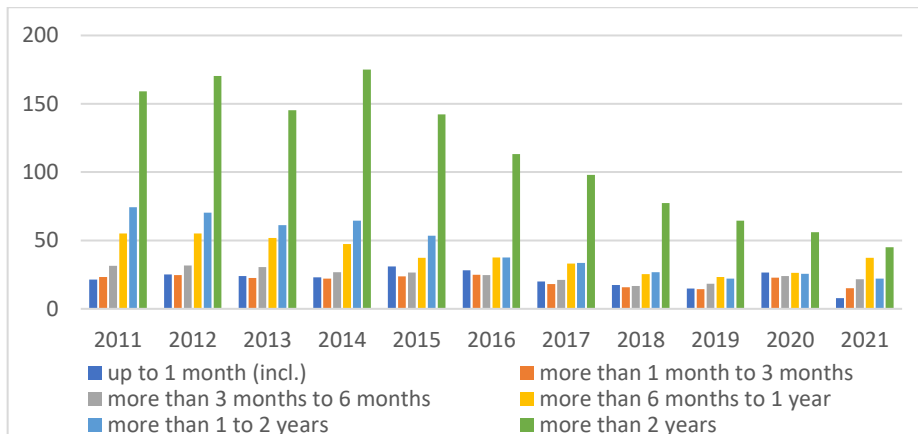
The correlation between unemployment, long-term unemployment and poverty has been the subject of much research and debate in both economic and sociological contexts. Unemployment is known to have a negative impact on the lives of individuals and society as a whole, but whether this negative correlation is directly linked to long-term unemployment and poverty is still a matter of debate. In this chapter, we focus on the analysis of the relationships between unemployment, long-term unemployment and poverty. Based on existing statistics and data, we will try to answer the question of how these factors are linked and what the implications are for individuals and society.



**Fig. 1.** Unemployment rate in Slovakia in the period 2011-2021

The rise in the unemployment rate in Slovakia over the period 2011-2021 is a significant phenomenon that affects both the economic and social situation. Figure 1 shows the overall unemployment rate for the period under review, which is relatively high, ranging between 15.4% in 2018 and 8.8% in 2013. During this period, there have been significant changes in the unemployment rates for different age groups. The most affected age group was the 25-39 age group between 2011 and 2013, with unemployment rates at a record high of 15.4%. In the following years, the situation for this age group improved, mainly due to economic growth and job creation. On the other hand, the 15-24 and 25-38 age groups contributed to the decline in the unemployment rate in 2014, the following years brought a similar trend where the unemployment rate for these groups was still on the decline. The age group of 50 years and above had the lowest unemployment rate during the period under review. This group was the hardest hit by the crisis in 2013 when the unemployment rate stood at 13.4%. Subsequently, in

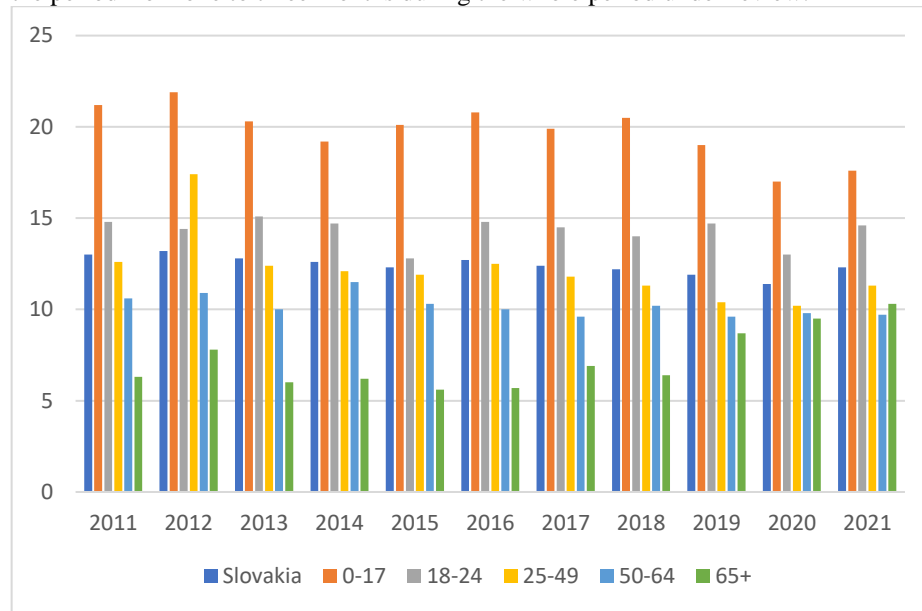
this age group we observe a significant decline in unemployment when this indicator dropped to 8.7% in 2021.



**Fig. 2.** Long-term unemployment rate in Slovakia for the period 2011 - 2021

Long-term unemployment rate data for Slovakia over the 2011-2021 reference period show high values. The highest unemployment rate was recorded in 2014 when it reached 51.9%. This high unemployment rate can be explained as a consequence of the global economic crisis, which also hit Slovakia and caused a significant increase in unemployment across the country. Long-term unemployment has been gradually declining since 2014, with Slovakia recording its lowest value in 2019 at 23.2%. However, it is important to note the number of unemployed has varied depending on the duration of the unemployment situation. The highest number of unemployed population was in the period when the duration of unemployment was more than 2 years

and mostly during 2011-2014, on the contrary, the lowest unemployment rates are in the period from one to three months during the whole period under review.



**Fig. 3.** At-risk-of-poverty rate in Slovakia for the period 2011 - 2021

The overall poverty risk rate in Slovakia ranges from 11.4% to 13% in the 2011-2021 reference period. The unemployment rate was relatively equilibrium at 13% in 2011 and this decreased slightly over time to 11.4% in 2020, but in 2021 the poverty risk rate rose to 12.3%. In the case of age groups, it is clear that the most at risk age group is children under 17. The poverty rate stood at 21.2% in 2011, but has slowly decreased over the last decade to 17.6% in 2021. The 25-49 age group recorded a rate of 12.6% in 2011, falling to 10.2% in 2020, but rising again to 12.6% in 2021. On the other hand, the least vulnerable group was made up of the 65+ population, which recorded a value of 6.3% in 2011. Gradually, this trend rose to a value of 10.3% in 2021. This age group is affected by various factors such as health care costs, low pensions and economic insecurity.

## 2.1 Relationship between unemployment and poverty

**Table 1.** Correlation of the unemployment and poverty in Slovakia

	<i>PO</i>	<i>TUM</i>	<i>UM1m</i>	<i>UM1-3m</i>	<i>UM3-6m</i>	<i>UM3m-1y</i>	<i>UM1-2y</i>	<i>UM2y</i>
PO	1							
TUM	0,7773	1						
UM1m	0,1617	0,2666	1					
UM1-3m	0,4596	0,5419	0,8728	1				
UM3-6m	0,6920	0,8603	0,5233	0,8196	1			
UM3m-1y	0,8748	0,9001	0,2573	0,6239	0,9189	1		
UM1-2y	0,7909	0,9396	0,4806	0,7085	0,9014	0,9176	1	
UM2y	0,7854	0,8424	0,5662	0,7129	0,8065	0,8351	0,9609	1

Source: own processing according to the Statistical Office of the Slovak Republic

Legend to the table

PO - Poverty

TUM - Total unemployment

UM1m - Unemployment rate up to and including 1 month

UM1-3m - Unemployment rate over 1 month to 3 months

UM3-6m - Unemployment rate over 3 months to 6 months

UM3m-1y - Unemployment rate over 6 months to 1 year

UM1-2y - Unemployment rate over 1 year to 2 years

UM2y - Unemployment rate more than 2 years

This comprehensive table shows the relationship between three important variables in Slovakia for the period 2011-2021: the unemployment rate (TUM), the long-term unemployment rate (LTU) and the poverty rate (PR). Examining these relationships provides important insights into the socio-economic situation in Slovakia. The unemployment rate (LTU) is the share of unemployed people in relation to the total unemployed population in Slovakia. This ratio is an important indicator of economic activity and is often associated with the risk of poverty. From the table we can see that there is a moderate positive correlation (0.7773) between the unemployment rate and the poverty rate. This suggests that a high unemployment rate may be associated with a population's risk of poverty. The other columns in the table represent different periods of unemployment. We can see that there is some correlation between long-term unemployment and the poverty rate. For example, the correlation between moderate long-term unemployment (UM2y) and moderate poverty was 0.7909. This positive correlation suggests that the long-term unemployed have a higher risk of poverty. Other results in the table show correlations by duration of unemployment. There appears to be some correlation between short-term and long-term unemployment. For example, unemployment of between one and three months (UM1-3m) had a correlation of 0.5419 with moderate unemployment of two years or more (UM2y). These relationships can



be important for assessing the effectiveness of employment policies and their impact on social stability and poverty.

### 3 Conclusion

As part of the data analysis, we concluded that there is a direct relationship between unemployment, long-term unemployment and poverty. For the reference years 2011-2021, we observed unemployment together with long-term unemployment linked to an increased risk of poverty. During the analysis of the age groups, we found that young individuals in the 15-24 age group were most affected by unemployment, particularly in 2013. However, their situation gradually improved with the growth of the economy. The age group of 50 years and above experienced the lowest unemployment rate. Analyzing the at-risk-of-poverty rate in Slovakia for the period 2011-2021, we observed a gradual decrease. The age groups most affected by the risk of poverty were children under 17 years old and the elderly above 65 years old. Several factors, such as low pensions, increased expenses, and economic uncertainty, contribute to this situation. Through correlation analysis between unemployment, long-term unemployment, and poverty, we found positive results for the observed period. This implies that an increase in the unemployment rate has a significant impact on the rise of long-term unemployment and poverty.

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