

# LONG-TERM UNEMPLOYMENT IN VISEGRAD COUNTRIES

**Tomas Pavelka**

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## **Abstract**

Long-term unemployment as unemployment lasting more than one year is associated with a number of direct and indirect negative impacts. The longer unemployment lasts, the worst are its negative impacts. The article deals with the development of total and long-term unemployment within the Visegrad Group countries. These countries have undergone an economic cycle in recent years. The recession caused by the financial crisis in the years 2008 - 2009 was replaced by a boom in the last two years. This paper only concerns the impact of the economic cycle on total and long-term unemployment. However, unemployment affects different age groups with varying intensities. This article analyzes the impact of the economic cycle on different age groups in the countries of the Visegrad Group. The conclusions confirm that younger people (aged 15-24 years) are most affected by total and long-term unemployment. Among this group, unemployment and especially long-term unemployment carry strongly negative effects that may manifest in the rest of the lives of young people. Conversely, the oldest group of economically active people are the least affected by the economic cycle in terms of unemployment and long term unemployment.

**Key words:** Economic cycle, unemployment, long-term unemployment

**JEL Code:** J64, E32

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## **Introduction**

The European labour market was strongly affected by the recent economic crisis. The result was not only high total unemployment, but also a significant expansion of long-term unemployment. The longer the length over which the unemployed can not find work, of course, intensifies the negative economic and social impacts. „Persistent long-term unemployment has implications for society as a whole, with dire social consequences for the persons concerned and a negative impact on growth and public finances. Long-term unemployment is one of the factors linked to the increase in poverty in the EU since the start of the crisis“ (European Commission, 2016). Walsh divided the costs of long-term unemployment between direct and

indirect. The main direct costs are associated with benefits that must be paid to affected persons. Indirect costs stem from the non-income earning sector, which leads to a loss of productive capacity among the unemployed, as well as a loss of their expenses, which prevents the creation and retention of jobs for others (Walsh, 1987, pp. 83). Some studies attempt to quantify the costs of unemployment, but are mostly limited to the impact on public budgets. One of these studies, which covers the Czech Republic, calculates the indirect costs by using Okun's Law (Čadil, Pavelka, Kaňková and Vorlíček, 2011). Extending the duration of unemployment may also intensify the hysteresis effect on the labor market (Blanchard 2006 Blanchard and Summers 1986).

This article aims to analyze long-term unemployment in the countries of the Visegrad Group (Czech Republic, Hungary, Poland and Slovakia) for the period 2007-2015, i.e. during the period that includes the last economic cycle. Attention will be paid to long-term unemployment with respect to the reaction of long-term unemployment on individual age groups during the economic cycle. As reported by Pavelka et al. in their publication, the incidence of long-term unemployment affects certain groups of people more, some less. In terms of age, the youngest are the most affected persons, and persons at the end of their working life are the least affected (Pavelka, Löster, Makovsky, Langhamrová, 2011). An analysis of long-term unemployment across the European Union during the recent economic recession can be found in a paper by Pavelka (2011). Data in this article comes from the Eurostat database, i.e. from Labour Force Survey in individual states.

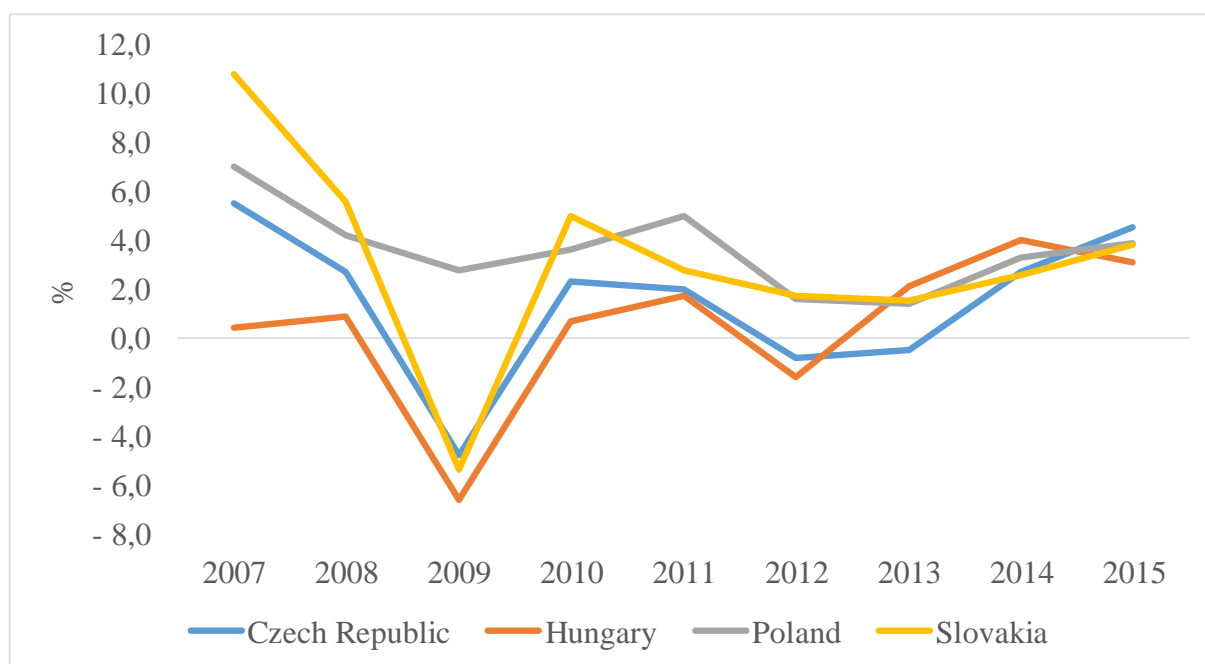
## **1 Economic cycle in Visegrad group**

Unemployment and long-term unemployment are associated with the economic cycle. Before the analysis of long-term unemployment, it is necessary to briefly mention the development of real gross domestic product, which is shown for the Visegrad Group in Figure no. 1.

At first glance, it is obvious that there is a very strong similarity in the basic tendencies in all countries, but the depth of these changes varies in each country. In 2008 there was a slowdown in GDP growth in the Visegrad Group countries, with the exception of Hungary. The first phase of the economic recession affected all Visegrad group countries, but Poland, despite a significant slowdown, maintained a positive GDP growth (2.8%). The deepest decline was registered in Hungary (-6.6%), followed by Slovakia (-5.4%) and Czech Republic (-4.8%). In all four countries there was a slight recovery in the next two years, but this was soon replaced by the Czech Republic's two-year decline in GDP (the second phase of the recession).

Hungarian GDP only fell in 2012, and in Poland and Slovakia there was only a slowdown in GDP growth. The last two years can be characterized as a period of accelerating economic growth. In 2015 the Czech Republic had the highest GDP growth (4.5%), but this was mainly due to efforts to spend the European funds from the previous Financial perspective, as well as an expansionary fiscal policy, which was constantly supported by keeping the Czech crown artificially weak.

**Fig. 1: Development of real GDP**



Source: Eurostat (20. 6. 2016)

## 2. Total unemployment

Strong economic growth in 2007 and the slowdown in the following year was associated with a decline in the total unemployment rate (15-74 years) in 2008 in Visegrad Group countries, except Hungary. The Czech Republic had the lowest unemployment rate in 2008, which was already near the natural rate of unemployment, and companies had serious problems finding staff, which is also reflected in the rapid increase of foreign nationals on the Czech labour market. The highest rate of total unemployment showed the Czech Republic, Hungary and Slovakia in 2010, a year after the fall of GDP. But Poland had the highest rate of total unemployment in 2013. Between 2008-2010, the highest increase in total unemployment was in Slovakia (by 4.9 p.p.) and in Hungary (by 3.4 p.p.) In Poland there was an increase of the total unemployment rate by 2.5 p.p. and in the Czech Republic by 2.9 p.p.

From a closer look at the unemployment rate for different age groups, it is clear that the highest increase during 2008 - 2010 was in the youngest age group, in the Czech Republic by 8.5 p.p., in Hungary by 6.9 p.p., Poland by 6.4 p.p., and Slovakia by as much as 14.5 p.p.

The economic recovery in the coming years, although it was interrupted by the second phase of slowdown to varying degrees, led to a reduction in the unemployment rate. The unemployment rate in the age group 15-74 years declined in the period from 2010 to 2015 in Hungary by -4.4p.p., by -2.9 p.p. in Slovakia, in the Czech Republic by -2.2 p.p. and in Poland by -2.1 p.p. Even during the economic recovery it is obvious that the youngest age group is most affected. In the period 2010 - 2015 the unemployment rate of the age group 15-24 years fell in the Czech Republic by -5.7 p.p., in Hungary by -9.1 p.p., in Poland by - 2.9 p.p. and in Slovakia by - 7.1 p.p.

**Tab. 1: Total unemployment rate by age groups**

	2007	2008	2009	2010	2011	2012	2013	2014	2015
	<b>Age: from 15 to 24 years</b>								
<b>Czech Republic</b>	10,8	9,9	16,6	18,3	18,1	19,5	19,0	15,8	12,6
<b>Hungary</b>	18,0	19,5	26,4	26,4	26,0	28,2	26,6	20,4	17,3
<b>Poland</b>	21,7	17,3	20,6	23,7	25,8	26,5	27,3	23,9	20,8
<b>Slovakia</b>	20,3	19,0	27,3	33,5	33,4	34,0	33,7	29,7	26,4
	<b>Age: from 25 to 49 years</b>								
<b>Czech Republic</b>	4,8	4,0	6,0	6,4	5,9	6,1	6,3	5,7	4,7
<b>Hungary</b>	7,0	7,3	9,4	10,6	10,3	10,1	9,3	7,0	6,1
<b>Poland</b>	8,4	6,1	7,0	8,3	8,3	8,9	9,2	8,1	6,7
<b>Slovakia</b>	10,2	8,8	10,9	13,0	12,3	12,6	13,0	12,1	10,5
	<b>Age: from 50 to 59 years</b>								
<b>Czech Republic</b>	5,3	4,2	5,9	7,0	6,4	6,3	6,1	5,2	4,6
<b>Hungary</b>	5,4	6,0	7,5	8,9	9,8	9,2	8,2	5,9	5,4
<b>Poland</b>	7,8	6,0	6,7	7,9	7,6	7,9	7,9	7,2	6,0
<b>Slovakia</b>	9,7	7,9	9,6	11,8	11,0	11,7	12,3	11,8	10,3
	<b>Age: from 60 to 74 years</b>								
<b>Czech Republic</b>	2,2	2,0	3,2	3,3	3,0	3,6	3,5	3,1	2,4
<b>Hungary</b>	1,5	2,3	2,8	3,3	4,1	5,4	5,6	6,6	6,6
<b>Poland</b>	3,9	2,8	3,5	4,2	4,5	5,2	5,9	4,6	4,1
<b>Slovakia</b>	5,8	3,1	4,2	3,5	5,3	5,2	4,8	6,1	6,3
	<b>Age: from 15 to 74 years</b>								
<b>Czech Republic</b>	5,3	4,4	6,7	7,3	6,7	7,0	7,0	6,1	5,1
<b>Hungary</b>	7,4	7,8	10,0	11,2	11,0	11,0	10,2	7,7	6,8
<b>Poland</b>	9,6	7,1	8,2	9,7	9,7	10,1	10,3	9,0	7,5
<b>Slovakia</b>	11,1	9,5	12,0	14,4	13,6	14,0	14,2	13,2	11,5

Source: own calculation from Eurostat data

### 3. Long-term unemployment

Long-term unemployment is unemployment lasting more than one year. Table no. 2 shows the rate of long-term unemployment by age groups. For the entire period 2007 - 2015 the highest rate of long-term unemployment in the total population was in Slovakia (8.4%), followed by Hungary (4.3%), Poland (3.5%) and Czech Republic (2.6%). So the ranking for each country is the same as was the case with the total unemployment rate

**Tab. 2: Long-term unemployment rate by age groups**

	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>Age: from 15 to 24 years</b>									
<b>Czech Republic</b>	3,5	3,1	3,3	5,8	5,3	6,5	6,2	4,4	3,8
<b>Hungary</b>	6,5	6,2	7,8	10,3	9,3	9,1	8,6	6,6	4,6
<b>Poland</b>	7,5	3,8	4,4	4,8	6,8	8,0	8,7	7,4	6,1
<b>Slovakia</b>	11,6	10,1	11,4	18,4	18,2	19,1	20,6	17,0	14,4
<b>Age: from 25 to 49 years</b>									
<b>Czech Republic</b>	2,7	2,0	1,9	2,8	2,5	2,8	2,8	2,6	2,3
<b>Hungary</b>	3,4	3,5	4,0	5,3	4,9	4,6	4,6	3,4	2,8
<b>Poland</b>	4,7	2,2	2,2	2,7	3,2	3,7	4,0	3,6	2,7
<b>Slovakia</b>	7,9	6,3	6,0	8,5	8,6	8,7	9,2	8,6	7,0
<b>Age: from 50 to 59 years</b>									
<b>Czech Republic</b>	3,1	2,5	2,2	3,0	3,1	3,1	3,1	2,8	2,7
<b>Hungary</b>	2,8	3,4	3,8	4,7	5,5	5,2	4,8	3,4	3,1
<b>Poland</b>	4,9	2,6	2,7	3,3	3,6	3,8	4,1	3,6	2,8
<b>Slovakia</b>	8,1	6,3	6,1	8,3	8,3	8,6	9,6	9,4	7,5
<b>Age: from 60 to 74 years</b>									
<b>Czech Republic</b>	0,9	0,9	0,7	1,2	1,1	1,3	1,3	1,2	1,0
<b>Hungary</b>	1,2	1,6	1,6	2,1	2,6	3,0	3,9	4,9	5,0
<b>Poland</b>	2,4	1,2	1,3	1,6	2,2	2,6	2,9	2,5	2,1
<b>Slovakia</b>	4,3	2,6	2,2	2,5	4,0	3,6	3,6	3,8	3,5
<b>Age: from 15 to 74 years</b>									
<b>Czech Republic</b>	2,8	2,2	2,0	3,0	2,7	3,0	3,0	2,7	2,4
<b>Hungary</b>	3,5	3,6	4,2	5,5	5,2	5,0	4,9	3,7	3,1
<b>Poland</b>	4,9	2,4	2,5	3,0	3,6	4,1	4,4	3,8	3,0
<b>Slovakia</b>	8,3	6,6	6,5	9,2	9,3	9,4	10,0	9,3	7,6

Source: own calculation from Eurostat data

When looking at long-term unemployment by age, it is revealed that the highest rate of long-term unemployment was in the age group 15-24 years, while the lowest was in the oldest age group (60 -74 years). It is again the same situation as was the case with the overall unemployment rate. It is obvious that young people in the countries of the Visegrad group have the highest overall and long-term unemployment rate. Conversely, the lowest total and long-term unemployment rates have the oldest age group. In both cases, however, this is not specific

to the Visegrad Group countries. The same conclusions can be made about the European Union as a whole. It is also the main reason why the European Union have focused their attention on helping young people to find or keep jobs during both the crisis and post-crisis period.

### 3. Economic cycle and its impact on total and long-term unemployment

The last part of the paper is devoted to the impact that the economic cycle had on total and long-term unemployment. Or, to be more precise, what impact the annual change in real GDP had on the annual change in the total unemployment rate and on the annual change in the long-term unemployment rate (one year later). The results of regression analysis for each age group are included in Table. 3. In considering these results, it is necessary to take into account the relatively short time period.

**Tab. 3: Effect of economic cycle on total unemployment and long-term unemployment**

	Total unemployment		Long-term unemployment	
	regression equation	R-squared	regression equation	R-squared
	Age: from 15 to 24 years			
<b>Czech Republic</b>	$y=1,2007-0,9565x$	0,76	$y=0,2245-0,2353x$	0,21
<b>Hungary</b>	$y=0,5004-1,1004x$	0,9	$y=-0,1542-0,3852x$	0,59
<b>Poland</b>	$y=1,6347-0,5414x$	0,05	$y=-0,1325-0,0527x$	0,02
<b>Slovakia</b>	$y=2,2921-0,6945x$	0,3	$y=1,7875-0,5923x$	0,39
	Age: from 25 to 49 years			
<b>Czech Republic</b>	$y=0,2897-0,3017x$	0,83	$y=-0,0190-0,1588x$	0,27
<b>Hungary</b>	$y=0,0600-0,3359x$	0,69	$y=-0,0622-0,2010x$	0,68
<b>Poland</b>	$y=1,1969-0,4374x$	0,18	$y=-0,2889-0,1169x$	0,08
<b>Slovakia</b>	$y=0,5432-0,2320x$	0,29	$y=0,5883-0,2473x$	0,53
	Age: from 50 to 59 years			
<b>Czech Republic</b>	$y=0,1550-0,2431x$	0,5	$y=0,0796-0,0902x$	0,49
<b>Hungary</b>	$y=0,1333-0,2336x$	0,35	$y=-0,0094-0,1319x$	0,31
<b>Poland</b>	$y=0,8010-0,3184x$	0,16	$y=-0,1772-0,0660x$	0,03
<b>Slovakia</b>	$y=0,5260-0,2046x$	0,23	$y=0,6251-0,2320x$	0,46
	Age: from 60 to 74 years			
<b>Czech Republic</b>	$y=0,2215-0,1937x$	0,84	$y=0,0492-0,0564x$	0,49
<b>Hungary</b>	$y=0,6397-0,0123x$	0,01	$y=0,4932-0,0251x$	0,05
<b>Poland</b>	$y=1,0080-0,3079x$	0,2	$y=-0,2331-0,1121x$	0,13
<b>Slovakia</b>	$y=0,5188-0,2077x$	0,24	$y=0,1351-0,0003x$	0
	Age: from 15 to 74 years			
<b>Czech Republic</b>	$y=0,3067-0,3363x$	0,78	$y=0,0970-0,1258x$	0,54
<b>Hungary</b>	$y=0,1166-0,3549x$	0,71	$y=-0,0386-0,1914x$	0,64
<b>Poland</b>	$y=1,1051-0,4245x$	0,15	$y=-0,3500-0,1376x$	0,1
<b>Slovakia</b>	$y=0,6421-0,2726x$	0,31	$y=0,6697-0,2717x$	0,52

Source: own calculation

It is evident that the mentioned models have the greatest explanatory power in the cases of the Czech Republic and Hungary. In the case of Slovakia, the information capacity is weaker, and from Polish data it is clear that the impact of the economic cycle on total unemployment and long term unemployment cannot be practically demonstrated by the model.

As regards total unemployment, it is clear that one percent of GDP growth will decrease the total unemployment rate (population aged 15 - 74 years) in the Czech Republic by 0.33 p.p., in Hungary by 0.35 p.p. and in Slovakia by 0,27.p.p.

As regards long-term unemployment, one percent of GDP growth brings, with a year's delay, a decline in long-term unemployment rate (population aged 15 - 74 years) in the Czech Republic by 0,13 p. p., in Hungary by 0.19 p.p. and in Slovakia by 0.27 p.p.

In the Czech Republic, Hungary and Slovakia, it is also clear that the greatest impact of a one percent change in GDP on the total unemployment rate and the rate of long-term unemployment was among young people.

## **Conclusion**

The analysis shows that the economic cycle had a significant impact on the total unemployment rate and the rate of long-term unemployment. Besides the economic cycle, however, both indicators are influenced by other factors which undoubtedly includes eg. the institutional environment.

The highest response to the economic cycle can be observed in the youngest age group in both total and long-term unemployment in the countries of the Visegrad Group. Any incidence of unemployment for this age group represents a significant risk, because some of these young people have never been employed. Since they have not created work habits, some of them may come to believe that "no work is normal." It is therefore critical for the state to pay special attention to this age group.

Conversely, the lowest response to the economic cycle can be observed among the oldest group of people in total and long-term unemployment. During the economic recession, levels of total and long-term unemployment in this age group increased the least. It should, however, be considered that, particularly for this age group, unemployment brings the risk of moving these people into the group of economically inactive persons.

## Acknowledgment

This article is provided as one of the outputs of the research project of the Faculty of Business Administration IP 307055 „National and corporate competitiveness from the perspective of endogenous growth models“.

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## Contact

Tomas Pavelka  
University of Economics, Prague  
W. Churchill Sq. 1938/4  
130 67 Prague 3,  
the Czech Republic  
pavelkat@vse.cz