



**GROWING INEQUALITIES AND THEIR IMPACTS IN THE CZECH REPUBLIC AND
SLOVAKIA**

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Executive Summary

This report deals with various inequalities and their correlates, effects and causes in the Czech Republic and Slovakia over the recent decades, focusing mainly on the 1990s and 2000s. Its main objective is to provide a comprehensive account of changing inequalities in income, wealth and education over time and their social, political and cultural impacts in the two republics. The Czech Republic and Slovakia as transforming economies experienced an increase of inequalities mainly in the beginning of the 1990s. The increase of inequality in both republics was a palpable output of the transformation process. However, it may have also resulted from the monetization, and thus improved measurability, of inequalities existing already before 1989 in different forms (e.g. access to certain goods or services not accessible to the general public). It should be emphasized that the level of inequality, after its growth in the 1990s, remained relatively stable and lower compared to other transforming countries in the 2000s. This is mostly a consequence of redistributive policies which alleviated the impact of transformation on low-income groups.

The drivers of inequalities are mostly the changes in the economy and the labour market. The structural changes across all sectors affected hundreds of thousands workers, increased unemployment and reshaped the remuneration schemes towards higher returns to education. Therefore, the incomes of tertiary educated people increased and they moved to top deciles of the income distribution. The composition of the low-income group changed too. For instance, while in the 1980s in Czech Republic, it was mostly old people above 65 years, in the 1990s families with more than three dependent children joined that group.

Increased inequalities had an impact on household behaviour in many aspects. The raising indebtedness, increased share of tertiary educated people or decreasing average number of household members are the most visible aspects.

The Great Recession of the late 2000s and early 2010s affected the Czech Republic and Slovakia similarly; the available data indicate that the recession reversed the tendency of decreasing income inequality from the years preceding the recession.

As concerns the social impacts of inequality in the Czech Republic and Slovakia, we find moderate negative effects on inequalities and an increase in the risk of poverty due to the crisis. Over the period preceding the Great Recession, the measures of material deprivation had been improving. After 2009, however, we have observed stagnation or worsening material deprivation for some

groups, such as the low-educated in Slovakia. This could indicate some interdependence between economic crisis and material deprivation, although we need to acknowledge that the worsening of material deprivation measures was not universal.

The crisis appears to have a similar effect on poverty. According to self-reported measures, after 2009 more people felt themselves to be at risk of poverty, especially the unemployed and low-educated segments of the population. The higher rate of illness after 2009 could also be attributed to worsening living conditions and increasing unemployment as a result of the economic crisis. The subjective well-being substantially decreased for people with low education and low income.

The risk of poverty varies across sub-populations. For instance, women in Slovakia remain in a higher risk of poverty than men, even though the risk of poverty is generally on the decline in the Slovak Republic, actually declining faster than the EU 27 average. Higher rates of poverty are especially significant for the Roma population, for whom higher rates of unemployment, illiteracy, and disease are also observed.

Even though marriage is the most prevalent form of a relationship, increasing numbers of couples have only one child. Together with decreased mortality this leads to the problem of aging population. This has a significant negative impact on public finances and increases the risks for their sustainability. Housing availability is declining, while prices of flats have increased rapidly, particularly since 2006. There are also significant price differences across regions.

We conclude that both political culture and national culture have heavily influenced the functioning of civil society in both republics. Another factor in the functioning of civil society is mutual distrust between politics and civil society. The average citizen does not trust the political elites; and conversely, individual politicians and political parties are distrustful of civil society. Due to significant levels of corruption, there is also a growing public scepticism regarding politics, reflected in a decreasing voter turnout. Furthermore, Czechs are among the nationalities that are more critical of, and some of the least enthusiastic about, the EU, and there has been a non-negligible fall in the proportion of positive attitudes towards EU membership in recent years. There is a relatively positive public perception about the functionality of welfare system in the Czech Republic.

Results for Slovakia can be summarized in three major points. First, political participation in Slovakia can be characterized by a decreasing voter turnout, which became less volatile in the last ten years (reaching 55 per cent to 60 per cent in parliamentary elections). Voters with the highest socio-economic background exhibit also the highest participation. With respect to civic engagement, a declining trend in realized and anticipated civic participation has been documented. Again, the actual

participation in civic organizations is higher among more educated and wealthier people. Moreover, both union density and union coverage have sharply dropped in Slovakia.

Second, political extremism in Slovakia has been always dominated by right-wing parties. A nationalist party, the SNS, had a parliamentary representation until 2012 and a slowly declining electoral support (at about 5 per cent in 2010). Based on the ESS, the share of respondents who classify themselves belonging to the extreme left or right wing is relatively small and stable over time. The share of individuals who classify themselves as belonging to the extreme left increases with education, while the opposite is true for the extreme right. A similar pattern is observed by household income, with poorer individuals inclining to the extreme left and richer ones to the extreme right.

Finally, findings from social surveys suggest that there is a lack of trust in national institutions and relatively strong demand for governmental interventions. The surveys also show strong support for the European Union. The number of people who consider the importance of an individual's decisions and responsibility has been increasing in recent years.

Over the last two decades, the Czech Republic has witnessed a significant shift in the area of migration and immigrant integration. Migrants have been attracted to the Czech Republic mainly because of its relatively strong labour market. However, social surveys show that the support for further immigrants has decreased in the last decade. Slovakia has relatively few immigrants and the endorsement of immigration has recently declined.

In sum, the increase in inequality detected in the Czech Republic and Slovakia influenced the development of political and cultural values. In particular popular surveys in both countries show a strong support for governmental actions aimed to reduce income differences. Similarly the level of trust in national institutions and the political participation exhibit an increasing tendency in recent years. At the same time the support for the extreme political parties has declined. The levels of interpersonal trust have significantly increased over the recent period in both countries. This finding is attributed to the rising levels of wealth. The attitudes towards the support of European Union are divided between two countries. While almost two thirds of Slovaks express positive attitudes only one third of Czechs do so.

Finally, we look at the main recent policy changes that affected or potentially could affect inequality in the Czech Republic and Slovakia. In the Czech Republic there is history of discourses about policies that could positively or adversely affect inequality, but there have not been any notable policy changes that would significantly affect inequality in recent decades. Even the flat-tax reform did not significantly change the tax burden across different income groups. The current government is

considering changes in consumption taxes, which can potentially affect inequality in the future. However, there is significant public opposition against this policy step, thus the future development is still uncertain.

Slovakia, with insistently high unemployment – especially long-term unemployment – is struggling with the low-income jobless groups often stuck in the incentive trap of the social system. Those groups are more often threatened by poverty and depend more on redistributive policies. With this regard the reforms of social policies and taxation system were expected to provide incentives to work and to employ, thus affecting both the supply and demand side of the labour market. However, policy reforms implemented in the 2000s, accomplished that goal only partially and more effectively on the demand side.

Tax reforms in Slovakia seem to be the ones that affected the redistribution of income profoundly. The degree of redistribution decreased, but the effectiveness of collection of taxes increased. Tax reforms were accompanied with the reform of social benefits which were intended to increase the difference between received non-employment benefits and actual income from full-time work. However, this reform did not provide the needed incentives, and enabling and empowering, to decrease long-term unemployment much.

The education systems in both countries could be efficient in combating inequalities, especially through raising the number of tertiary educated people. On the other hand, the education system is suffering from low financial sources, underpaid teachers and professors who consequently only provide an insufficient level of services.

From the above-mentioned reforms and undertaken policies, we can conclude that their primary intention was more aimed at the demand side – investors and the business sector – than at the supply side, such as the enhancement of human capital and social mobility in the country. The policy of combating inequalities was not the primary intention of the reforms undertaken in the 2000s. Therefore, the decreased level of inequalities in the 2000s (before the Great Recession) appears to be rather a consequence of the increased job opportunities thanks to generally positive economic global development and some stimulating measures aimed at the business sector than the consequence of any policies targeted at combating inequalities. Nevertheless, the absence of policies targeted at inequalities could generate further problems in the future, mainly because of some marginalized groups, such as the Roma people, who have been out of the labour market and have lived in poverty for years.

1. Introduction

The roots of inequalities in the Czech Republic and Slovakia date back to the establishment of Czechoslovakia in 1918, when northern parts of the Austrian Empire – present-day Czech Republic – and northern part of the Kingdom of Hungary – present-day Slovakia and Carpathian Ruthenia – united in a new state. The two parts of the newly established state¹ differed in a number of aspects, including the degree of industrialization, urbanization, education and literacy (Slovakia being the less-developed part) and religiosity (Slovakia being the more conservative and religious part). Within pre-war and post-war Czechoslovakia the two parts converged in many aspects, whether as a consequence of deliberate policies or as a by-product of mingling populations and coexistence under one roof.

The coup-d'état in 1948 followed by four decades of communist regime deeply affected the Czechoslovak society, with scarring effects even after the 1989 Velvet Revolution. One of the key policy doctrines during the communist period was reduction of inequality, which the communist regime achieved often using rather harsh methods, such as the 1953 currency reform. After the Velvet Revolution deep economic, social and political reforms were implemented, leading to democratization and economic liberalization in Czechoslovakia. On January 1, 1993, the Velvet Divorce resulted in two successor states of Czechoslovakia – the Czech Republic and Slovakia.

While some of these legacies have withered away (e.g. Slovakia is now equally little agricultural as the Czech Republic) others (e.g. more conservative Slovakia) have affected and still affect inequalities in the two independent republics. Their understanding is thus crucial for interpretation of inequalities and their impacts in the Czech Republic and Slovakia.

This report's main objective is to provide a comprehensive account of changing inequalities in income, wealth and education over time and their social, political and cultural impacts in the Czech Republic and Slovakia. This includes elaboration of country specific narratives and interpretations linked to national policies and institutions, but also comparative accounts illuminating the variation observed between the two countries. Data permitting, the report primarily covers the period since 1980 to present, but mainly the 1990s and 2000s.

¹ Carpathian Ruthenia was the eastern-most part of Czechoslovakia that ceased to be part of Czechoslovakia as a consequence of World War II.

To this end, Chapter 2 of the report depicts the nature of inequality and its development over time. Facing severe data limitations and measurement challenges, every effort is made to define and measure inequality over time and across the two countries as uniformly as possible, applying a common methodology. Chapters 3 and 4 are dedicated to the analysis of the social, political and cultural impacts of changing inequalities. The policy context is discussed in Chapter 5. Each of these chapters is split into a section about the Czech Republic and a section about Slovakia. Chapter 6 comparatively evaluates the experience of the two countries.

2. The Nature of Inequality and Its Development over Time

The process of economic and political transformation at the beginning of the 1990s released economic and societal processes that provided for rising income inequalities in the Czech Republic and Slovakia. Prior to 1989, Czech and Slovak societies in Czechoslovakia had felt some income inequalities but their extent had been modest. After the fall of the communist regime, the Czech Republic and Slovakia, along with many other post-socialist countries, went through a series of major changes. The formerly centrally planned economy collapsed, resulting in various shocks to the economy. Producers lost their customers, unemployment grew rapidly, inflation hit savings, and former business and social ties were broken. This resulted in spreading inequalities in the region. In the 1990s, income inequalities grew by exceptional speed. The reason was mainly the changing structure of economy and consequently changing structure of the labour market. For example, tertiary education gained a remarkable position in remuneration schemes.

Despite the growth of these inequalities in the 1990s, the absolute value of income inequalities remains relatively small compared to other European countries. This is mainly because wage differences were not so high before the 1990s. In addition, the Czech Republic and even more so Slovakia have moderate average wages and social benefits do not fall much short of the minimum wage. The combination of these factors results in a higher density of low income workers and families and lower inequality overall.

In this chapter, we trace the main developments of inequalities and their consequences in the Czech Republic and Slovakia. Our focus is concentrated primarily on the 1990s and 2000s, periods during which the Czech and Slovak economies went through deep institutional and economic transformations. In the first section, we provide various metrics of inequalities, such as the Gini coefficient, based on available statistics. We pay attention to the role of tax redistribution on the development of income inequalities at the individual and household level. Then, we focus on wealth and debt development, labour market changes and the role of the education in the distribution of income. Finally, we examine the cross-section variables such as gender differences or regional differences in income distribution.

Before we proceed with evidence of the growing inequalities and who they concern the most, it is worth mentioning the fact that the lack of data for the Czech Republic and Slovakia does not allow us to fully describe the development of inequalities since 1980s and most often data are available just since mid-1990s or later. The data used in this chapter are retrieved mostly from the OECD and Eurostat database. Some particular evidence is retrieved from other sources such as the Czech

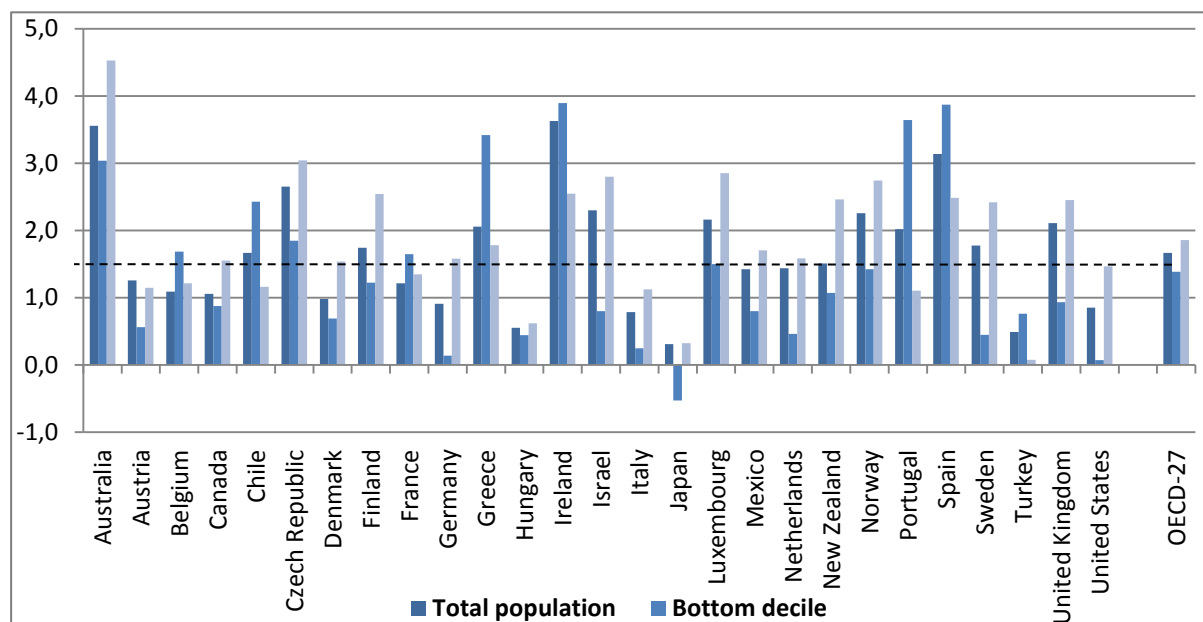
Statistical Office (CSO) and Statistical Office of the Slovak Republic (SOSR) or ad hoc surveys conducted in the two countries since 1980.

2.1 Has inequality grown?

2.1.1 Household income inequality

The Czech Republic, as a transforming economy, belongs to the group of countries where inequalities grew significantly during the 1990s (OECD, 2011). The major contribution to this change is assigned to the increase of incomes in the top decile. Since the mid-1980s until late-2000s, the average change of per capita income was 3 per cent per year in the top decile while the bottom decile grew by 1.8 per cent per year. This places the Czech Republic among countries where inequalities are rising. These figures result in average annual increase of incomes by 2.7 per cent. The average annual increase in OECD countries was 1.7 per cent with 1.9 per cent of annual growth in the top decile and 1.4 per cent growth in the bottom decile. In Figure 2.1, we present growth rates in the top and the bottom deciles for 27 OECD countries.

Figure 2.1 Increase in real household income, mid-1980s to early 2000s (change in per cent)



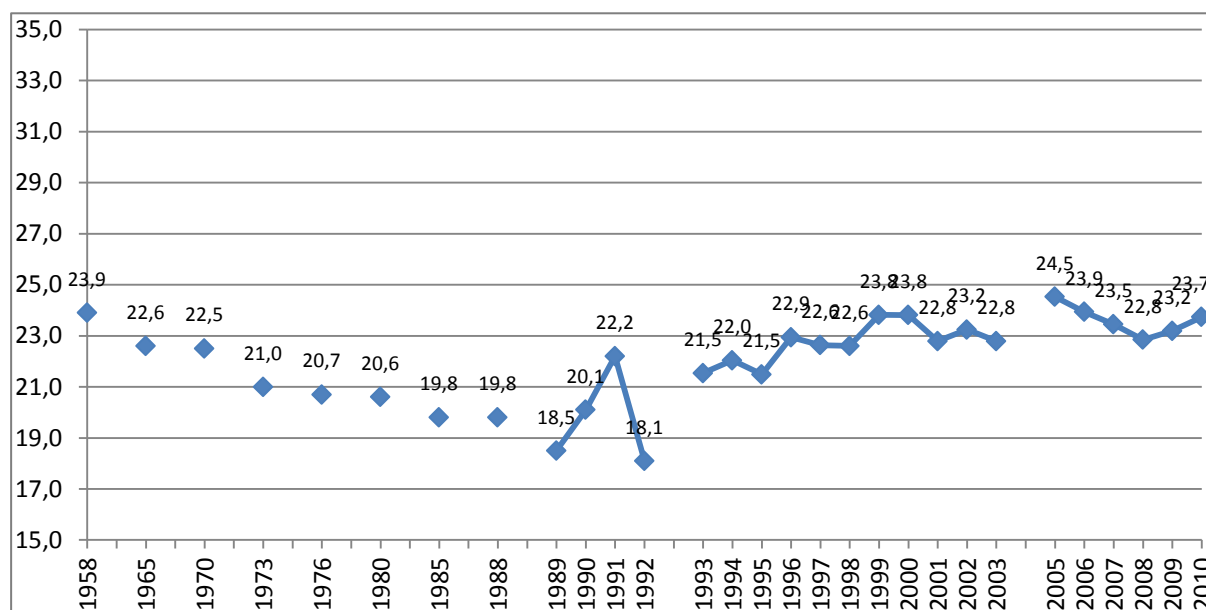
Source: OECD Database on Household Income Distribution and Poverty.

Notes: Horizontal dashed line represents the OECD average of total population, 1.7 per cent.

Since the 1980s, the Czech Republic has experienced significant changes in income distribution. Although we do not have complete time series data at our disposal, we can recover particular milestones in the development of inequalities. Before 1989, the Czech Republic had fairly equal

income distribution. Since 1958 the inequalities were systematically decreasing down to the level of 20 Gini points. The situation changed in the 1990s, when inequalities grew at an exceptional rate. Later, during the 2000s, there was some levelling off and in some particular periods also moderate attenuation of inequality. We present the time series of the Gini coefficient for the Czech Republic retrieved from various sources in Figure 2.2.

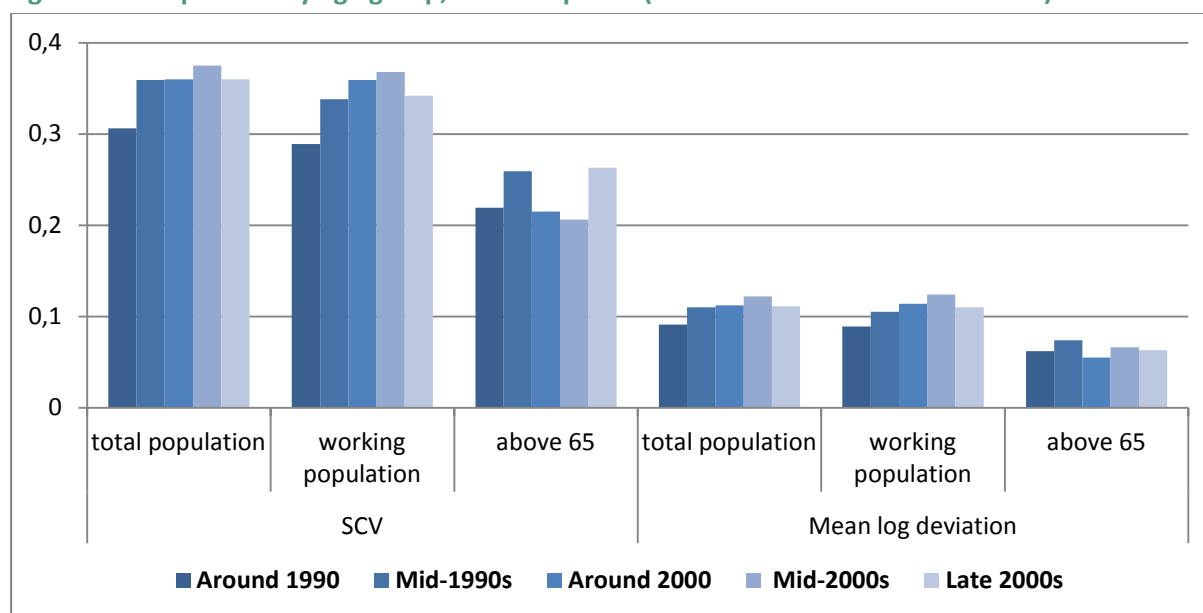
Figure 2.2 Gini coefficient, Czech Republic



Sources: 1958 and 1988 Atkinson and Micklewright (1992); 1989-1994 Cornia (1994), 1993-2002 Transmonee (2004), 2003 Transmonee (2005), 2005-2010 own calculations based on EU Survey of Income and Living Conditions.

Notes: Gini coefficient in the Czech Republic. Income sharing unit is household, units of analysis is household (after 1993) or person (up to 1992), income defined as disposable income (monetary disposable income before 1989). Data for 1965-1985 valid for Czechoslovakia. Household income equivalized since 2005.

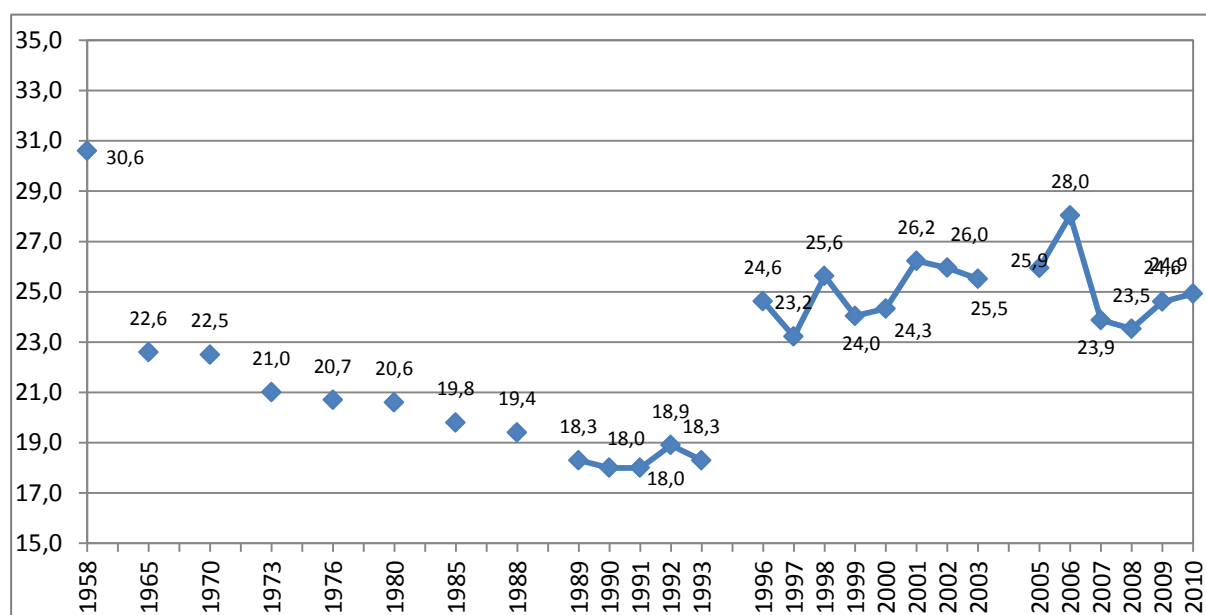
Another source of data is the OECD. It reports inequalities as the standard coefficient of variation (SCV). For SCV a lower value means lower inequalities (see Figure 2.3). The developments of inequalities in total population and in working population are interconnected; there was an increase until mid-2000s followed by the slight decrease in late 2000s. The development of inequalities of elderly people (above 65) was different, peaking in mid-1990s and again in mid-2000s.

Figure 2.3 Inequalities by age group, Czech Republic (standard coefficient of variation)

Source: OECD.

In Slovakia, after the changes during the economic transition, a steady recovery of production and wages took place. An economic boom started mainly after accession to the EU in 2004. Growth has been hit hard by the global recession which started in 2008. However, the period with negative year-on-year quarterly real growth rate lasted only one year, the four quarters of 2009, followed by relatively robust recovery.

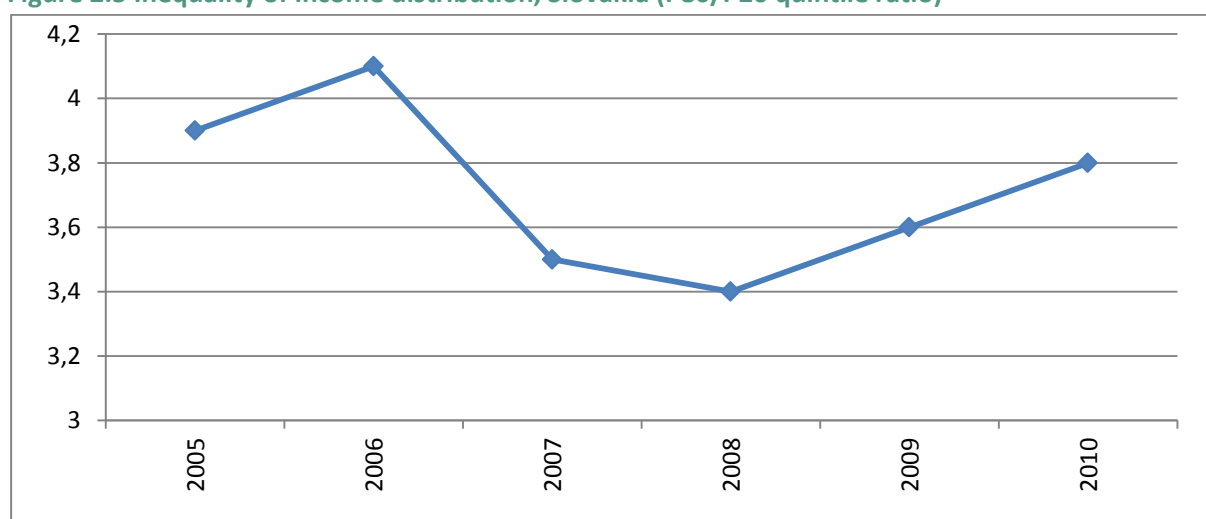
Generally speaking, inequalities in Slovakia were fairly stable through the recent decade. During the economic boom, income inequalities showed small upward tendencies, while during the subsequent crisis there were mixed tendencies – some of the metrics increased, others decreased. Various sources are used in order to capture the longest time-span possible. As reported in Figure 2.4, the Gini coefficient in 1958 reached around 30 points, the highest figure for the period with available data. We do not have data for Slovakia for the period between 1958 to 1988, but the data available for Czechoslovakia indicate steadily decreasing inequalities through this period. Gini values for Slovakia are then, with some breaks in the series, available since 1988, just before the fall of the communist regime. The figure for 1988, 19.4, confirms the trend of decreasing inequality since 1958. As previously mentioned, the most significant change in income distribution occurred in the early 1990s, when the Gini coefficient rose from 18.0 in 1990 to 24.6 in 1996. During the 2000s inequalities stabilized, oscillating between 23.2 and 26.2, with an exceptionally high value in 2006 at 28.0.

Figure 2.4 Gini coefficient, Slovakia

Sources: 1958 -1988 Atkinson and Micklewright (1992); 1989-1992 Cornia (1994), 1993 Milanovic (1998), 1996-2002 Transmonee (2004), 2003 Transmonee (2005), 2005-2010 own calculations based on EU Survey of Income and Living Conditions.

Notes: Ginicoefficientin Slovakia. Income sharing unit is household, unit of analysis is person, income defined as disposable income (monetary disposable income before 1989). Data for 1965-1985 valid for Czechoslovakia. Household income equivalized since 2005.

The dynamics of income inequality in Slovakia can be also measured by the changes of the ratio of income of the richest 20 per cent of the population compared to the poorest 20 per cent of the population. This measure, depicted in Figure 2.5, provides the same message as the Gini coefficient: inequality has decreased in two years from 2006 to 2008 (from 4.1 to 3.4), but bounced back thereafter (to 3.8 in 2010).

Figure 2.5 Inequality of income distribution, Slovakia (P80/P20 quintile ratio)

Source: Eurostat.

Tables 2.1 and 2.2 exhibit relatively stable, and perhaps somewhat declining, inequalities during the late 2000s in both republics. They also corroborate the inequality-reducing role of taxation.

During the 1990s the income structure in the Czech Republic changed remarkably. Based on the statistics of the Czech Statistical Office, the prevailing source of household income in 1993 was regular employee income and self-employment – reported by 9.3 per cent of households. In 1998, the situation was very different. Around 80 per cent of households reported an employee contract as their main income source and more than 13.6 per cent of households claimed self-employment as the main income source.

Table 2.1 Distribution of inequalities, Czech Republic

Year	Income definition	Gini	p90/p10	p50/p10	P90/p50
2005	Gross income, person	0.30	3.44	1.75	1.97
2005	Gross income, equivalized	0.29	3.27	1.72	1.90
2005	Net income, equivalized	0.25	2.76	1.59	1.73
2005	Net income net of rent, equivalized	n.a.	n.a.	n.a.	n.a.
2006	Gross income, person	0.29	3.43	1.75	1.96
2006	Gross income, equivalized	0.28	3.27	1.71	1.91
2006	Net income, equivalized	0.24	2.70	1.57	1.72
2007	Gross income, person	0.28	3.30	1.68	1.96
2007	Net income, equivalized	0.23	2.67	1.56	1.71
2007	Net income net of rent, equivalized	0.24	2.70	1.57	1.72
2008	Gross income, person	0.28	3.13	1.61	1.95
2008	Gross income, equivalized	0.27	3.11	1.68	1.86
2008	Net income, equivalized	0.23	2.56	1.53	1.68
2008	Net income net of rent, equivalized	0.23	2.61	1.55	1.69
2009	Gross income, person	0.28	3.13	1.62	1.94
2009	Gross income, equivalized	0.27	3.09	1.68	1.84
2009	Net income, equivalized	0.23	2.55	1.52	1.68
2009	Net income net of rent, equivalized	0.23	2.57	1.53	1.68
2010	Gross income, person	0.28	3.20	1.67	1.92
2010	Gross income, equivalized	0.28	3.16	1.67	1.89
2010	Net income, equivalized	0.24	2.63	1.55	1.70
2010	Net income net of rent, equivalized	0.24	2.65	1.55	1.71

Source: Own calculations based on EU SILC.

Table 2.2 Distribution of inequalities, Slovakia

Year	Income definition	Glni	p90/p10	p50/p10	p90/p50
2005	Net income, equivalized	0.26	3.14	1.85	1.69
2005	Net income net of rent, equivalized	n.a.	n.a.	n.a.	n.a.
2006	Gross income, person	0.31	3.57	1.94	1.84
2006	Gross income, equivalized	0.31	3.37	1.84	1.83
2006	Net income, equivalized	0.28	3.01	1.79	1.68
2006	Net income net of rent, equivalized	n.a.	n.a.	n.a.	n.a.
2007	Gross income, person	0.28	3.43	1.91	1.80
2007	Gross income, equivalized	0.27	3.24	1.82	1.78
2007	Net income, equivalized	0.24	2.85	1.73	1.65
2007	Net income net of rent, equivalized	0.26	3.27	1.93	1.70
2008	Gross income, person	0.27	3.42	1.89	1.81
2008	Gross income, equivalized	0.26	3.22	1.80	1.78
2008	Net income, equivalized	0.24	2.82	1.71	1.65
2008	Net income net of rent, equivalized	0.26	3.25	1.89	1.72
2009	Gross income, person	0.28	3.60	1.90	1.89
2009	Gross income, equivalized	0.27	3.34	1.82	1.83
2009	Net income, equivalized	0.25	3.06	1.76	1.74
2009	Net income net of rent, equivalized	0.27	3.48	1.90	1.83
2010	Gross income, person	0.28	3.41	1.87	1.82
2010	Gross income, equivalized	0.27	3.14	1.75	1.80
2010	Net income, equivalized	0.25	2.97	1.73	1.72
2010	Net income net of rent, equivalized	0.27	3.43	1.92	1.78

Source: Own calculations based on EU SILC.

Among households, there were several economic and social reasons that led to increased inequalities in the Czech Republic, including changing employment structure and demographic characteristics. In this section, we concentrate on empirical evidence of these changes as well as on related indicators, such as poverty rates. The altered wage distribution is behind the increasing income inequalities during the 1990s. During the transformation period, rising personal income inequalities were transformed into the household income inequalities as well. For comparison, the Gini coefficient of personal income changed from 0.19 in 1988 to 0.24 in 1996, and for households, it rose from 0.29 in 1988 to 0.33 in 1996 – so approximately by the same proportion.² Some other sources, such as Mysíková (2011) and Alderson and Doran (2010), find that the inequality increased even more in the given period, between 5 and 10 Gini points. In the 2000s, income inequalities in the

²Microcensus data in 1988 and 1996 (Večerník, 2001).

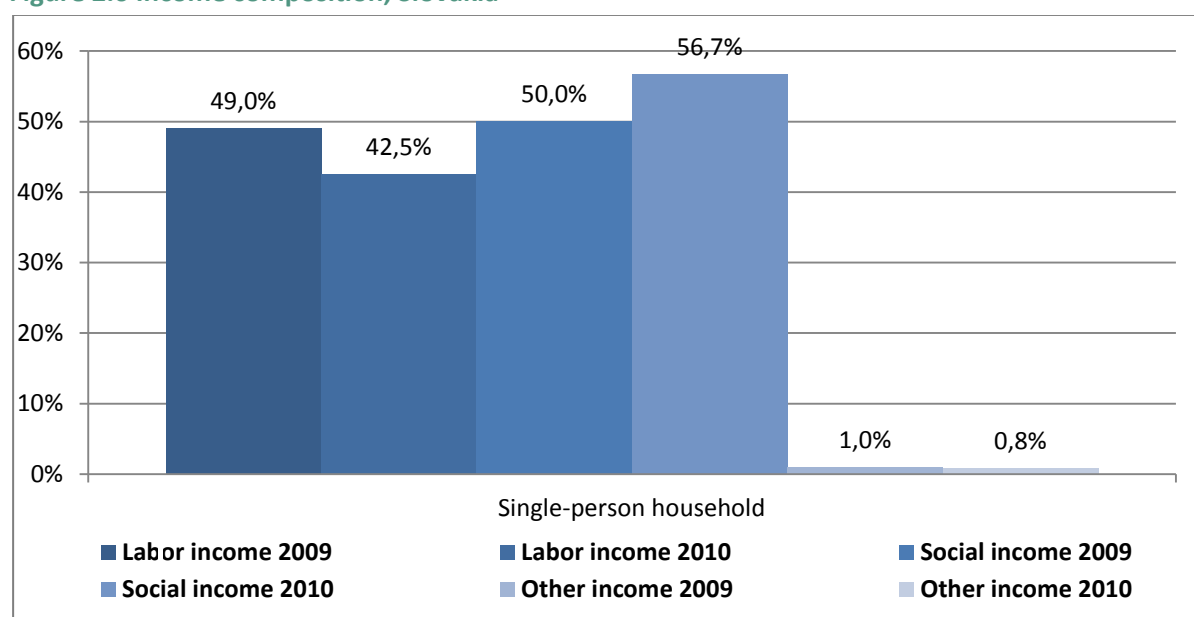
Czech Republic stabilized except for some relatively small changes in some specific groups (e.g. women). The estimated Gini coefficient for 2000s stayed at the same level, 0.28 (Mysíková, 2011).³

The rising inequalities in the 1990s mostly affected middle-income groups. As claimed by Mysíková (2011), the distribution of incomes has shifted towards the ends of the distribution shrinking the middle part of the density function. This phenomenon, also called “hollowing the middle”, was also examined by Alderson and Doran (2010). Comparing the relative position of both distributions, they concluded that 40 per cent more households appeared in the first decile in 1996 compared to 1992. In contrast, 25 per cent to 30 per cent of households disappeared from the 5th and 6th deciles by 1996. Both the expected value and the variance of probability density functions of income distribution changed significantly within the four-year period. The 1996 distribution had greater variance and lower expected value compared to 1992. This suggests the shrinking middle-income groups and growing income groups on both edges of the distribution.

The characteristics such as age and number of children have lost much of their importance since the 1990s and now do not explain much of the income variation. The more important factors which explain the income differences are education and position at work (Večerník, 2001). Some changes in the composition of households in low-income levels can be seen in data from 1988 and 1996. While the lowest-income households were previously composed of retirees receiving only social transfers, eight years later low-income households were mostly families with children. The recent research about income inequalities suggests that the remarkable increase of inequalities during the transformation in the 1990s was alternated by the moderate development during 2000s (Mysíková, 2011).

Similarly to the Czech Republic, households in Slovakia had to undergo a transformation process which included increased unemployment and changed distribution of wages. Those changes were reflected in inequalities growth, but their extent was significantly lower than other post-socialist countries. This is mostly interpreted as a consequence of the strong redistributive policies (see for example Boeri and Terrell (2002), or Garner and Terrell (1998)). In income composition we observe that the highest share (60 per cent) belongs to wages. The second are social transfers, composed of retirement benefits and other social transfers, with the smallest share stemming from self-employment. Figure 2.6 illustrates the composition of income in 2009 and 2010.

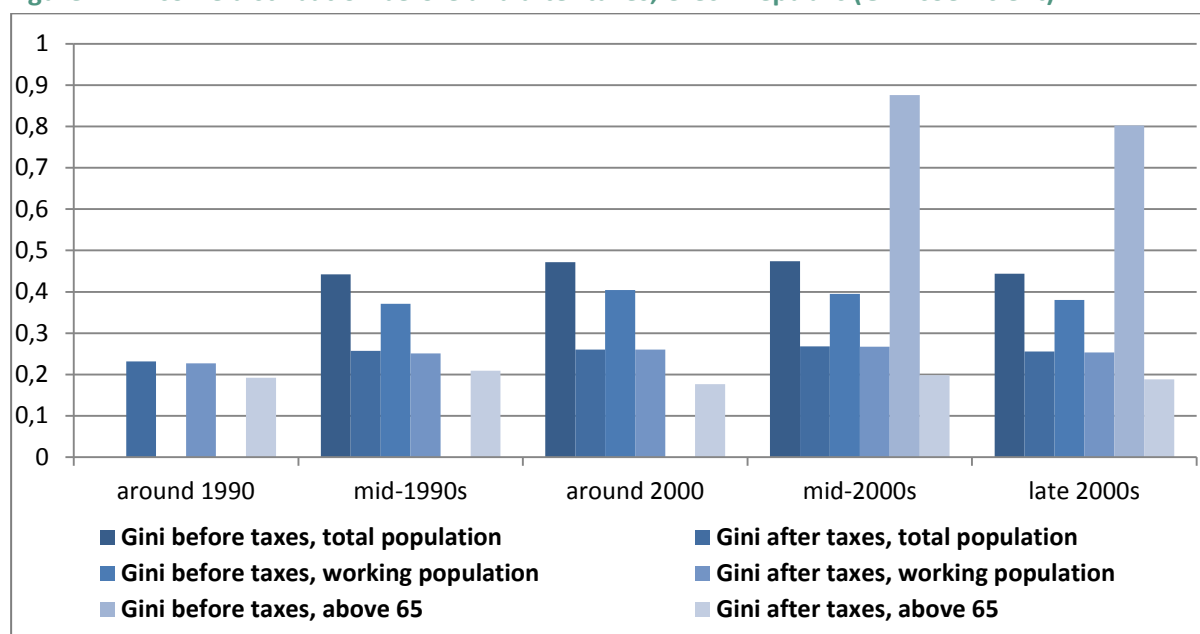
³Microcensus conducted in 2002, the Life Conditions survey conducted in 2006 and 2008.

Figure 2.6 Income composition, Slovakia

Source: SÚSR, SILC 2009 and 2010.

Rising income inequalities in the Czech Republic mostly during 1990s were perceived as high, mainly because of the sudden changes in the short time span. However, growth of income inequalities never reached the levels of other transforming countries, especially those from former Soviet Union. Boeri and Terrell (2002) explain the difference by the stronger social support of low-income households and individuals in the transition period in the Czech Republic. Taxes redistribution and governmental transfers contributed the most on this relatively moderate increase of inequalities. According to Garner and Terrell (1998), who provided the decomposition of Gini coefficient of after-tax income, governmental transfers decreased the income inequalities by 32.1 per cent and tax redistribution by 31.2 per cent in 1993.

In order to examine the effect of redistribution and social policies over a longer time span, we use data retrieved from the OECD database. The income distribution before and after the taxes is reported in the OECD income inequalities datasets. The estimate of inequalities of the OECD does not differ from those of the Microcensus. Inequalities measured by Gini coefficient are reported in Figure 2.7. The taxation yields the expected impact on decrease of inequalities. It is especially remarkable for the group above 65 years, i.e. retired people. In this case, the Gini coefficient before taxation and transfers is around 0.8, while after taxation it drops to 0.2.

Figure 2.7 Income distribution before and after taxes, Czech Republic (Gini coefficient)

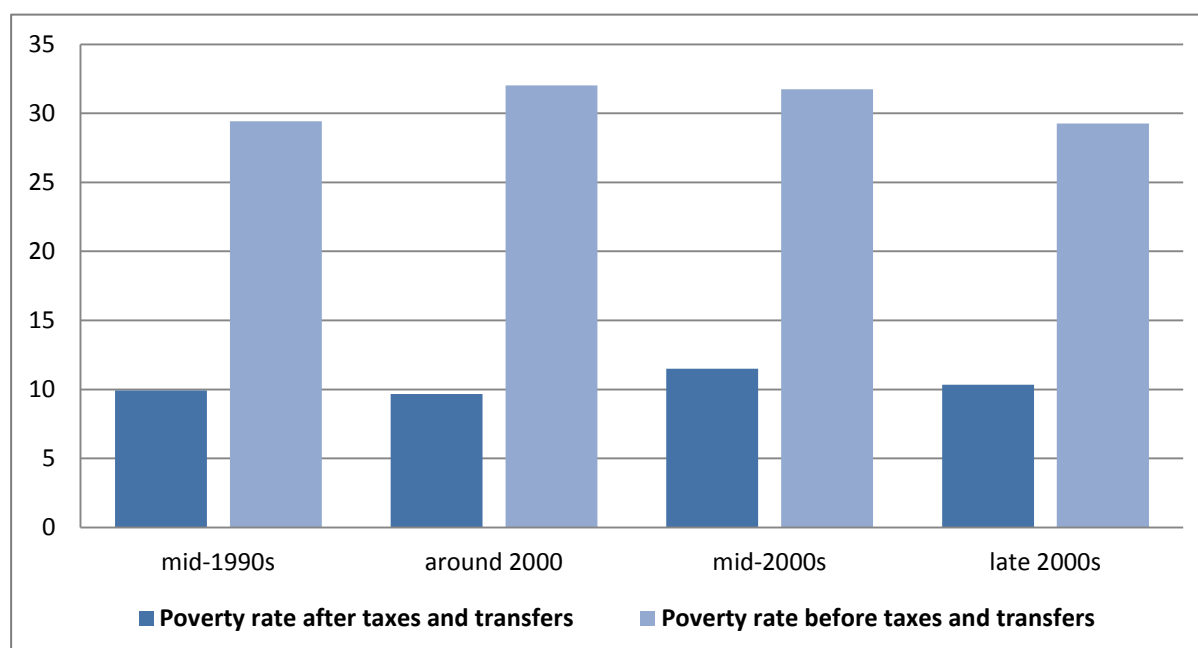
Source: OECD.

The positive effect of social policies and taxation on income distribution is mainly visible in lower deciles of income distributions. The indicator at-risk-of-poverty rate reported by the OECD is defined as the percentage of people with income lower than 60 per cent of the median of current income. According to OECD data the share of people threatened by poverty is around 30 per cent when we consider income before social transfers and taxation. This figure drops to 10 per cent when we consider income after the social transfers and taxation (see Figure 2.8). According to the OECD, the poverty rate increased in mid-1990s and around 2000 and slightly decreased in later years.

The low figures of poverty rates rank Czech Republic below average among the OECD countries. Sirovátka and Mareš (2006) find the fact that the poverty rate in the Czech Republic remained low “surprising”, especially when they compare the social expenditures of Czech Republic with the countries with the similar poverty rates, such as Denmark or Sweden. The Czech government spent around 20.1 per cent of gross domestic product (GDP) in 2001 on social expenditures, while Denmark or Sweden spent 29.1 per cent and 28.9 per cent of GDP, respectively.⁴

The lower at-risk-of-poverty rates can be explained mainly by the redistributive social policies targeted mostly on low-income groups: unemployed, families with single parent and families with three and more children (Sirovátka and Mareš, 2006, p. 292). These are also the most numerous groups threatened by poverty.

⁴Data from Eurostat.

Figure 2.8 Poverty rates before and after taxes and transfers, Czech Republic

Source: OECD.

Note: Poverty defined by 60 per cent of the current median income.

The very recent development of poverty rate suggests positive development towards decrease of the number of people threatened by poverty. The detailed development of poverty rate in recent years is offered by Eurostat. The share of people threatened by poverty was 14.4 per cent of all population in 2010. This percentage has decreased by 5.2 percentage points since 2005 (see Table 2.3).

Table 2.3 People at risk of poverty or social exclusion, Czech Republic (per cent)

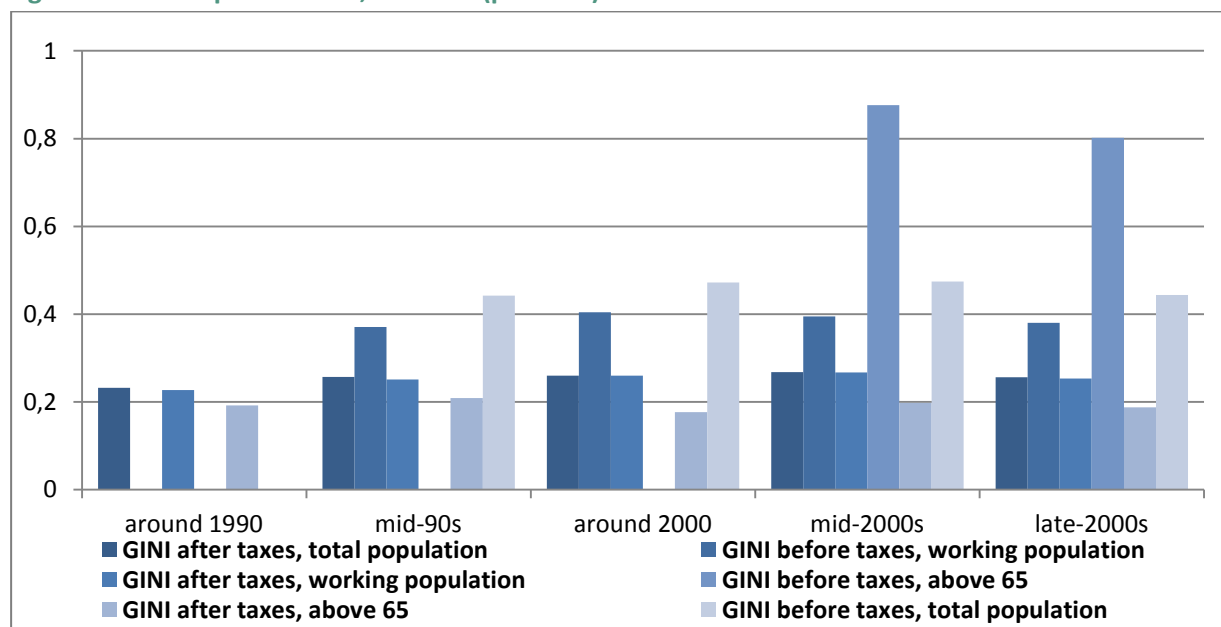
	2005	2006	2007	2008	2009	2010
Poverty rate	19,6	18	15,8	15,3	14	14,4

Source: Eurostat.

As previously mentioned, tax redistribution plays an important role in lowering income inequalities. Similarly to the Czech Republic, in Slovakia the most significant decrease can be seen in the age group over 65. Similarly to the Czech Republic, the Gini coefficient before taxation is around 0.8 while after taxation and transfers it is 0.2. This is similarly true for the working population, but we can see some additional dynamics here. In the mid-2000s taxation was significantly decreasing inequalities (from 0.4 to 0.23) while in the late-2000s taxation did little to contribute to income redistribution of the working population (see Figure 2.9). What changed? In 2004 Slovakia introduced a flat tax rate which had positive impacts on high-income groups, but a neutral effect on low-income

populations. The taxation policy therefore partially lost its redistributive features. We will expand on this issue in Chapter 5.

Figure 2.9 Tax impact on Gini, Slovakia (per cent)



Source: OECD.

For measurement of consumption inequalities of households in the Czech Republic, we use the ratio of bottom and top quintiles (Q80/Q20) of household expenditures per adult. According to data retrieved from CSO, the ratio Q80/Q20 was 2.47 in 2006 and 2.33 in 2010, which would suggest the decrease of consumption inequalities in the recent years.

The share of consumption on revenues decreased on both first and last quintiles (see Table 2.4). Low-income households used almost 98 per cent of all their income on consumption in 2006, while in 2010 it was 94.67 per cent. High-income households spent 90.5 per cent of their income on consumption in 2006 and 88.5 per cent in 2010.

Table 2.4 Shares of consumption on revenues for lower (20) and upper quintiles (80), Czech Republic (per cent)

	2006		2010	
	Expend./Reven. 20	Expend./Reven. 80	Expend./Reven. 20	Expend./Reven. 80
Gross	98.00	90.55	94.67	88.51
Net	97.79	88.51	94.28	86.30

Source: CSO, authors' calculations.

From the available data for Slovakia we can capture consumption development related to income rather than the development of consumption inequalities themselves. However, the relation of

consumption to income can still reveal an interesting story. Since 2004 the ratio of consumption/income decreased, suggesting that higher amounts of income were saved (see Table 2.5). The relationship between overall expenses and income reveals a similar trend, decreasing from 97 per cent of income to 90 per cent.

Table 2.5 Consumption inequalities, Slovakia (per cent)

	2004	2005	2006	2007	2008	2009	2010	2011
Consumption/income	79.30	79.31	77.95	74.94	71.65	67.98	69.75	69.81
Expenses/income	97.47	97.68	98.36	96.00	93.47	88.99	89.54	90.36

Source: SOSR.

To conclude, in the Czech Republic and Slovakia alike, income inequalities rose rapidly at the beginning of 1990s. Besides the rapid increase of inequalities, those were mitigated by the redistributive policies which mostly had an impact on the population above 65 years old and on people living at the edge of poverty. In 2000s, these inequalities stagnated with some positive signals in poverty reduction.

Because of data inconsistencies and different sources, it is rather difficult to assess the development of household inequalities over time. Nevertheless, the main points which arose from the conducted research and available data are: (i) household income inequalities mirrored the earnings income inequalities which increased mostly in the 1990s; (ii) household income structure changed towards increased share of self-employed; and (iii) the consumption pattern of households also changed.

2.1.2 Wealth and debt inequality

The lack of available data for Czech Republic does not allow us to examine in details the impact of household wealth on inequalities. Therefore, we combine relevant conclusions of studies conducted since the 1990s, with the description of available data retrieved from Eurostat and OECD databases.

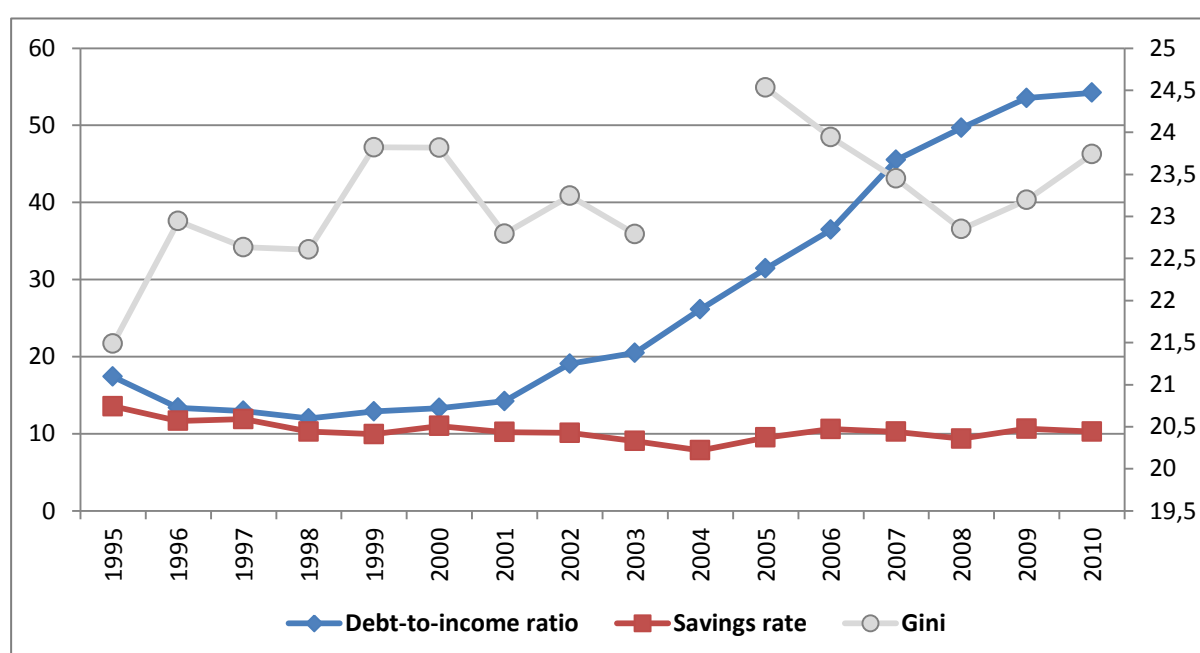
Regarding the household assets, Czech households belong to those whose primary assets are non-financial. The non-financial assets constitute around 66 per cent of all assets kept by households. According to the CSO, the most common non-financial asset is the dwelling – at around 77 per cent of all non-financial assets. Of financial assets, the most prevailing one are liquid assets, which account for 60 per cent of all financial assets (Kiss et al., 2006).

Household liabilities are mostly constituted by medium- and long-term bank loans. Since the mid-1990s, household indebtedness had increased substantially, by about 30 per cent per year.

Indebtedness measured as the debt-to-income ratio within 15 years more than tripled, from 17.4 in 1995 to 54.2 per cent in 2010. However, the currently estimated debt-to-GDP ratio remains low, at around 10 per cent. This ratio is low compared to developed countries. Therefore, the expected development is towards increasing indebtedness of Czech households (Ganelli, 2006).

Hand in hand with the increase of household debt is also a decreasing savings rate. The savings rate measured as the ratio of savings on income and net transfers decreased by 3.2 percentage points to 10.2 per cent between 1995 and 2010 (see Figure 2.10). Household liabilities-to-assets share is around 30 per cent (Ganelli, 2006, p. 190).

Figure 2.10 Household savings and debt, Czech Republic



Source: Eurostat.

Notes: Per cent, left axis. The Gini coefficient on the right axis.

Just like in the Czech Republic, the nature of wealth inequality in Slovakia can be traced back to the socialist era. Houses, flats or dwellings, which are usually the most valuable asset a household owns, were either privately owned and build (in case of houses) or build by the government and then sold to long term tenants at discount prices. This caused high ownership rates, which is a common phenomenon for most post-socialist countries.

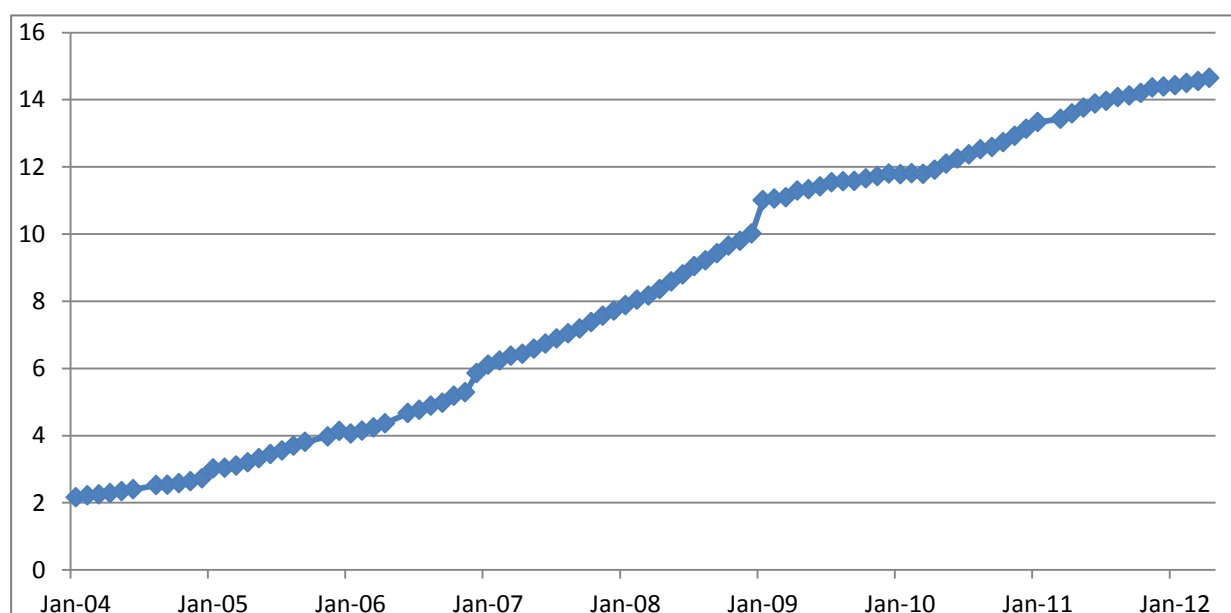
Moreover, mortgage loans were virtually inaccessible during the 1990s. This was caused by high inflation, low liquidity of banks in general, high government deficits imposing high interest rates and low labour income in general. After accession to the EU, mortgage loans became available. This caused an increase of the per cent of the population living in their own dwellings with mortgage

loans from 3.7 in 2005 to 7.7 per cent in 2010. Similarly, the percentage of households with loans increased. Dwelling prices peaked in 2008, though decreases were not as drastic as in other countries.

Flat ownership is almost exclusively private, with the owner living in given flat or house. 82 per cent of the population live in dwellings as the owner, with no mortgage or loan. This is the fourth highest figure in the EU (after Romania, Bulgaria and Lithuania). 8.4 per cent of the population live in dwellings as a tenant at market prices. This is the highest figure of all post-socialist countries in the EU and is significantly lower than any other countries (in Spain, which has the lowest rate of the older member countries, this figure is 8.8 per cent). The number of households living in dwelling with a loan is at 8.2 per cent (2011), and this share is steadily rising (in 2005 it was only 3.7 per cent).

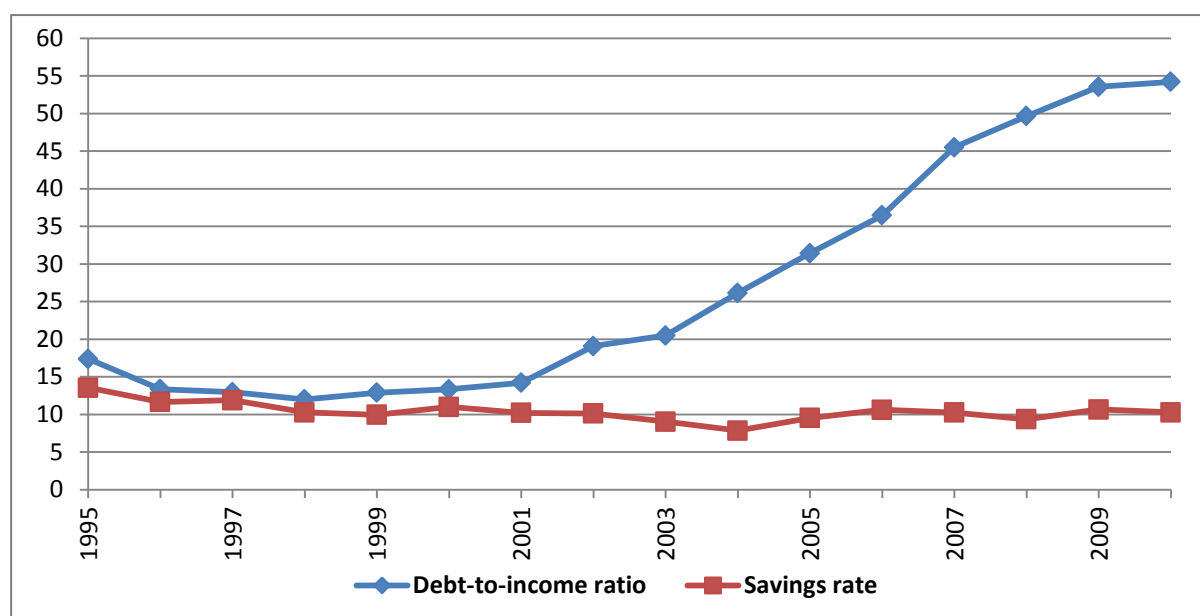
Every year since 2004, Slovak banks have provided more loans than in the prior year. A small decline can be seen only in January 2006 (see Figure 2.11).

Figure 2.11 Stock of loans, Slovakia (monthly, billion EUR)



Source: National Bank of Slovakia.

The majority of these loans, around 43 per cent of total loans, are acquired in the Bratislava region. Loans per capita is 6,130 euro in Slovakia as whole, while in Bratislava it is 21,000 euro. Other Slovak regions have loans of 3 to 5,000 euro. This demonstrates regional disparities, where only the Bratislava region can generate income high enough to pay a mortgage.

Figure 2.12 Debt to income ratio and saving, Slovakia (per cent)

Source: Eurostat.

After entering into the European Union, and as a component of market political stabilisation, more loans are available to the general public, though mainly to middle and higher-income workers. The overall debt to income ratio has increased by 42.2 percentage points between 1998 and 2000, though its value is still less than half of EU average (Figure 2.12).

2.1.3 Labour market inequality

The remarkable growth of income inequalities in the 1990s was mostly determined by the growth of earnings inequalities. Without any doubts, the changes in earnings distribution are the reflection of changes in the labour market. In this section, therefore, we briefly introduce some underlying features of the labour market and its development over time in the Czech Republic and Slovakia, in order to better explain the impact of earnings on inequalities. We then proceed with the current development in the labour market and earnings inequalities.

In the last 20 years, the Czech labour market has experienced important changes in employment and unemployment. While the unemployment rate in the 1980s virtually approached zero and the employment was concentrated mostly in productivity sector, the turbulent 1990s brought changes in the structure of employment as well as in increased level of unemployment.

Compared to other transition countries, the Czech Republic had relatively low unemployment rates during the 1990s and 2000s. While in many other transition countries the unemployment rates sometimes reached 20 per cent, the peak in the Czech Republic was 8.83 per cent in 2000. Notwithstanding, the changes in employment and unemployment in transition period were not

invisible. The employment rate decreased from 58.8 per cent in 1993 to 54.2 per cent in 2010. In addition, the unemployment rate increased from 4.3 per cent in 1993 to 7.4 per cent in 2010 (see Table 2.6). The employment structure shifted towards tertiary sector, such as services and research and development. In the last 20 years, virtually 10 per cent of workers moved from secondary to tertiary sector.

Table 2.6 Employment, unemployment and self-employment, Czech Republic (per cent)

	1993	1994	1995	1996	1997	1998	1999	2000	2001
Employment rate	58.8	59	59	58.9	58.2	57.1	55.7	55.1	55.1
Unempl. rate (15-64)	4.3	4.31	4.02	3.89	4.81	6.46	8.74	8.83	8.17
Share of self-empl.	9.3	10.5	11.9	12.1	12.3	13.6	14.4	15	15.1

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Employment rate	55.4	54.8	54.3	54.7	55	55.6	55.9	54.8	54.2
Unempl. rate (15-64)	7.32	7.82	8.36	7.98	7.2	5.37	4.44	6.75	7.4
Share of self-empl.	16	17.1	16.8	16	16.1	16.2	16.1	16.8	17.7

Source: CSO.

Concerning the changes in the structure of employment, vast number of jobs was lost in the industry and agriculture sectors. In 1993, almost 40 per cent of all employees worked in industry. Until 2008 the employment in industry sector has stabilized at 35.5 per cent of all workers but because of the crisis another 140,000 workplaces have been destroyed. The employment rate stabilized at 33 per cent in 2009 and in absolute numbers, this represents 400,000 lost jobs since 1993. Another downgraded sector, agriculture, employed 8.4 per cent of all employees in 1993, but only 2.9 per cent in 2009 – a loss of over 200,000 jobs.

Another important change in the employment structure was the introduction of private ownership and entrepreneurship after 1989. The overall number of self-employed increased significantly mainly between 1993 and 1998, by 4 percentage points. In absolute terms 130,000 people became self-employed. The average growth rate of self-employed was 3 per cent per year during the last two decades.⁵ Currently, 17.7 per cent of households declare self-employment as their main source of income (see Table 2.4).

Another novelty in the labour market appeared in late 1990s, when alternative forms of working contracts, such as part-time work or temporary work, were made available. The share of part-time workers has persisted since 1997, at around 5 per cent of the working population. Temporary

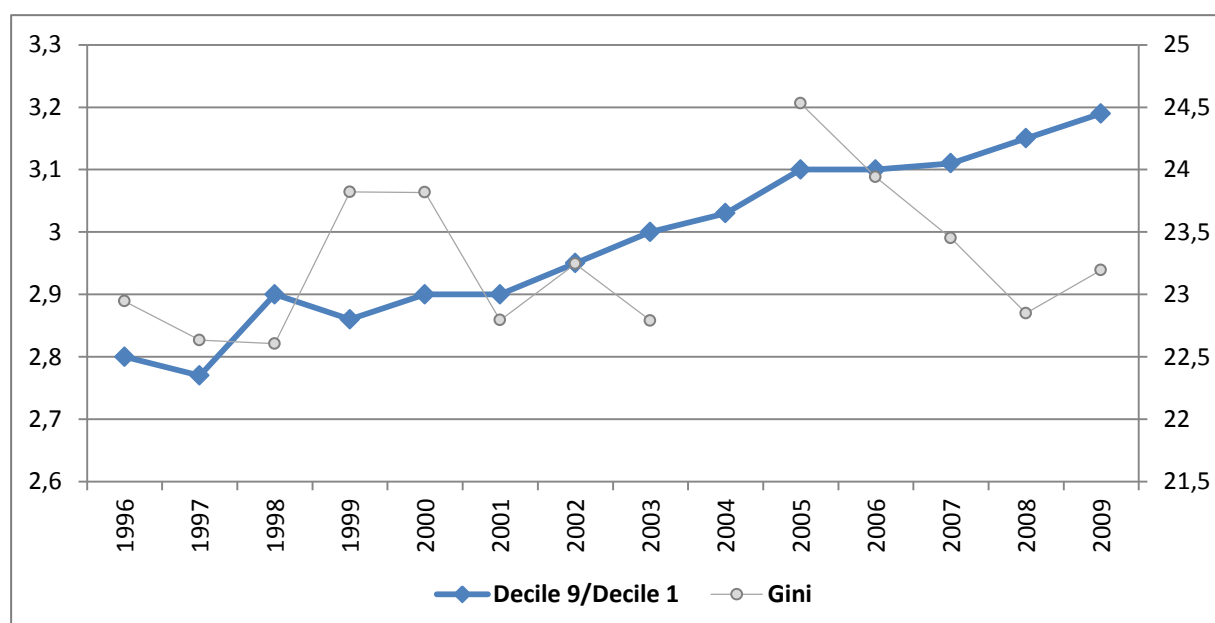
⁵Eurostat and authors' own computation.

workers occur in 7 per cent of households.⁶ All those changes and developments necessarily mirrored in wage differences and remuneration patterns.

Together with the structural change of the labour market, wages have also changed greatly. Higher wages have increased while low wages have remained stable – as a consequence, the middle-income group shrank. The determinants of wages have also moved from appreciation of age and seniority towards a greater focus on education. We focus on these two phenomena in more detail in the next section.

Up until 1989, wage differences had been regulated by the state. From 1990, however, wage setting was a subject of labour market forces. At the end of 1980s, the decile ratio of wages was 2.4, which means that 10 per cent of the highest wages were 2.4 times higher than the 10 per cent of the lowest wages. This ratio increased rapidly in the 1990s, when the top wages in 1999 were three times higher than the lowest wages. The current 90/10 ratio is 3.19 (see Figure 2.13). Wage inequalities have therefore been the driving force of rising income inequalities in the last two decades.

Figure 2.13 Gross earnings, Czech Republic (top/bottom decile ratio)



Source: Eurostat.

Note: The Gini coefficient on the right axis.

The determinants of increased wage inequalities lie mostly in the two aspects. First, it is the change in remuneration when demographic characteristics such as gender, age or seniority lost their

⁶Labour Force Survey, Eurostat.

importance. While as much as 30 per cent of variation of wages in 1988 could be explained by gender, this was the case for only 12 per cent in 1996 (Večerník, 2001). Second, education gained outstanding weight in personal remuneration. According to the estimated effects, education explains 11 per cent of variation of wages in 1988 and 20 per cent in 1996. Therefore, education in the 1990s became the most important determinant of remuneration of employees (Večerník, 2001, p. 16).

Table 2.7 Share of minimum wage on mean wage, Czech Republic (per cent)

	1996	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2012
Mean	25.45	22.46	28.13	29.42	33.10	35.82	36.68	37.17	37.94	37.55	37.00	33.00

Source: CSO.

The sharp increase of wage differences in the 1990s was mitigated by the introduction of statutory minimum wage. The original level in 1991 was set to 40 per cent of average wage, and it decreased over time, although between 1998 and 2005 it increased by 15 percentage points (see Table 2.7). Its main aim is to overcome the absolute decrease of lowest earnings in the labour market. The mechanism of the increase is not defined, so its setting strongly relies on the ruling government. The statutory minimum wage in the Czech Republic has not increased since 2007.

Looking at the statistical evidence of labour market inequality, we find that an average of 13 per cent of households in the Czech Republic are composed of not working individuals. Not working households are those composed of unemployed and inactive individuals. The percentages reported in Table 2.8 are retrieved from Eurostat and jobless households share refer to the share of households where any of adult members is working on all households. From the jobless households, around 17 per cent are composed also from children. This creates 2 per cent joblessness of households with children from all households. Data are available only from 2005 and for the given period reports stable trend.

Table 2.8 Jobless households, Czech Republic (per cent)

	2005	2006	2007	2008	2009	2010	2011
Jobless households	13.60	13.34	12.56	12.38	13.13	13.32	13.04
Jobless households with children	2.44	2.46	2.29	2.06	2.26	2.20	2.10

Source: Eurostat, own calculations.

The increase in income inequalities in Slovakia in the 1990s was caused mostly by an increase in unemployment and a decrease in real wages as a result of inflation. However, the impact on income redistribution was not as dramatic as in other transforming countries. The reason is that

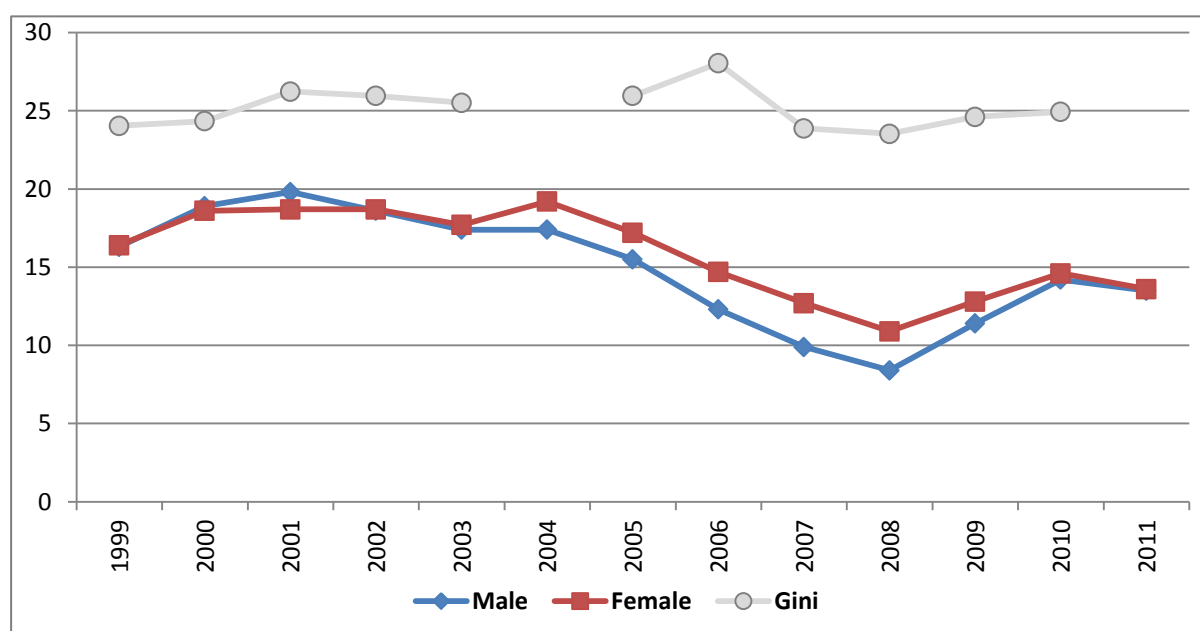
unemployment benefits were sufficient to partially lower the income shock in the 1990s (Garner and Terrell (1998)).

Unemployment development over the past decade had expected development: after high values at the change of the millennium, it started to decrease, from 19 in 2000 – 2002 to around 9.5 per cent in 2008 before increasing to 14.4 per cent. Generally, an economic boom increased the unemployment rate differences among men and women (see Figure 2.14).

In the Slovak labour market, part time work penetration is traditionally among the lowest in EU. Only around 4 per cent of workers engage in part time work (as measured by LFS), as compared to the Netherlands where the level reaches almost 50 per cent. Female part time work is almost twice as likely as male. Female part time work gradually increased during the crisis (by 1 p.p.), while male part time work increased by almost 2 p.p. to 2.8 per cent. Due to very low volumes of part time workers and their special conditions (around 20 per cent of them are disabled) it is not possible to draw reliable conclusions about the wages of these workers.

Fixed term contracts also were and are very infrequent. At 7 per cent it is half of the EU average. During the crisis this increased from 4.4 per cent. Before, there was a gradual increase of temporary contracts.

Figure 2.14 Unemployment rate by gender, Slovakia (per cent)



Source: Eurostat, LFS.

Although in Slovakia self-employment was technically forbidden before 1989, by the beginning of the 1990s it had gained importance in effects on income distribution. Following the decomposition of the

Gini provided by Garner and Terrell (1998) the components that contributed most to income inequalities in 1993 were wages, bonds and stocks and self-employment. The impact of self-employment gains in income redistribution within three years was more visible in Slovakia than in the Czech Republic (11.4 per cent share on Gini in Slovakia, compared to 9.2 in the Czech Republic).

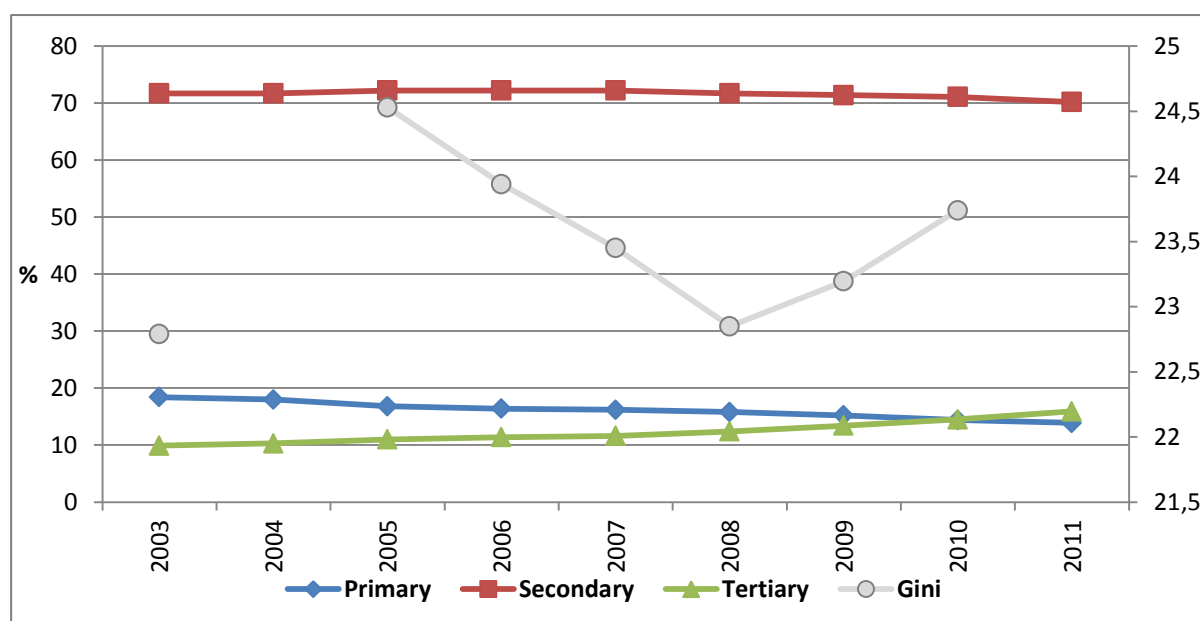
The importance of self-employment has grown over recent years, from 6 per cent of workers in 1998 to the current value of 16 per cent, which is near the EU average. There are at least two factors that contributed on this increase. The first is that entrepreneurship was not legal before 1989, with the first self-employers and entrepreneurs emerging in the early 1990s. The second factor is connected to social contribution payments. The majority of self-employed are engaging in so-called “creative accountancy,” and manage to pay social contributions only to the necessary minimum. Currently around 87 per cent of self-employed workers pay social contributions, and taxes, at the minimum level possible. This is a result of a social system which allows those self-employed to pay about half of an equivalent employee's taxes. This is confirmed by available data from the Slovak Insurance Agency, which show that 80 to 85 per cent of self-employed workers have officially reported minimum income.⁷

2.1.4 Educational inequality

As we mentioned in the previous section, the role of education in the changing distribution of wages was essential in the 1990s in both republics. As claimed by Mysíková (2011), in the Czech Republic education contributed the most to the deepening of income inequalities during the transition period. In this section, we present linkages between educational appreciation and wage remuneration in more detail.

The Czech Republic is a country with a high share of secondary educated people. Recent statistics suggest that 70 per cent of the active population attained lower or upper secondary education. This share slightly declined in recent years, and we observe increase of tertiary educated people mainly in the last decade. In 2011, the share of tertiary educated people exceeded the share of primary educated group. Currently, there are 15.9 per cent of people with lower or upper tertiary education. The share of primary education is two percentage points lower (see Figure 2.15).

⁷Minimum wage or minimum taxable income.

Figure 2.15 Educational attainment of population, Czech Republic (per cent)

Source: Eurostat.

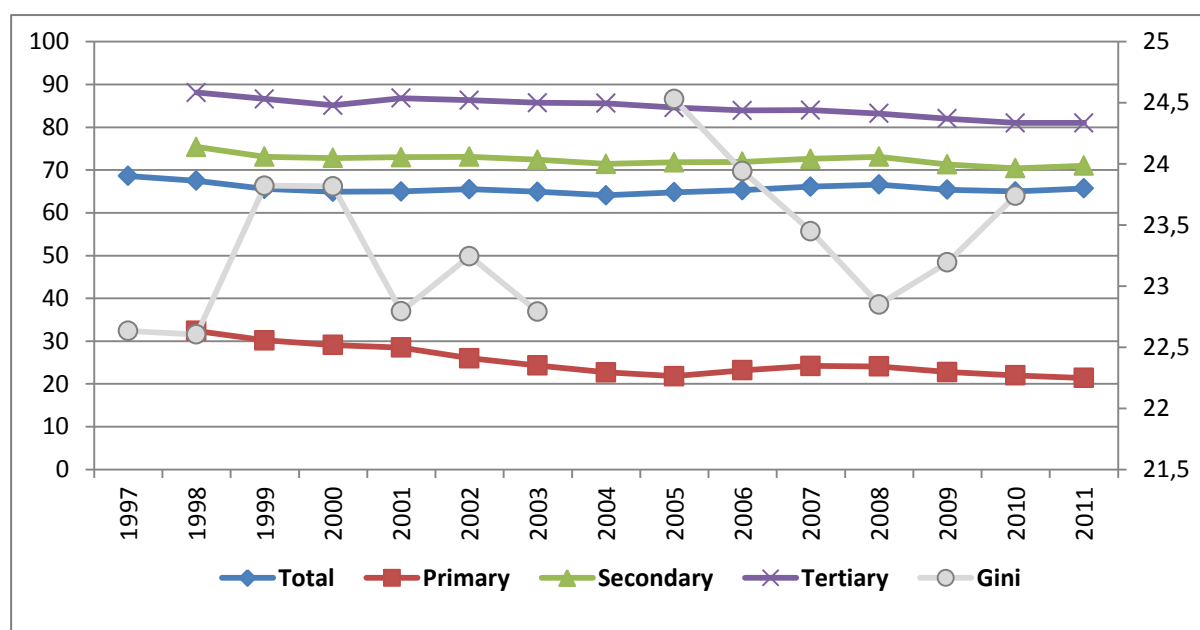
Notes: Per cent, left axis. The Gini coefficient on the right axis.

The increasing rate of tertiary educated people leads us to an evaluation of the returns to investment in education. Returns to education were measured by, for example, Filer et al. (1999), who estimated the effect of additional year of education on wages by the standard Mincer equation. The estimation captures years 1995, 1996 and 1997. Despite the short time span, the increasing effect of education on wages is already visible. They observed 12 per cent increase of effect of the additional year of education on wage increase between 1995 and 1997, from 8.4 to 9.4 per cent.

Returns to education measured as the ratio of wages of primary and tertiary educated people serves as another indicator. Such ratio measured at the median wages is 1.6 in the Czech Republic. Therefore, the tertiary educated people have on average 60 per cent higher wages as primary educated people.⁸

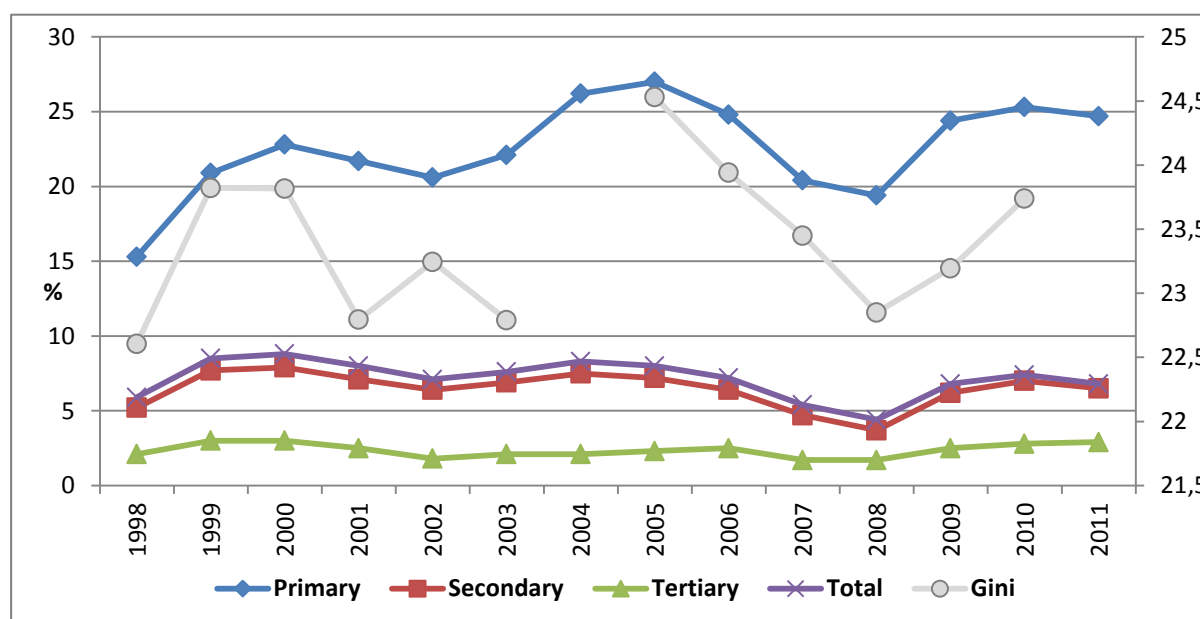
The increasing importance of education had also impact on labour market position of differently educated people. According to available data, the employment rate of tertiary educated people is the highest, reaching 80 per cent compared to 60 per cent average (see Figure 2.16). On the other hand, people with primary education have difficulties in finding a job, and they compose more than two thirds of all unemployed (see Figure 2.17).

⁸Eurostat and authors' computation.

Figure 2.16 Employment rate and education, Czech Republic (per cent)

Source: Eurostat.

Notes: Per cent, left axis. The Gini coefficient on the right axis.

Figure 2.17 Unemployment rate and education, Czech Republic (per cent)

Source: Eurostat.

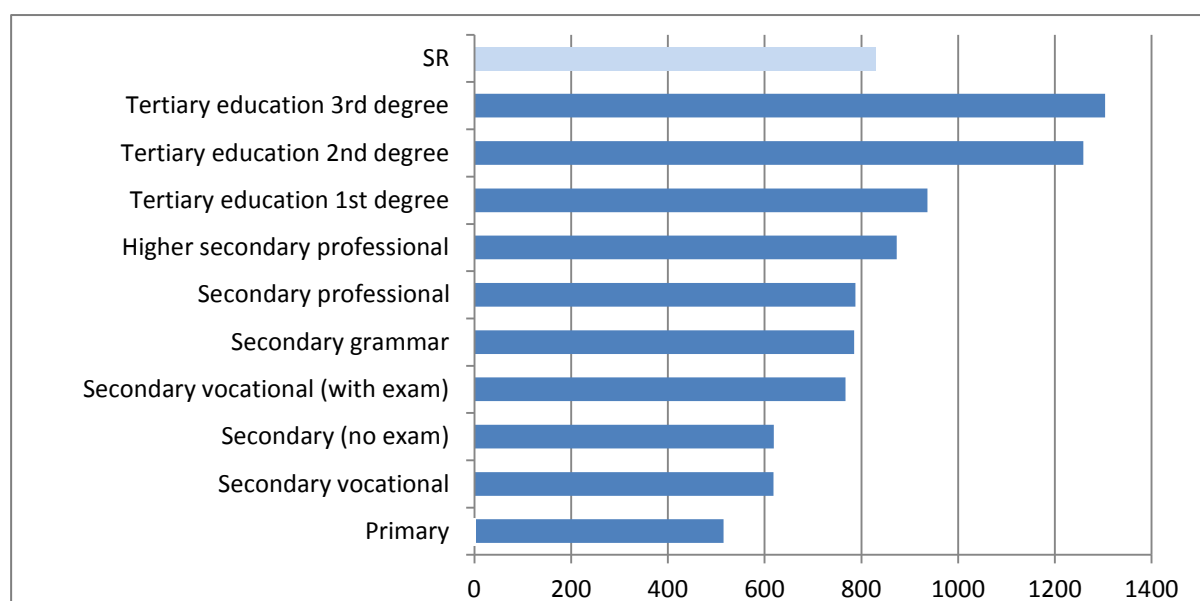
In-work at-risk-of-poverty rate reported by Eurostat reveals some other interesting facts about the situation of different groups with given education attainment. Not surprisingly, the highest share of in-work at-risk-of-poverty is among those who attained only primary education, around 10 per cent, followed by 7 per cent of secondary educated people who are employed struggle with poverty. In spite of the fact that people in this category rarely have a university degree, their share doubled

between 2005 and 2009 from 0.9 per cent to 1.8 per cent. This can be partially due to the consequence of current economic crisis and also the consequence of increasing number of tertiary educated people.

After World War II, the educational structure of the population of Slovakia was largely homogeneous and at the same time very low. This unfavourable situation has gradually improved in the post-war period through the development of elementary education, and Slovakia today has almost complete literacy. In spite of this achievement the educational system during the socialist period favoured acquisition of skills demanded in the agricultural and manufacturing sectors at the expense of intellectual and creative work, which gradually lead to the creation of a specific educational structure.

Wage differentials have not been, during socialism, an important impulse for the growth of educational attainment. In a way, even higher educated graduates in the first years after graduation suffered from a relatively significant wage gap in comparison with their peers who, after completion of a primary or secondary education, went directly into the workforce. Significant wage equalization gradually resulted in the degradation of higher schooling. Men frequently only reached vocational education without general certificate of education (“maturita”), and women completed secondary education. The number and the proportion of university students were consistently low.

After the fall of the communist regime, the educational structure of the Slovak population changed dramatically. Participation in tertiary education in the age bracket 20 to 24 has grown significantly: from 16 per cent in 1998 to above 40 per cent in 2011. Female participation is almost 20 percentage points higher than male and reaches 50 per cent of total university age population. According to Štefánik (2011), this resulted in about 1 percentage point lower returns to education for younger generation compared to the older one. The paper by JRC (2011) confirms a lower tertiary education premium compared to other EU countries. In line with these findings the income gradient across educational groups is rather steep as depicted in Figure 2.18. For instance, workers with only a primary education earn EUR450 per month on average, while those workers with tertiary education – a 2nd and 3rd degree – earn more than EUR1200 per month.

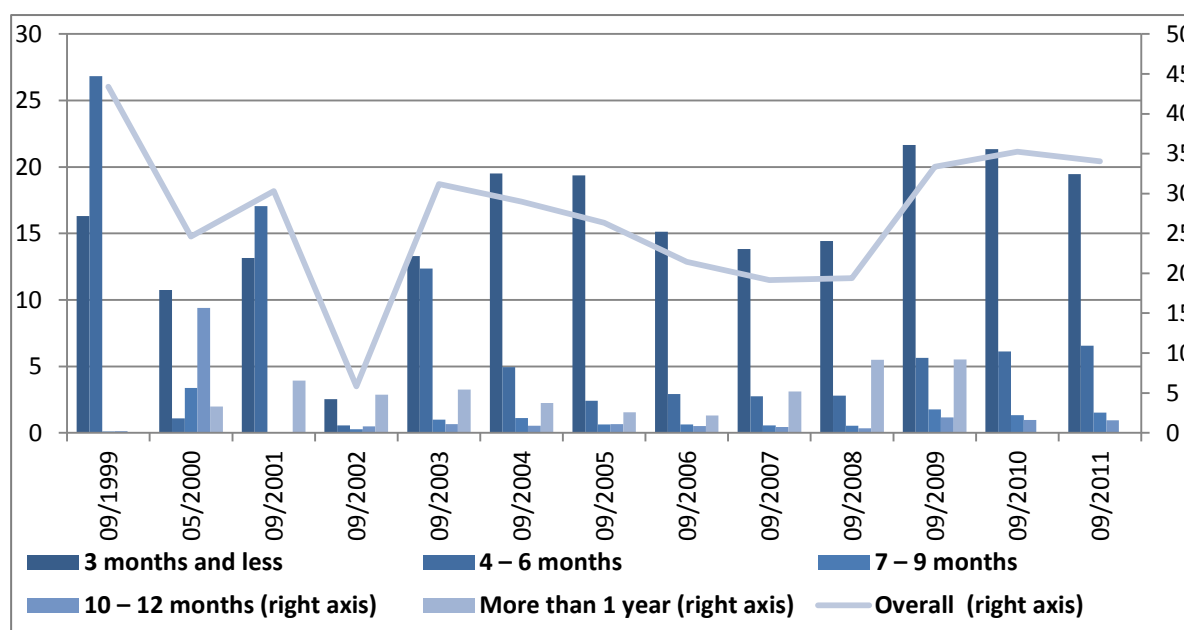
Figure 2.18 Average income by level of education, Slovakia (EUR)

Source: SOSR, 2010.

An important factor in the process of raising the level of education was the development of various forms of distance education. This was the result of efforts to increase educational attainment among working people who have gone through the education system in the past. After the change of the regime, we could gradually see in the youngest age groups a new qualitative transformation of the educational structure of the population. It shows signs of increasing the value of upper secondary and, especially, tertiary education.

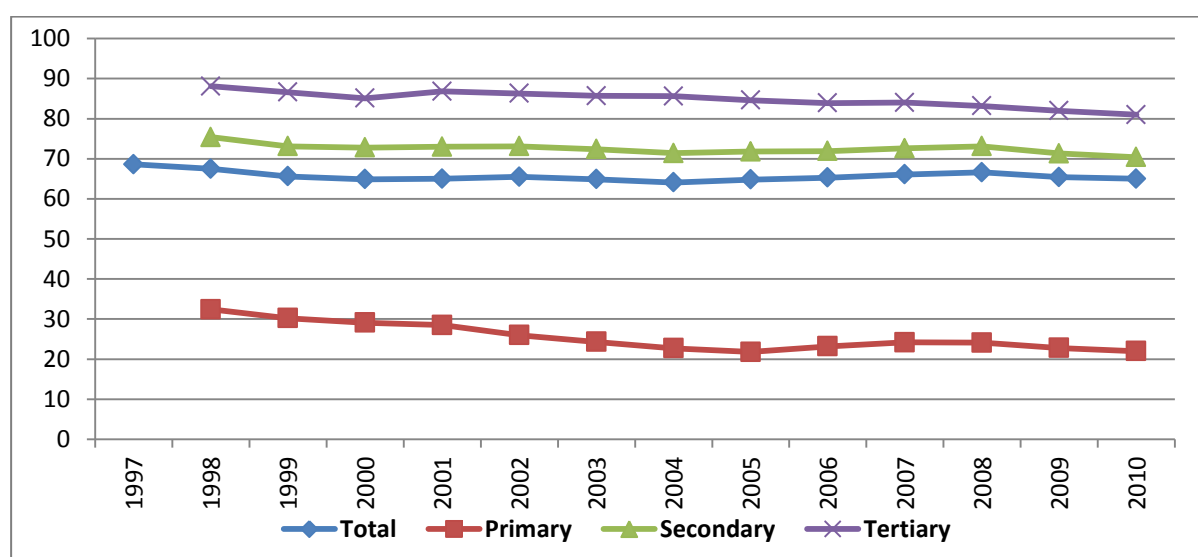
Besides higher earnings for more educated workers, education decreases the probability of being unemployed as well. Before 2009, we can see a decreasing tendency of unemployment in Slovakia. After this year unemployment grows to the same levels as in 2003, and further grows between 2008 and 2010 (Figure 2.19).

Figure 2.19 represents levels of unemployment of graduates. This rate has been high since 1999 and still is even today. The numbers of graduates who have had no employment for over a year is alarming. In 2011 there were more than 34,000 graduates without any job (5500 of whom had been unemployed for more than 1 year), while there were 35,000 jobless graduates in the previous year.

Figure 2.19 Unemployment of graduates, Slovakia (thousands)

Source: The Institute of Information and Prognoses of Education.

Despite that, employment statistics show that the situation is clearly stacked against low-educated individuals. Figure 2.20 shows employment rate by highest level of education attained for people aged 15-74, from 1998 to 2011.

Figure 2.20 Employment rate by highest level of education attained, Slovakia (per cent)

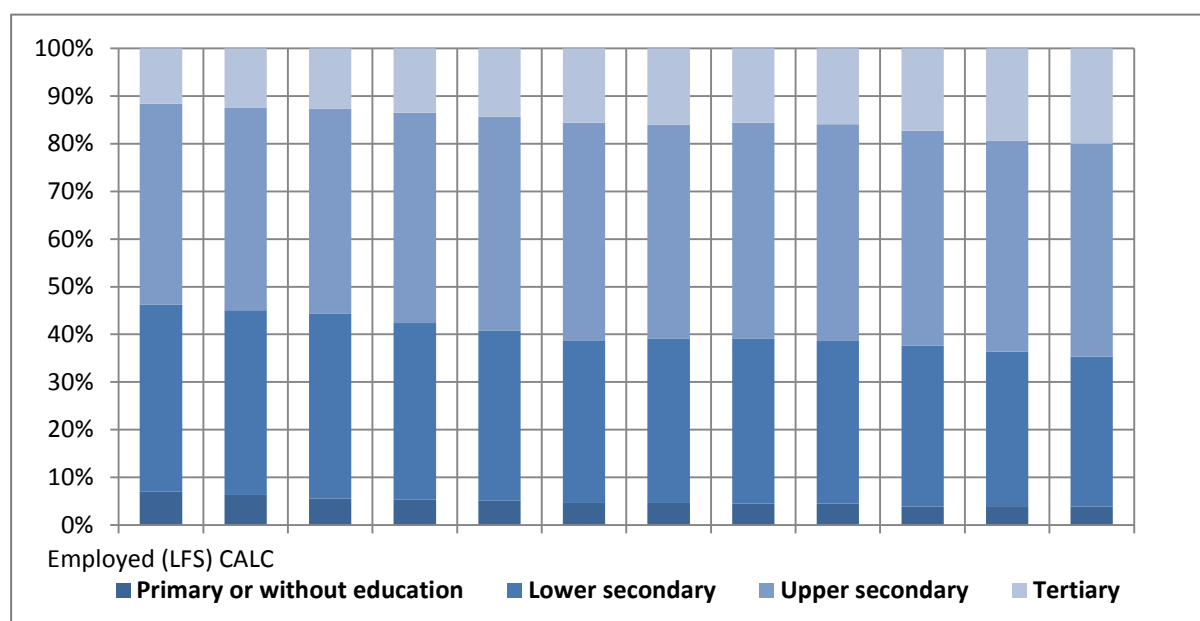
Source: Eurostat, Labour Force Survey.

The employment rate of people with diplomas dropped from 85.2 per cent in 1998 to 73.2 per cent in 2011, but this group is still the best paid and most employed. On the contrary, low educated

individuals (ISCED 0-2) are mostly unwanted by Slovak companies. Consequently, their employment rate has been consistently low (e.g. 10.5 in 2005, 12.4 per cent last year) as shown in Figure 2.20. However, the overall number of low-educated individuals is very low in Slovakia, so their low employment figures do not drastically affect total employment.

Figure 2.21 shows employment by education as a portion of employed. Those with primary or no education at all are very sparsely represented in the labour market. Their employment rate is also low, which means that their total share in employment is very low as well. The employment ratio of the low-educated workforce is one of the lowest in Europe and is still decreasing. Meanwhile, the ratio of tertiary educated people is increasing slightly as tertiary education is more widely available, rising from 12 in 2000 to 20 per cent in 2011. The share of people with only primary or without education in employment is decreasing, as is the number of those with lower secondary education. On the other hand, the share of people with upper secondary or tertiary education in employment is increasing. Overqualification starts to be a more visible problem. The number of tertiary educated individuals is rising, on top of which the current crisis has decreased overall employment possibilities, resulting in highly educated applicants for lower-skills jobs.

Figure 2.21 Employment by education as portion of total employment, Slovakia (per cent)



Source: Eurostat, LFS

2.2 Whom has it affected?

As revealed in previous sections, the transformation period with the deepening income inequalities concerned mostly low-educated people. The winners of the transformation period were people with

university degree. However, the decomposition of rising income inequalities across population into specific subgroups reveals some further issues related to income inequalities. We concentrate on gender, age and regional inequalities. The lack of data does not allow us to fully decompose the income inequalities into specific subgroups. Therefore, we assess some underlying factors that are the reasons behind the income inequalities.

Looking first at the Czech Republic, between 1988 and 1996, the Gini coefficient of female income inequalities grew by 11 points and it slightly decreased in the 2000s (Mysíková, 2011). The polarization of income was even more remarkable for women compared to the overall population. The main driving force was again education. “While in 1992 about 64 per cent of women with high education were concentrated in the two top deciles, in 1996 as many as 74 per cent of these women joined the top two (median-adjusted) 1992 deciles. At the lower tail, 29 per cent of women with low education fell in the two bottom deciles in 1992, while as many as 52 per cent of women with low education occupied these ranks in 1996” (Mysíková, 2011, p. 13). Therefore, the phenomenon of “hollowing the middle” was also the case for women.

The gender pay gap is another determinant that contributes to the income inequalities. The difference of hourly average payments related to men and women is estimated by Eurostat at 25 per cent. This is far above the EU average (16 per cent) and this difference ranks Czech Republic to the member states with one of the highest gender pay gaps in the European Union. The explanation partially lies in the education attainment of women. According to the CSO, the share of women with tertiary education in the whole population in 2001 was 7.1 per cent and the share of men was 10.8 per cent. On the other edge of the education scale, primary education is the domain of women – at 29.1 per cent – compared to 16.5 per cent for men. Therefore, the difference of male and female income is strongly determined by their educational attainments. The larger part of wage difference between men and women remains unexplained and can be assigned to discrimination or work segregation (Mysíková, 2007).

The group of young people and elderly people arose as specific group after the restructuralization of the Czech economy in the 1990s. Elderly people had difficulties with adaptation to new labour market situation, most often because of the necessary requalification. Young people were added to the problematic groups later, in the 2000s. The increasing share of secondary and tertiary educated people in the younger cohorts increased the competition on supply side of labour market. In addition, the lack of experience of new graduates is perceived as a disadvantage by employers.

The actual rates of unemployment of different age groups are reported in Table 2.9. We can see that the highest is the unemployment rate of young people in the two lowest age cohorts, 15 to 19, and

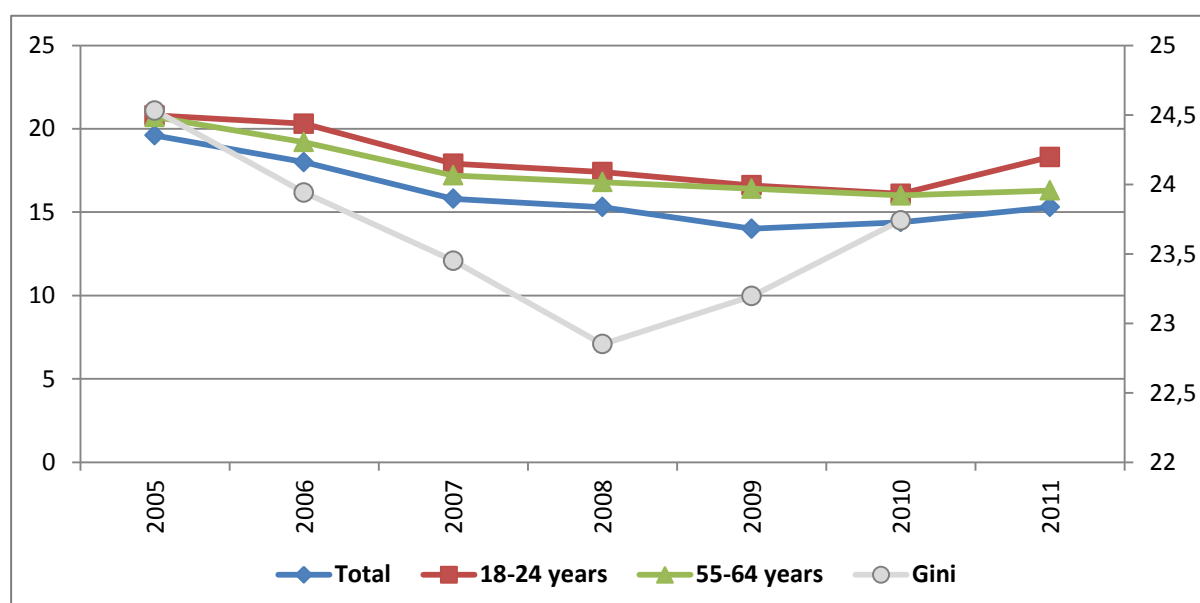
20 to 24 years. Since 2003, those rose by around 3 percentage points. In addition, both groups are threatened by poverty more than average of the population.

Table 2.9 Unemployment rates according to age and education attained, Czech Republic (2011)

		Average	Males	Females
CZ average		6.7	5.8	7.9
Education attained	Primary education or not finished	24.3	28	21.5
	Lower secondary	7.7	6.3	10.5
	Upper secondary	5	4.1	5.9
	Tertiary	2.8	2.4	3.2
Age	15 - 19	41.7	40	44.6
	20 - 24	15.4	15.6	15.1
	25 - 29	7.8	6.8	9.4
	30 - 34	6.1	4.3	8.9
	35 - 39	5.3	3.3	7.9
	40 - 44	5.2	4.1	6.4
	45 - 49	5.4	4.7	6.2
	50 - 54	6.2	5.3	7.2
	55 - 59	6.6	6.8	6.4
	60 - 64	3.5	3.7	3
	65 and above	1.4	-	2.2
	15 - 64	6.8	5.9	8

Source: CSO.

Figure 2.22 Poverty rates, age groups, Czech Republic (per cent)



Source: Eurostat. Notes: Per cent, left axis. The Gini coefficient on the right axis.

According to Eurostat, the share of young people aged 18 to 24 years was around 18.3 per cent in 2011. People aged 55 to 64 are also disproportionally threatened by poverty, the risk of poverty being 16.3 per cent. The average rate in 2011 was 15.3 per cent (see Figure 2.22).

As concerns gender inequality in Slovakia, the difference between income of men and women was stable from 2005 to 2008, at around 28 per cent (average male income was 28 per cent higher than female). During the beginning of the crisis, this decreased to 21 per cent and then increased back to pre-crisis levels in 2011. In an international comparison, Slovakia is in the group of countries with a higher gender pay gap, with lower values than in Czech Republic but higher than in Poland or Hungary. In some sectors (mainly health care) this gap is increasing, while public employers have a lower gender pay gap (14 compared to 23 per cent), which is less than in Czech Republic or Hungary.

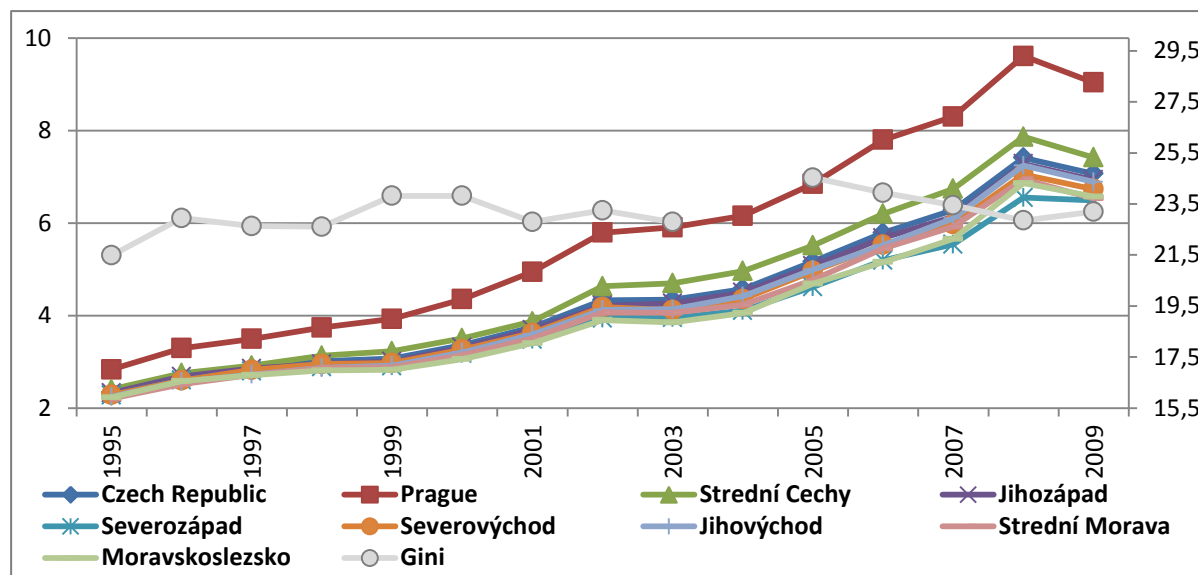
An important divide in terms of socio-economic variables in the Slovak society is between the Roma and non-Roma populations. Roma generally have lower educational attainment, live in the poorest regions, and suffer from low employment and higher dependence on welfare. According to a survey of stakeholders, the risk of social exclusion of the Roma population is in general very high and increasing (Constant et al., 2011). Immigration into Slovakia over the studied period was very low (currently several thousand people per year) and not significantly affecting aggregate measures of inequality.

The Czech Republic, suffers from significant regional disparities, which are mostly determined by the economically strong capital and weaker regions distant from the capital. In the case of the Czech Republic, regional disparities are visible in most of the social and economic indicators, with Prague as an outlier. Concerning income inequalities, Prague is the only region in the country which has income higher than the national average. Over time, disparities among the regions have even grown. While in 1995, the income per inhabitant in Prague was 17 per cent above the average, the gap rose to 26 per cent by 2003. Comparing Prague and the poorest region, Moravskoslezský region, the difference between them in 1995 was 21 per cent and 34.8 per cent in 2003 (see Figure 2.23).

In Slovakia, differences in inequalities are rather significant between as well as within regions. Based on administrative data from the Social Insurance Agency, net average income in the Bratislava region, the most affluent region of Slovakia (measured by GDP or average income), has increased from 138 to 142 per cent of the national average in the period from 2005 to 2011. The gap vis-à-vis the national average for the other regions remained stable between 86 to 100 per cent. The only exception is the Košice region, in which the average income decreased by 4 percentage points from

100 to 96 per cent. Net median income showed similar behaviour, except that the Košice region did not change its position.

Figure 2.23 Income of households by NUTS 2 regions, Czech Republic (thousands EUR)



Source: Eurostat.

Notes: Thousands of EUR per inhabitant on the left axis. The Gini coefficient on the right axis.

As concerns the variation of inequalities within regions, Bratislava, has traditionally had the highest disparities in income distribution. These disparities did not change in recent years. Banská Bystrica and Prešov, on the other hand, are the poorest regions in Slovakia with lower Gini coefficients (see Table 2.10).

Table 2.10 Gini coefficient in regions, Slovakia

	2005	2006	2007	2008	2009	2010
Bratislava	0.424	0.426	0.421	0.416	0.411	0.413
Trnava	0.331	0.335	0.335	0.329	0.324	0.334
Trenčín	0.311	0.311	0.314	0.308	0.298	0.309
Nitra	0.316	0.317	0.32	0.316	0.313	0.326
Žilina	0.321	0.323	0.323	0.315	0.307	0.325
Banská Bystrica	0.316	0.314	0.319	0.312	0.303	0.319
Prešov	0.304	0.298	0.306	0.299	0.293	0.313
Košice	0.35	0.342	0.348	0.341	0.323	0.343

Source: Own calculations based on Social Insurance Agency data.

Note: The Social Insurance Agency is a governmental organization which manages mandatory social insurance. The majority of official employment data and state transfers are recorded by this institution. Since it is not a survey, all declared legal income in Slovakia is registered.

2.3 Interdependence between the above inequalities over time

The introduction of the market economy was accompanied with the deep structural changes not only in the economy but also in the whole social life. The income distribution exerted the sharp increase in the first half of the 1990s. In spite of that, the levels of the Gini coefficient stayed at a moderate level compared to other post-communist countries, such as the Baltic states. The actual levels of inequalities in the Czech Republic are comparable with those of old EU member states such as Germany, Denmark or Sweden. One of the reasons was the creation of effective social net which smoothed the increase of income differences (Sirovátka and Mareš, 2006). However, there is an ongoing discussion about the possible distortive effects of social transfers on incentive to work especially for low-productive workers (Mysíková, 2007).

The changes in the income distribution towards inequalities concern mostly low- and middle-income groups. The phenomenon of “hollowing the middle”, confirmed by economic research, was transformed at the micro-level into the modification of household behaviour. Firstly, the education gained remarkable importance. The reason was the eminent increase of returns to education already at the beginning of 1990s. Secondly, the changes on labour market opened the space to other forms of earnings such as self-employment and family entrepreneurship. On the other hand, many alternative employment contracts were utilized, such as temporary jobs, which possibly created the group of workers called in-work at risk-of-poverty with very low income. Thirdly, the indebtedness of households rose significantly. The main reasons for increased household debt were long-term loans, usually mortgages. All these modifications of household behaviour are the consequences of changed income distribution in the 1990s.

In the 2000s, we mostly observe a stabilization of income inequalities throughout population, but at the same time, there is an increasing number of some specific groups threatened by poverty. Among these groups, we can find young people, the elderly, families with more than three children and ethnic groups, such as the Roma or immigrants. Those groups have persistent high levels of unemployment mostly because they face a segmentation and/or discrimination in the labour market.

In Slovakia, some of the main factors that formed the observed inequalities have been the transformation process from a centrally planned economy to a market economy, accession to the EU and EMU, and the current economic crisis.

The opening of the markets caused a decline in local low productivity and low quality producers, as artificially maintained employment in many sectors was dismissed (mainly agriculture in rural regions). As a result, fertility dropped dramatically, emigration saw increases, and the economy in rural regions declined. Changes in legislation caused increased availability of education, while mass

and sometimes corrupt privatization caused the decline of some traditional sectors. The overall effect was that inequalities increased.

Accession to the European Union in 2004 caused further increase of both GDP and wages in the Slovak economy. This coincided with increasing average net income of individuals (in both nominal and real terms), increase in employment, and a decrease in unemployment, though increase of income inequalities was not significant. The large post-enlargement out-migration from Slovakia to the “old” member states of the EU also significantly affected the income distribution in Slovakia (Kahanec and Zimmermann, 2010). According to Kaminska and Kahancová (2011), these outflows enabled the trade unions to negotiate higher wages in some sectors.

The current crisis, which started in 2009, caused a decline of employment, slower increase of wages, and a short term decline of inequalities. The inequalities returned back to pre-crisis levels in 2011.

2.4 Why has inequality grown?

After several decades of decreasing income inequalities under the communist rule, the history of growing inequalities in the Czech Republic and Slovakia started after the 1989, when communism fell and the market economy was restored. The transformation process towards the market economy during 1990s is perceived as one of the most intensive from the post-communist countries, as the 100-per-cent state ownership of capital required massive privatization and therefore massive changes in the economy (Münich et al., 2005). Undoubtedly, such a rapid transformation process had the predictable consequences on income distribution.

Overall, the income inequalities were induced by these multiple transformations. The structural change occurred across all sectors and was the key driver of increased income inequalities in the 1990s. In addition, the changes in returns to education led to the increase of income of well-educated people. ized situation in the economy in the 2000s, with positive GDP growth, resulted in stable or even, in some periods, decreasing income inequalities.

During the transformation period, redistribution policies played a remarkable role in reducing the income inequalities, especially in the reduction of poverty among citizens. On the other hand, at least in the Czech Republic, the redistribution was paid mostly from the contributions of the middle-income groups, which have shrunk significantly in the last 20 years, and we observe the phenomenon of “hollowing the middle”. The insufficient active labour market policies also led many citizens into the unemployment trap with almost no perspectives in the labour market.

2.5 Conclusions

The Czech Republic and Slovakia as transforming economies experienced an increase of inequalities mainly in the beginning of the 1990s. The increase of inequality in both republics was a palpable output of the transformation process. However, it may have also resulted from the monetization, and thus measurability, of inequalities existing already before 1989 in different forms (e.g. access to certain goods or services not accessible to the general public). It should be emphasized that the level of inequality, after its growth in the 1990s, remained relatively stable and lower compared to other transforming countries in the 2000s. This is mostly a consequence of redistributive policies which alleviated the impact of transformation on low-income groups. In spite of redistributive policies playing an important role in combating inequalities in the 1990s, they are currently criticized because of built-in incentive-distorting components which provide low incentives to search for a job. One of the reasons is the small difference among non-working benefits and minimum wage.

The drivers of inequalities are mostly the changes in the economy and the labour market. The structural changes across all sectors affected hundreds of thousands workers, increased unemployment and reshaped the remuneration schemes towards higher returns to education. Therefore, the incomes of tertiary educated people increased and they moved to top deciles of income distribution. The composition of the low-income group changed too. While in the 1980s in Czech Republic, it was mostly old people above 65 years, in the 1990s families with more than three dependent children joined that group.

Increased inequalities had an impact on household behaviour in many aspects. The raising indebtedness, increased share of tertiary educated people or decreasing average number of household members is the most visible aspects.

The Great Recession of the late 2000s and early 2010s affected the Czech Republic and Slovakia similarly; the available data indicate that the recession reversed the tendency of decreasing income inequality from the years preceding the recession.

3. The social impacts on inequality

3.1 Introduction

In this chapter we will look at the impacts of inequality on human's lives. First, we describe the historical background of inequalities in the Czech Republic and Slovakia. Then we focus on the development in material deprivation and its impacts. In the next section we compare inequality between genders and people according their age. We make efforts to describe the family formation, lone parenthood and fertility conditions in the two republics. A separate section is devoted to health inequalities where the biggest challenge is the aging population. Finally, we analyse the threat of criminality, the subjective indices of well-being and happiness and the intergenerational mobility.

We first provide a broad view on the social impacts of inequality. We start with a detailed overview of material deprivation, poverty indices and social exclusion. It is important to note that despite a moderate increase in the risk of poverty and social exclusion due to the recent economic crises, the Czech Republic still has one of the lowest poverty rates of EU member states.

Further, we focus on the topic of family formation and lone parenthood. We document substantial increases in single-earner households with children. The trend is mainly driven by the rising number of single-person households accompanied by the rising number of new-borns to non-married couples. We continue with the description of population health status and the development in the housing and mortgage market. It is well documented that mortgages have been common mainly among high-income households, but recent trends in the Czech Republic show substantial increased mortgages among lower-income households as well. This outcome may potentially increase the risk of poverty among these groups in the future.

The development in crime in the Czech Republic is characterized by a continuous decrease in the crime rate, while surprisingly the number of prisoners has been increasing. This outcome is driven by the recent changes in criminal law that increased the duration of the mandatory minimum prison sentence. We further show a substantial educational gradient in the population of prisoners. In Slovakia, the crime rate has also been decreasing for most of the studied period, except for the years 2000-2004, when it steeply increased. Just like in the Czech Republic, the number of prisoners in Slovakia increased for most of the studied period except for the years 1996-1998 and 2004-2007.

In the current economic crisis, several of the inequality measures deteriorated; mainly those that pertain to vulnerable groups (low educated, unemployed and Roma). In Slovakia, the rate of

unemployment is reaching 14 per cent: a lot of middle-aged workers have lost their jobs, while a high number of younger individuals cannot find their first job. The recession has also adversely affected subjective well-being indicators. The lower-educated individuals experienced the strongest declines in well-being levels.

Finally, we provide the evidence of low intergenerational educational mobility, which suggests that the existing inequality is persistent.

3.2 Material deprivation

Večerník (1996) describes that when communism took complete power, in 1948, a true “wage revolution” started, assuring the communist principle of equality. Its aim was to prevent incomes falling below the subsistence level and not to waste money for the comfort of higher social categories. During communism, massive urbanization connected to new industrial centres took place. Industrial centres were built together with panel housing, which increased living conditions for their inhabitants. Through this period, labour market participation was an obligation enforced by law. In addition to eliminating unemployment, this guaranteed minimal income for all citizens. Additionally, many services were provided by the government virtually free of charge (e.g. education, kindergartens), or at very low cost compared to today’s levels.⁹

Equalization of incomes and access to public goods and social services during the communist period ensured certain standard of living conditions for majority of inhabitants, a factor helping to explain why both countries currently rank low in material deprivation statistics. For example, in Slovakia, according to SILC, only 0.3 per cent of inhabitants live in households without a shower or bath, well below the EU27 average of 3 per cent.

As a result of this, the then Czechoslovakia belonged to the countries with the highest level of equality and reduced regional disparities at the end of the 1980s (Zelinsky, 2012). After decades of apparent stability in earnings distribution, the overall range of inequality started to increase in 1990. Večerník (1996) explains that after 1990, the lowest income became protected by the minimum wage and various social transfers while top earners enjoyed opportunities made available by private business, foreign capital, new management requirements and the financial market.

⁹However, many of the provided goods and services were of low quality, and it was difficult if not impossible to obtain services or goods at better quality. Some goods were only available formally.

The poverty phenomenon began to be publicly discussed only after 1989. The communist regime prevented poverty by using several direct and indirect tools, such as redistribution mechanisms, price subventions and regulations, and wage interventions, among others (Mareš 1999). Before 1989, there had not been any official publications which had analysed the level of material deprivation in Czechoslovakia (Zelinsky, 2012). The first analyses of poverty in objective and subjective terms were conducted in December 1990 (Večerník, 1991). According to the survey, objectively poor rates were 4.4 per cent (3.7 per cent in the Czech part and 5.9 per cent in the Slovak part) and subjectively poor rates were 39.2 per cent (33.9 per cent in the Czech part and 49.7 per cent in the Slovak part).

Recent development in deprivation indices in the Czech Republic is depicted in Tables 3.1 and 3.2. Economic boom in 2005 to 2007 significantly decreased material deprivation. However, there was no sign that economic recession in 2009 and 2010 would increase the material deprivation.

Table 3.1 Deprivation indices, Czech Republic (per cent of total population)

Economic strain			Durables			Housing		
2006	2007	2008	2006	2007	2008	2006	2007	2008
24.4	22.9	23.5	7.7	6.6	5.9	15.2	12.7	12.2

Sources: EU-SILC, adapted from Zelinsky (2012).

Table 3.2 People suffering from material deprivation, Czech Republic (per cent of total population)

	2005	2006	2007	2008	2009	2010
3 items or more	22.7	19.7	16.4	16.2	15.6	15.1
4 items or more	11.8	9.6	7.4	6.8	6.1	6.2

Source: Eurostat (EU-SILC).

Notes: The indicator measures the percentage of the population that cannot afford at least three or four of the following nine items: pay their rent, mortgage or utility bills; keep their home adequately warm; face unexpected expenses; eat meat or proteins regularly; go on holiday; a television set; a washing machine; a car; and a telephone.

The recent study by Zelinsky (2012) provides an assessment of relative material deprivation in the Czech regions using EU-SILC 2006-2008 microdata. Households' deprivation is assessed along three dimensions: economic strain, enforced lack of durables and, housing and dwelling.¹⁰ In terms of

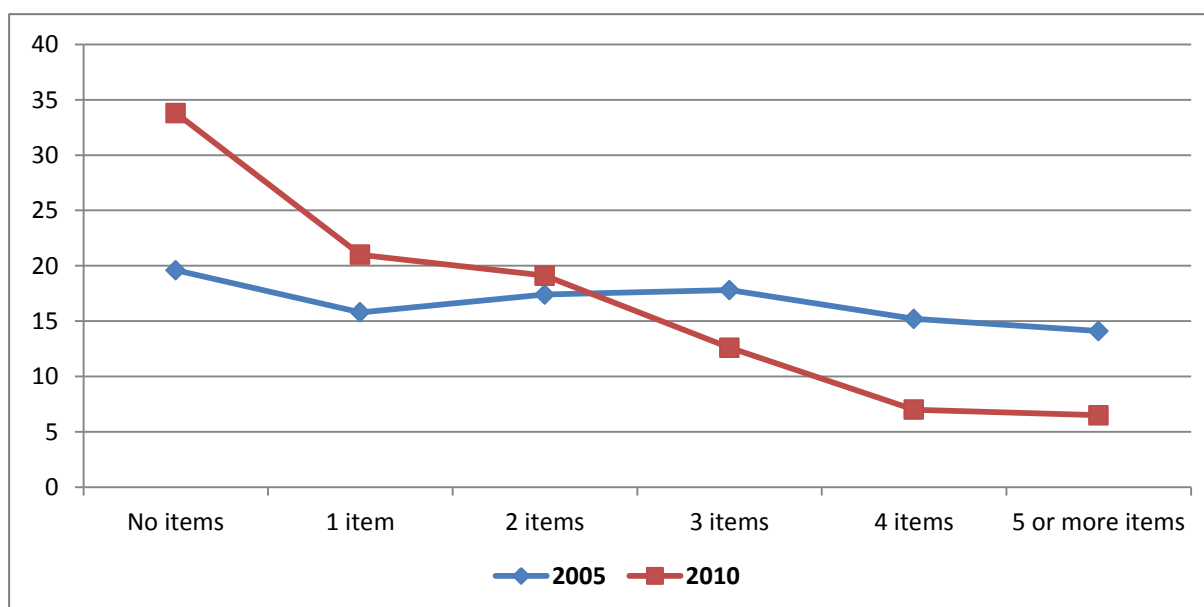
¹⁰Economic strain: arrears on mortgage or rent, utility bills or hire purchase; inability to afford one week's holiday away from home; inability to afford a meal with meat, chicken, fish or a vegetarian equivalent every second day; inability to face unexpected financial expenses; and inability to keep the home adequately warm. Durables: enforced lack of a telephone; a colour TV; a computer; a washing machine; and a personal car.

Housing and dwelling: considering internal conditions: leaking roof, damp walls, floors or foundation, or rot in the window frames or floor; lack of a bath or shower in the dwelling; lack of an indoor flushing toilet for the sole use of the household; dwelling too dark; and external conditions: noise from neighbours or from the street; pollution, grime or other environmental problems; crime, violence or vandalism in the area.

economic strain, the north-western part of the Czech Republic (especially the Karlovy Vary and Ústí nad Labem regions) and the Moravskoslezský region can be considered as the most deprived regions. These areas have higher levels of housing deprivation and higher levels of strain and durables deprivation. People living in Czech regions located in the southern and eastern parts of the country perceive the lowest level of deprivation. The capital city, Prague, was identified as the region with the highest level of housing deprivation and the lowest level of strain or durables deprivation. Prague also has a special position, as it can be considered the most economically developed region in the Czech Republic, with the highest degree of urbanization. As is the case of densely populated areas, people living in Prague face a low level of the economic strain or durables types of deprivation, but perceive a relatively high level of crime, pollution or noise, which is a kind of external housing deprivation. Other regions are characterized with average levels of deprivation.

Material deprivation in Slovakia has been decreasing since the beginning of EU-SILC measurements. The material deprivation rate indicator is defined as the percentage of population lacking at least three, or at least four, of nine material deprivation items in the economic strain and durables dimension. Overall, material deprivation had been decreasing until the economic crisis, during which material deprivation increased, mainly in low educated groups.

Figure 3.1 Material deprivation for the 'Economic strain' and 'Durables' dimensions, by number of items, Slovakia (per cent)

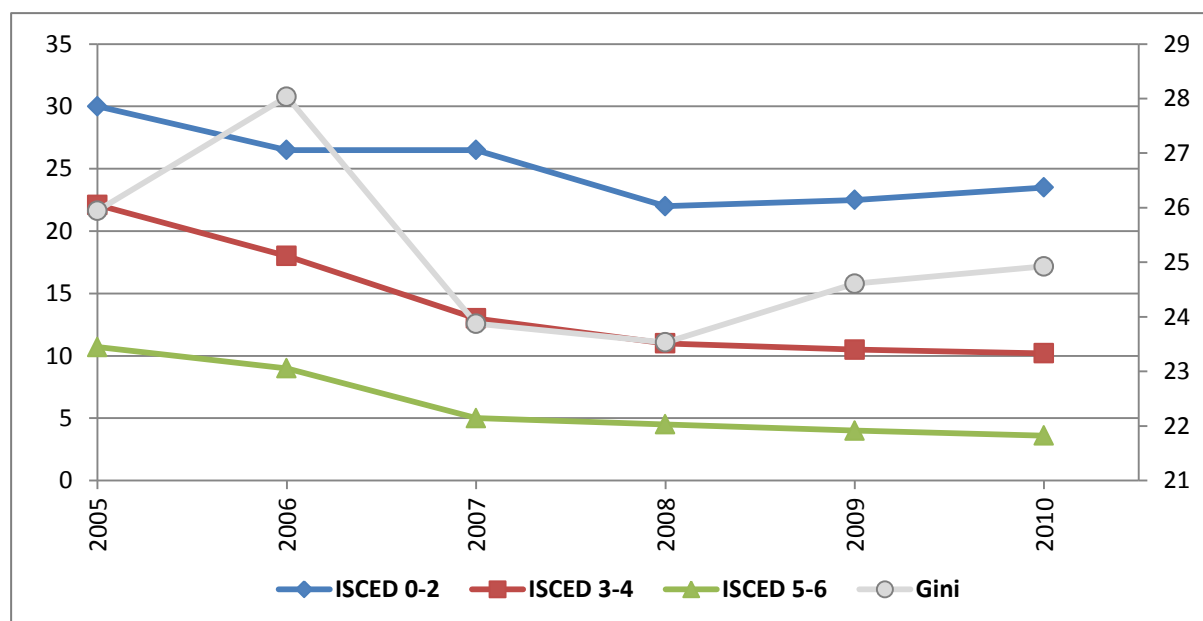


Source: Eurostat, EU SILC.

Remarkably, the severity of material deprivation in Slovakia has decreased over the past 5 years (see Figure 3.1). The share of people indicating a lack of no material deprivation items increased over five

years from 19.6per cent to 33.8per cent in 2010. The share of those lacking one item increased from 15.8 per cent in 2005 to 21per cent in 2010 and for two items by 1.7 p. p. from 17.4per cent to 19.1per cent over five years. On the other hand, material deprivation for 3, 4 and 5 or more items have decreased from 17.8 (3 items), 15.2 (4 items) and 14.1per cent (5 or more items) in 2005 to 12.6, 7 and 6.5 per cent in 2010.

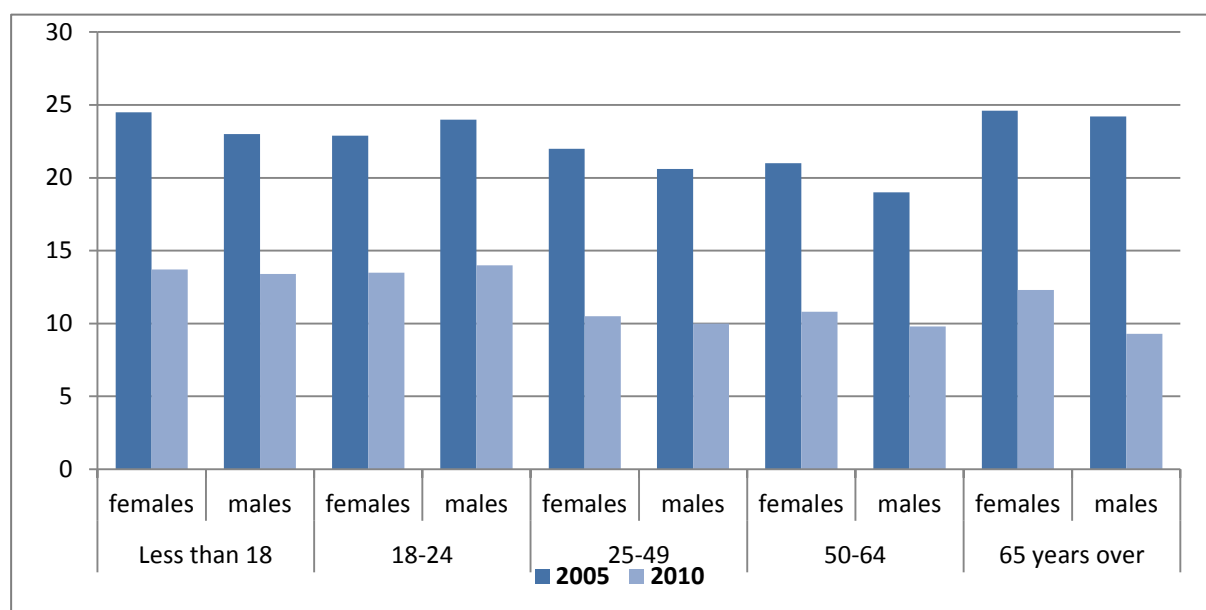
Figure 3.2 Severe material deprivation rate by education level (population aged 18 and over, in per cent)



Source: Eurostat.

Severe material deprivation rate – being deprived of at least 4 of the nine items – is highest among lower educated people (ISCED 0-2) (see Figure 3.2). Its value has been slightly above 30per cent in 2005 and decreased by 7 p. p. in the next 5 years. The rate for secondary educated people (ISCED 3-4) has decreased by almost 12 p. p. over five years from 22.1, to 10.2per cent in 2010. Higher educated people have the most favourable conditions for avoiding material deprivation, and this is reflected in the numbers: their severe material deprivation rate is the lowest of all population segments, and also decreased, from a high of 10.7, down to 3.6per cent in 2010.

In Slovakia, the material deprivation rate decreased over five years by nearly half of its value in most age groups and for both genders (see Figure 3.3). Material deprivation was to a large extent higher for women than men except for the age group of 18-24. A major decrease is visible over time in the deprivation rate for those 65 years and older, from 24.6 (Females) and 24.4 per cent (Males) in 2005 down to 12.3 and 9.3 per cent, respectively, five years later.

Figure 3.3 Severe material deprivation rate by age and gender, Slovakia (per cent)

Source: Eurostat, EU SILC

In looking into regional disparities in Slovakia, there were notable differences in the development of severe material deprivation across regions. During the crisis (2009 to 2011), the percentage of the total population experiencing severe material deprivation has slightly increased in the Bratislava region (from 6.5 to 11.8 per cent), fluctuated in Western and Central region (around 9 to 11 per cent) and decreased in the Eastern region (from 17.3 to 12.3 per cent). The overall countrywide rate decreased from 11.8 to 10.6 per cent.

Materially deprived individuals are often concentrated in particular locations. The most visible evidence of high concentration is among the Roma minority, often living in segregated settlements. Gabal (2006) identifies over 300 socially excluded Roma communities in the Czech Republic often characterized by low levels of education, high long-term unemployment rates (90 per cent to 100 per cent) and high inactivity. In Slovakia in 2004, there were 1575 Roma settlements, of which 338 were located on the border of a city or village and 281 were separated. Out of these, 149 settlements had very poor living conditions (segregated, no water, and sharing irregular dwelling is higher than 20 per cent). The recent census in 2011, which is not yet fully available, shows a further increase of the Roma population living in substandard conditions.

In the Czech Republic, the problem of social exclusion is also documented by the Agency for Social Inclusion. Roma pupils often suffer from the highest primary-school drop-out rate and exhibit very low education participation in secondary education. Davidova et al. (2010) report that more than 60 per cent of the Roma minority attain only primary education. From interviews with members in

Roma communities, the authors identify that the motivation to pursue education is extremely low because of the expected labour market discrimination.

3.3 Cumulative disadvantage and multidimensional measures of poverty and social exclusion

Sirovatka et al. (2008) evaluate the cumulative risk of poverty in the Czech Republic. Using the EU–SILC 2006, the authors observe that at 18 per cent, the risk of poverty in households with children is twice that of all other households. Statistically, almost one in five children lives in poverty, while the lowest incidence is recorded among people aged above 55 years (6 per cent). The authors note that deprivation in childhood creates a strong basis for a life in poverty in adulthood. Furthermore, children at the greatest risk of poverty are those in single-parent households (40 per cent), while in complete families with one or two children, the risk is below 10 per cent. Families with three and more children comprise less than 5 per cent of the Czech population but also exhibit high levels of poverty (28 per cent). The risks are much lower for single individuals and couples without children. Couples are least likely to live in poverty. Low education is a strong predictor of poverty, as it is often associated with low levels of income and a higher risk of unemployment. The degree of poverty among people in households with low education is nearly 27 per cent, while it decreases to merely 2 per cent if at least one member of household has higher education. Households with unemployed exhibit an extremely high risk of 44 per cent (see Table 3.3).

Sirovatka et al. (2008) explain that the increased risk of poverty further translates to the higher incidence of income and material deprivation. Almost 70 per cent of households who are at-risk of poverty also report difficulty getting by on their incomes. Essentially both the risk of income poverty and material deprivation are strongly concentrated in the specific groups of the population. The authors identify unemployment and family incompleteness as the two main social risks. The employment rate of single-parent families with children is 63 per cent and the unemployment rate is 21 per cent. The unemployment rate for other types of household is from 2 per cent to 6 per cent.

Table 3.3 People under at-risk-of-poverty threshold, Czech Republic

	2006	2007	2008	2009	2010	2011
Total	9.9	9.6	9.0	8.6	9.0	9.8
By age						
0-17	16.5	16.6	13.2	13.3	14.3	15.2
18-64	8.8	8.6	8.3	7.6	8.1	9.1
65 and over	5.9	5.5	7.4	7.2	6.8	6.7
By household economic status						
working-employed	3.5	3.3	3.6	3.2	3.7	4.6
Non-working -unemployed	43.6	49.4	48.5	47.3	41.2	46.4
By household composition						
households without children	6.2	5.7	6.9	6.4	6.5	6.8
lone parent with children	40.8	37.7	40.0	40.3	37.7	36.3
2 adults, one dependent child	7.6	6.9	6.4	4.6	7.9	6.8
2 adults, two dependent children	9.8	8.1	6.8	7.2	8.7	9.8
2 adults, three or more children	29.5	29.9	19.0	23.1	20.9	24.5

Source: Czech Statistical Office.

Notes: The threshold of at-risk of poverty is set at 60 per cent of median of national equivalized disposable income.

Table 3.4 combines the risk of poverty and social exclusion and shows decomposition into age groups. This indicator increased slightly in 2010 especially for the young age group. This corresponds to the worsening position of young workers during the recent economic recession. In 2009, the unemployment of young workers increased substantially. In 2010, however, the Czech Republic recorded the lowest shares of people being at risk of poverty or social exclusion among EU-27 member states.

Table 3.4 People at risk of poverty or social exclusion, Czech Republic(per cent of total population)

	2005	2006	2007	2008	2009	2010
Total	19.6	18.0	15.8	15.3	14.0	14.4
By age						
0-17	25.6	22.7	21.5	18.6	17.2	18.9
18-64	19.0	17.8	15.3	15.0	13.7	14.1
65 and over	14.7	12.7	10.9	12.5	11.7	10.1

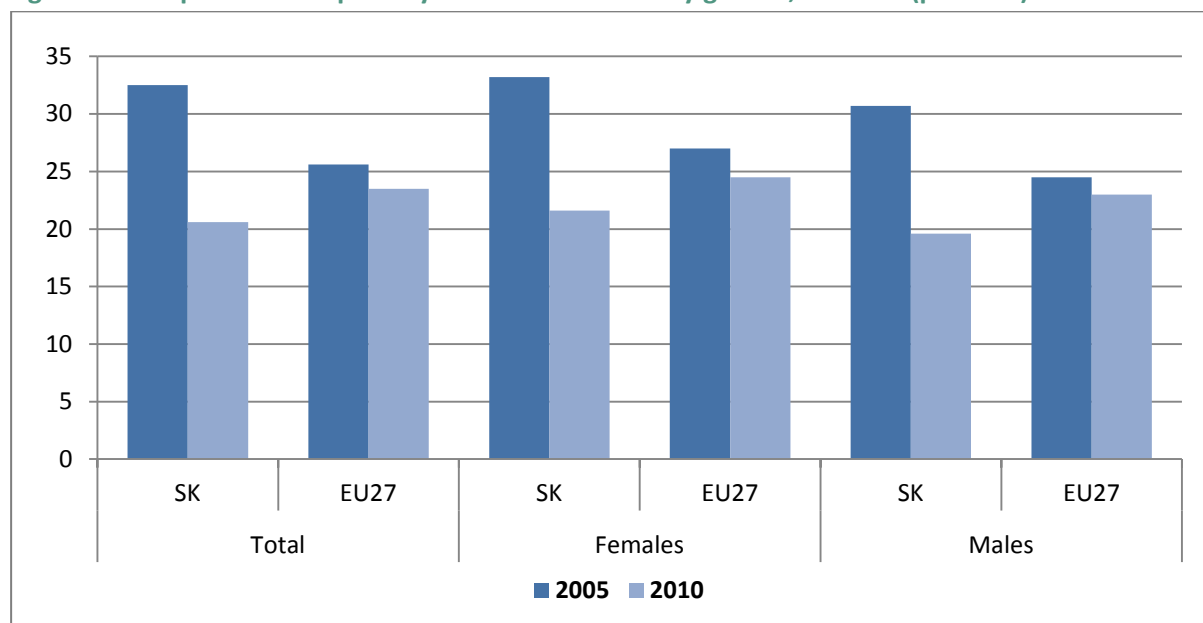
Source: Eurostat (EU-SILC).

Notes: The indicator corresponds to people who were at least in one of the following three conditions: at risk of poverty, severely materially deprived or living in households with very low work intensity.

In Slovakia, age and gender are factors which in general influence the at-risk-of-poverty rate to a significant extent (see Figure 3.4). On the basis of results from the EU SILC, women were more often viewed as being at-risk-of-poverty than men both in Slovakia and the EU27. 33.2 per cent of women

were at-risk-of-poverty in 2005 compared to 30.7 per cent of men (the EU average was 25.6 per cent, 6.4 p.p. less than SK average). In 2010, the share of women at-risk-of-poverty decreased to 21.6 per cent and for men 19.6 per cent. Again in comparison, in the EU27 24.5 per cent of women and 22.3 per cent of men were at-risk-of-poverty for the same period. In total, 23.5 per cent of people in the EU27 and 20.6 per cent of people in Slovakia were at-risk-of-poverty, showing a greater decrease over five years in Slovakia than the EU average.

Figure 3.4 People at risk of poverty or social exclusion by gender, Slovakia (per cent)



Source: Eurostat, EU SILC

As we can see in Table 3.5, the number of people at risk-of-poverty was decreasing before year 2009. After this year people again felt less secure, but this increase was not especially significant.

Table 3.5 People at risk of poverty or social exclusion in Slovakia(per cent)

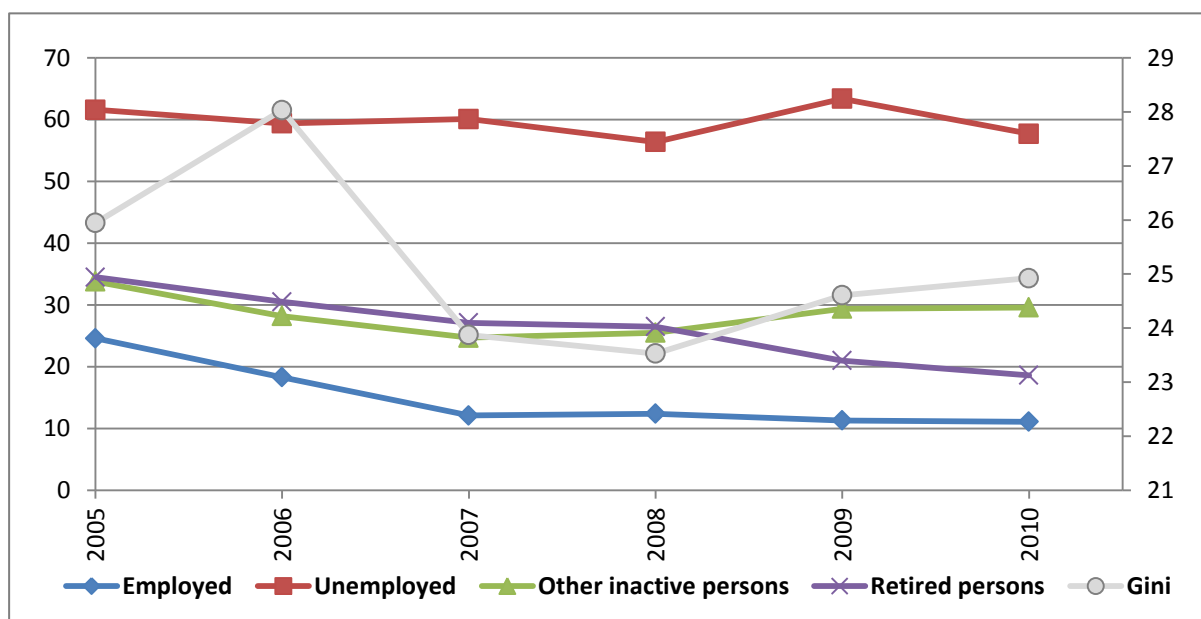
Year	2005	2006	2007	2008	2009	2010	2011
Poverty rate	32	26.7	21.3	20.6	19.6	20.6	20.6

Source: Eurostat.

The most frequent activity status is defined as the status that an individual declares himself or herself to have occupied for more than half the total number of months in the reference period. The activity status is self-defined by the respondent. From results based on the EU SILC findings, it is obvious that, according to the most frequent activity status, persons not at work were five times more at-risk-of-poverty than working persons (see Figure 3.5). The most vulnerable group is unemployed persons: more than one of every two unemployed persons was at-risk-of-poverty. The least

vulnerable group from within the population of all persons not at work was (until 2008) retired individuals, followed by other inactive and employed persons. In 2009, when Slovakia had already felt the impacts of financial crisis, almost every group was more at-risk-of-poverty due to negative economic and social background.

Figure 3.5 People at risk of poverty or social exclusion by most frequent activity status, Slovakia (population aged 18 and over, in per cent)



Source: Eurostat, EU SILC

The development of retirement pensions during the crisis was stable and influenced by inflation only. The development of employment income was affected by labour market fluctuations, while income of the unemployed and the inactive was impacted as a result of austerity measures (see Table 3.6). This resulted in a decrease in the at-risk-of-poverty rate of retired persons.

Table 3.6 Poverty rate by age, Slovakia (per cent)

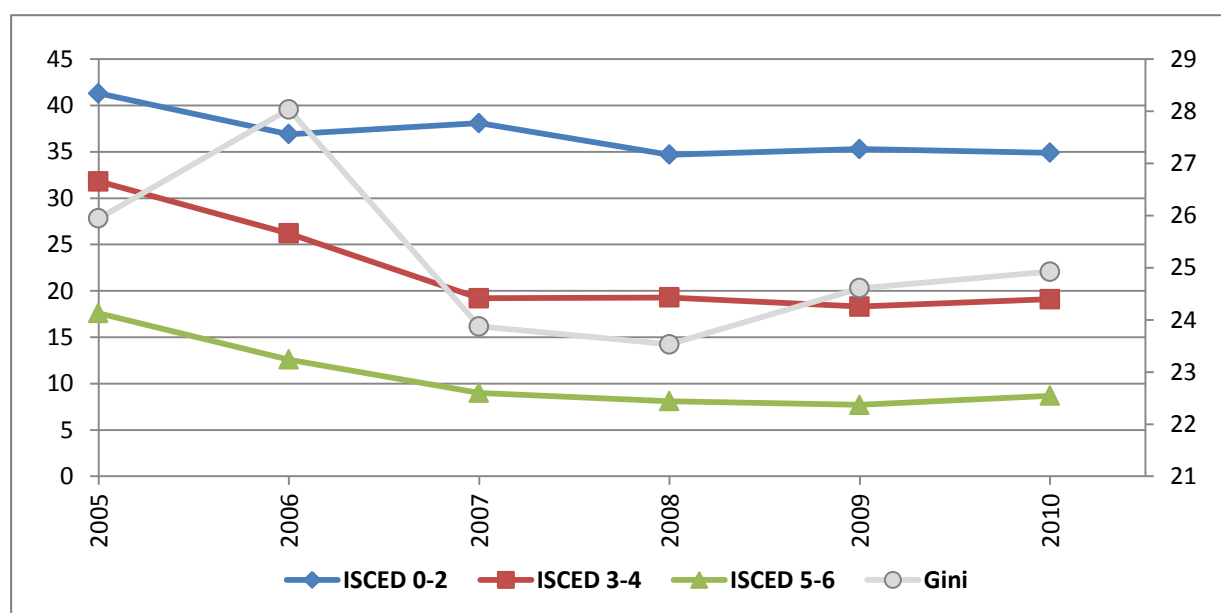
Year	2005	2006	2007	2008	2009	2010	2011
Total	19.6	18	15.8	15.3	14	14.4	15.3
18 – 24 y.	20.8	20.3	17.9	17.4	16.6	16.1	18.3
55 – 64 y.	20.7	19.2	17.2	16.8	16.4	16	16.3

Source: Eurostat.

Investments in education decrease the at-risk-of-poverty rate. Figure 3.6 shows populations facing the risk-of-poverty by their level of educational attainment. Highly educated persons (ISCED 5-6) have decreased their risk from 17.6 in 2005 to 8.7 per cent in 2010. People with secondary education (ISCED 3-4) decreased their at-risk-of-poverty rate from 31.8 to 19.1 per cent in 2010 (almost 13 p.

p.). The most vulnerable group is comprised of the lowest educated segment of the population (ISCED 0-2). Their risk of poverty was more than 41 in 2005 and almost 35 per cent in 2010, 4 times higher than those persons who have attained tertiary education.

Figure 3.6 People at-risk-of-poverty or social exclusion by education level, Slovakia (population aged 18 and over, in per cent)



Source: Eurostat, EU SILC.

3.4 Indicators of social cohesion

In the Czech Republic in 2010, an average of one in ten individuals reported meeting with friend, relatives or colleagues less than once a month. The reported frequency of meetings has visibly increased between 2002 and 2010. Social isolation has dominated among individuals older than 60 years. This group of elderly people often lives alone and faces the greatest risk of no or rare contact with their peers. One in five elderly reports meeting with their peers less than once a month. Even higher social isolation is observed among elderly people in city areas. The respective figures in Table 3.7 for the younger population show no difference between rural and urban areas.

Table 3.7 How often do you meet with friends, relatives or colleagues?, Czech Republic (per cent)

	very rare or never	at least once a month	at least once a week
By year			
2002	14	39	47
2004	16	40	44
2008	11	32	57
2010	10	35	55
By age			
18-35	4	26	70
35-60	12	38	51
61+	18	37	46
By education			
low	16	25	59
middle	13	39	48
high	12	37	51
By location for persons above 61			
city	23	36	41
small town	14	40	46
village	17	33	50

Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

According to the ESS survey report 13.8 per cent of respondents indicated that they meet daily with their friends, relatives or colleagues, which is slightly higher than in the Czech Republic (11 per cent).

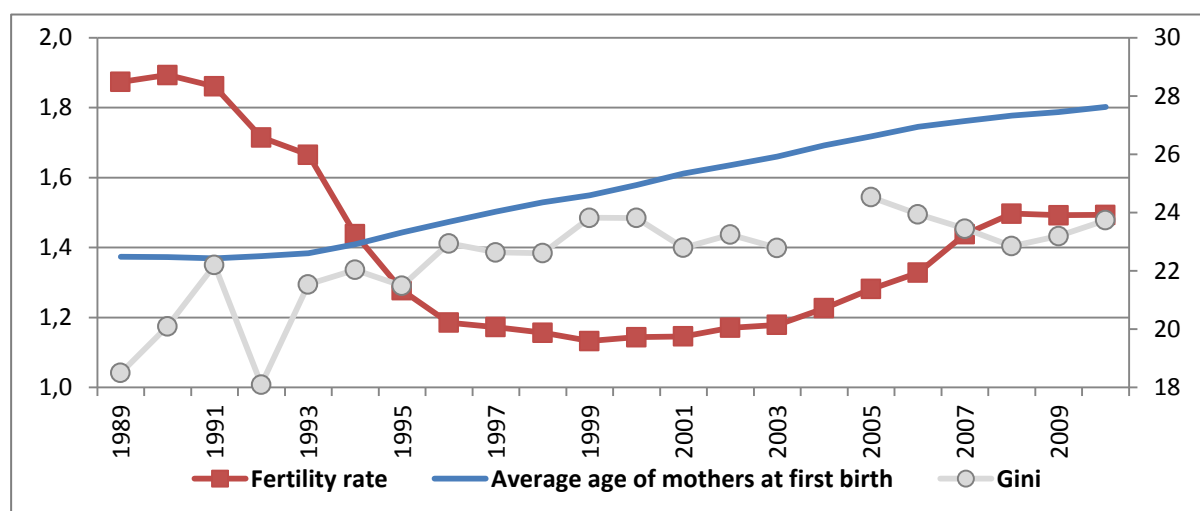
In Slovakia, however, a most severe social divide undermining social cohesion is between Roma and non-Roma populations. Roma are the second largest minority group in Slovakia; the World Bank (2012) estimates that Roma population in Slovakia counts 320,000. The Roma population tends to suffer disproportionately from higher rates of poverty, unemployment, illiteracy, and disease. When discussing "the Roma problem", most references focus on the segment of the Roma population living in very poor rural and urban conditions, mainly segregated villages. The number of Roma living in unbearable conditions in rural communities and devastated central city zones is agglomerating and represents a potentially very serious social and economic problem.

Reliable statistics on this problem are missing. Segregated villages are said to be excluded from census (SILC or LFS). However, according to Vašečka (2010) about 25 per cent of Roma live in segregated rural settlements. This further undermines the creation of interethnic social ties and social cohesion in Slovakia.

3.5 Family formation and breakdown, lone parenthood, fertility

At the end of 2010, the Czech Republic had a population of 10,533,770. Since 2003, there has been an increase in total fertility and the number of newborns (see Figures 3.7 and 3.8). This has resulted in a positive natural population growth. The increase of newborns since 2002 is mainly due to women from the large cohorts born in the 1970s delaying childbirth to a later age, and then this was combined with the fact that other women from subsequent relatively large birth cohorts, 1980-1982, reaching the age of higher fertility (Vašečka, 2010).

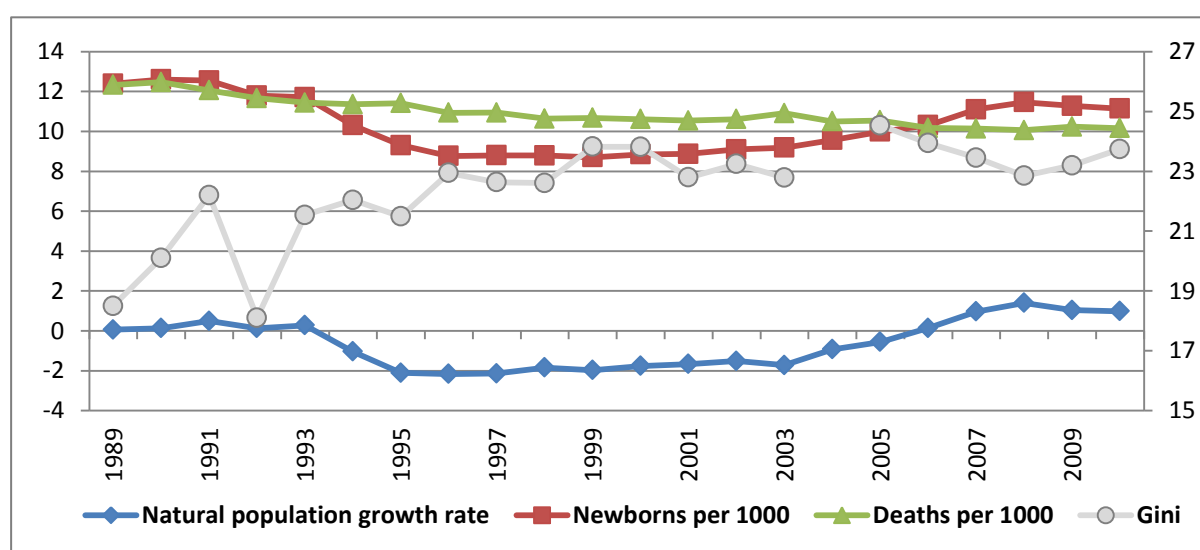
Figure 3.7 Fertility rate and age of mothers at first birth, Czech Republic



Source: Czech Statistical Office.

Note: Fertility rate on the left axis. Age in years and the Gini coefficient on the right axis.

Figure 3.8 Natural population growth rate, Czech Republic (per 1000 of population)



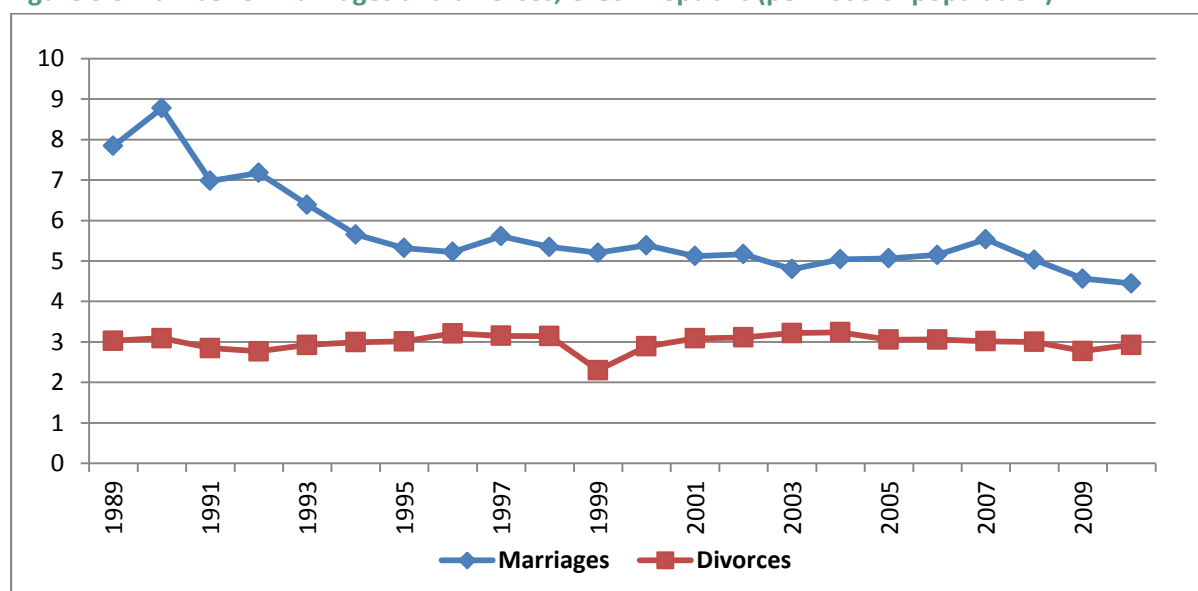
Source: Czech Statistical Office.

Note: Population growth, newborns and deaths on the left axis. The Gini coefficient on the right axis.

The annual number of marriages has been steadily decreasing since the 1990s (see Figure 3.9).¹¹ The declining marriage rate and continued postponement of marriage to a later age resulted in a further increase in the share of singles in the population. The average age at first marriage gradually increased, and in 2010, it reached 32.2 years for men and 29.4 years for women – an increase of 3.3 and 2.9 years, respectively, from 2000. The average age difference between marrying partners remained principally unchanged, at about three years (3.1 years in 2008 and in 1995). Styglerova (2010) observes that about half of all marriages are between men and women with the same level of education (58 per cent in 2008 and 57 per cent in 1995). Moreover, 95 per cent of spouses differed by at most one level of education.

The number of divorces has remained remarkably stable over last two decades. The biggest exception was in 1999, when, in connection with the new amendment to the Family Act, there was a temporary decrease in the number of new divorces (Styglerova, 2010). Given that the annual number of marriages significantly and rapidly decreased from the beginning of 1990s, this had almost no impact on the number of divorces in subsequent years. The average duration of a marriage ending in divorce in the Czech Republic is roughly 12 years.

Figure 3.9 Number of marriages and divorces, Czech Republic (per 1000 of population)



Source: Czech Statistical Office.

¹¹Styglerova (2010) notes that there was probably a slight accumulation of marriages in 2007, largely due to the strong marriage appeal of the date 7.7.07. The same was true for 2008, with the date 8.8.08. On that day, a total of 2,200 weddings took place in the Czech Republic (on 7.7.07 the figure was 4,400).

Statistics document a substantial increase in the number of single-earner households with children. The Czech Statistical Office reports that the number of incomplete family households increased by 92 thousands between 1995 and 2010 (see Table 3.8). The trend is mainly driven by the rising number of single-person household accompanied by the rising number of newborns to non-married couples. As single-earner households with children exhibit the highest risk of poverty, the continuation of this trend may pose a significant disadvantage for children growing up in incomplete families.

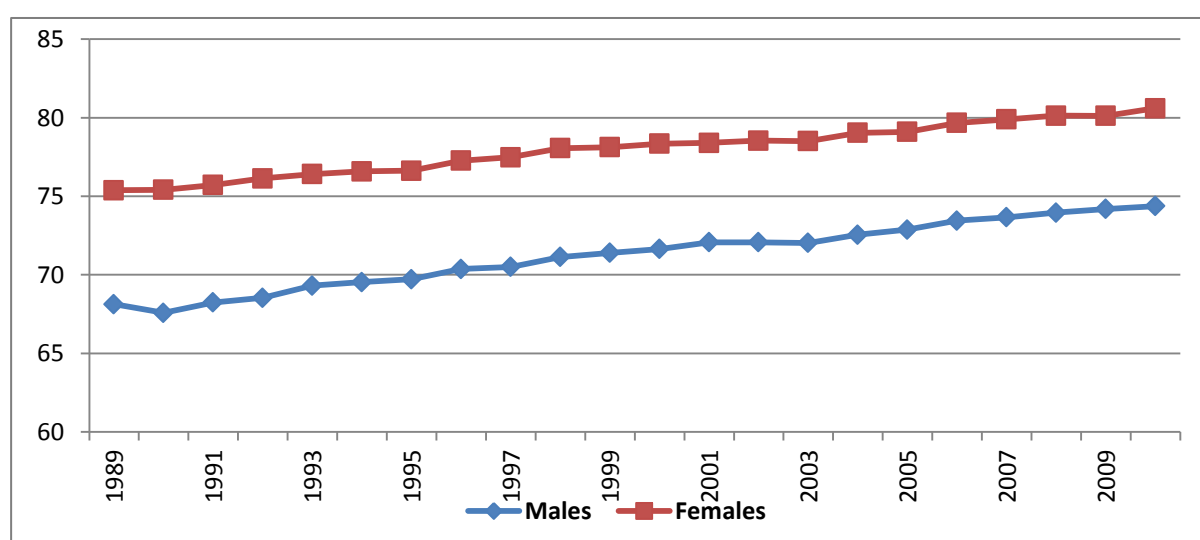
Table 3.8 Number of households by type, Czech Republic (in thousands)

Household type	1995	2000	2005	2010	2010-2005	% 2010-2005
Total	3692	3855	4100	4412	719	20
Married couple with children	2576	2568	2552	2638	63	2
Single parent households	342	378	420	434	92	27
Households without children	670	799	1027	1226	556	83
Other households	104	110	100	113	9	9

Source: Czech Statistical Office (Labour Force Survey).

The average, annual, inter-year increase in life expectancy at birth was 0.3 years for men and 0.25 years for women (see Figure 3.10). In 2010, life expectancy at birth was 74.4 for men and 80.6 for women. Similar to other countries, a declining mortality rate is also observed (see Figure 3.8). The greatest decline in the rate of mortality during last decade was recorded for cardiovascular diseases (Styglerova, 2010).

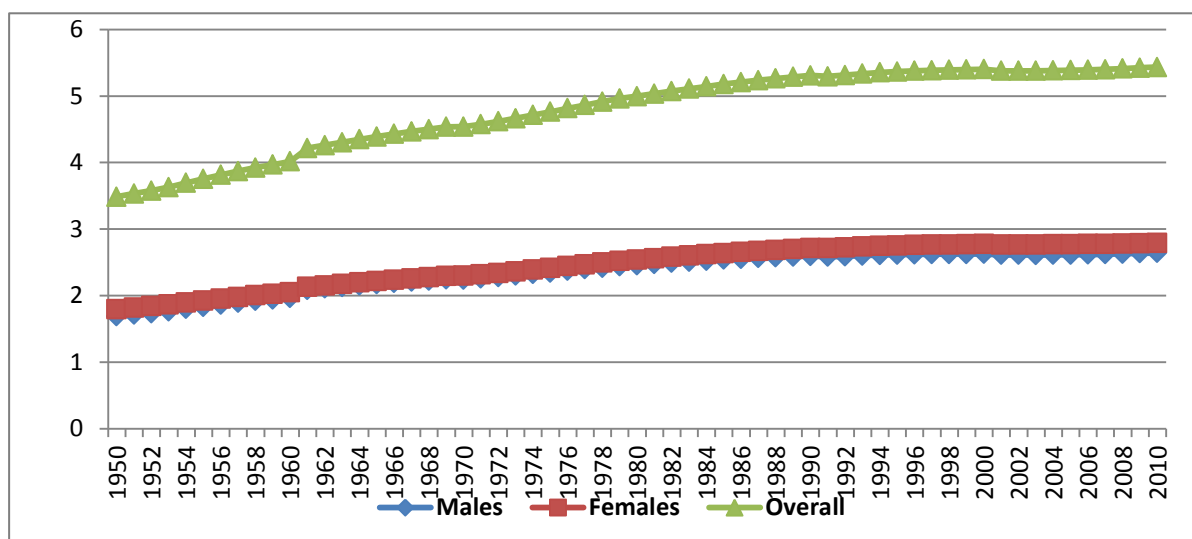
Figure 3.10 Life expectancy at birth by gender, Czech Republic (years)



Source: Czech Statistical Office.

According to the Slovak Statistical Office, the Slovak population grew by 56 per cent from 1950 to 2010, increasing from nearly 3.5 million to nearly 5.5 million residents (Figure 3.11). Historically, this development can be divided into two stages: a post-war period since 1950 (development in socialist Czechoslovakia) to 1990 (when a democratic Slovakia became independent from Czechoslovakia), and a second period from then until today.

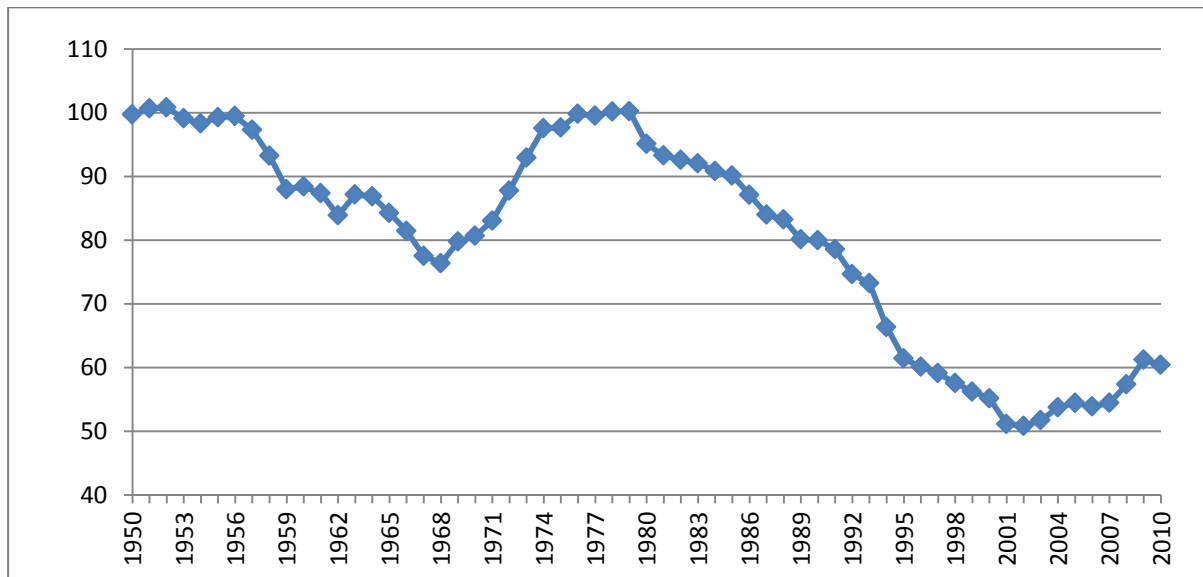
Figure 3.11 Population, Slovakia (millions)



Source: Statistical Office of the Slovak Republic

The first period was characterized by significant population growth in Slovakia. The marriage rate increased and with it, the number of births (Figure 3.12). Natural growth was relatively high. Between 1950-1956 the value of the natural growth exceeded 17 per cent. However at the turn of the 1960s and 1970s natural growth fell below 10 per cent. The birth rate is one of the two major demographic processes (besides mortality) significantly affecting the population development. The demographic development in Slovakia is characterized by a continued decline of the birth rate. Over the past three decades the number of live births declined by up to one half, from 100,000 in 1979 to 60,000 in 2010 and it was just 50,000 in 2002.

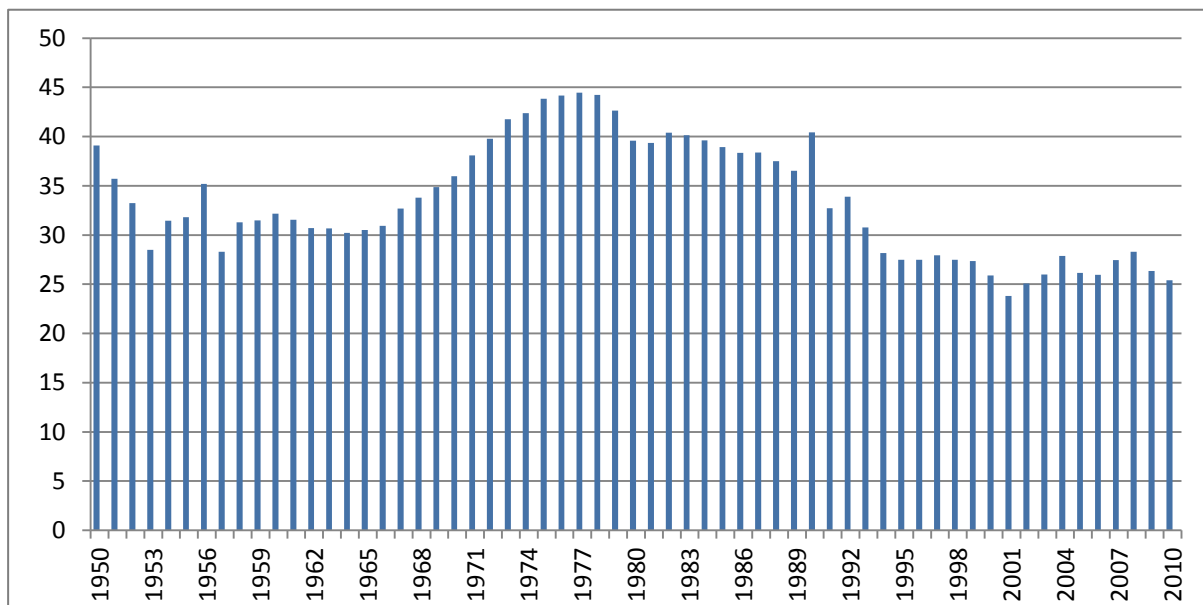
The main drivers in this decline were the reduction of the pro-child policies of the late-'70s, social insecurity, the acceptance of a consumer lifestyle from Western developed countries, and the severe reduction of housing construction. These circumstances led to a decline of marriage and birth rates, and subsequently led to an organic growth decrease. In total, between 1991 and 2010, the population in Slovakia increased by only 140,000 residents.

Figure 3.12 Live births, Slovakia (thousands)

Source: Statistical Office of the Slovak Republic

As concerns migration, the Iron Curtain curtailed migration to the Western countries before 1989. At the same time, there were little incentives to move into poorer regions of the USSR and other socialist countries. On the other hand, domestic migration increased. Slovaks migrated mainly to cities in the Slovak or Czech parts of Czechoslovakia.

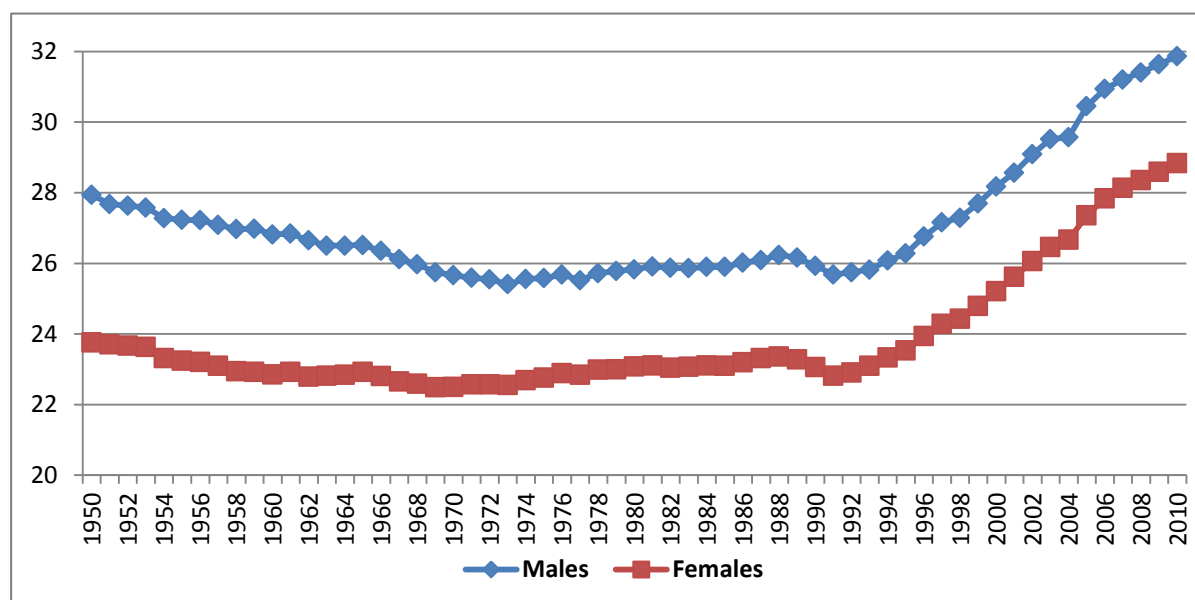
The number of marriages (Figure 3.13) in Slovakia at that time ranged from 30,000 to 39,000, and it was common for more than 90 per cent of men and women to marry at least once in their lives.

Figure 3.13 Number of marriages, Slovakia (thousands)

Source: Statistical Office of the Slovak Republic

At the turn of the 1960s and 1970s, significant changes took place in terms of population development. While the marriage rate declined overall in Europe, in Slovakia (as well as in other countries with communist regimes) the marriage rate grew, and traditional forms of living together in marriage were further intensified. Marriage at a young age was typical (Figure 3.14).

Figure 3.14 The average age at marriage by sex, Slovakia



Source: Statistical Office of the Slovak Republic

Reducing the prevalence of marriage as a form of partnership in response to changes in social relations is most apparent in the first half of the 1990s, especially after 1992. Even in 1990 there was a significant one-off increase in the number of marriages and the marriage rate. This was a response to the previously announced state cancellation of loans for young married couples to January 1, 1991, so that many couples sped up their marriage plans in order to get married in 1990 and qualify for the loan cancellation. Reductions in marriage rates after 1990 continued without significant interruption until 2001, which hit a historical level with the second lowest number of marriages since 1920. Also, the individual marriage indicators achieved their extreme low values. Since 2001, marriage has taken place in the context of a positive turnaround, increasing the intensity of marriage again.

Marriage in Slovakia is still the most prevalent form of partnership, even though in recent years the population has started to promote other forms. The increasing number of divorces and much greater instability of relationships from previous decades are affecting the structure of two-parent families. Compared to the other European countries, Slovakia has a rather large percentage of children living

with two married parents (Table 3.9) – nearly 85 per cent, with the rate of children living with only one parent at 10.6 per cent.

Table 3.9 Household type in which children live, Slovakia

	0 parents	1 parent	2 parents, cohabiting	2 parents, married
Percentage	1.1	10.6	3.7	84.7

Source: Eurostat, 2007

In Europe, as well as in Slovakia, a progressively emerging model is that of the single-child (or even childless) family. Table 3.10 shows that more than 50 per cent of all households which have at least one child have only 1 child, 36 per cent of households have 2 children, and only 10.3 per cent of households with children have 3 or more children.

Table 3.10 The distribution of households by number of children, Slovakia

	1 child	2 children	3 children	4 + children
Percentage	53.7	36	8.3	2

Source: Eurostat, 2007

3.6 Health inequalities

The Czech health-care system is publicly funded and all citizens have an equal access to it.¹² Yet, this does not guarantee the same quality of health care for everyone. There is evidence that the quality of hospitals varies significantly across regions.¹³ Shopping for better doctors is a common practice in the Czech Republic. These features of the Czech health-care system may lead to possible disadvantages for poor households.

One method of looking at the equity of access to services is through assessing the reports of unmet needs for health care (see Table 3.11).¹⁴ Some common reasons that people give for not receiving care include excessive treatment costs, long waiting times, not being able to take time off work or needing to look after children or others, or that they had to travel too far to receive care. Based on

¹²This does not apply to all foreign nationals. Only those with permanent residence or those with temporary residence who are employed have access to public-health insurance. Other foreign nationals, including self-employed workers, have to be insured with commercial insurance companies and pay a high one-off lump sum that covers a considerably narrower range of health-care services.

¹³Annual rating of hospitals in the Czech Republic is published by HealthCare Institute, www.hc-institute.org.

¹⁴To determine unmet medical care, individuals are typically asked whether there was a time in the previous 12 months when they felt they needed health-care services but did not receive them, followed by a question as to why the need for care was unmet.

the available data, health care in the Czech Republic is highly accessible. Only 3.5 per cent of the adult population reported having some type of unmet care need in 2010. Moreover access to health has greatly improved since 2005. Adults with below-average incomes report unmet needs more often but the differences are minimal.

There are several drivers affecting health and consequently the need for health care. First, there is education-specific segregation into occupations with a high incidence of injury or sickness. Although the statistics on work-related injuries show a declining trend, the higher risk can prevail in low-skilled occupations. The number of work injuries fell from 120,000 in 2001 to 70,000 in 2009.¹⁵ Second, lifestyle may vary with income and education. The available evidence in other countries confirms that obesity is dominant among individuals with lower education. Although this type of data is not available in the Czech Republic, there is a strong belief that similar pattern occurs in Czech society.

Table 3.11 Self-reported unmet needs for medical examination, Czech Republic (per cent)

	2005	2006	2007	2008	2009	2010
Total	7.3	5.2	4.7	3.5	3.0	3.5
By quintile of equivalised income						
1 (lowest)	9.6	6.4	5.1	4.3	4.3	4.8
2	7.6	4.6	4.4	2.8	2.9	3.4
3	6.6	4.6	4.5	3.5	2.7	2.8
4	6.2	5.1	4.7	3.3	2.6	3.8
7	6.5	5.5	4.5	3.4	2.7	2.9
By age						
From 18 to 44 years	7.3	4.6	4.4	3.4	2.7	3.4
From 45 to 54 years	7.3	7.0	5.3	4.4	4.2	3.7
From 55 to 64 years	6.4	5.2	4.8	2.8	2.9	3.8
From 65 to 74 years	8.1	5.4	4.0	2.9	2.5	2.7
Above 75 years	8.5	4.8	5.5	4.4	3.6	4.8

Source: Eurostat.

Table 3.12 documents recent trends in long-standing illness or health problems according to income groups. First, there is a clear income and educational gradient. Second, there is positive long-run development, which is, however, specific only to high-income and high-educated people.

¹⁵www.bozpinfo.cz/.

Table 3.12 People having a long-standing illness or health problem, Czech Republic (per cent of adult population)

	2005	2006	2007	2008	2009	2010
Total	30.7	30.3	28.2	28.2	30.2	29.3
By quintile of equivalised income						
1 (lowest)	39.2	36.8	36.6	39.3	41.8	35.7
2	38.1	38.5	37.5	37.1	36.6	38.3
3	30.3	30.2	28.0	25.6	28.5	29.0
4	25.2	24.8	20.8	21.1	23.3	24.0
5 (highest)	20.1	20.6	17.6	16.8	19.4	18.6
By education						
Low	41.3	39.7	37.3	38.0	42.1	40.4
Medium	28.3	28.5	26.7	26.8	28.5	28.1
High	25.3	22.5	19.2	18.6	22.1	21.4

Source: Eurostat.

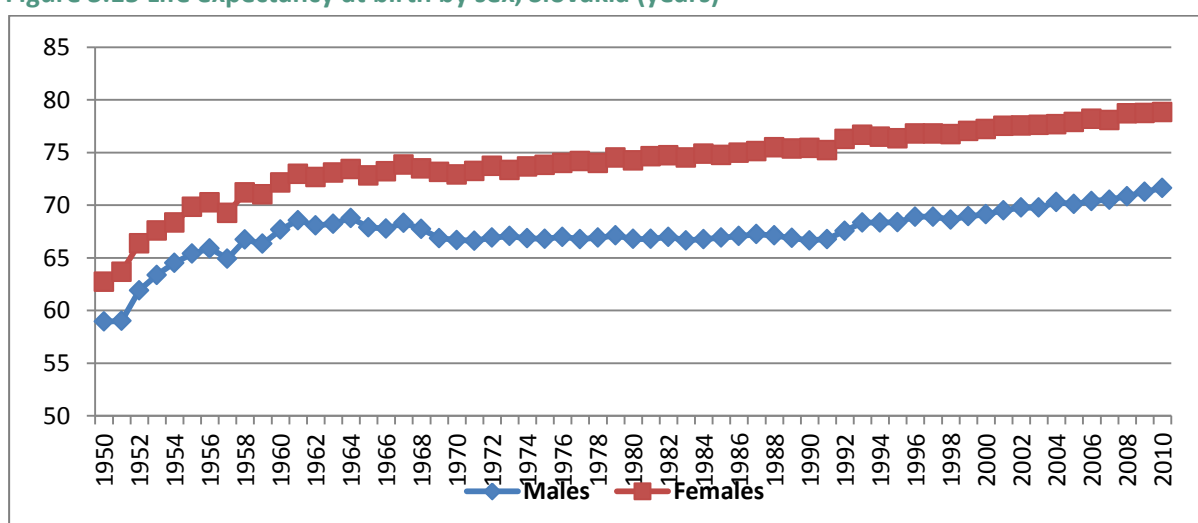
The European Social Survey provides subjective information on the health status of respondents. Despite the subjective nature of the questions, the answers received have been found to be a good predictor of people's future health-care use. In the Czech Republic, around 60 per cent of the adult population says their health is "good" or "very good". Table 3.13 documents a significant variation in subjective measure of health across educational and income groups. Higher socio-economic status is positively associated with subjective health. In 2010, 11 per cent of respondents reported on average bad or very bad health, while the respective number is 20 per cent for low-educated and 18 per cent for individuals from a low-income family. Interestingly, reported health levels vary only little between the urban and rural population.

Table 3.13 Subjective general health, Czech Republic (per cent)

By year	Very good or good	fair	Bad or vary bad
2002	54	34	12
2004	61	29	10
2008	62	27	11
2010	62	27	11
By education			
Low	52	27	21
Middle	61	29	9
High	68	28	4
By income			
Low	44	38	18
Middle	65	27	9
High	70	24	6
By location			
city	62	28	10
small town	59	31	10
village	61	27	12

Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

In Slovakia, the share of the population aged 65 or more is expected to increase to 33.5 per cent in 2060 from 12.3 per cent in 2010. According to the Slovak Statistical Office, life expectancy at birth (Figure 3.15) has changed through 60 years from 1950 to 2010 from 59 (males) and 62.7 years (females) in 1950 to 71.6 (males) and 78.8 (females) years. This means that a child born in 2010 will live approximately 20-25 per cent longer (depending on the child's gender) than a child born in 1950. These demographic changes will have a significant impact on public finances.

Figure 3.15 Life expectancy at birth by sex, Slovakia (years)

Source: Statistical Office of the Slovak Republic.

Table 3.14 depicts the shares of people reporting long-standing illness or health problems in Slovakia, the Czech Republic and the EU. The Slovak population does not significantly differ from the EU average. We do however observe an interesting tentative pattern in Slovakia and even more so for the Czech Republic, whereby the generally decreasing trend in the share of people reporting health issues reversed around the same time as the crisis affected the two countries. This could have been caused by worsened living conditions or increased unemployment during crisis.

Table 3.14 Long-standing illness and health problems, Czech Republic and Slovakia (per cent)

Region	2004	2005	2006	2007	2008	2009	2010
EU	19.4	20.9	21.3	21	20.9	21.1	21.1
CZ		19.4	18.4	16.2	14.8	16.6	16.2
SK		19.6	18.5	18	19.4	19.1	20.7

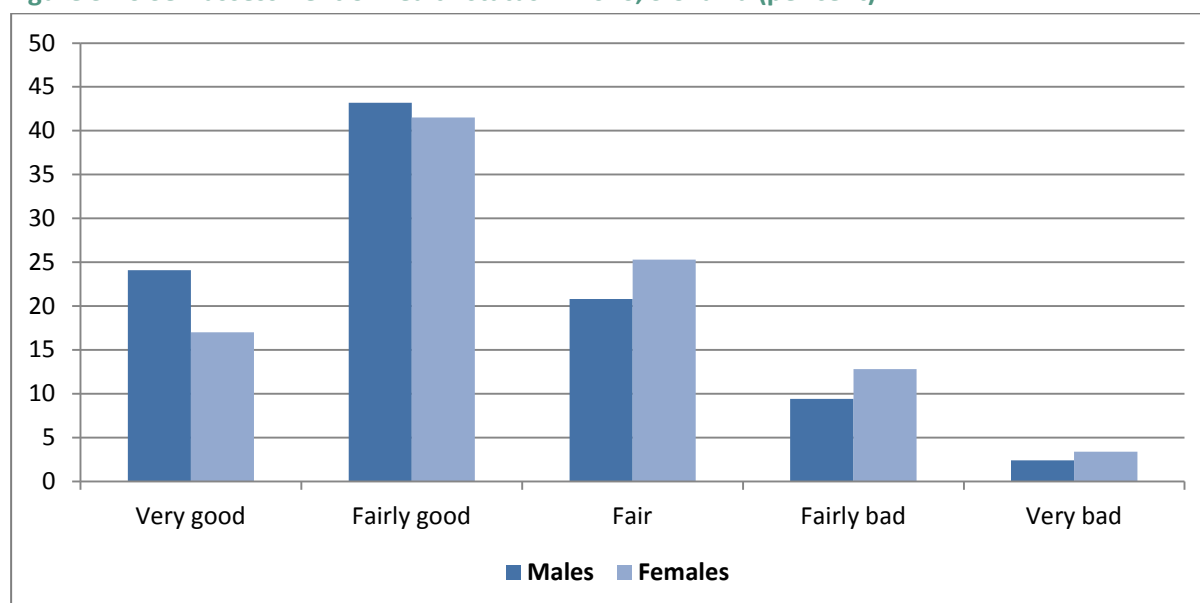
Source: Eurostat, hlth_silc_04.

The self-assessment of health status of men and women shows that in 2010 more than 24 per cent males find their health status very good, the largest share (43.2 per cent) consider their health fairly good, and only 2.4 per cent think their health status is very bad (see Table 3.15). On the other hand, only 17 per cent of females rate their health as very good, more than 25 per cent believe that their health is fair and almost 13 per cent of women assume their health is fairly bad. Slovak men are generally more optimistic and presume that their health status is good; conversely, women are more pessimistic than men when it comes to self-assessing their health (see Figure 3.16).

Table 3.15 Self-assessment of health status of persons, Slovakia (per cent)

Males	2006	2007	2008	2009	2010
Very good	26.8	28.5	23	24.7	24.1
Fairly good	30.1	29.7	42.1	42.2	43.2
Fair	28.8	27.2	22	20.6	20.8
Fairly bad	10.5	10.6	9.2	9.4	9.4
Very bad	3.8	4	3.6	3.1	2.4
Females	2006	2007	2008	2009	2010
Very good	19.9	20.8	16.5	17.5	17
Fairly good	28.3	27.7	38.7	40.3	41.5
Fair	30.6	31	26.7	25.7	25.3
Fairly bad	15.3	14.8	13	12.4	12.8
Very bad	5.9	5.6	5.1	4.1	3.4

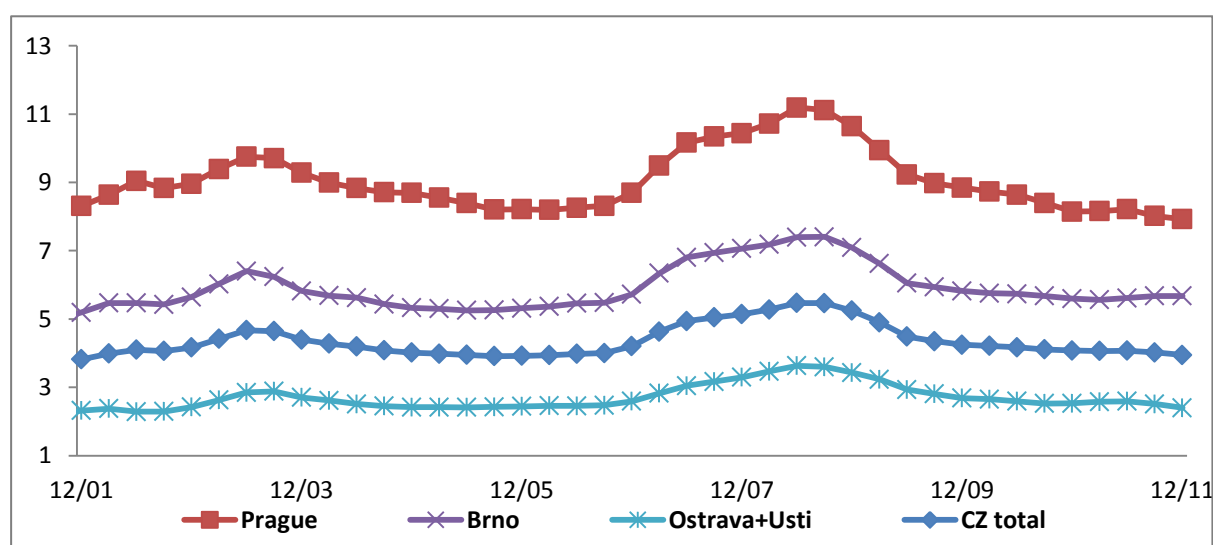
Source: Statistical Office of the Slovak Republic

Figure 3.16 Self-assessment of health status in 2010, Slovakia (per cent)

Source: Statistical Office of the Slovak Republic

3.7 Housing tenure

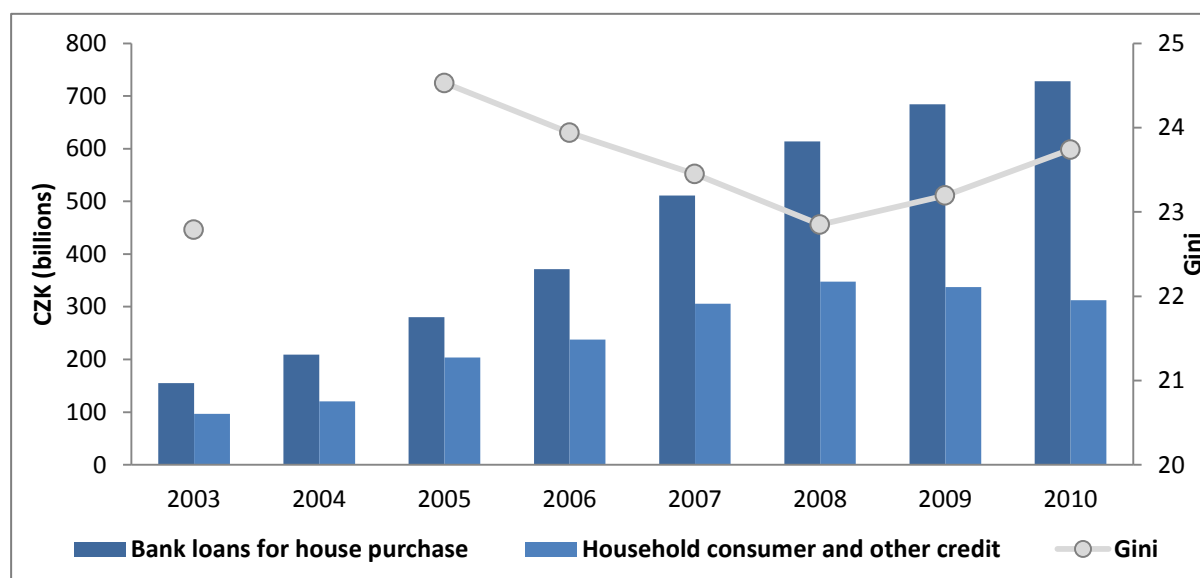
Housing prices in the Czech Republic have been falling steadily in recent years and in comparison to the peak in 2008, the prices in 2011 were 20 per cent lower (Figure 3.17). A similar pattern is also observed in regions with the highest (Prague and Brno) and the lowest (Ostrava and Ústí nad Labem) housing prices.

Figure 3.17 Price-to-income ratios (ratio of the price of 68m² apartment to moving sum of wage for last four quarters), Czech Republic

Source: Czech Statistical Office, Czech National Bank calculation.

Household indebtedness rose moderately in 2011. While the number of households with loans account for 38 per cent, it is quite a low level in the European context. Thanks to favourable lending conditions, demand for house loans has mainly increased (see Figure 3.18).

Figure 3.18 Bank and non-bank loans to households, Czech Republic (CZK billions)



Source: Czech National Bank.

Notes: CZK billions, left axis. The Gini coefficient on the right axis.

Table 3.16 Relative frequency of mortgage and inability to meet obligations among households, Czech Republic (per cent)

	Household has mortgage	Household has difficulties meeting obligations
Total	11.7	5.3
By quintile of equivalised income		
1 (lowest)	2.6	7.2
2	5.9	6.2
3	10.7	6.1
4	18.3	3.9
5 (highest)	21.1	3.0
Education attained by household		
Low	3.2	10.5
Middle	12.2	4.7
High	20.1	3.6

Source: Czech Statistical Office (EU–SILC 2008 and 2009), CNB calculation.

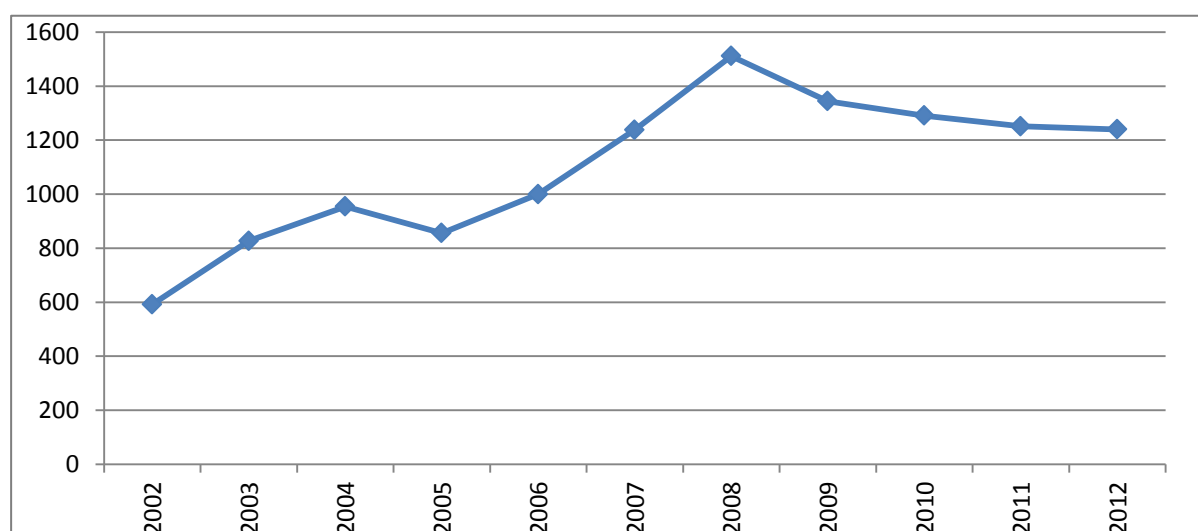
Notes: The figures express the relative frequency of the phenomenon in the given category of households.

About 21 per cent of households in the Czech Republic had a mortgage in 2011, although low-income households had almost no mortgages (CNB, 2011) (see Table 3.16). Yet, due to expected weaker

economic growth, a rise in the over indebtedness of low-income households can be expected in 2012.¹⁶ This may further increase the difficulties of low-income households to meet their obligations. In 2008 and 2009, this risk was twice as high for poor households relative to the richest ones.

In Slovakia, from the perspective of monetary stability, the development of housing prices has a significant impact on economic activity and price changes generally. The growth of housing prices has contributed to an increase of economic activity by increasing investment in housing, as well as increasing household consumption financed by returns to estate ownership.

Figure 3.19 Housing prices, Slovakia (EUR/ sq meter)



Source: National Bank of Slovakia

The housing prices changed from 592 EUR/m² to 1235 EUR/m² (aggregate prices) in the last decade, reaching a peak in 2008 of 1511 EUR/m² (Figure 3.19). Prices for flats have increased rapidly after 2006, when cost per square meter were approximately EUR 998, as compared to 2007, when the price increased by almost EUR 300 to EUR 1276 per m².

There are significant price variations between various Slovak regions. Apartments in Bratislava and the surroundings can be several times more expensive than apartments in other cities. The current economic crisis decreased prices in major cities, but it did not affect much the gap between housing prices in the cities and regions in Slovakia. This leaves economic migration as problematic as ever.

¹⁶Based on figures from the Czech National Bank, the overall risk of high over indebtedness of low-income households for the banking sector is not substantial due to a low absolute number of loans granted.

3.8 Crime and punishment

In 2010, more than one in 500 adults in the Czech Republic was in prison (see Table 3.17). While 95 per cent of prisoners are men and 70 per cent are younger than 40 years, they are almost exclusively low-educated individuals. A slight increase of prisoners with upper secondary education corresponds to the increase in the share of secondary graduates in the young Czech population. Dominance of prisoners from lower socio-economic background points to a large divide in Czech society.

Table 3.17 Number of prisoners by education levels (2000-2010), Czech Republic

	2000	2001	2002	2003	2004	2005	2008	2009	2010
Total	15571	14737	12829	13868	15074	16077	18100	21734	21900
By education level (per cent)									
primary	51.5	47.6	46.9	47.4	47.0	47.8	47.1	49.4	46.8
lower secondary	40.0	43.1	42.8	42.3	42.1	41.6	40.4	39.4	41.3
upper secondary	7.5	8.2	8.8	8.8	9.4	9.1	11.1	9.6	10.3
tertiary	0.9	1.2	1.4	1.4	1.4	1.5	1.5	1.6	1.7

Source: Yearbooks of the Prison Service of the Czech Republic

Notes: Statistics by education for years 2006 and 2007 are not available.

The number of prisoners has been continuously rising even though the crime rate has been steadily decreasing (see Table 3.18). As Dušek (2012) points out this can be explained by the increase of conviction rate and the prolongation of sentences. Imprisonment in the Czech Republic still dominates over the alternative forms of punishment.

Table 3.18 Number of prisoners, crime rate and crime detection (2003-2011), Czech Republic

	2003	2004	2005	2006	2007	2008	2009	2010	2011
Number of prisoners	13868	15074	16077	16179	16647	20502	21734	21900	20541
Crime rate (per 100,000)	3503	3440	3356	3271	3443	3284	3168	2975	3020
Crime detection as % of crimes	37.9	38.2	39.3	39.7	38.9	37.2	38.3	37.6	38.5

Source: Adapted from Dušek (2012).

The perceptions of crime go along with actual crime statistics. The decreasing tendency in burglary or assault occurrences is probably the consequence of a high number of convicts imprisoned. The higher perception of safety may be attributed to the positive economic development, which substantially increased national income and general well-being in society. Overall, much less crime and greater feelings of safety are perceived by rural than urban respondents. The ongoing economic

crisis leading to the higher risk of poverty may deteriorate the perception of crime in the future (see Table 3.19).

Table 3.19 Perception of crime, Czech Republic (per cent)

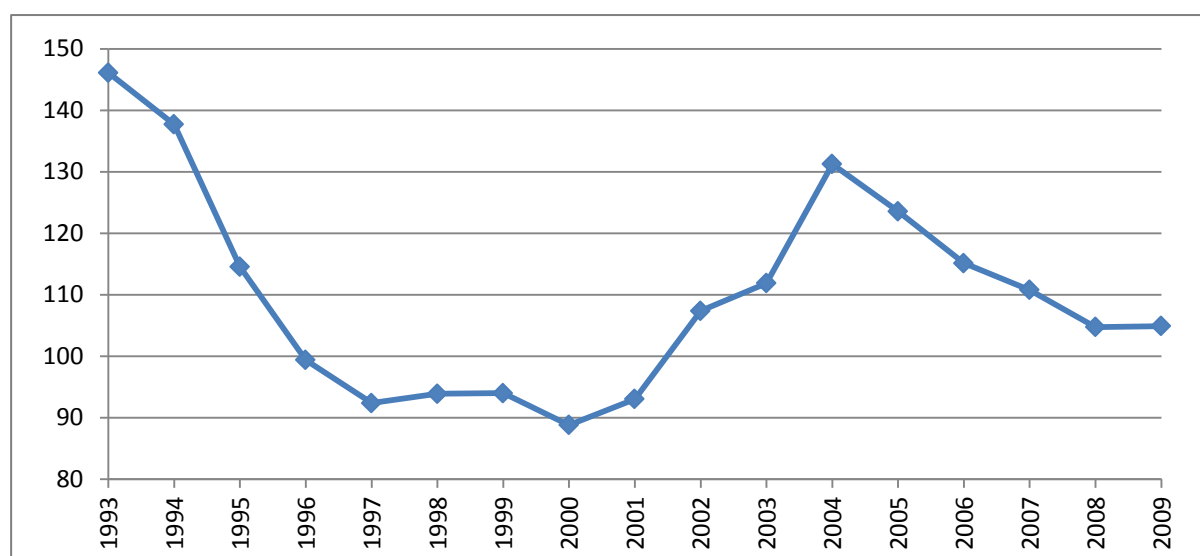
	Victim of burglary/assault	Feel unsafe walking after dark	Worry about becoming a victim of violent crime
By year			
2002	25	33	
2004	19	32	
2008	12	28	8
2010	12	28	8
By location			
city	22	39	11
small town	16	31	8
village	11	20	4

Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

Notes: Following question were asked: (1) Respondent or household member has been a victim of burglary/assault in last 5 years; (2) Respondent feels safe of walking alone in local area after dark; (3) Worry about becoming a victim of violent crime most of the time/some of time. Question (3) was not asked in 2002 and 2004.

Until 1990, crime in Slovakia was strongly suppressed, which resulted in its decline. A significant increase in crime occurred after 1990. In particular, property crime significantly increased, which can be interpreted as a reflection of the overall economic level of the country. Unemployment, loss of social security, existential problems or other related factors created distress for large segments of the population. Opening the borders resulted in the territory of Slovakia becoming a drug transfer country, from east to west. Not only the quantity but also the types of crime have changed. There were new forms of crime emerging (organized crime, racketing, white collar crime) with which the police had no prior experience.

The number of all recorded offences dropped from 146,000 in 1993 to 89,000 in 2000, the year in which the lowest offences after 1993 were recorded (Figure 3.20). In 4 years, the number of all recorded offences reached a level of more than 131,000, and is now in decline with 105,000 recorded offences in 2009.

Figure 3.20 All recorded offences, Slovakia (thousands)

Source: Eurostat

The most common crime recorded by the police is violent crime (in every year from 1994 to 2009). In 2009 there were 8337 violent crimes (Table 3.20). Drug trafficking has risen from 88 recorded drug trafficking offences in 1994 to 602 in 2009. Conversely, motor vehicle thefts decreased from 9137 in 1994 to 3779 in 2009.

Table 3.20 Crimes recorded by the police, Slovakia

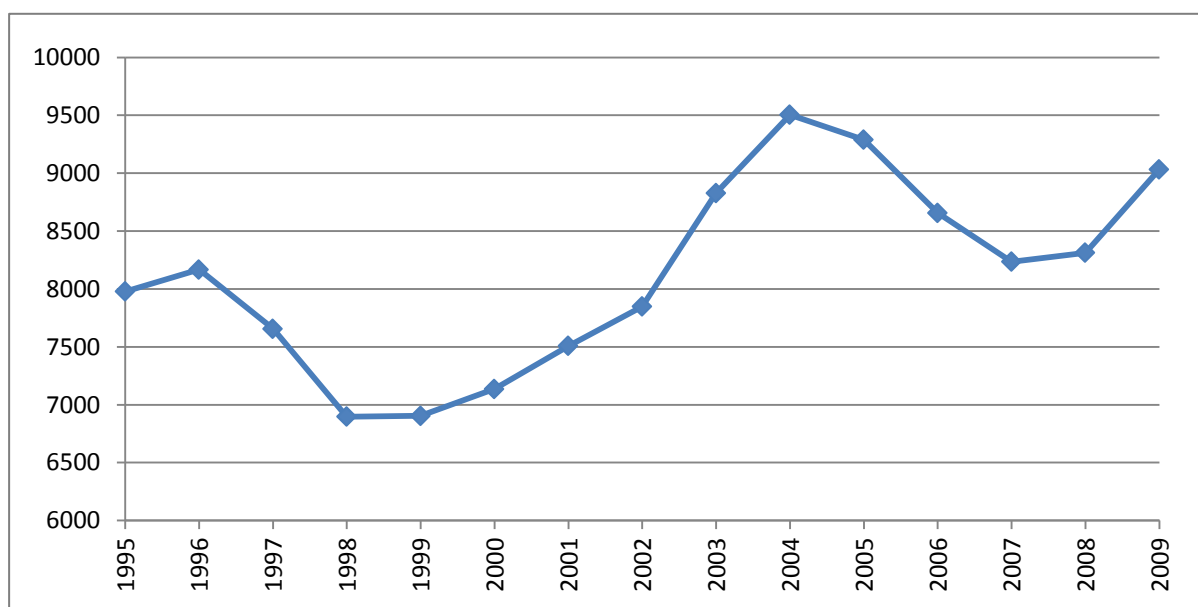
	1994	1997	2000	2003	2006	2009
Homicide	129	140	143	146	89	84
Violent crime	9876	11564	13549	13724	10896	8337
Robbery	x	1199	1264	1918	1594	1358
Domestic burglary	4666	3854	3248	2642	2602	2330
Motor vehicle theft	9137	7438	6073	5295	5525	3779
Drug trafficking	88	967	604	734	411	602

Source: Eurostat

Before 1997 crime was growing primarily in urban districts, but in 1998 crime rates started to rise in small rural districts as well. Gradually increasing crime in the countryside is a worrying phenomenon. While in urban districts the struggle with crime has been an ongoing challenge for several years, in the unprepared rural districts it can cause significant disruptions, and thus further complicate the difficult position of the Slovak countryside.

The prison population in Slovakia was at its lowest in 1998 with approximately 6900 prisoners, while the highest number was in 2004, more than 9500 prisoners (Figure 3.21). Prisons are currently approaching their peak capacity.

Figure 3.21 Prison population, Slovakia



Source: Eurostat

3.9 Subjective measures of well-being, satisfaction and “happiness”

It is increasingly understood that traditional economic measures are necessary, but not sufficient, to reflect a country’s overall progress or well-being. An important component of national well-being is the subjective well-being of individuals, which is measured by finding out how people think and feel about their own lives. Well-being in seven Eastern European countries right at the beginning of the transformation process is analysed by Hayo (2007), using New Democracy Barometer 1991 data. The highest national happiness levels in Eastern Europe at that time were observed in Czechoslovakia. This result is further confirmed in the regression analysis, when individual characteristics are controlled for.

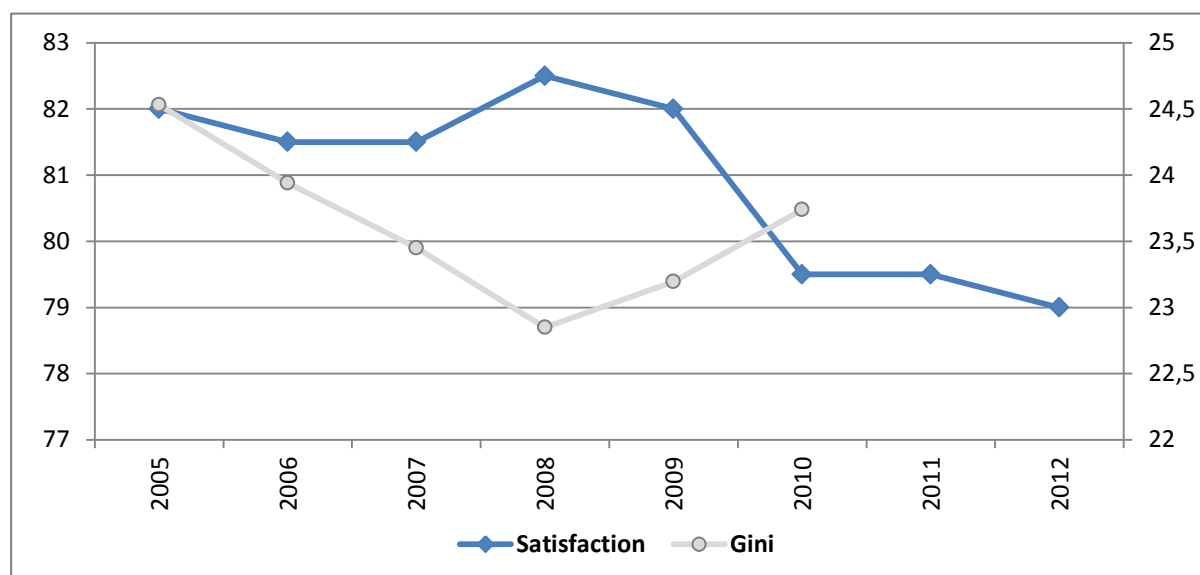
Yet, despite strong growth performance in transition economies, the residents of transition countries report traditionally low levels of life satisfaction. Guriev and Zhuravskaya (2009) investigate the gap in happiness between transition and non-transition countries using the World Value Surveys 1999-2003. Part of their analysis focuses on income inequality. Theoretically, the effect of inequality on life satisfaction is ambiguous. On the one hand, people may feel dissatisfied with the sharp increase in

inequality during transition because they perceive it as unfair. Greater inequality may show that opportunities are opening up as a result of market-oriented reforms, which may be considered a positive factor.

An important finding of their analysis is that inequality does indeed contribute to low levels of life satisfaction in transition countries.¹⁷ Furthermore, the authors find that younger people in transition are less affected by income volatility, inequality and worse public goods for at least two reasons: first, young people – in contrast to older people – have not lived in a paternalistic command economy; and second, they are less dependent on public goods such as health care and social security.

The recent development of life satisfaction is depicted in Figure 3.22. It clearly shows drop of life satisfaction levels after the start of economic recession in 2009. Figure 3.23 depicts satisfaction levels during 2002 and 2010 by education groups. Reported levels are very stable for the group with the highest education, while changing pattern is observed for groups with middle and low education. This clearly explains that the aggregate drop in life satisfaction is mainly driven by lower-educated workers.

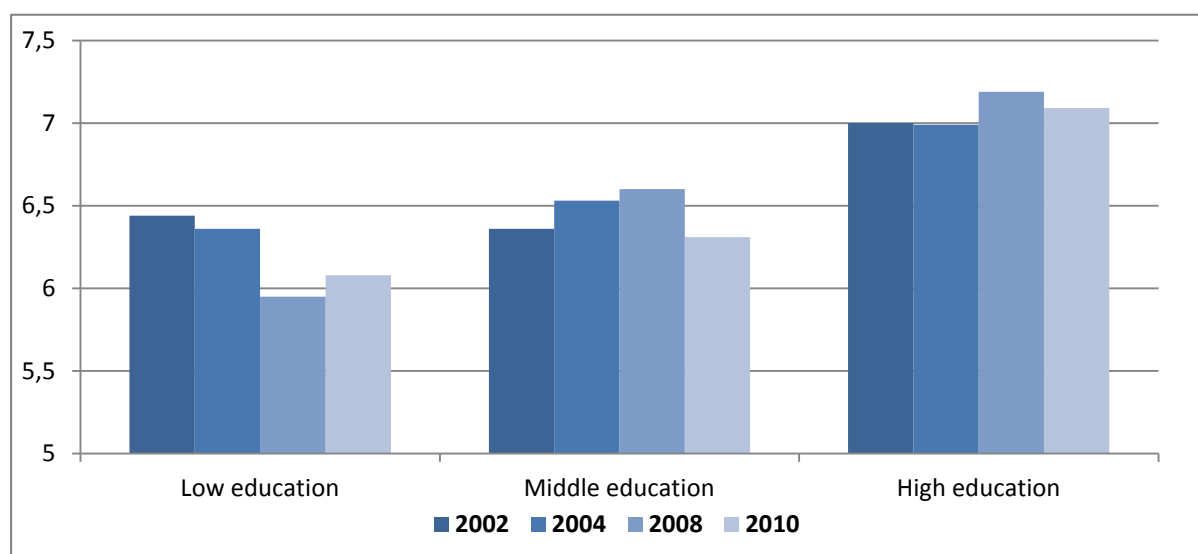
Figure 3.22 General life satisfaction, Czech Republic



Source: Eurobarometer.

Notes: On the left axis is the percentage of respondents who report that they are “very or fairly satisfied” with life as a whole. The Gini coefficient is on the right axis.

¹⁷In the case of non-transition countries, the confirmed effect of inequality on happiness is positive.

Figure 3.23 Average (mean) subjective well-being ratings by education, 2002-2010, Czech Republic

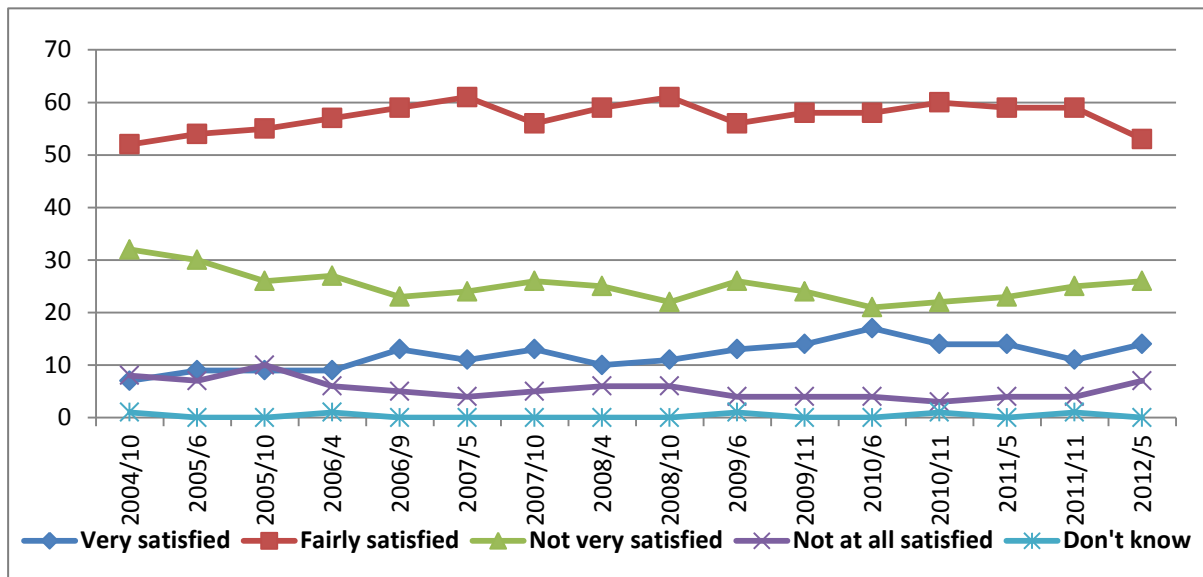
Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

Notes: Adults aged 16 and over were asked: "Overall, how satisfied are you with your life nowadays?" Possible answers are on the scale from 0 to 10.

The recent development shows increasing divide in well-being levels between low- and high-educated individuals. This may be attributed to the worsening labour market conditions during the economic crisis. The most affected groups are low-educated workers. Similarly, public dissatisfaction with political situation is more pronounced among individuals of low socio-economic background. Future development shows whether this polarization will further deepen or even lead to greater political instability.

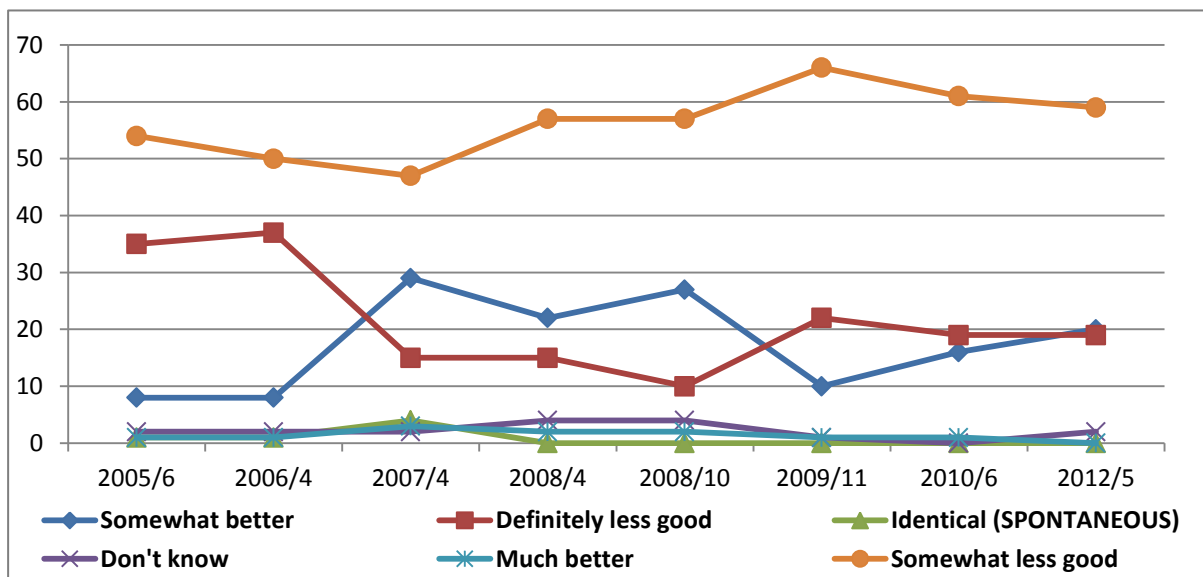
Only 70 per cent of Slovak people say they are satisfied with their standard of living (the EU average is 83 per cent) and three in four persons say their quality of life is satisfying. When asked their confidence about the future of their pensions, only 41 per cent of Slovak citizens report being confident about their pension security. When asked if they feel safe walking alone in their local area after dark, only 60 per cent of respondents say yes, one of the lowest scores in the EU.

Satisfaction rates for Slovak citizens have not changed much over the last 8 years, including after Slovakia became a member of the European Union (Figure 3.24). The number of "very satisfied" people increased from 7 in 2004 to 14 per cent in 2012, while the number of "not at all satisfied" decreased from 8 in 2004 to 3 per cent in November 2011 and then rose again to 7 per cent in May this year. "Fairly satisfied" persons represent the largest group with 53 per cent of respondents this year. Four years prior, 61 per cent of Slovaks reported being fairly satisfied with their life.

Figure 3.24 Life satisfaction, Slovakia (per cent)

Source: Eurobarometer.

The opinion on the Slovak economy, when compared to the average of the EU countries, has improved over last 7 years (see Figure 3.25).

Figure 3.25 The opinion on situation of the Slovak economy compared to the average of the EU countries (per cent)

Source: Eurobarometer.

The number of citizens of the opinion that the economy is “somewhat better” has increased from 8 in 2005 to 20 per cent in 2012; “definitely less good” responses decreased from 35 to 19 per cent over the same period. The highest proportion of responses, 59 per cent, think the Slovak economy is “somewhat less good” than the average of the EU countries.

3.10 Intergenerational mobility

Intergenerational mobility for any individual is determined primarily by two factors: (i) the amount of opportunity in society; and (ii) the rate of economic growth and associated change in the occupational structure. Economic theory usually defines two types of mobility: income and educational.

Education mobility in the Czech Republic is low in the international perspective. The education of parents plays a crucial role in educational choices as well as the educational performance of children. The former is partially determined by the early tracking of children into different types of secondary school. In fact, the choice of secondary school is important for the acquirement of university education as well as labour market performance. The choice of secondary school is analysed in Drňáková (2007) using the Programme for International Student Assessment (PISA) data. The author points to a large impact of parental education on the decision about school choice. The same result is confirmed by the OECD (2010) study. Intergenerational educational persistence partly reflects the influence of family background on cognitive skills acquired during secondary education. Persistence in secondary education, as measured by the influence of students’ socio-economic background on student test score (PISA) achievements, is considerable in Austria, the Czech Republic, France, New Zealand, the United Kingdom and the United States.

There is basically no evidence on intergeneration income mobility. The only evidence that is close to the concept of income mobility is presented in Table 3.21. It is based on the Life in Transition Survey, a representative survey of households conducted by the European Bank for Reconstruction and Development (EBRD) in 2006, in 28 post-transition countries. Respondents were asked to compare their current living standard with that of their parents. About 55 per cent of respondents in the Czech Republic said they were doing better than their parents, and the figure is higher for those with higher income (72 per cent) and better education (67 per cent). Interestingly, 61 per cent individuals in rural areas said they lived in better economic conditions than their parents, while the respective figure was 53 per cent for metropolitan residents. However, the results cannot take into account aggregate long-term economic growth.

Table 3.21 Share reporting “I have done better in life than my parents”, Czech Republic (per cent)

By income		By education		By location	
Low	38	Low	49	Rural area	61
Middle	58	Middle	53	Small town	51
High	72	High	67	City	53

Source: 2006 Life in Transition Survey.

Note: Value 1 is taken for the modalities agree and strongly agree and 0 otherwise with the statement “I have done better in life than my parents”. Information on income is approximated by question how the respondent would characterize the financial situation of the household imagining a ten-step ladder. Answers are grouped: Low = 1-3, Middle = 4-6, Top = 7-10.

In Slovakia, using the same data, we observe somewhat lower perception of intergenerational mobility, with about 48 per cent of respondents believing that they have done better in live than their parents (Table 3.22). The group with the highest perception of mobility includes people living in metropolitan areas (56 per cent). People with relatively high income, high education and those living in rural areas also report above-the-average perception of mobility (54, 54, 53 per cent, respectively). Compared to the Czech Republic, the income and education gradients of the perceived mobility are lower. The variation of perceived mobility across locations is qualitatively similar to the Czech Republic, except that rural and urban areas in Slovakia exhibit much lower perceptions of intergenerational mobility than the corresponding areas in the Czech Republic.

Table 3.22 Share reporting “I have done better in life than my parents”, Slovakia (per cent)

By income		By education		By location	
Low	28	Low	49	Rural area	53
Middle	50	Middle	44	Urban area	44
High	54	High	54	Metropolitan	56

Source: 2006 Life in Transition Survey.

Note: Value 1 is taken for the modalities agree and strongly agree and 0 otherwise with the statement “I have done better in life than my parents”. Information on income is approximated by question how the respondent would characterize the financial situation of the household imagining a ten-step ladder. Answers are grouped: Low = 1-3, Middle = 4-6, Top = 7-10.

3.11 Conclusions

In this section, we analyse the social impacts of inequality in the Czech Republic and Slovakia. Results presented above are generally consistent with the findings about social inequalities already discussed in previous chapters about the moderate impact of the crisis on inequality. In particular, we find a moderate increase in the risk of poverty due to the crisis. The subjective well-being substantially decreased for people with low education and low income. This is in line with the increase in the risk of unemployment documented in the previous chapter.

Over the period preceding the Great Recession, the measures of material deprivation had been improving. After 2009, however, we have observed stagnation or worsening material deprivation for some groups, such as the low-educated in Slovakia. This could indicate some interdependence between economic crisis and material deprivation, although we need to acknowledge that the worsening of material deprivation measures was not universal.

The crisis appears to have a similar effect on poverty. According to self-reported measures, after 2009 more people felt themselves to be at-risk-of-poverty, especially the unemployed and low-educated segments of the population. The higher rate of illness after 2009 could also be attributed to worsening living conditions and increasing unemployment as a result of the economic crisis.

The risk of poverty varies across sub-populations. For instance, women in Slovakia remain in a higher risk of poverty than men, even though the risk of poverty is generally on the decline in the Slovak Republic, actually declining faster than the EU 27 average. Higher rates of poverty are especially significant for the Roma population, for whom higher rates of unemployment, illiteracy and disease are also observed.

Even though marriage is the most prevalent form of a relationship, increasing numbers of couples have only one child. Together with decreased mortality this leads to the problem of aging population. This has a significant negative impact on public finances and increases the risks for their sustainability.

Housing availability is declining, while prices of flats have increased rapidly, particularly since 2006. There are also significant price differences between regions.

In general, the secondary effects of the economic crisis are not yet visible. However, this might change in the coming years, given the current economic growth is close to zero in the Czech Republic and only moderate in Slovakia, and the unemployment rates have increased in both countries. It is also well documented from previous economic crises in the late 1990s that for the unemployment rate to decline, stronger economic recovery would be necessary. The “sclerosis” of the labour market might further increase inequality, and secondary effects might be amplified.

4. Political and Cultural Impacts

4.1 Introduction

When analysing post-communist countries, it should be realized that their politics, social norms and beliefs, and social structures are largely determined by their communist past. This applies well to the Czech Republic and Slovakia. The collapse of the communist regime in the former Czechoslovakia in 1989 created favourable conditions for implementing important changes within the society – in political, social and economic areas as well as in the field of interethnic relations and the organization of institutions. Indeed, the early years were marked by the genuine determination of the wider public to actively participate in the social and political development. In 1993, Czechoslovakia formally split into two independent states, upon the actions of the political leaders of the two nations but without an approval from general public in a referendum.

The political system in the Czech Republic quickly consolidated and stabilized, and two newly emerged political parties – the conservatives and social democrats – became the major players in Czech politics. In terms of the influence on the political system, the president plays an important role in the system. Depending on his or her personal preferences, the president is able to navigate the government to do things that he or she supports. Especially the first Czech president, Vaclav Havel, managed to remain above political conflicts and also helped to shape public opinion. Another phenomenon in the Czech political scene is the gradual amalgamation of the Communist Party (KSCM) into the political mainstream. The KSCM has an important position in the party system, although it has never entered any governmental coalition. The explanation for the success of the Communist Party (compared to other post-communist countries) can perhaps be linked to a historical tradition of *Sozialstaat* ideas in the Czech lands, as well as a relatively straightforward transformation after 1989.

The early transformation period has been considerably more complicated in Slovakia. The situation especially deteriorated during the Prime Minister Meciar coalition, who led the country from 1992 to 1998. His government employed a populist, nationalist rhetoric and threatened democratic institutions in Slovakia. In 1997, Slovakia was excluded from the first accession round with the European Union. In the election year 1998, the political situation became highly polarized and the mobilized masses on the democratic, center-right, segment of the political spectrum succeeded in changing the government. These events determined the nature of the political system in Slovakia, with a group of heterogeneous parties sharing a more democratic vision on the center-right and a

single leading autocratic party with some pendants on the center-left. After 1998, with further weakening of Meciar's party and a new center-left party Smer-SD attracting its voters, the political situation became more stable. Nevertheless, these events were not strong enough to revert the decreasing trend and to stimulate active public participation in social development.

The second Dzurinda government (2002-2006) passed major structural reforms, such as the introduction of a flat-tax system and reforms of the pension and health-care systems. Based on these reforms and an inflow of foreign investment, Slovakia has experienced high economic growth since 2006 until the Great Crisis of the late 2010s. However, citizen discontent with social policy, labour-code reforms and health care completely changed the composition of the government in the 2006 elections. In 2006, the government formed by the leftist party Smer-SD, promoted the idea of a strong welfare state hence suppressing the role of individual responsibility. Thus, it is not surprising that people tend to rely more on government and that their interest in social development has diminished. A reversal in this trend has only recently been observed.

Within 20 years since the Velvet Revolution both the Czech Republic and Slovakia successfully integrated into European and transatlantic structures. In 1999, the Czech Republic became a member of the North Atlantic Treaty Organization (NATO) and in 2004 it joined the European Union after a lengthy admission procedure. As Slovakia was left out of the 1999 NATO expansion, in the 1998-2002 election term, the government led by Mr Dzurinda introduced foreign-policy reforms that focused on gaining international credibility and membership in the North Atlantic Treaty Organization (NATO), the European Union, and the Organisation for Economic Co-operation and Development (OECD). In 2004, Slovakia officially joined the NATO, the European Union, which reinforced the public trust in European and transatlantic institutions. Both countries became OECD members by 2000.

Support for the European Union and approval of EU membership remain strong in Slovakia, but confidence in some national institutions is rather low. In the Czech Republic, however, in recent years the public criticism of European unity has grown, and faith in its benefits and institutions has eroded. Owing significantly to views promoted by president Vaclav Klaus, the Czech population is either indifferent or mildly supportive of his pessimistic beliefs about the future of the European Union.¹⁸

Democracy in the two republics is currently confronted with an increasing gap between political parties and citizens. In particular, the lack of interest in public matters is reflected in decreasing voter

¹⁸President Klaus began campaigning against the earlier Constitutional Treaty, seeing it as a blueprint for a European "super state" usurping national sovereignty. He then campaigned against the Lisbon Treaty. The Czech Republic was the last EU member state to ratify the Lisbon Treaty.

turnouts. In the Czech Republic, trust in national institutions is rather stable over time, with strong public confidence in judiciary. No major political or religious conflicts are present in the country, although certain ethnic tension between the Czech majority and the Roma minority has been documented. On the other hand, the Czech Republic has become one of the major target immigration countries in the European context. This brings new challenges for Czech society – the need for greater tolerance towards other cultures. Although trust in the Slovak government and parliament has increased in recent years, trust in the justice system remains rather low. Many negative developments took place in the judiciary and the rule of law is identified as one of the major problems in the Slovak society. Ethnic segmentation and latent or open tensions imperil Slovak-Hungarian-Roma relationships in Slovakia, whereas no religious conflicts are present.

4.2 Political and civic participation

Czechoslovakia experienced a non-democratic communist regime until 1989. During that time, participation in the national elections was compulsory and turnout rates in the elections were traditionally very high (i.e. more than 95 per cent) in the 1980s. The first democratic parliamentary election in the former Czechoslovakia took place in June 1990 and electoral participation was 95.4 per cent. The first democratic parliamentary elections in the former Czechoslovakia were organized in 1990. Initially, the political competition took place between the Civic Forum (Czech lands) and Public Against Violence (Slovakia) and the Communist Party (Voda and Pink, 2011).¹⁹

From the mid-1990s, the two most important political bodies emerged on the Czech political scene: the conservative Civic Democratic Party (ODS) and the Czech Social Democratic Party (CSSD). These two political parties, conservatives and social democrats, have remained major players in the Czech politics. A standard measure of political participation is voter turnout – defined as the ratio of the number of votes cast. Based on this measure, political participation in the Czech Republic exhibits similar patterns to other post-communist countries. Voter turnout rates in the parliament election largely declined from an enthusiastic 97 per cent in 1990 to 63 per cent in 2010 (see Table 4.1). The sharpest downfall of turnout rates appeared between 1998 and 2002 (by 16 percentage points) and participation never returned back to its level from mid-1990s. Such a long-term drop in turnout rates is attributed in the literature (see Wattenberg, 2002) to large system changes (e.g. a decrease of

¹⁹The Civic Forum and Public Against Violence were peoples' movements founded during the revolution in November 1989. After elections in 1990, they started to disintegrate, and some of their successors are the Civic Democratic Party in the Czech Republic and Movement for a Democratic Slovakia in Slovakia.

ideological competition between major parties). In the Czech Republic, this can be attributed to the power-sharing agreement – the so-called “opposition contract” – established after elections in 1998 by the two major political parties the CSSD and the ODS. This mutual cooperation has been perceived as a break of pre-election promises of both parties, leading subsequently to lower turnout rates (Linek, 2011).

Table 4.1 shows that participation rates are substantially lower in local elections, both municipal and regional, than in national elections. In the Czech Republic, the voter turnout is substantially differentiated with respect to the city size. Čmejrek (2007) shows that small municipalities traditionally record higher voter turnout in local elections relative to the national average.

Table 4.1 turnout in elections in the Czech Republic (per cent)

Elections	Parliamentary	Municipal	Regional	EP
1990	97	-	-	-
1992	85	-	-	-
1994	-	61	-	-
1996	76	-	-	-
1998	74	45	-	-
2000	-	-	34	-
2002	58	46	-	-
2004	-	-	30	28
2006	65	46	-	-
2008	-	-	40	-
2009	-	-	-	28
2010	63	49	-	-

Source: Czech Statistical Office (CZO).

The voter turnout of the elections to the European Parliament remained at 28 per cent in both 2004 and 2009, although the turnout in 2004 was anticipated to be higher. A possible explanation for the lower turnout in the EP election compared to the participation in the vote on the accession of the Czech Republic to the European Union is attributed to the public scepticism about role of the European Union and public perception about the rather unclear role of the European Parliament. Moreover, top political leaders and the Czech media ascribed much less importance to the EP elections than to the parliamentary elections.

Results from the European Social Survey (ESS) are informative about characteristics of voters. As in other countries, voters with the socio-economic status have the highest participation in parliamentary elections. On average, almost 80 per cent of voters with high education participate in the election relative to 60 per cent and 44 per cent participation rate of voters with middle and low

education, respectively. Turnout is also slightly higher in rural (63 per cent) than urban (59 per cent) areas (see Table 4.2).

Table 4.2 Share of respondents who voted in last parliamentary elections in the Czech Republic (per cent)

By education		By income		By location	
Low	44	Low	56	Rural area	63
Middle	60	Middle	65	Urban	59
High	78	High	64		

Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

Civic engagement or civic participation can be formally defined as individual and collective actions that are aimed to identify issues of public concern. The ESS provides information on respondents who worked in an association during last year. According to the ESS, the rate of civic participation decreased from 15 per cent in 2002 to 9 per cent in 2008 (see Table 4.3). The observed participation in civic organizations is higher among more educated and wealthier people.

Table 4.3 Share of respondents who worked in an association in the last 12 months in the Czech Republic (per cent)

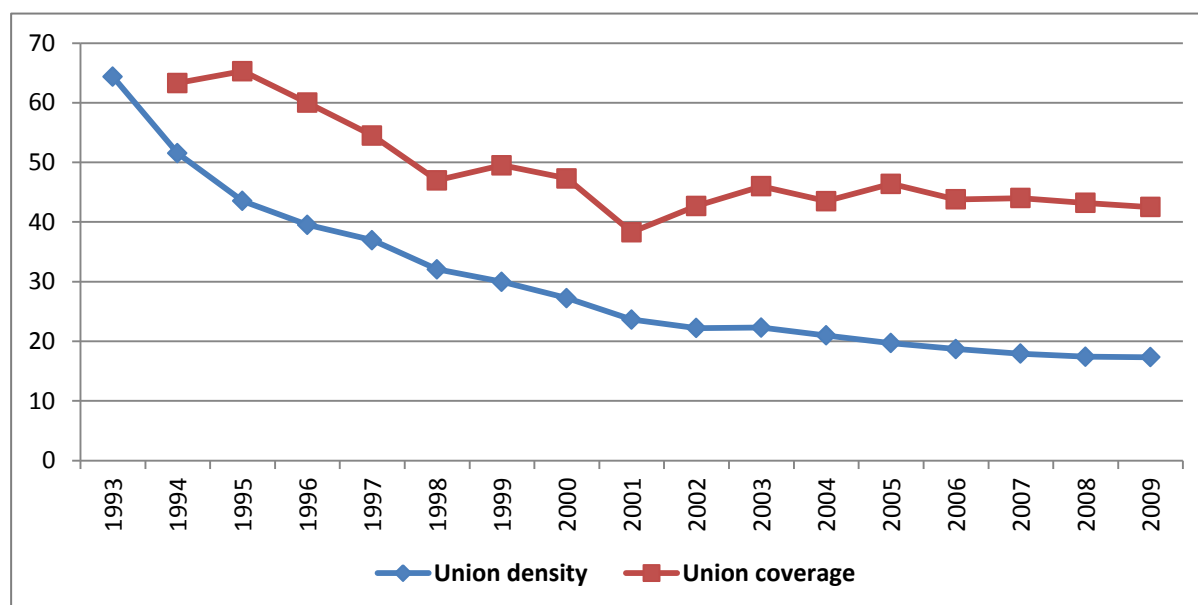
By year		By education		By income	
2002	15	Low	6	Low	8
2004	8	Middle	9	Middle	10
2008	9	High	18	High	12

Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

Civic engagement can be further measured by workforce unionization. During the communist regime, there was *de facto* (although not *de iure*) obligatory membership in unions. Not surprisingly, following the change of the political regime, the union density (i.e. the proportion of employees who are union members) dropped from 64 per cent in 1993 to 17 per cent in 2009. Figure 4.1 documents that the decline was steepest in the 1990s. In recent years, union membership has still declined, although at the rate less than one percentage point per year. The second measure that should be taken into account is union coverage – which is defined as the share of employees whose contract is regulated by wage bargaining agreements. Measure depends primarily on the labour legislation of the country and statistics is collected by the Database on Institutional Characteristics of Trade

Unions, Wage Setting, State Intervention and Social Pacts (ICTWSS).²⁰ Similarly to the union density, a significant decrease of union coverage is recorded in the 1990s, while later it stabilizes at around 40 per cent. A detailed analysis of trends and historical overview of union membership in the Czech Republic can be found in Myant (2010).

Figure 4.1 Union density and union coverage in the Czech Republic (per cent)



Source: OECD (union density), ICTWSS (union coverage).

Turning to the Slovak Republic, this section presents the statistics of voter turnout, defined as the percentage of eligible voters who participated in an election. Since the 1990 elections, a declining trend of turnout rates in parliamentary elections has been observed over time (see Table 4.4). Elections in 1998 were an exception while the political situation at that time was highly polarized between Meciar's Movement for a democratic Slovakia and a coalition of democratic center-right parties and led to 84.2 per cent turnout. In early 2000s Slovakia integrated into EU and NATO structures and these events mobilized a high percentage of voters. After 2002, turnout rates in parliamentary elections dropped markedly to the relatively stable level of 55 per cent to 60 per cent.

²⁰Source: www.uva-aias.net/208.

Table 4.4 Voter turnout in elections in Slovakia (per cent)

Elections	Parliamentary	Municipal	Regional 1st / 2nd round	Presidential 1st / 2nd round	EP
1990	95	64	-	-	-
1992	84	-	-	-	-
1994	76	52	-	-	-
1998	84	54	-	-	-
1999	-	-	-	74 / 76	-
2001	-	-	26 / 23	-	-
2002	70	50	-	-	-
2004	-	-	-	48 / 44	17
2005	-	-	18 / 11	-	-
2006	55	48	-	-	-
2009	-	-	23 / 18	44 / 52	20
2010	59	-	-	-	-
2012	59	-	-	-	-

Source: Statistical Office of the Slovak Republic.

Participation rates in both municipal and regional elections are noticeably lower compared to general parliamentary elections (columns 2 and 3 in Table 4.4). Regional elections especially are characterized by a traditionally low turnout rate (with the highest rate of 26 per cent in 2001). Bútorová and Gyarfášová (2010) attribute low rates to rather unclear public perception about the competency of regional bodies and the difference in their agenda compared to municipal bodies. European Parliament (EP) elections are the least mobilizing event in Slovakia. The turnout rate was the lowest both in 2004 and 2009 (17 and 19.6 per cent, respectively) among all participating EU member states.

Large differences in turnout rates, as presented in Table 4.4, can be attributed to the importance voters assign to each election. Based on results of ISSP 2008, Krivý (2009) argues that 61 per cent of people in Slovakia perceive municipal elections as the most important, followed by parliamentary (57 per cent) and presidential (54 per cent) elections. On the other hand, only 33 per cent and 34 per cent of respondents respectively consider regional and EP elections to be important.

Voter turnout is substantially differentiated with respect to regional characteristics of the electorate. Krivý (2005) discusses that parliamentary elections in Slovakia are characterized by higher turnout in rural than in urban areas (see Table 4.5).²¹ The difference between the two was the greatest in 1994

²¹In this analysis, municipalities with less than 5,000 inhabitants are considered as rural, while settlements with more than 5,000 inhabitants are defined as urban.

(reaching 10.4 percentage points), but it dropped to less than 3 percentage points in later years. As mentioned above, the election campaign in 1998 was highly mobilizing and especially among the urban electorate. Although participation was still higher in rural areas, the urban/rural difference has been largely reduced since then.

Table 4.5 Turnout in parliamentary elections by urban/rural type of settlement in Slovakia (per cent)

Year	Total	Urban	Rural
1992	84	81	89
1994	76	71	82
1998	84	83	86
2002	70	69	71
2006	55	53	56
2010	59	58	60
2012	59	58	61

Source: Statistical Office of the Slovak Republic.

Bútorová and Gyarfášová (2010) explain that a divide between urban/rural electorate is also reflected in political preferences. It is the traditional rural culture that provided the support for Meciar's nationalist-populist politics. Urban voters traditionally gave higher preference to pro-reform and pro-European parties. The situation started to change in early 2000s, when the political agenda and electorate of Meciar's party HZDS was taken by the party Smer-SD. The electoral base of Smer-SD²² has been more uniformly distributed with respect to urban versus rural areas.

It has been documented in several studies that turnout rates tend to be higher in environments with higher socio-economic status (see Evans, 2004). In light of this theory, it seems that the evolution of political participation in Slovakia converges to this model (Bútorová and Gyarfášová, 2010). The influence of urban voters (who are assumed to be more educated and better-informed) has been increasing since the mid-1990s (in other words, turnout in urban areas fell less relative to rural areas).

Results from the ESS are informative about the characteristics of voters (see Table 4.6). On average voters with the highest socio-economic status (by education and wealth) document the highest participation. A similar pattern is observed in the EP election. The highest turnout rates (above 25 per cent) in the 2004 and 2009 EP elections were recorded in the capital city Bratislava, while the

²²Smer-SD won the elections in 2006, 2010 and 2012. They reached the majority and formed the government in 2006 and 2012.

average turnout in Slovakia was only about 17 per cent and 20 per cent respectively. EP elections are considered as “more sophisticated” compared to other elections (Franklin, 2007), since they are based on the cognitive mobilization of the electorate.

Table 4.6 Share of respondents who voted in last parliamentary election in Slovakia (per cent)

By year		By education		By income	
2004	74	Low	65	Low	72
2006	69	Middle	74	Middle	77
2008	78	High	82	High	76
2010	75	-	-	-	-

Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

Civic engagement or civic participation can be formally defined as individual and collective actions that aim to identify issues of public concern. There are several dimensions of participation that could be investigated and that should be addressed. A detailed analysis of civic engagement in Slovakia can be found in Bútorová and Gyarfášová (2010). Their analysis of the current state, types and trends is based on three surveys²³ that were carried out in 1994, 1998 and 2008. Using the results of factor analysis authors found that participation increases both with educational level and socio-economic status. Comparing the published rates in the respective categories in 2008 with 1994, a declining trend both in realized and anticipated participation is observed. For example, the willingness to actively solve problems in the local communities fell from 40 per cent in 1994 to 36 per cent in 2008. A similar pattern is observed in ESS data examining those who worked in an association during the last year. According to the ESS, the rate of civic participation varied between 6 per cent and 8 per cent during 2004 and 2008 (see Table 4.7). The observed participation in civic organizations is higher among more educated and wealthier people.

Table 4.7 Share who had worked in an association in the last 12 months, Slovakia (per cent)

By year		By education		By income	
2004	8	Low	4	Low	7
2006	8	Middle	6	Middle	9
2008	6	High	13	High	10

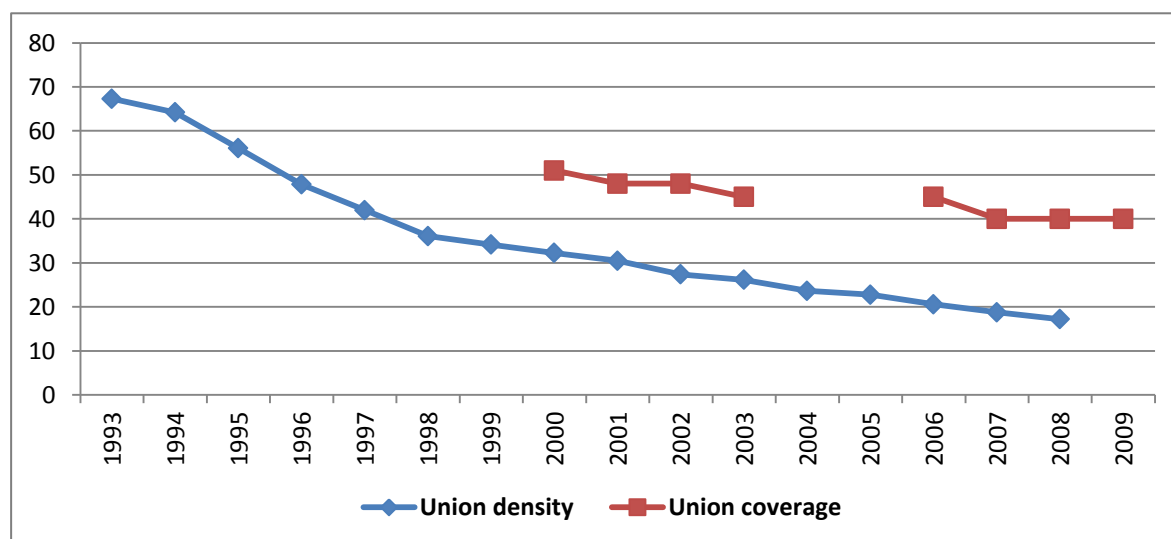
Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

Workforce unionization is another measure of civic engagement. Union density (measured by the share of wage earners who are registered union members) expresses the importance of the social

²³Source: COPART-KVSBK / IVO, http://sasd.sav.sk/en/data_katalog_abs.php?id=sasd_2008003.

role of unions. Union coverage (the proportion of wage earners whose contract is regulated by wage bargaining agreements) depends heavily on the labour legislation. Statistics collected by the OECD shows that union density in Slovakia dropped sharply from 67 per cent in 1993 to 17 per cent in 2008 (Figure 4.2). Figures for union coverage published by ICTWSS²⁴ are not complete but the decreasing trend is confirmed as well.

Figure 4.2 Union density and union coverage in Slovakia (per cent)



Source: OECD, ICTWSS.

4.3 Trust in others and in institutions

The Czech Republic exhibits higher levels of social trust (i.e. trust in other people) among Central and Eastern European (CEE) countries. Sedlackova and Safr (2008) report that the level of social trust in the Czech Republic has been relatively stable over last 20 years. In particular, one quarter of respondents declared that people could be generally trusted. Using regression analysis, the authors document a connection between interpersonal trust and non-institutionalized participation based on collective actions (such as participation in demonstration, appearance in media and donations). Satisfaction with the political and economic situation and trust in national institutions appeared to act as the strongest determinants of social trust.

Using ESS survey data, Table 4.8 records the percentage share of people in the Czech Republic who declare that most people can be trusted. Results suggest that the general level of trust has increased over the last five years. One in three respondents in 2010 agreed that most people can be trusted.

²⁴Source: www.uva-aias.net/208.

Respondents with higher education or from wealthier households report higher levels of trust in others. This finding corresponds with the analyses of social trust determinants (Borgonovi, 2012).

Table 4.8 Share agreeing most people can be trusted, Czech Republic (per cent)

By year		By education		By household income	
2002	29	Low	31	Low	30
2004	29	Middle	32	Middle	34
2008	38	High	39	High	39
2010	35	-	-	-	-

Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

Regular opinion polls have demonstrated that the level of trust in government institutions varies with the country's political and economic developments. Results for post-communist countries practically confirm the shared hypothesis of cultural and institutional theories that after the initial wave of enthusiasm from the establishment of a free democratic regime, citizens of post-communist countries would not declare high trust in government institutions for some time as a result of both transitional difficulties and the inherited general lack of institutional trust (Mishler and Rose, 2001).

Opinion polls from the Public Opinion Research Centre²⁵ in the years 1998-2006 show that the level of institutional trust in the Czech Republic was relatively stable over time, as well as the ordering of institutions based on the observed levels of public confidence. Stachova et al. (2008) confirm that the president was the most trusted institution in the Czech Republic in 2004 (trusted by 74 per cent respondents). Other institutions with a high level of trust are municipal (61 per cent) and regional (42 per cent) councils. National institutions, like parliament (23 per cent) and government (32 per cent), have much lower levels of trust.

Evidence based on Eurobarometer data illustrates the popular trust in the Czech parliament, government and justice system between 2005 and 2009 (see Table 4.9). Reported figures confirm the highest level of trust in justice (41 per cent in 2010) followed by the government (28 per cent) and parliament (21 per cent). Results are in line with Mishler and Rose (2001) who show that distrust in post-communist societies is greatest for political institutions, especially parliaments and parties.²⁶

²⁵Public Opinion Research Centre, Sociological Data Archive IS CAS CR, <http://archiv.soc.cas.cz>.

²⁶Based on New Democracies Barometer survey conducted in 1998 in Belarus, Bulgaria, the Czech Republic, Hungary, Poland, the Russian Federation, Romania, Slovakia, Slovenia and Ukraine.

Table 4.9 Trust in institutions, Czech Republic (tend to trust per cent)

Year	Parliament	Government	Justice system
2005	17	24	34
2006	22	31	37
2007	17	21	33
2008	16	20	34
2009	21	28	41

Source: Author's calculations based on Eurobarometer. Weighted by design weight.

From the European perspective the trust in national institutions in Slovakia is generally low. Using the ESS survey, Lovas (2010) observes that Slovak people report higher trust in the international institutions such as the European Parliament and the United Nations than in national institutions. In particular, the confidence in the Slovak judiciary is one of the lowest in the European Union. The current state of the Slovak judiciary is well described in Bojarski and Koster (2012). The public generally does not have confidence in the impartiality of its judges, believes the judiciary is corrupt and complains about the lengthiness of legal procedures. Authors note that in 2006-2010, many negative developments took place in the Slovak judiciary that were not helpful in restoring public confidence.

Table 4.10 shows the percentage of people who tend to trust to Slovak institutions as reported in the Eurobarometer surveys. The share of people trusting the Slovak parliament and government steadily increased from 23 per cent in 2005 to 40 per cent in 2010. Trust in justice remained remarkably stable over the same period, at about 30 per cent. When the figures on trust in national institutions are contrasted across different personal characteristics of respondents, the following observations can be made: younger respondents report higher levels of trust in general and the levels of trust are substantially higher for justice. People living in rural areas and small towns report higher trust in parliament and government relative to people living in large cities.²⁷ The reported trust differs little by the education of respondent, yet people with the lowest education report slightly higher trust in national institutions.

²⁷ Respondents in Eurobarometer were asked whether they lived in a village/small town/large town.

Table 4.10 Trust in institutions, Slovakia (tend to trust per cent)

Year	Parliament	Government	Justice system
2005	25	23	28
2006	30	27	33
2007	38	42	28
2008	39	43	32
2009	40	39	31

Source: Authors' calculations based on Eurobarometer. Weighted by design weight.

The level of trust in other people substantially increased over the period 2004 to 2010 in Slovakia. One in three respondents in 2010 agreed that most people can be trusted. Data from the ESS record that individuals with higher education and those in richer households report higher level of trust in people (see Table 4.11).

Table 4.11 Share agreeing most people can be trusted, Slovakia (per cent)

By year		By education		By income	
2004	20	Low	24	Low	24
2006	28	Middle	26	Middle	26
2008	27	High	34	High	34
2010	31	-	-	-	-

Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

4.4 Political values and legitimacy

The fall of the communist regime at the beginning of the 1990s did not lead to the disappearance of communist parties from the political scene in CEE countries. The Czech Republic was not an exception. The KSCM (Communist Party of Bohemia and Moravia) still keeps a relatively strong position within the Czech political system (Mareš, 2008). In the first free parliamentary elections, in 1990, it gained 13.24 per cent (second rank in the election), and it reached between 10 per cent and 20 per cent of votes in later elections (see Table 4.12). Yet, the KSCM never joined any governmental coalition. Kyloušek and Pink (2007) analyse the distribution of electoral support of the KSCM and its correlation with the selected socio-economic statistics, such as the rate of unemployment or average wage. Based on their results, the electoral support for the KSCM is driven mainly by a long-term influence, which is regionally conditioned.

Table 4.12 Results of the extreme right and left parties in parliamentary elections, Czech Republic (per cent)

	1990	1992	1996	1998	2002	2006	2010
Extreme right parties	-	-	-	-	-	-	-
SPR-RSC (Association for the Republic)	1.0	6.0	8.0	3.9	-	-	-
Worker's Party for Social Justice (DSSS)	-	-	-	-	-	-	1.1
National Party (NS)	-	-	-	-	-	0.2	-
Extreme left parties	-	-	-	-	-	-	-
KSCM (Communist party)	13.2	14.1	10.3	11.0	18.5	12.8	11.3

Source: CZO.

The radical right wing in the Czech Republic has a relatively long historical tradition, although it has never gained a significant support in the elections. An historical overview can be found in Mareš (2011). From the typological viewpoint, two main strands of the Czech extreme right movement can be distinguished: the nationalists and the neo-nazis.²⁸ In the 1990s, the most important extreme right party was the SPR-RSC (Association for the Republic-Czechoslovak Republican Party) (Smolík, 2011). Mainly due to its charismatic leader M. Sládek, the party successfully included various ideological branches of the extreme right. It had a parliamentary representation in 1992-1998 (1992: 5.98 per cent, 1996: 8.01 per cent and 1998: 3.98 per cent), but afterwards it lost its position. The most often cited cause of their failure was a change in political culture. For many voters, the extreme presentation of their leader became unacceptable (Mareš, 2009).

After its breakdown, there have been several attempts to replace this party, but successor parties never gained parliamentary representation, and their political influence has been marginal (with the electoral support lower than one per cent). The NS (National Party) represented a nationalist movement associated with extreme right populism – scoring 0.17 per cent in the parliamentary elections in 2006, but disappearing in 2009. Currently, the most important party on the extreme right is the DSSS (Worker's Party for Social Justice). Until 2007, the party manifesto had pursued mainly workers' interests. Afterwards, the focus shifted to ethnic minorities and crime (especially Roma). The DSSS received 1.14 per cent in the 2010 election.

The right-wing extremist movement may also have contributed to the rise in extremist-related criminal activity. According to the Ministry of the Interior, the number of such acts has risen by some 10 per cent (from 169 in 2008 to 186 in 2009). The number of those accused has risen by

²⁸The difference between the two lies in their perception of World War II history. Neo-nazis at least partially accept Hitler's ideas of National Socialism, while the nationalists reject Nazism and the occupation during World War II.

approximately 16 per cent (from 163 in 2008 to 189 in 2009). This apparent increase, however, might be due to the fact that the courts have become more willing to qualify cases of assault as racially motivated.

Evidence based on the ESS illustrates the incidence of political extremism over recent years. Data identify respondents who report themselves to be in the extreme left or right. The shares of individuals on the extreme left (6 per cent) and right wing (11 per cent) are very stable. The shares reported by education attainment and household income reveal small differences between two groups. The share of respondents who classify themselves belonging to the extreme left decreases with education, while the opposite is observed for the extreme right. The similar pattern is observed to lesser extent by household income, with poorer individuals inclining to extreme left and richer ones to extreme right (see Table 4.13).

Table 4.13 Share identified with extreme left or right, Czech Republic (per cent)

By year	left	right	By education	left	right	By income	left	right
2002	5	11	Low	10	7	Low	8	8
2004	8	11	Middle	6	11	Middle	6	10
2008	5	11	High	4	17	High	5	12
2010	6	11	-	-	-	-	-	-

Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

Notes: Political self-identification based on the question: "In politics, people sometimes talk of 'left' and 'right'. Where would you place yourself on this scale, where 0 means the left and 10 means the right?" Answers 0 and 1 are treated as "extreme left" while 9 and 10 as "extreme right".

While public opinion in the Czech Republic was consistently supportive of the process of accession, its level of support was one of the lowest among the ten states in the 2004 enlargement. Lyons (2007) analyses the economic and identity bases of popular support for EU membership in the Czech Republic before 2004. Explanations of public support based on national economies are based on the simple idea that whatever is good for the country is also of benefit to the individual. Lyons confirms the importance of economic considerations as a motivating factor in explaining individual level support for EU membership. The concerns over the loss of sovereignty and fears about defending national interests were very much less important.

The support for European Union is regularly recorded in the Eurobarometer survey. Figures for the Czech Republic demonstrate a declining trend in the public support of EU membership after 2008. According to some commentators, the overall weak support of EU membership stems from several factors: the absence of immediate threats explains its lack of interest in anything beyond the Czech borders; the paucity of Euro-optimistic intellectuals in the political debate; and the disproportional

influence of Eurosceptic political actors.²⁹ Czech right-wingers compare European integration with central planning and warn against Brussels violating the Czech Republic's individual liberty. However, according to Eurobarometer surveys, young Czech people are strong supporters of EU membership. Higher support is also recorded among respondents with higher education and in urban areas. Between 60 per cent to 70 per cent of respondents think that Czech Republic has benefited from EU membership (see Table 4.14).

Table 4.14 Support for the European Union, Czech Republic (per cent)

Year	think EU membership was a good thing	think that country benefited from EU membership
2005	50	67
2006	52	70
2007	48	66
2008	51	70
2009	45	71
2010	30	63

Source: Authors' calculations based on Eurobarometer. Weighted by design weight.

The Czech Republic has become one of the most important immigration target countries in the CEE region. According to the Report on Migration, published each year by the Czech Ministry of Interior, the number of immigrants has been gradually growing since the beginning of the 1990s – with more than 425,000 foreigners with a long-term or permanent residency permit at the end of 2010. Attitudes towards immigrants are well summarized in Drbohlav et al. (2009). Using the results of public opinion surveys,³⁰ the authors document that the tolerance of Czech citizens towards people of different ethnicity ranges between 40 per cent and 60 per cent and generally increases over time. The report further confirms that the tolerance depends largely on the national and ethnic group of immigrants: Czechs have the most positive attitudes towards Slovaks (58-74 per cent), while negative evaluation prevails towards Roma minority (positive attitudes express only 4-8 per cent of respondents). Based on the socio-demographic characteristics of respondents, positive attitudes towards immigrants are statistically significant in high-educated and high-income groups.

The decreasing support for further immigrants is observed in the ESS. As one would expect, support is weaker for immigrants of different race or ethnic group than majority of population. One in four

²⁹See http://ecfr.eu/content/entry/reinventing_europe_czech_lessons_for_small_countries.

³⁰Public Opinion Research Centre, <http://www.cvvm.cas.cz>.

respondents opposed the immigration of either different ethnic groups or from poorer countries outside Europe. On average, people with higher education oppose the immigration half as much as low-educated individuals. Similarly respondents from poor households disagree more with allowing additional immigrants into country (see Table 4.15).

Table 4.15 Share agreeing no additional immigrants to be allowed, Czech Republic (per cent)

	of same race/ethnic group	of different race/ethnic group	from poorer countries outside Europe
By year			
2002	7	13	12
2004	13	22	22
2008	12	21	22
2010	15	24	26
By education			
Low	18	28	25
Middle	12	21	22
High	6	12	13
By income			
Low	16	26	25
Middle	11	20	19
High	10	18	20

Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

According to the Eurobarometer 2010 survey, almost 60 per cent of people feel a lot of ethnic tension in Czech Republic. Ethnic tensions are less prevalent in rural areas (58 per cent) than in cities (64 per cent) and among high educated (56 per cent) than low educated (72 per cent) (see Table 4.16).

Table 4.16 Share saying they feel lot of ethnic tensions, Czech Republic (per cent)

By year		By education		By location	
2010	60%	Low	72	Rural area	58
-	-	Middle	59	Small town	59
-	-	High	56	City	64

Source: Authors' calculations based on Eurobarometer. Weighted by design weight.

In 2006, the Eurobarometer survey asked respondents to identify two important things for getting ahead in life. Respondents in the Czech Republic saw getting a good education (47 per cent) and being lucky (45 per cent) as the two single most important things for getting ahead in life. Interestingly, being lucky and knowing the right people (31 per cent) was more important than

working hard (29 per cent) and being smart (19 per cent). Coming from a wealthy family (11 per cent) was identified by only a few. Equally interesting was that people in urban areas identified being lucky and coming from a wealthy family just as likely as those living in rural areas. As expected, those with higher education rely the least on luck and family wealth, although the differences are very small (see Table 4.17).

Table 4.17 Which are the two most important things for getting ahead in life? Czech Republic (per cent)

	Getting a good education	Working hard	Coming from a wealthy family	Knowing the right people	Being lucky	Being smart
All	47	29	11	31	45	19
By location						
Rural	43	33	11	25	45	19
Small town	48	27	11	35	44	19
City	50	27	10	29	46	20
By education						
Low	31	40	9	28	42	15
Middle	41	30	10	32	46	19
High	61	32	8	24	40	21

Source: Authors' calculations based on Eurobarometer 2006. Weighted by design weight.

Political extremism in Slovakia has been dominated by right-wing parties. The radical left has never restored its status after the fall of the communist regime in 1989. The extreme left Communist party of Slovakia (KSS) – the successor of former ruling Communist party – gained the 5 per cent threshold to get into the Slovak parliament only in the 2002 election (with the result of 6.3 per cent). On the opposite site of the political spectrum, right-wing parties are quite active. Mesežnikov (2009) identifies several historical and socio-political features specific to Slovakia after 1989 that may help to understand the issues of local nationalism and right-oriented extremism. First, nationalism is connected to the creation of independent Slovak statehood in 1993, after the split of former Czechoslovakia. Second, the composition of the Slovak population is multi-ethnic. Up to 20 per cent of the population belongs to minorities, and the Hungarian minority, in particular, shows a high degree of political mobilization. Third, the critical social situation of the Roma minority often becomes a target of Slovak nationalist groups. Finally, there still exist the ideas of historical revisionism and nostalgia for the wartime Slovak state (1939-1945), or fears of revisionist ideas on the side of foreign nationalists.

Typologically, extreme right-oriented formations in Slovakia can be classified into three main categories: “mainstream” nationalists, ultranationalists and extremists (Mesežnikov, 2009). The

mainstream nationalist Slovak National Party (SNS) gained electoral support from radical nationalists in all previous parliamentary elections (see Table 4.18). The situation changed in 2010, when Smer-SD – the winner of the elections – became an acceptable alternative for the disappointed voters of SNS (mainly due to its corruption scandals). The final electoral defeat of SNS (they failed to get into the parliament) in 2012 can be attributed to various factors: decreasing public support for the party has been indicated by pre-electoral polls and this may have stimulated voters to vote for other “stronger” parties with a “national” programme like left-oriented populist Smer-SD or Ordinary People party (Mesežnikov, 2012). Moreover, SNS has competed for voters with a new party NaS (Nation and Justice) – founded by former members of SNS – and also the extremist LS-NS (People’s Party – Our Slovakia) could have attracted a number of traditional SNS voters.

Table 4.18 Results of the extreme right and left parties in parliamentary elections, Slovakia (per cent)

	1990	1992	1994	1998	2002	2006	2010	2012
Extreme right parties								
"Mainstream" nationalists								
SNS (Slovak National Party)	13.94	7.93	5.40	9.07	3.30	11.73	5.07	4.55
PSNS (Real Slovak National Party)					3.70			
Ultrnationalists								
SLS (Slovak People's Party)		0.30		0.27		0.16		
SNJ (Slovak National Unity)				0.13	0.15			
NaS								0.63
Extremists								
LS-NS (People's Party - Our Slovakia)							1.33	1.58
Extreme left parties								
KSS (Communist Party of Slovakia)		0.80	2.70	2.80	6.30	3.90	0.80	0.72

Source: Statistical Office of the Slovak Republic.

Notes: SNS split into two formally independent fractions (SNS and PSNS) with equal electoral support in 2002 and failed to get into parliament. Later, it reunited back into SNS.

At least one party with ultranationalist or extremist orientation, for example SLS (Slovak People’s party), SNJ (Slovak National Unity), NaS or LS-NS, ran in every Slovak parliamentary election, yet these parties never received a significant support from voters. The political programme of ultranationalist parties like SLS and SNJ can be characterized by historic revisionism and open admiration of the wartime Slovak state. They are politically insignificant and their preferences in the elections have been declining. On the other hand, an extremist movement like Slovak Togetherness (Slovenská pospolitost’) exerts long-term efforts and aim to form a political formation. The political branch of Slovak Togetherness ran in the last two elections under the name LS-NS, improving its electoral result from 1.3 per cent in 2010 to 1.6 per cent in 2012.

Kadlečíková and Kriglerová (2012) present the results of a public opinion survey on political extremism in Slovakia organized in 2011. The report confirms that respondents who can be defined as definite supporters of the ideas of far-right extremism comprise 8.3 per cent. Supporters of the right-wing extremist groupings mostly comprise individuals who work as manual workers, those employed in services, pensioners, more often men than women, and almost exclusively Slovak nationals. A more worrisome finding is that a significant portion of respondents (75.5 per cent) tends towards some ideas of far-right extremism. This group proves risky in case of rather explosive views in the population (views on the state policy on Roma and Hungarians, among others). Another figure that illustrates the activities of radical nationalist and extremist groups in Slovakia is the steady increase in the total number of racially motivated crimes. According to official statistics supplied by the Slovak police force and the Ministry of Interior, 79 such crimes were recorded in 2004, 121 in 2005, 188 in 2006, 155 in 2007 and 213 in 2008 (Mesežnikov, 2009).

Evidence based on the ESS illustrates the incidence of political extremism over recent years. Data identifies respondents who report themselves to be on the extreme left or right. The shares of individuals on the extreme left (9 per cent) and right wing (8 per cent) are very stable, although slightly higher more recently (see Table 4.19). The shares reported by education attainment and household income reveal small differences between the two groups. The share of respondents who classify themselves belonging to the extreme left decreases with education, while the opposite is observed for the extreme right. The similar pattern is observed by household income, with poorer individuals inclining to the extreme left and richer ones to the extreme right.

Table 4.19 Share identified with extreme left or right, Slovakia (per cent)

By year	left	right	By education	left	right	By income	left	right
2004	9	7	Low	10	9	Low	12	7
2006	8	8	Middle	9	8	Middle	7	9
2008	8	8	High	8	11	High	9	12
2010	11	11	-	-	-	-	-	-

Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

Notes: Self political identification based on question "In politics, people sometimes talk of 'left' and 'right'. Where would you place yourself on this scale, where 0 means the left and 10 means the right?" Answers 0 and 1 are treated as "extreme left" while 9 and 10 as "extreme right".

Support for the European Union is generally very high in Slovakia (see Table 4.20). Statistics from Eurobarometer survey demonstrate that the majority of people think that EU membership was a good thing (62 per cent). Moreover, more than three quarters of respondents think that Slovakia benefited from EU membership (81 per cent). According to Eurobarometer surveys, young people in

Slovakia are strong supporters of EU membership. Higher support is also recorded among respondents with higher education and in the urban areas.

Table 4.20 Support for the European Union, Slovakia (per cent)

Year	think EU membership was a good thing	think that country benefited from EU membership
2005	55	74
2006	57	76
2007	65	80
2008	65	84
2009	71	89
2010	59	83

Source: Authors' calculations based on Eurobarometer. Weighted by design weight.

Overall, people in Slovakia have little experience with immigrants. In 2009, 62,900 foreigners (with a residence permit) resided in Slovakia, out of which 62 per cent were from EU member states. According to ESS surveys, support for immigrants has declined in Slovakia.

Table 4.21 Share agreeing no further immigrants to be allowed to country, Slovakia (per cent)

	Of same race/ethnic group	Of different race/ethnic group	From poorer countries outside Europe
By year			
2004	9	15	13
2006	9	14	13
2008	13	15	15
2010	14	18	20
By education			
Low	19	25	22
Middle	11	15	15
High	6	8	10
By income			
Low	14	20	19
Middle	9	13	12
High	8	13	14

Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

As one would expect, support is weaker for immigrants of different race or ethnic group than majority of population. In 2010, one in five respondents opposed the immigration from poorer countries outside Europe (see Table 4.21). On average, people with higher education oppose immigration three times less, relative to low educated. Similarly, respondents from poor households disagree substantially more with allowing further immigrants to country. According to the

Eurobarometer 2010 survey, almost 40 per cent of people feel many ethnic tensions in Slovakia. Ethnic tensions are less prevalent in rural areas (35 per cent) than in cities (49 per cent).

In 2006, the Eurobarometer survey asked its respondents to identify two important things for getting ahead in life (see Table 4.22). The respondents in Slovakia see a good education (49 per cent) and being lucky (39 per cent) as the two most important things for getting ahead in life. Interestingly, being lucky and knowing the right people (35 per cent) comes before working hard (35 per cent) and being smart (26 per cent). Coming from a wealthy family (6 per cent) is identified by only a few. People in rural areas identify the options of being lucky and coming from a wealthy family more often than those living in cities. As expected those with higher education rely the least on luck and family wealth.

Table 4.22 Which are the two most important things for getting ahead in life? Slovakia (per cent)

	Getting a good education	Working hard	Coming from a wealthy family	Knowing the right people	Being lucky	Being smart
All	49	35	6	35	39	26
By location						
Rural	44	34	7	33	42	30
Small town	53	37	6	36	38	21
City	54	31	5	37	32	31
By education						
Low	37	43	10	29	43	25
Middle	42	36	6	35	44	27
High	64	34	5	34	29	27

Source: Authors' calculations based on Eurobarometer 2006. Weighted by design weight.

4.5 Values about social policy and welfare state

Chapter 2 documents that the income inequalities have widened largely since 1990s but a decreasing trend has been observed in the recent years. This pattern is also confirmed by the high percentage of people who strongly agree that income differences are too large as documented in Table 4.23. The figure slightly dropped from 60 per cent in 1999 to 53 per cent in 2009 and the opinion is more prevalent among groups of low socio-economic background. The 40 per cent of high educated respondents agree that income differences are too large in the country.

Table 4.23 Share agreeing income differences are too large, Czech Republic (per cent)

By year		By education		By income	
1999	60	Low	62	Low	63
2009	53	Middle	53	Middle	61
-	-	High	40	High	45

Source: Authors' calculations based on ISSP 1999, 2009. Weighted by design weight. Notes: Figures are a percentage of code 1 out of following choices: 1 = strongly agree, 2 = agree, 3 = neither agree nor disagree, 4 = disagree and 5 = strongly disagree.

Furthermore, a strong support for governmental actions to reduce income differences is visible in the Czech Republic. Based on the ESS, about 63 per cent of respondents supported this policy in 2010. Not surprisingly, the agreement is least endorsed by wealthier individuals and highly educated people (see Table 4.24).

Table 4.24 Share agreeing government should reduce differences in income level, Czech Republic (per cent)

By year		By education		By income	
2002	52	Low	72	Low	69
2004	63	Middle	60	Middle	59
2008	54	High	36	High	52
2010	63	-	-	-	-

Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

Notes: Figures are per cent of codes 1 and 2 to the following answer: "The government should take measures to reduce differences in income levels." Answers 1 = agree strongly, 2 = agree, 3 = neither agree nor disagree, 4 = disagree, 5 = disagree strongly.

Through the social policy government distributes resources to individuals in need and prevents people from poverty. As shown in Chapter 2, the Czech welfare system effectively decreases the poverty rate. Based on Eurobarometer, essentially one in three respondents considers the social welfare as very good or fairly good. The perception about the social welfare situation has changed little in last years and does not vary a lot between respondents with different educations or by their location (see Table 4.25).

Table 4.25 Share who consider the social welfare situation as very good or fairly good, Czech Republic (per cent)

By year		By education		By location	
2005	35	Low	42	Rural area	38
2006	41	Middle	37	Small town	41
2007	35	High	43	City	34

Source: Authors' calculations based on Eurobarometer. Weighted by design weight.

Notes: Figures are a percentage of codes 1 and 2 to the following question: "How would you judge the current situation in the social welfare situation?" Answers: 1 = very good, 2 = fairly good, 3 = fairly bad, 4 = very bad.

Based on the International Social Survey Programme (ISSP) 2006 survey, two in five respondents think the government should definitely provide job for everyone (see Table 4.26). However, every second respondent with low education and low income endorse this opinion. This points to rather strong beliefs about the role of government among low-educated groups.

Table 4.26 Share agreeing the government should provide a job for everyone, Czech Republic (per cent)

By year		By education		By income	
2006	40	Low	48	Low	47
-	-	Middle	34	Middle	40
-	-	High	20	High	26

Source: Authors' calculations based on ISSP 2006. Weighted by design weight.

Notes: Figures are a percentage of code 1 out of following choices: 1 = definitely, 2 = probably, 3 = probably not, 4 = definitely not.

Around a quarter of individuals in the Czech Republic think people live in poverty because of laziness and a lack of willpower (based on the ESS). This opinion is shared among more low educated than high educated (see Table 4.27). The opinion that people live in poverty because of laziness was seen less in 2010. This might be explained by the fact that more people landed in poverty because of economic crisis.

Table 4.27 Share who thinks people live in poverty due to laziness and a lack of willpower, Czech Republic

By year		By education		By location	
2009	28	Low	31	Rural area	28
2010	25	Middle	25	Small town	26
		High	27	City	24

Source: Authors' calculations based on Eurobarometer. Weighted by design weight.

Notes: Figures are a percentage of code 2 to the following answer: "Why in your opinion are there people who live in poverty? Here are four opinions: which is closest to yours?" Answers: 1 = they have been unlucky, 2 = laziness and a lack of willpower, 3 = there is much injustice in our society, 4 = it is an inevitable part of progress, 5 = none of these.

Chapter 2 documents that in Slovakia the incidence of poverty as well as inequality have increased over time. Many Slovaks perceive this as a failure of the government. The percentage of people who strongly agree that income differences are too large dropped from 74 per cent in 1999 to 61 per cent in 2009 (see Table 4.28). About three quarters of people of low socio-economic background in Slovakia consider differences in income too large.

Table 4.28 Share who strongly agree income differences are too large, Slovakia (per cent)

By year		By education		By income	
1999	74	Low	72	Low	77
2009	61	Middle	63	Middle	67
		High	56	High	57

Source: Authors' calculations based on ISSP 1999, 2009. Weighted by design weight.

Notes: Figures are the percentage of code 1 out of following choices: 1 = strongly agree, 2 = agree, 3 = neither agree nor disagree, 4 = disagree and 5 = strongly disagree.

There is a strong support for governmental actions to reduce income differences in Slovakia. Based on the ESS, about three quarters of population would support this policy (see Table 4.29). Not surprisingly, the agreement is least endorsed by wealthier individuals and highly educated people.

Table 4.29 Share who agree government should reduce differences in income levels, Slovakia (per cent)

By year		By education		By income	
2004	76	Low	84	Low	85
2006	74	Middle	76	Middle	74
2008	68	High	57	High	69
2010	77	-	-	-	-

Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

Notes: Figures are the percentage of codes 1 and 2 answers to the following question: "The government should take measures to reduce differences in income levels." Answers 1 = agree strongly, 2 = agree, 3 = neither agree nor disagree, 4 = disagree, 5 = disagree strongly.

Through social policy the government distributes resources to individuals in need and prevents people from poverty. The perception about the social welfare situation has largely improved since 2005. Still, only one in four respondents considered the situation as very good or good in 2007 (see Table 4.30).

Table 4.30 Share who consider the social welfare situation as very good or fairly good, Slovakia (per cent)

By year		By education		By location	
2005	12	Low	19	Rural area	20
2006	20	Middle	17	Small town	19
2007	24	High	22	City	15

Source: Authors' calculations based on Eurobarometer. Weighted by design weight.

Notes: Figures are the percentage of codes 1 and 2 answers to the following question: "How would you judge the current situation in the social welfare situation?" Answers: 1 = very good, 2 = fairly good, 3 = fairly bad, 4 = very bad.

The importance of an individual's decisions and responsibility for individual needs are opposing the need for governmental paternalism. Based on the ESS, the share of respondents who consider an

individual's decisions very important increased by almost 50 per cent (by 7 percentage points) between 2004 and 2010 (see Table 4.31). More than one in five respondents in 2010 believed that it was important to make their own decisions and be free. This opinion is prevalent among highly educated and wealthier people.

Table 4.31 Share who think it is very important to make own decisions and be free, Slovakia (per cent)

By year		By education		By income	
2004	16	Low	13	Low	15
2006	18	Middle	18	Middle	19
2008	22	High	33	High	26
2010	23	-	-	-	-

Source: Authors' calculations based on ESS Cumulative file 1-4 (2011). Weighted by design weight.

Note: Figures are the percentage of the code 1 answer to the following question: "It is important to make own decisions and be free." Answers 1 = very much like me, 2 = like me, 3 = somewhat like me, 4 = little like me, 5 = not like me, 6 = not like me at all.

About a fifth of individuals in Slovakia think people live in poverty because of laziness and a lack of willpower (based on the ESS). Although this opinion is more prevalent among men than women, it is equally shared among the low and high educated (see Table 4.32). The opinion that people live in poverty because of laziness was less frequent in 2010. This might be explained by the fact that more people got into poverty because of the economic crisis.

Table 4.32 Share who think poverty is because of laziness and a lack of willpower, Slovakia (per cent)

By year		By education		By gender	
2009	23	Low	23	Male	24
2010	19	Middle	20	Female	18
-	-	High	24	-	-

Source: Authors' calculations based on Eurobarometer. Weighted by design weight.

Note: Figures are the percentage of the code 2 answer to the following question: "Why in your opinion are there people who live in poverty? Here are four opinions: which is closest to yours?" Answers: 1 = they have been unlucky, 2 = laziness and a lack of willpower, 3 = there is much injustice in our society, 4 = it is an inevitable part of progress, 5 = none of these

4.6 Conclusions

We can conclude that both political culture and national culture have heavily influenced the functioning of civil society in the Czech Republic. Another factor in the functioning of civil society is mutual distrust between politics and civil society. The average citizen does not trust the political elites; and conversely, individual politicians and political parties are distrustful of civil society. Due to

significant levels of corruption, there is also a growing public scepticism regarding politics, reflected in a decreasing voter turnout. Furthermore, Czechs are among the nationalities that are more critical of, and some of the least enthusiastic about, the EU, and there has even been a slight fall in the proportion of positive attitudes towards EU membership in recent years.

The Czech Republic has been traditionally viewed as the country with a lower number of poor in comparison with other similar countries. Indeed, there is a relatively positive public perception about the functionality of welfare system in the Czech Republic. However, more recently centre-right parties in the government are using the economic crisis to weaken the welfare state.

Over the last two decades, the Czech Republic has witnessed a significant shift in the area of migration and immigrant integration. Migrants have been attracted to the Czech Republic mainly because of its relatively strong labour market. However, social surveys show that the support for further immigrants has decreased in the last decade. In the future, the government will have to address integration policies towards immigrants more intensively and systematically.

Results for Slovakia presented above are in general consistent with findings about social inequalities already discussed in previous chapters. In particular, three major points should be mentioned. First, political participation in Slovakia can be characterized by a decreasing voter turnout, which became less volatile in the last ten years (reaching 55 per cent to 60 per cent in parliamentary elections). Similarly to other countries, voters with the highest socio-economic background exhibit also the highest participation. With respect to civic engagement, a declining trend in realized and anticipated civic participation has been documented. Again, the actual participation in civic organizations is higher among more educated and wealthier people. Moreover, both union density and union coverage have sharply dropped in Slovakia.

Second, political extremism in Slovakia has been always dominated by right-wing parties. A nationalist party, the SNS, had a parliamentary representation until 2012 and a slowly declining electoral support (at about 5 per cent in 2010). Based on the ESS, the share of respondents who classify themselves belonging to the extreme left or right wing is relatively small and stable over time. The share of individuals who classify themselves as belonging to the extreme left increases with education, while the opposite is true for the extreme right. A similar pattern is observed by household income, with poorer individuals inclining to the extreme left and richer ones to the extreme right.

Finally, findings from social surveys suggest that there is a lack of trust in national institutions and relatively strong demand for governmental interventions. The surveys also show strong support for the European Union, while the endorsement of immigration has recently declined in Slovakia. The

number of people who consider the importance of an individual's decisions and responsibility has been increasing in recent years.

5. Are Public Policies Effective in Combating Inequalities?

5.1 Introduction

In this chapter, we present the main changes to public policies in the Czech Republic and Slovakia that have affected or potentially could affect inequalities. We first look at the institutional settings of labour markets in the two countries. The minimum wage was hardly able to decrease inequality in the Czech Republic due to its relatively low value compared to the average wage as well as the “no change” policy in recent years leading to further lowering of its relative value. Similarly, union membership is relatively low, and thus trade unions seem to be not strong enough to have a significant impact on inequality. Trade unions in Slovakia are similarly weak, although the minimum wage, relative to average wage, is somewhat higher and steadily increasing.

We continue with a simple analysis of tax system and social expenditures. The main shift in taxes in the Czech Republic was due to the flat-tax reform in 2006, which slightly decreased the tax burden for all income groups. The Necas government is increasing consumption taxes, which can be expected to have an adverse effect on low-income households. Social expenditures in Slovakia mainly follow business-cycle patterns, although political developments may matter as well. Policies introduced in recent years in Slovakia were mostly aimed to decrease the unemployment rate, enhance attractiveness for business and create new workplaces. The reforms introduced mostly in the first half of the 2000s changed the taxation system, pensions system and partially the health-care system, education and social benefits system. Some reforms have had a direct impact on redistribution of income (e.g. taxation reform and social system reform), and some have focused on the business environment.

There is not much effectiveness in fighting long-term unemployment in either of the two countries, although the problem may be more severe in Slovakia, which suffers from some of the highest long-term unemployment rates in Europe. Active labour market policies are under-financed and their effectiveness is not monitored. There is a long-term danger in pension expenditures, as the Czech and Slovak societies are rapidly aging.

In health care, the Czech government has established co-payments for every doctor visit. It transpires that this policy measure has not decreased the frequency of doctor visits, but instead it has placed a greater financial burden on the elderly. Slovakia adopted co-payments in early 2000s, but these were discontinued by the Fico cabinet in 2006. Several new fees were introduced, however.

The education system suffers from notorious under-financing, which adversely affects the quality of teaching at all educational levels. From the inequality perspective, the most significant are the absence of day care for very young children and the tracking system of high schools, which lead to irreversible educational decisions for relatively young children.

5.2 Labour income

We start our discussion on public policies with wage bargaining and the minimum wage. Wage development in the Czech Republic is weakly tied to centralized bargaining decisions. Trade unions express their opinion on wage development through the negotiation with the Czech government and representatives of Czech employers. It is called a tripartite system and representatives of all three bodies are in the Council of Social Accord. This council usually agrees on the target for wage increases for the next year.

However, it is very unclear to what extent this agreement has any real impact on the economy. The power of trade unions dramatically diminished in early 1990s. The number of union members has stabilized at fewer than one million workers, which is about 25 per cent of the workforce. Unionization is thus lower than the EU average and is in contrast with the structure of the economy, which is mainly dependent on manufacturing and middle-sized firms.

Although the coverage of unionization is relatively low, the concentration is relatively high compared to other European Union member states. Around 55 per cent of trade union members are in one organization – the Czech-Moravian Confederation of Trade Unions – and 22 per cent are in the next largest, the Association of Independent Trade Unions.

Babecky et al. (2008) provide direct evidence about wage setting in Czech firms. Firms in their stratified sample provide basic information about the wage-setting process. They show that firms tend to use past and expected inflation in their wage-setting process and they adjust the wages about once a year. Collective agreement also plays a role, mainly in explaining downward wage rigidity. This suggests that tripartite agreement can play a role for setting the overall framework for wage increases, but mainly for middle-sized and large firms

Due to the relatively weak centralized bargaining. It is unlikely that most endangered workers who are employed in small firms or are self-employed might be affected by the tripartite agreement.

The comparison of the increase in the average wage and the minimum wage provides a striking contrast (see Table 5.1). The minimum wage has hardly caught up. The last change to the minimum wage was undertaken in 2007, and its current level is about 33 per cent of the average wage, while in 2005 this share was about 39 per cent. The current right wing government does not show any

willingness to change it, even though the average wage has increased substantially since 2008. The current minimum wage is quite low so that it is hardly binding for wage contracts. It means that it does not make low-skilled employees too expensive. On the other hand, it is such low level that it does not satisfy the basic purpose of a minimum wage, which is preventing employers from abusing their potential dominant position in local labour markets and extracting rent from employees.

Table 5.1 Minimum wage in the Czech Republic (CZK in thousands)

Year of change	Minimum wage per month	Average wage
1996	2.5	9.8
1998	2.7	11.8
1999	3.3	12.8
1999	3.6	12.8
2000	4.0	13.6
2000	4.5	13.6
2001	5.0	14.8
2002	5.7	15.9
2003	6.2	16.9
2004	6.7	18.0
2005	7.2	18.9
2006	7.6	20.2
2006	8.0	20.2
2007	8.0	21.6
2012	8.0	24.2

Source: Czech Statistical Office.

The Czech labour market is distorted by the special regime for self-employed in paying social security and health tax. In fact, the total labour cost of self-employed workers is lower by around 30 per cent compared to the labour cost of standard employees. The original idea of this arrangement was to improve the position of self-employed individuals in the labour market.

However, the result of this arrangement is that many workers are forced to become self-employed, as this is much cheaper arrangement for their potential employers. Indeed, there are around one million self-employed (25 per cent of the workforce) with a job without any former protection or health insurance. Furthermore, the self-employed pay lower social security tax, which results in low future pensions and threatens stable social development in the future.

Many self-employed workers perform jobs with similar characteristics as those of employees. Relatively low-skilled workers with a low bargaining position thus end up in unprotected jobs. The current government is unwilling to fully equalize the conditions for employees and self-employed.

Under a new act, they established stricter controls of firms which “employ” self-employed workers, which although officially illegal is widespread. The success of stricter control is, however, uncertain.

In Slovakia, besides the economic boom that the country experienced at the end of the 2000s, the average wage remained lower compared to other Visegrad countries. Therefore, we can conclude that employees benefited from the boom mostly on the extensive margin, through decreased unemployment, rather than on the intensive margin, through increased wages. However, the low wage level seems to be the consequence of relatively lower productivity by Slovak employees (Brook and Leibfritz, 2005). Slovakia has an institutionally defined minimum wage, which is subject of negotiation within the social dialog.

Slovakia maintains social dialog on all three levels: national, sector and company level. The tripartite level is composed of government representatives, representatives of employers and employees organizations. The tripartite is an advisory body of the government and its decisions are not legally binding for the government. Nevertheless, the tripartite is the space for negotiation the labour legislation, including the minimum wage.

At the sector level, only few sectors in the economy preserve the collective bargaining among which we can find construction, automotive and machinery. Because of the voluntary membership in employee and employer organizations, there is a tendency to decrease the number of collective agreements at the sector level. The company level is very individual, and there are no clear statistics which capture the number of collective agreements at the company level.

All three levels are important for setting the wages in the given sector or particular company. The negotiated wage in the collective agreement cannot derogate from the statutory minimum wage defined by law. Social partners negotiate the increase of statutory minimum wage regularly at tripartite level. In Slovakia, the minimum wage has been set by law since 1991, when it was defined at 40 per cent of average wage, but by 2000, it had decreased to 35 per cent (see Table 5.2). Currently, the minimum wage is once again 40 per cent of average wages.

Table 5.2 Average and statutory minimum wage, Slovakia (EUR)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Average wage, nominal	379	410	449	477	525	573	623	669	723	745	769	786
Statutory minimum wage	133	146	163	185	202	216	229	252	269	295	308	317
Share (per cent)	35	36	36	39	38	38	37	38	37	40	40	40

Source: SOSR, authors' calculations.

Union density has declined rapidly during the last 20 years. While in 1993, 67 per cent of employees were engaged in union activities, it was only 17.2 per cent in 2008. The actual coverage rate is estimated at 40 per cent, so fewer than half of employees are covered by collective agreements.

The minimum wage has been a subject of political debate for decades. According to law, it should be increased each year, but the mechanism is not clearly stated in the legislation. Therefore, it is a subject of tripartite negotiations among government, employers and trade unions. While unions and center-left parties perceive it as an efficient tool for combating inequalities, especially because of the phenomenon of in-work poverty, employers and center-right parties see it as an obstacle to new job creation.

According to the Statistical Office of the Slovak Republic (SOSR), the minimum wage is 40 per cent of average wage in Slovakia. Currently, 5.4 per cent of employees have a wage at around the minimum threshold.

In the 1990s, the number of self-employed grew rapidly. Besides the advantages associated with self-employment, there are also some pitfalls that distort the income distribution. For example, self-employment can be considered as less advantageous in terms of social protection. The reason is that according to Slovak legislation, the self-employed are fully responsible for their contributions to social security.

The self-employed are obliged to pay social contribution to the amount of 47.15 per cent of income. The minimum base from which the social contribution has to be paid is 44.2 per cent of the average wage. The minimum monthly social contribution is around 163 euros, and the maximum is 1,258 euros. However, paying the minimum social contribution does not mean entitlement to even the minimum pension.

The preference of high net income of self-employed people is obvious here. According to the Social Security Agency of Slovakia, 87 per cent of all self-employed contribute minimum payments. These low payments are already starting to have some consequences. There is a group of retired self-employed who has to be supported by additional social transfers because they are only entitled to very low pensions. The current government intends to eliminate such cases by increasing the minimum base for social contributions to 50 per cent of the average wage.

5.3 Taxation

Taxation is an important policy measure affecting inequality in both countries. The Czech tax system is a standard central European system that consists mainly of income taxes and taxes on production. The share of taxes on production reaches around 60 per cent of the total tax receipt and has been increasing. Restructuring the tax burden from income to production and consumption taxes has resulted in a greater increase in the tax burden for lower-income households, since consumption and production taxes have a regressive impact (see Table 5.3).

The most important recent change in the income tax system was the introduction of the flat tax in 2006. The development of redistributive effect of average income tax is shown in Table 5.4. The average effective income tax rate includes income tax and employee social security contributions, less cash benefits. If we compare average tax rate for a single person without children for different income groups, the differences are quite low. The lowest income group has an approximate 14-per-cent income tax rate, and the highest income group pays a 26-per-cent income tax rate. The development over time suggests that the level of redistribution increased compared to 2005. This development is surprising given that flat-tax reform was established in 2006. However, it needs to be stressed that the previous tax scheme was not extremely progressive (the maximum rate used to be 32 per cent and new flat-tax scheme changed the rate to 15 per cent, but significantly broadened tax base). Second, the tax reform in 2006 increased the size of the non-taxed income base. If we look closely at the tax rates for median to top income groups, the tax rate remained relatively similar from 1995 through 2010.

Table 5.3 Structure of taxes, Czech Republic (per cent of GDP)

	1996	1999	2000	2003	2004	2005	2006	2007	2008	2009	2010
Taxes on production and imports	11,5	11,0	10,6	11,1	10,8	10,5	10,3	10,6	11,3	11,3	10,8
Current taxes on income, wealth, etc.	8,0	8,5	8,0	8,2	7,9	8,3	8,7	9,2	9,1	8,9	8,8
Total tax receipts	19,5	19,5	18,6	19,3	18,8	18,8	19,1	19,8	20,5	20,2	19,7
Actual social contributions	14,6	15,1	14,9	15,0	15,1	15,0	15,5	15,7	15,4	15,5	15,6
Total receipts from taxes and social cont	34,1	34,7	33,5	34,3	33,9	33,8	34,6	35,5	35,9	35,7	35,4

Source: Eurostat

Table 5.4 Average effective income tax, Czech Republic (per cent)

	1996	1999	2000	2003	2004	2005	2006	2007	2008	2009	2010	2011
Single none1												
50% AW	19.3	19.3	19.1	19.8	20.2	20.4	16.8	17.3	14.5	13.5	13.9	14.82
67% AW	20.9	20.9	20.7	21.3	21.5	21.7	19.1	19.7	19.1	17.9	18.2	18.89
80% AW	21.7	21.7	21.6	22	22.2	22.5	20.7	21.3	21.4	20.1	20.3	20.93
100% AW	22.5	22.7	22.5	23.3	23.8	24	22.4	22.9	23.6	22.3	22.5	22.96
125% AW	24	24.2	24	24.7	25	25.2	24.5	25.2	25.5	24.1	24.2	24.59
167% AW	25.8	25.7	25.5	26.5	27	27.3	27.2	28.1	27.3	25.8	25.9	26.22
Single two2												
67% AW	0.3	-15.9	-18.1	-12.6	-10.4	-11.3	-9.3	-12.9	-14.8	-13.3	-12.9	-12.03
One earner, married, two3												
100% AW	7.3	-2.1	-5.3	1.7	4.1	1.4	0	-6.2	-6.9	-6	-5.5	-4.87
Two earner, married, two4												
100 + 33%	11.6	9.5	7	11.3	13.1	12.4	10.2	4.8	6.2	6.5	6.7	7.2
100 + 67%	14.4	14.5	14	17.7	18	17.5	16	11	11.6	11.8	12.1	12.45
100 + 100%	18.6	18.6	18.2	19.3	19.7	19.6	18.2	15.6	16.2	15.9	15.9	16.24
Two earners, married, none5												
100 + 33%	20.9	21.1	20.8	21.7	22.2	22.5	20.3	20.8	20.9	19.5	19.6	19.97
100 + 100%	22.5	22.7	22.5	23.3	23.8	24	22.4	22.9	23.6	22.3	22.5	22.76

Source: Eurostat

Notes: AW = average wage. ¹Single parent without children. ²Single parent with two children. ³One-earner married couple with two children. ⁴Two-earner married couple with two children. ⁵Two-earner married couple with no children.

Households with children enjoy a significantly different income tax scheme than those without. The tax rate is lower compared to childless households and differences across income groups are more pronounced. Currently, the lowest income families pay negative income tax, and the highest-income families have an income tax rate of 16 per cent. The development over time has been in favour of two-earner households. By comparing 2010 and 2005 income tax for low income family with two earners, it dropped by 5 percentage points, for highest income family it dropped by 3 percentage points.

The Income Tax Act has undergone many changes, and the number of words in the Act has been increasing exponentially. Many deductibles are in favour of high income groups. One specific example is the interest on mortgage loans. Mortgages became extremely popular to specifically families with above-average incomes, and the amount deductible from payable tax did not have upper cap up to 2010.

In Slovakia, one of the milestones in the taxation policies affecting the income redistribution was the introduction of a flat income tax rate in 2004. The taxation reform also included changes in value added tax (VAT) and in taxes on capital. In income taxation, instead of a progressive scheme, one tax rate was introduced together with the system of deductions. This reform had an impact on redistribution with estimated slightly negative impacts on middle-income groups and strongly positive impacts on upper-income groups. The effect on low-income groups is rather ambiguous. In the remainder of this section, we introduce basic attributes of the tax reform in 2004, which – after some minor modifications – is still effective in Slovakia. We then discuss its effects on different income groups.

Before 2004, the progressive framework was applied on income taxation. Tax rates were divided into five income brackets, taxed from 10 per cent to 38 per cent. The corporate tax rate was 25 per cent and basic VAT was 20 per cent and reduced VAT was 14 per cent. In 2004, all those tax rates changed to 19 per cent exclusively. In later years, some small exceptions were added, such as reduced VAT at 5 per cent for equipment in the health sector and some changes in deductibles.

Concerning the taxation of labour, the social security contribution stayed unchanged on 48.6 per cent of gross earnings, from which 13.2 per cent is paid by employees and 35.4 per cent by employers. These security contributions are levied on the majority of employee's incomes,³¹ even on very low incomes. The high social security contributions have been criticized for a long time mostly

³¹We include here income from full-time and part-time contracts. According to the Slovak Labour Code, some special contracts called "contracts outside of the main working contracts" are possible and those were not subject to social contribution until 2012.

because they significantly contribute to labour costs and, together with the Czech Republic, are the highest in the Visegrad countries (OECD, 2006).

One of the aims of the tax reform in 2004 was the shift from direct to indirect taxes as the main source of governmental tax revenues. The whole tax reform was planned as income neutral for the government. Therefore, effects on income redistribution were the expected outcome. Analysis by the Ministry of Finance claimed a “not negative” impact on low-income groups, a slightly negative impact on middle-income groups and a strictly positive impact on high income groups (MF SR, 2005). It was especially the effects on low-income groups which induced the discussion over this reform and found many proponents and opponents.

The ambiguous effect of the tax reform on low-income groups is because of two related aspects. The potentially positive effect of the increase of the deductible part of income before taxation led to an effective zero income tax up to the income 1.6 higher than 60 per cent of the median income. On the other hand, the positive effect was supposed to be neglected by the introduction of a flat VAT rate at 19 per cent, which is by definition regressive and therefore, the flat VAT rate will mostly affects low-income groups (Brook and Leibfritz, 2005).

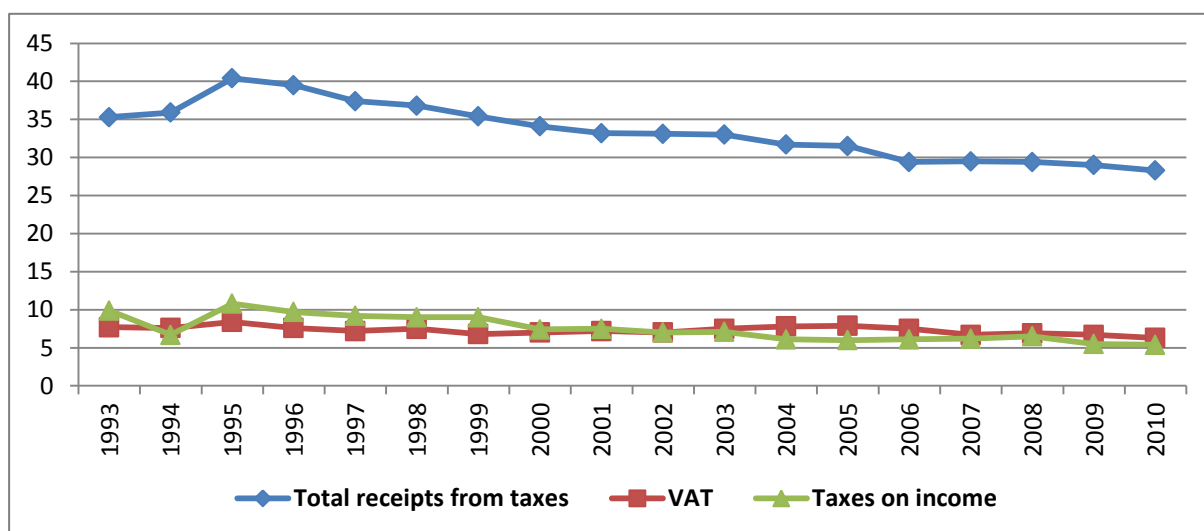
The positive impact on high income groups was the clear outcome, given the setup of the reform. As it is claimed by Brook and Leibfritz (2005), “there are various elements of the Slovak tax reform which tend to change income distribution in favour of the more affluent households”. Therefore, the overall taxation system seems to be less redistributive as the former one.

Something similar is claimed by Moore (2005), who states that the system stayed progressive but to a lower degree. Considering the average tax rate, this decreased for all income groups compared to previous system of taxation mainly because of the significant amount of deductibles. After the reform, the effective tax rate was lower for employed husbands with a non-working spouse and children compared to non-married workers.

Nevertheless, the lack of redistributive effects were intended to be overcome by the effectiveness and simplicity of the new tax system, which were supposed to induce investors’ activity, create new workplaces and reduce tax evasion. The new tax system was supposed to create incentives for low productive groups of people to work and therefore decrease unemployment (Brook and Leibfritz, 2005, p. 30). It is hard to measure the impact of tax reform on job creation because the interest of investors is related to variety of other factors than just taxes. According to estimates, about 13,500 new workplaces were created in Slovakia in 2004 (Golias and Kičina, 2005).

Looking at the tax revenues as a percentage of gross domestic product (GDP), we can see that they decreased between 1995 and 2010 by more than 10 percentage points. The receipts from VAT and personal income tax did not change a lot relative to GDP (see Figure 5.1).

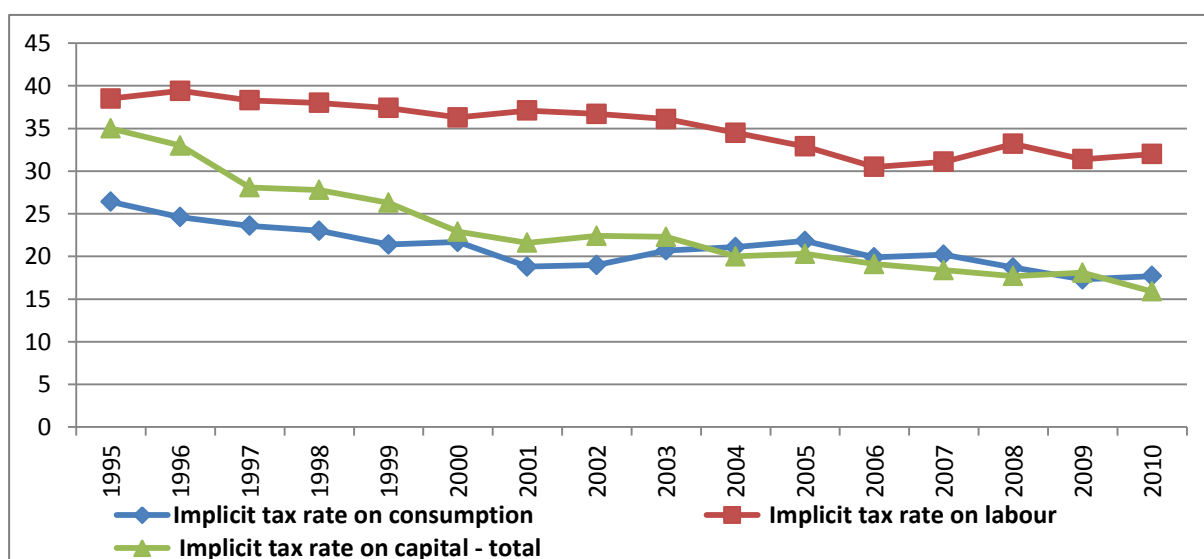
Figure 5.1 Tax revenues as a share of GDP, Slovakia (per cent)



Source: Eurostat.

The implicit tax rate, reported by Eurostat, shows a decline in the tax wedge on consumption, labour and capital. The implicit tax rate is measured as the ratio of collected tax revenues on estimated tax base based on the national accounts. In Figure 5.2, we can see that implicit tax rate on labour exceed the tax burden on capital and consumption.

Figure 5.2 Implicit tax rates, Slovakia (per cent)



Source: Eurostat.

5.4 Social expenditures

Perhaps the most powerful policy measure in combating poverty and inequality are social transfers. For the Czech Republic, tables 5.5 and 5.6 summarize recent development in social expenditures as percentage of the gross domestic product (GDP) for sickness and health expenditures, invalidity, old-age pensions, survivor pensions, family and children benefits, unemployment benefits, housing benefits and social exclusion. The overall picture shows that up to 2008, total expenditures had stayed remarkable stable over time, regardless of which political party was in power. In fact, the GDP share of expenditures was more affected by the economic cycle than by any change in public policies.

For example, a drop in aggregate social expenditures between 2004 and 2003 by 0.8 percentage points (p.p.) was caused rather by unexpected increase in GDP rather than by drop in aggregate expenses, which is shown in Table 5.6.

Table 5.5 Social expenditures, Czech Republic (per cent of GDP)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
All functions	18.2	18.1	18.8	18.8	18	17.8	17.4	17.5	17.5	19.8
Sickness/health care	6.1	6.2	6.6	6.7	6.3	6.3	6	5.9	5.8	6.4
Invalidity	1.4	1.4	1.5	1.5	1.4	1.4	1.5	1.4	1.4	1.5
Old age	7.1	6.9	7.1	6.9	6.6	6.8	6.8	6.9	7.3	8.3
Survivors	0.8	0.8	0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.8
Family/children	1.5	1.5	1.5	1.4	1.5	1.3	1.3	1.6	1.4	1.4
Unemployment	0.6	0.6	0.6	0.8	0.7	0.6	0.6	0.6	0.6	1.1
Housing	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Social exclusion	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2

Sources: Eurostat

As Jurajda and München (2011, 2012) point out, the Czech unemployment benefit system is financed by compulsory payroll contributions. The contribution rate is 1.2 per cent for employers and 0.4 per cent for employees. The contribution rate for self-employed is also 1.2 per cent. However, employment policy expenditure is actually financed from the general budget without any strict link to specific contribution revenue.

Jurajda and München (2011, 2012) also indicate that the registered unemployed are eligible for unemployment benefit and those openly refusing to accept a reasonable job offer or not cooperating with the District Labour Office on their Individual Action Plan, as well as those not actively searching for jobs, may be expelled from the register. However, these conditions are somewhat hard to define and monitor. Unemployment benefit eligibility is narrowly defined in terms of strictly binding conditions. The eligibility depends on the reason the person left previous employment (redundancy,

resignation or fired for a specific reason) and upon the person having contributed to the system during a base period, which excludes recent graduates.

Table 5.6 Social expenditures, Czech Republic (in millions of current CZK)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
All functions	413,601	442,839	482,036	504,382	526,791	553,214	582,992	639,319	672,066	739,940
Sickness/ health care	139,075	151,884	168,804	178,920	185,298	195,067	199,876	215,487	222,767	239,254
Invalidity	32,037	35,302	37,479	40,685	41,430	43,056	49,829	52,512	54,823	57,176
Old age	160,644	169,625	182,541	185,229	194,507	212,206	227,174	254,174	281,441	310,322
Survivors	18,663	20,632	22,120	22,589	22,739	23,670	24,864	26,741	27,182	28,297
Family/ children	34,984	36,452	38,738	38,477	44,164	41,765	44,040	58,787	53,549	53,893
Unempl.	14,309	14,406	16,513	20,836	20,877	19,767	18,618	22,060	23,666	39,283
Housing	2,710	2,720	3,038	2,904	2,623	2,547	2,389	2,205	2,194	2,896
Social exclusion	11,178	11,818	12,803	14,742	15,153	15,136	16,202	7,353	6,444	8,819

Sources: Eurostat

Currently around 27 per cent of all expenditures on employment policies is spent on active labour market policies. There is, however, no true evidence-based evaluation applied. In fact, there are specific groups who have had persistently high unemployment for two decades: the Roma minority and young mothers with young children. The activation policies are failing to succeed.

Specific groups suffer from high long-term unemployment and the system is not able to help them. Activation policies are mainly failing to increase their human capital. The current government is focused on avoiding abuse of the system. There is very little attention on activation policies.

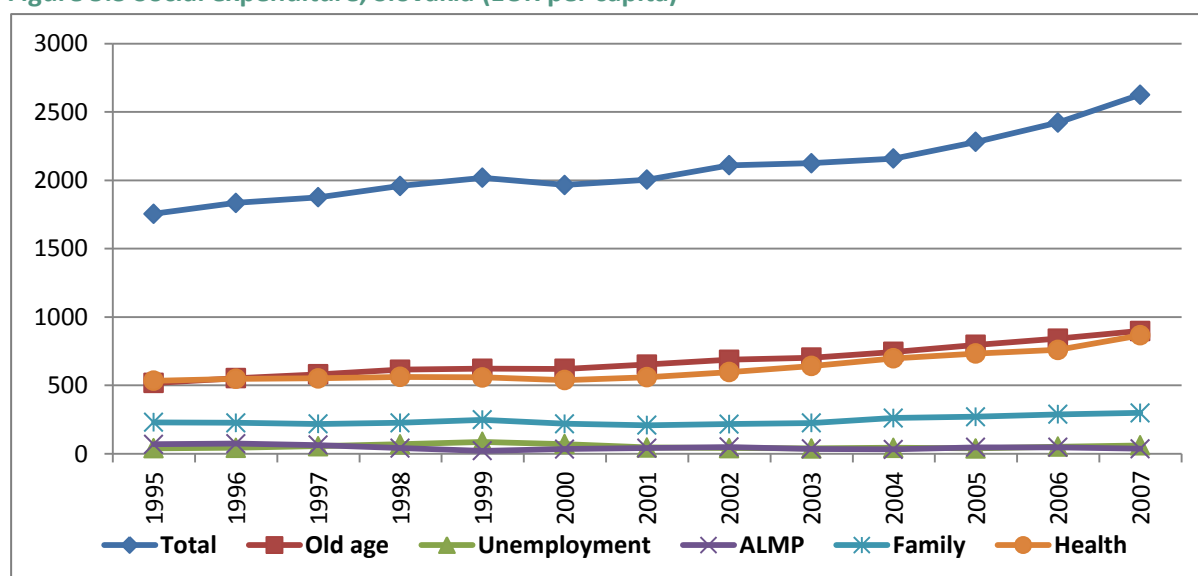
In Slovakia, according to the OECD SOCX database, we can see that the social expenditures expressed as a percentage of GDP have changed significantly since 1995. While total expenditures in 1995 were approaching the OECD average, they were substantially lower in 2007 – the OECD average was 19.2 per cent of GDP and for Slovakia it was 15.7 per cent. Slovakia also spends lower amounts of its GDP on social policies compared to neighbouring countries. For example, the level of expenditures in the 1990s were similar to the Czech Republic, but while Czech Republic also kept the level of expenditures at 19 per cent of GDP in the 2000s, Slovakia performed more restrictive fiscal policies.

Relative comparison of expenditures, expressed as a percentage of GDP, allows us to compare differences between countries. However, within differences are better captured with per capita figures. The reason is that the increased GDP and the constant expenditures could result in a decreased ratio of expenditures on GDP. This seems to be the case for Slovakia. In 2006 and 2007,

Slovakia experienced unusual economic growth at almost 8 per cent per year. Therefore, the relative measure of expenditures as the ratio of GDP reveals an ambiguous conclusion.

That is why we examined expenditures expressed in per capita in constant prices. We see that those rose by almost 50 per cent from 1995 to 2007³². Mostly pensions (increased by 74 per cent), unemployment benefits (by 55 per cent) and family expenditures (by 30 per cent) contributed to that increase. On the other hand, expenditures on active labour market policies (ALMP) decreased remarkably – by 47 per cent (see Figure 5.3).

Figure 5.3 Social expenditure, Slovakia (EUR per capita)



Source: OECD.

The increase in expenditure on pensions is not surprising when we consider that Slovakia has an ageing society. The increase of unemployment benefits and family benefits expenditures are the consequence of the social policy, which is criticized for providing very low incentives to work for low productive workers. In this context, the decrease of expenditures on ALMP by 47 per cent is surprising (see Table 5.7). Considering the persistently high levels of long-term unemployment in Slovakia, the decreased ALMP expenditures seem to be one of the reasons why still more than 50 per cent of unemployed are without work for more than one year. Another fact worthy of mention is the

³²Source: OECD SOCX database, own calculation.

absence of any housing policy in Slovakia. According to the OECD database, expenditures are virtually zero.³³

Table 5.7 Social expenditure as a share of GDP, Slovakia (per cent)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Old age	5.5	5.5	5.6	5.7	5.7	5.7	5.7	5.8	5.6	5.7	5.7	5.6	5.4
Survivors	1	1	1	1	1	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8
Health	5.7	5.5	5.3	5.2	5.2	4.9	4.9	5	5.1	5.3	5.2	5	5.2
Family	2.5	2.3	2.1	2.1	2.3	2	1.8	1.8	1.8	2	1.9	1.9	1.8
ALMP	0.8	0.7	0.6	0.4	0.2	0.3	0.4	0.4	0.3	0.2	0.3	0.3	0.2
Unempl.	0.4	0.4	0.5	0.6	0.8	0.6	0.4	0.3	0.3	0.3	0.3	0.3	0.4
Total	18.8	18.4	18	18.1	18.6	17.9	17.6	17.7	17	16.5	16.3	16	15.7

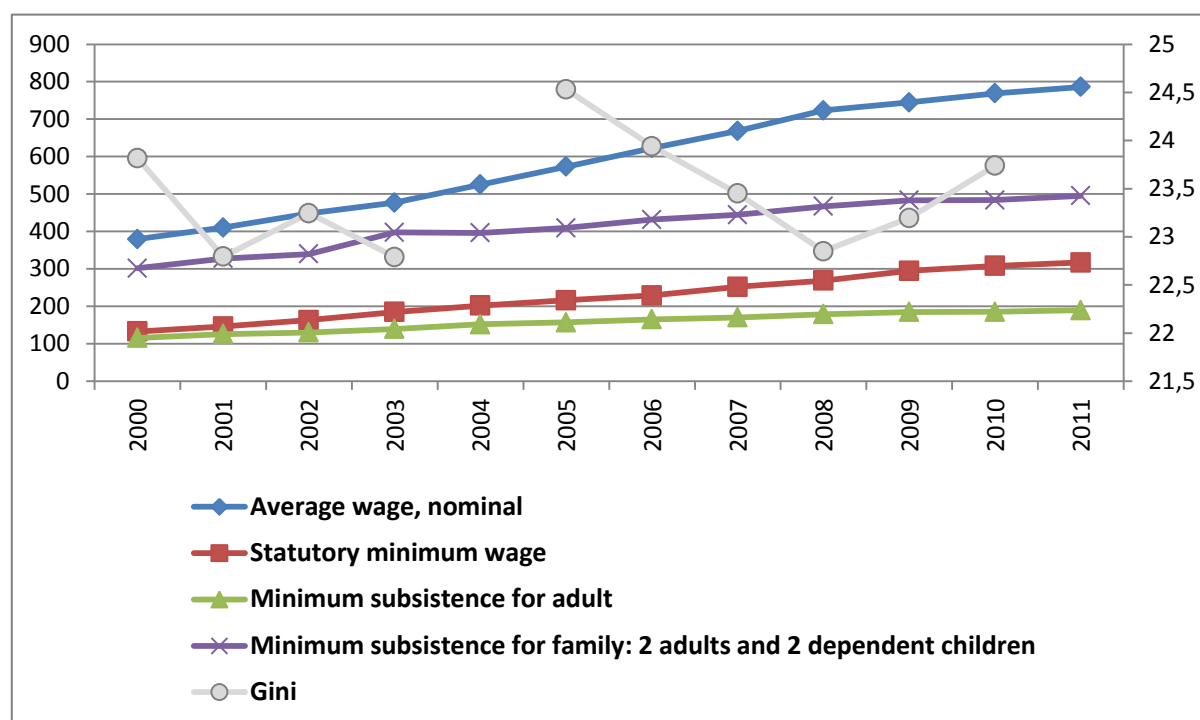
Source: OECD, SOCX.

The actual discussion about the social policies in Slovakia is targeted at low productivity individuals that are long-term unemployed. On the one hand, they are facing the difficult situation on the labour market (no or very low qualification and discrimination). On the other hand, social benefits received do not stimulate their activity to search for a job. This has a negative impact on income distribution in Slovakia because many of them appeared in the inactivity trap.

For example, when we compare the minimum subsistence levels for family with two children and statutory minimum wage, we see that the minimum wage is lower. According to Slovak law, once started working an individual is only entitled to very low or no social benefits. As a consequence, there are cases when the received benefits exceed the earnings of low-income workers. This especially concerns families with dependent children (younger than 18 years). The actual discussion is about the changes in this system with the aim to increase the marginal income of household if at least one of the partners works (Nádaždyová, 2011).

In Figure 5.4, we can see the development of the minimum subsistence benefits compared to statutory minimum wage and average wage in the 2000s. What is remarkable is the increasing difference between minimum wage and minimum subsistence level. Actually, the minimum wage is 40 per cent higher than minimum subsistence for a single adult.

³³The only housing expenditure included in social benefits is housing benefit. Housing benefit is supposed to compensate part of the paid rent (around 60 euros per month). They are provided to individuals without work or with very low income.

Figure 5.4 Wages and social policy, Slovakia (EUR)

Source: MoLSaF, SOSR.

Notes: Constant prices, left axis. The Gini coefficient on the right axis.

Old-age pensions are one of the biggest long-term challenges for the sustainability of public finances in the Czech Republic, even though the expenses have not been growing substantially. The projections of demographic development are extremely unfavourable.

The pension system is pay-as-you-go (PAYG), with the retirement age currently around 63 for men and 62 for women. For women, it depends on the number of children. There have been several attempts to reform the system and maintain the whole system sustainable. First, several measures were undertaken to make early retirement less attractive. These measures were mostly effective. One of them was analysed in Kocourek and Pertold (2011). In this evaluation study, the authors find a substantial labour market response to the changes in the parameters of early retirement benefits. There is, however, little evidence on the risk of unemployment of older workers in the labour market. Kocourek and Pertold (2011) also show that there is substitution between disability pensions and other early retirement options.

Second, the statutory retirement age has been prolonged each year by three months for women and two months for men. Currently, 30-year-olds will retire at age 66 at the earliest. In the current version of legislation, there is no upper cap, nor is there a clear plan how to activate older workers in the labour market.

Third, the new second pillar will be established in 2013. It will be voluntary and the great unknown is the number of participants. Those above 45 years of age will have very limited time to make the irreversible decision to enter the pillar. Recent calculations by the think-tank IDEA (Kalíšková and München, 2012) show that participation in the scheme may only be advantageous for above-average income earners. But even among high earners the pessimistic expectation about financial sector would make the second pillar unattractive. The issue of low costs and transparency is not sufficiently addressed and the voluntary nature of the opt-out is likely to leave major demographic groups under-prepared for their retirements in terms of their savings.

To sum up, there is a long-term danger of very low pensions for the majority of pensioners in the PAYG pillar. This has been documented by many projections, including those from the Ministry of Social Affairs. There are no signs that other pillars could effectively step in and add substantial amounts to cover the loss in old-age income for the majority of pensioners. The current plan of substantial prolonging of the retirement age might not be socially feasible. The current government does not show any willingness to directly help older workers to stay in the labour market as long as possible. In fact, a recent policy measure did just the opposite – it increased disincentives to work after the statutory retirement age.

In Slovakia, among the reforms introduced in the mid-2000s, pension reform was – together with the tax reform – the most influential. The reform introduced in 2004 changed the former pay-as-you-go system (PAYG) to the three pillar system. The first pillar remained the features of the former PAYG system (i.e. non-funded pillar and mandatory), the second pillar is fully funded and mandatory, and the third pillar is fully funded but voluntary. The social contributions were equally split among the first and the second mandatory pillar at 9 per cent each. This was slightly more than in Poland (7.3 per cent) and Hungary (6 per cent). The aim of the reform was to increase the linkage between the contributions and benefits as well as to create a more stable pension system based on diversified sources (Melicherčík and Ungvarský, 2004).

According to some critique, there was no reason to implement the three pillar scheme and the whole reform was rather motivated by: “investors’ efforts to expand financial markets through the inflow of previously public financial resources; pressure from the international financial institutions, particularly the World Bank; political efforts to implement the neoliberal notion of merit in the pension scheme; and the state’s effort to shift the risk of unfavourable developments onto individuals” (Lesay, 2006, p. 7).

The three pillar system has not been in place for long, so we cannot assess its impact on income distribution so far. The prognosis of Melicherčík and Ugrvaldský (2004) suggested that there is a still

risk that the pensions from the second pillar could be overcome by the first pillar. The current financial crisis also brought even more ambiguity into the new pension scheme and its outcome.

Therefore, the current debate is more concentrated on the two-fold problem of financing the newly established system. The first problem is the financing of the first pillar from public sources which is still the only source of the current pensions. The estimated debt caused by the missing contributions into first pillar is around 3.4 per cent of GDP per year.³⁴ In addition, the second pillar participation is an issue. There are ongoing changes in the conditions for whom the second pillar is and for whom it is not mandatory. This brings even more ambiguity into the whole system.

The health-care system in the Czech Republic functions relatively well, with virtually equal access for all population. It is publicly funded, but the government recently established several policy changes that increased private copayment into the system. First, there is gradually increasing copayments for prescribed medical pills. The second, and most important recent change, was in 2008, when the Czech government established copayment for each visit to a general practitioner, prescriptions and days of hospitalization.

Hromadkova and Zdenek (2012) describe it as follows. Prior to the reform, the Czech Republic health insurance system has provided complete coverage – the level of cost-sharing by patient was very low and solely consisted of the supplementary payments for prescription drugs. The expenditure on prescription drugs and medical aids together accounted for approximately 60 billion CZK paid from the public health insurance system each year. The estimated value of unused and expired drugs was between 4-10 billion CZK annually, accounting for 6 per cent to 16 per cent of total expenditure. Moreover, the Czech Republic was the country with the highest number of physician visits per person in the European Union, at 13 visits per year. According to anecdotal evidence some of the doctor visits were undertaken just to get a prescription.

On 1 January, 2008, in an attempt to achieve lower utilization, the Czech Ministry of Health introduced mandatory cost sharing in the form of lump-sum copayments for several types of health-care services: physician visits (30 CZK), prescriptions (30 CZK), emergency room visits (90 CZK) and each day of hospitalization and institutional care (60 CZK). With prescribed medicines, the patient was obliged to pay 30 CZK for each item (type of drug) on the prescription, regardless of the number

³⁴Based on the governmental material about the law of State budget for 2013-2015. According to that material, the implicit debt caused by ageing society is estimated at 164 per cent of GDP from 2012 to 2060. See www.rokovanie.sk/File.aspx/ViewDocumentHtml/Mater-Dokum-149212?prefixFile=m_ (in Slovak).

of packages. The copayment was not paid if the prescription drug was fully paid by the patient (e.g. contraception) or if the drug could be easily purchased without any prescription.

To summarize the results of Hromadkova and Zdenek, the reform did not change the behaviour of the most vulnerable groups of patient. The increasing trend in the utilization of older individuals persists, and thus they carry a larger financial burden. This remains a high risk for the future, as old-age pensions will relatively decrease.

In Slovakia, health expenditures constitute around 5 per cent of GDP and together with pension expenditures are the highest among social expenditures (see Table 5.8). The accessibility of health services is in general satisfactory, although the level of services provided varies. Moreover, the health sector generates a considerable share of public debt. Therefore during the 2000s some reforms such as privatization of city hospitals, and introduction of co-payments of patients were introduced. Nevertheless, none of the reform package measures in 2003 and 2004 had significantly decreased the debt in the sector.

Health insurance contributions are obligatory in Slovakia. Those who are outside of the labour market such as children, students, retired and also unemployed are insured by the state, i.e. the health contributions are paid by the state. Therefore, the accessibility of the health services is virtually guaranteed to each citizen. However, the quality of the services and the efficiency of the health care are criticized. For example, Verhoeven et al. (2007) analysed the cost-efficiency of health care system and its relation to outcomes. They found that health care efficiency is rather low compared to western European countries. At the same time, the efficiency levels are comparable to the new EU member states. As the main source of inefficiency they identified the low private contributions and high number of consultations and visits to doctors.

Regarding accessibility of health care, mostly the introduction of co-payments has been discussed. In 2004 co-payments were levied on visits of the practitioners; stays in the hospital or drug prescriptions. They were obligatory to the most of the population with some exceptions for disabled. However, their level was rather low and the expected result – the decrease of unnecessary visits at the doctor – was not achieved, just like in the Czech Republic more recently (Hromadkova and Zdenek (2012)). On the other hand, they turned to provide doctors and hospitals with non-negligible additional income. Nevertheless, the co-payments were abolished just in 2006 when the new government took the office.

5.5 Education

The characteristics of educational system largely determine social mobility of individuals and groups. The Czech education system is notoriously under-financed and Table 5.8 shows that there have been no signs of improvement. Teachers' wages at all educational levels are too low to be competitive in the Czech labour market. A new study, Münich et al. (2012), also finds that there is apparent adverse selection of applicants to pedagogical colleges. Most skilled high school graduates choose different university degree subjects. In total, the quality of teaching is depreciating, which could be supported by decreasing Programme for International Student Assessment (PISA) scores in traditionally strong subjects such as mathematics and sciences.

Table 5.8 Expenditures on education, Czech Republic (per cent of GDP)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
All levels of education combined	4.71	4.46	3.95	3.97	4.04	3.93	4.15	4.32	4.2	4.08	4.42	4.05	3.92	4.38
Primary level of education (ISCED 1)	–	–	–	–	–	0.66	0.67	0.68	0.64	0.59	0.6	0.56	0.58	0.7
Secondary level of education (ISCED 2-4)	–	–	–	–	–	2.01	2.14	2.23	2.17	2.14	2.13	1.96	1.92	2.07
Tertiary level of education (ISCED 5-6)	–	–	–	–	–	0.76	0.83	0.9	0.9	0.86	1.18	1.03	0.93	1.02
Pre-primary level of education (ISCED 0)	–	–	–	–	–	0.51	0.51	0.52	0.48	0.49	0.51	0.5	0.49	0.6

Source: Eurostat

However, there has been big improvement in the accessibility of college education, which was originally designed only for elites. Currently, about 50 per cent of high school graduates go on to college. Despite this, there is anecdotal evidence of a decreasing trend in the quality of tertiary education, and there is also no proper distinction between bachelor and master levels of education. Many programmes often fail to meet the demand for skills in the labour market. The quality of college education is also affected by low or non-existent scientific output of many Czech universities. This problem is especially pronounced in social sciences and humanities.

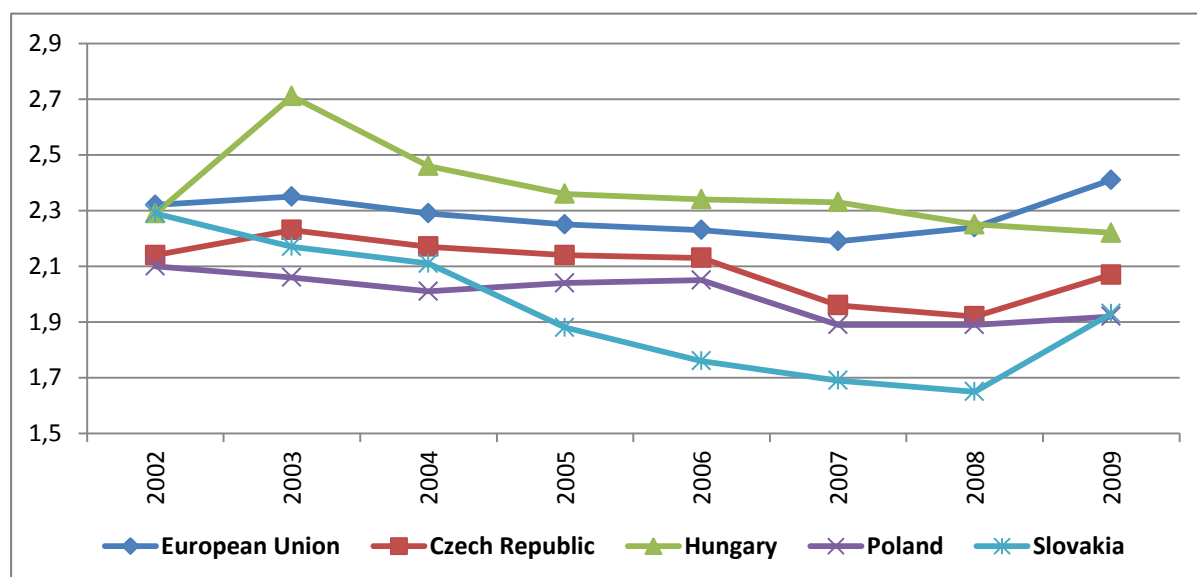
The traditional problem of Czech education is the almost non-existent day care for children aged three or younger. This has very strong impact on labour market participation of young women with children, which is among lowest in Organisation for Economic Co-operation and Development (OECD) countries. The current government has made no attempts to improve this situation. In fact, Czech women with young children are discouraged to enter the labour market by paid maternity leave,

which can be received until the child is four years old. The non-existence of high-quality day care for very young children adversely affects inequality, as children from disadvantaged families get inappropriate background for their further education.

The high school system is based on tracking children into different types of schools. There is a strong sorting of students based on their background into gymnasiums, vocational schools and apprenticeships. In fact, the pool of children is fairly homogenous within school-types. This is one the main source of inequality in the Czech society, as those students who choose the “wrong” type of school are disadvantaged in any goals of tertiary education and ultimately perspectives in the labour market.

Education institutions in Slovakia are comprised of pre-primary schools, primary and secondary schools, and universities and other institution providing tertiary education. Pre-primary schools and primary schools are financed by the local municipalities, while secondary schools are financed by upper regional administrative units.³⁵ In the 2000s, primary and secondary schools passed several reforms. Because of the significant decrease of youngest cohorts, many of schools were merged or cancelled. Tertiary education is financed by the central government.

Figure 5.5 Expenditures on education as a share of GDP, Slovakia (per cent)



Source: Eurostat.

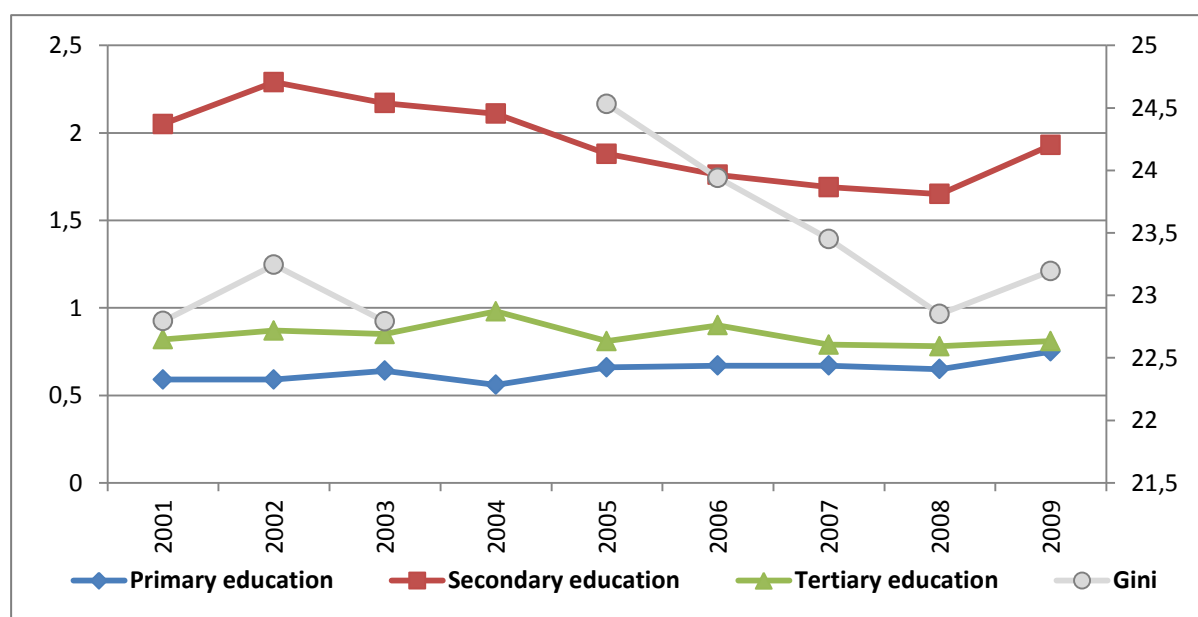
³⁵ Slovakia comprises of eight Upper Territorial Units (Vyššie územné celky), which were constituted as apart of decentralization reform in years 2001-2004. The reform included transfer of huge amount of competences on municipalities of those eight regions. The system of financial flows also changed and the main source of income are personal income taxes. At the local level, reform had a significant impact on local services such as education, health care and culture, among others.

The overall expenditures on education as a percentage of GDP can be seen in Figure 5.5. Especially in recent years, Slovakia has relatively decreased its education expenditures below the EU average as well as below the levels of Visegrad countries.

The development of expenditures in Slovakia is shown in Figure 5.6. In recent years, Slovakia has increased remarkably the per head expenditures in primary and secondary schools, but it still has very low per head expenditures on education (Golias, 2011). The share of expenditure on education on overall public expenditure increased between 1995 and 2007 by 1.3 percentage points, from 9.2 per cent to 10.5 per cent.³⁶ According to data retrieved from Eurostat, secondary education takes the largest share of overall expenditures on education.

In addition, this increase can be misleading when we consider the reduced number of pupils at schools. This claim is confirmed by available data retrieved from OECD where the share of expenditures on primary and secondary school from overall expenditure on education decreases over time (see Figure 5.6).

Figure 5.6 Expenditure on education as a share of GDP, Slovakia (per cent)



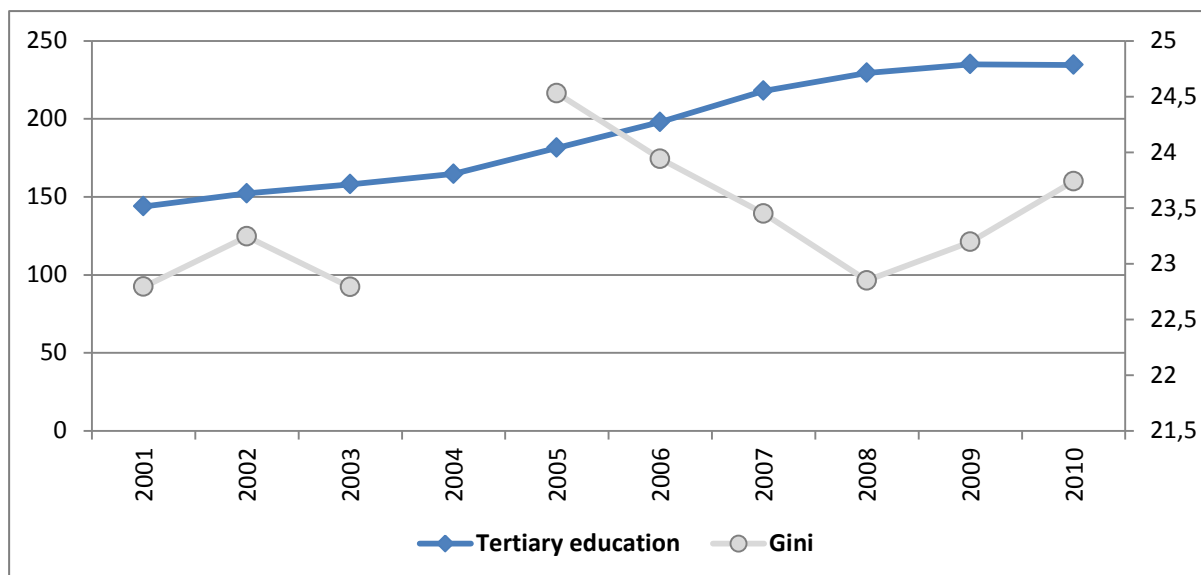
Source: Eurostat.

Tertiary and primary education expenditure each constitute less than one per cent of GDP. In recent years, expenditure on tertiary education per head has decreased. This decrease is mostly related to

³⁶Source: OECD.

the increased number of university students (Goliaš, 2011). As can be seen from Figure 5.7, the increase of tertiary students in recent years is remarkable.

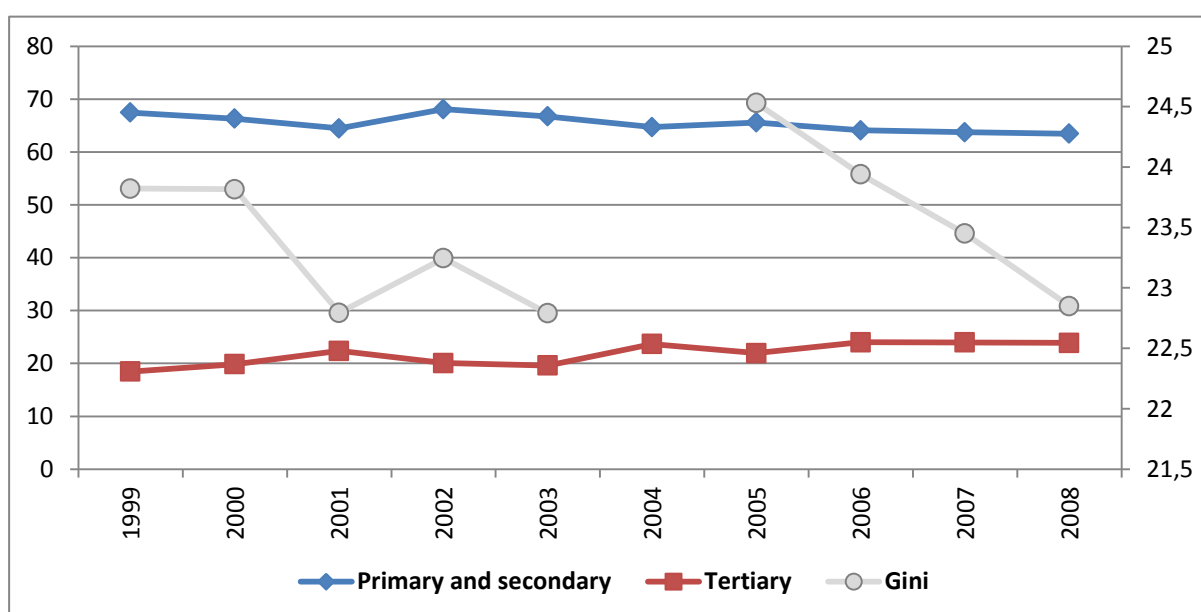
Figure 5.7 Number of students in tertiary education, Slovakia (in thousands)



Source: Eurostat.

The overall increase is 63 per cent from 2001 to 2010. The increased share of tertiary educated people probably contributes to decreasing income inequalities. However, the performance and quality of attained education is not at satisfactory level. Currently, expenditures on tertiary education create around 24 per cent of all expenditures allocated to education (Figure 5.8).

Figure 5.8 Share on all education expenditure, Slovakia (per cent)

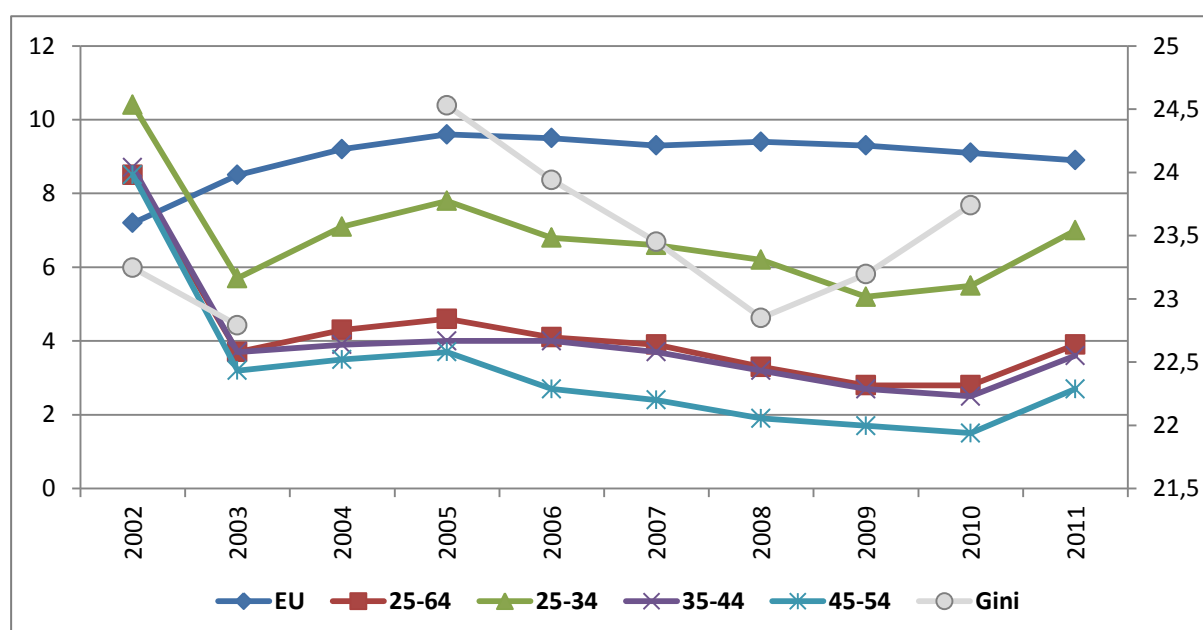


Source: OECD.

Slovakia is one of the few countries where there are no general fees for tertiary education (Goliaš, 2011). Some fees are collected for the extension of the studies above five years and also part-time studies are subject to fees. Full-time students who complete their studies within the regular time period (i.e. 5 years) do not pay. The discussion about imposing the fees occurred in 2001 but the law was not approved by parliament. Since then, only minor changes have been made in tertiary education. The potential implementation of the fees would have consequences on the accessibility of the education to low-income groups.

Lifelong learning (LLL) participation is one of the tools for combating poverty (see Figure 5.9). On average, 3.9 per cent of the Slovak population aged 25 to 64 participates in LLL education compared to 8.9 per cent for the whole of the European Union. Mostly young people up to the age of 34 years participate in LLL (7 per cent).

Figure 5.9 LLL participation, Slovakia (per cent)



Source: Eurostat.

5.6 Conclusions

In this chapter, we discuss the main recent policy changes that affected or potentially could affect inequality in the Czech Republic and Slovakia. In the Czech Republic there is history of discourses about policies that could positively or adversely affect inequality, but there have not been any notable policy changes that would significantly affect inequality in recent decades. Even the flat-tax reform did not change the tax burden across different income groups. The current government is

considering changes in consumption taxes, which can potentially affect inequality in the future. However, there is significant public opposition against this policy step, thus the future development is still uncertain.

Slovakia, with insistently high unemployment – especially long-term unemployment – is struggling with the low-income jobless groups often stuck in the incentive trap of the social system. Those groups are more often threatened by poverty and depend more on redistributive policies. With this regard the reforms of social policies and taxation system were expected to provide incentives to work and to employ, thus affecting both the supply and demand side of the labour market. However, policy reforms implemented in the 2000s, accomplished that goal only partially and more effectively on the demand side.

Tax reforms seem to be the ones that affected the redistribution of income profoundly. The degree of redistribution decreased, but the effectiveness of collection of taxes increased. Tax reforms were accompanied with the reform of social benefits which were intended to increase the difference between received non-employment benefits and actual income from full-time work. However, this reform did not provide the needed incentives, and enabling and empowering, to decrease long-term unemployment much.

The education systems in both countries could be efficient in combating inequalities, especially through raising the number of tertiary educated people. On the other hand, the education system is suffering from low financial sources, underpaid teachers and professors who consequently only provide an insufficient level of services. The ongoing discussion about the changes in the system of financing tertiary education and its effectiveness seem far from reaching the end for now.

From the above-mentioned reforms and undertaken policies, we can conclude that their primary intention was more aimed at the demand side – investors and the business sector – than at the supply side, such as the enhancement of human resources in the country. The policy of combating inequalities was not the primary intention of the reforms undertaken in the 2000s. Therefore, the decreased level of inequalities in the 2000s (before the Great Crisis) appears to be rather a consequence of the increased job opportunities thanks to generally positive economic global development and some stimulating measures aimed at the business sector than the consequence of any policies targeted at combating inequalities. Nevertheless, the absence of policies targeted at inequalities could generate further problems in the future, mainly because of some marginalized groups who have been out of the labour market and have lived in poverty for years.

6. Conclusions: A comparative perspective on inequality in the Czech Republic and Slovakia

The two nations under scrutiny shared one state from 1918 until 1992, with a de facto exception of the 1939-1945 period during World War II. Even since independence on January 1, 1993, the two republics underwent broadly similar social, economic and political transformations. This history of shared institutions and similar transformations can be expected to manifest itself in similarities of inequalities and their development. On the other hand, the two nations differed in many aspects as well. While in 1918 the Czech, Moravian and Silesian Lands emerged as a rather industrialized part of the Austrian part of Austria-Hungary, Slovakia entered the newly established Czechoslovakia with a legacy of underdeveloped institutions and predominantly agrarian population from the Hungarian part of Austria-Hungary. While, by European standards, the Czech society is traditionally very secularized, religiosity – primarily Roman Catholic – is rather high in Slovakia. While the Czech Republic started as a vigorous reformer in the 1990s, slowing down a bit in the 2000s, Slovakia lagged behind its neighbours in the 1990s, but reformed at a very high pace since 1998, especially until the mid-2000s. Such differences may have resulted in differences in the development of inequality in the two countries. The key question we address in this chapter is what similarities and differences in the development of inequalities can be identified in the two countries.

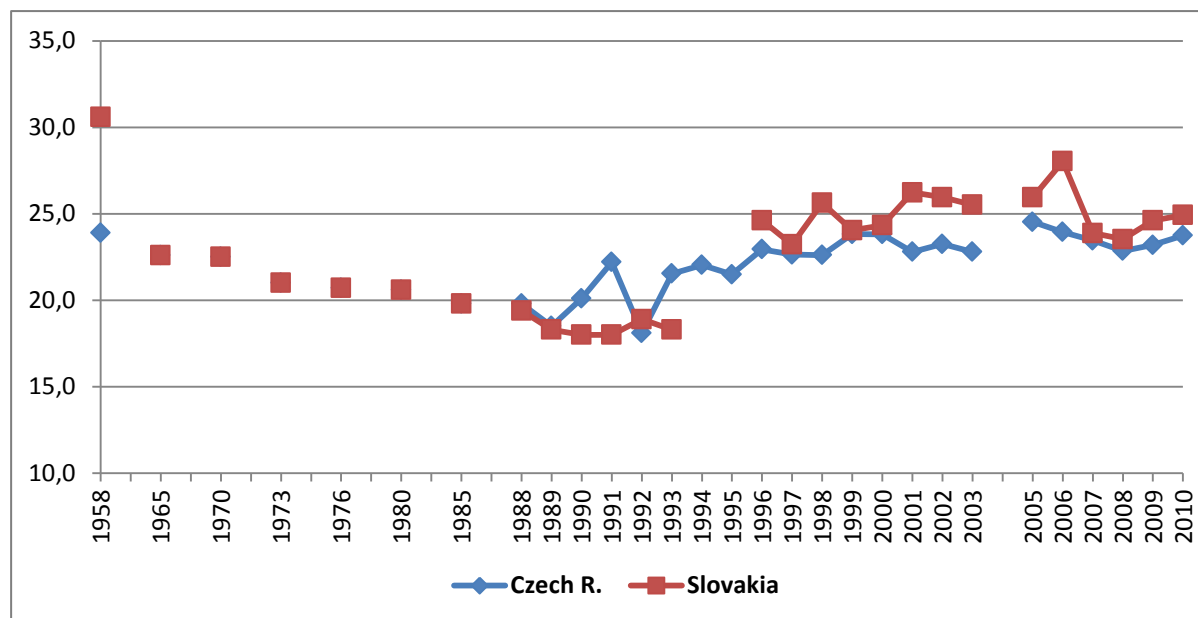
6.1 The nature of inequality and its development over time

We start the comparative analysis by reviewing and comparing the major trends in inequality in the two countries. An obvious methodological issue is the comparability of the statistics we gathered in the previous chapters. Yet, several robust findings have emerged.

First, inasmuch as we can interpret historical data from several sources, the two republics share the general pattern of decreasing inequality until just after the fall of the Iron Curtain, increasing inequality until late 1990s, and rather trend-less, or slightly decreasing, inequality since then (Figure 6.1). On this general background, several observations deserve attention. In the 1990s the Czech Republic observed the so-called “hollowing of the middle” of the income distribution, with both tails getting thicker over time. In Slovakia the share of total income accruing to the poorest 10 or 20 per cent of the population has been declining, whereas the share accruing to the top 10 or 20 per cent of the income distribution remained rather invariant. In both countries taxation and redistribution

appear to reduce inequality significantly. Another important observation is the increase in the share of rather unequally distributed non-labour income in people's total income in both countries.

Figure 6.1 Ginicoefficient in the Czech Republic and Slovakia

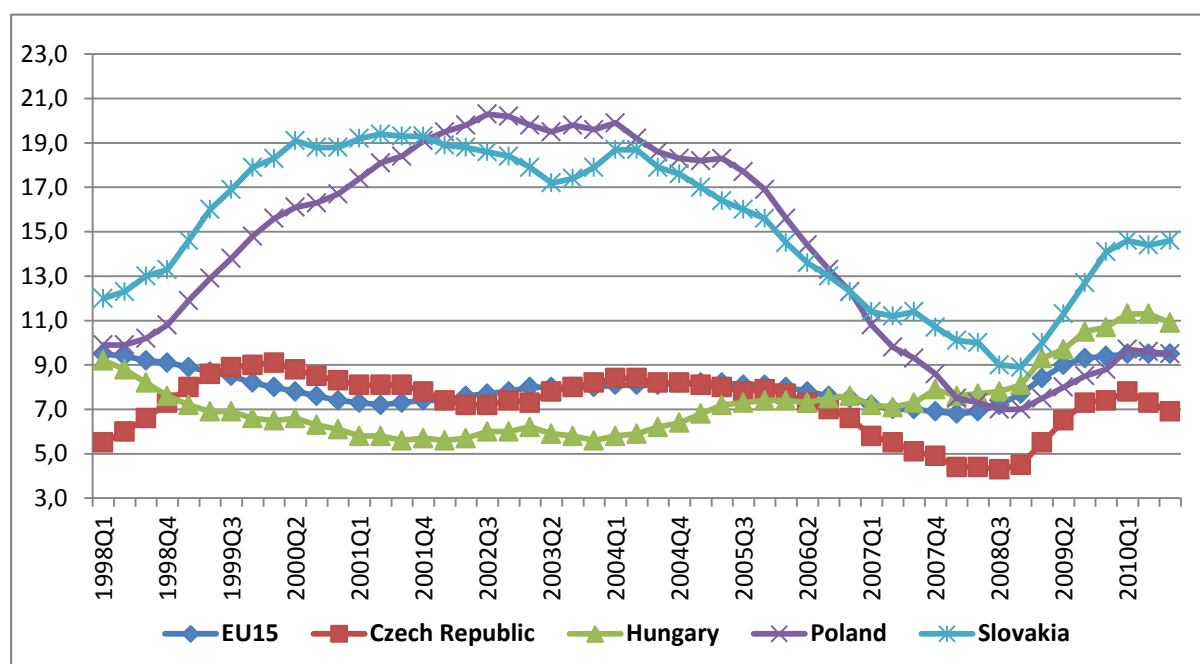


Sources: See Figures 2.2 and 2.4 in Chapter 2.

Notes: Gini coefficient in Czechoslovakia (hollow square), Czech Republic (diamond), Slovakia (square).

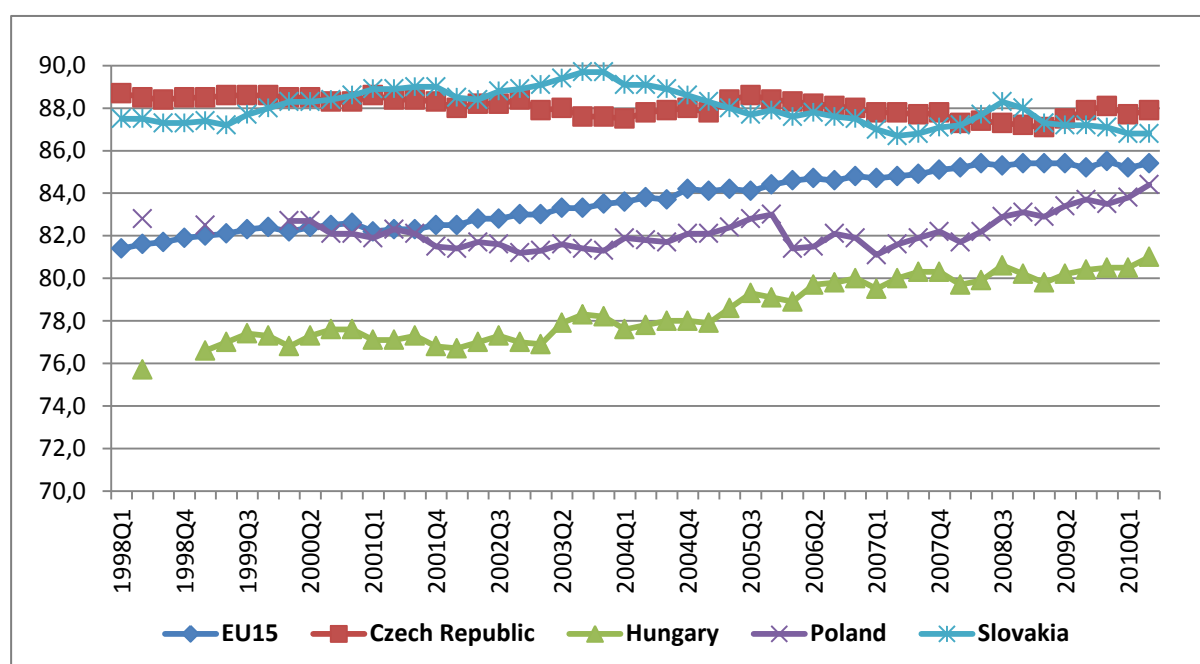
The Czech and Slovak labour markets have undergone deep transformations after their emergence from the command-economy system. Some of the most important developments include the emergence of (official) self-employment and unemployment and growing inequalities. Due to special tax treatment of self-employed and of people working on special contracts called “dohoda” intended for casual and temporary work, both nations have experienced significant bogus self-employment and (ab-)use of the “dohoda” for long-term full-time employees. In spite of these similarities, the two countries differ markedly in their experience with unemployment, which has been rather high in Slovakia and moderate in the Czech Republic (Figure 6.2). As concerns participation, it is rather high at about the same levels in the two countries for prime age workers, increasing with Slovakia catching up for the elderly workers, and decreasing for the youth (Figures 6.3-5). The last trend can be explained by steeply increasing university enrolment rates and so it underscores the importance of marketable education for the young generation, which is trading off investment in human capital for current labour income.

Figure 6.2 Unemployment in the Visegrad countries

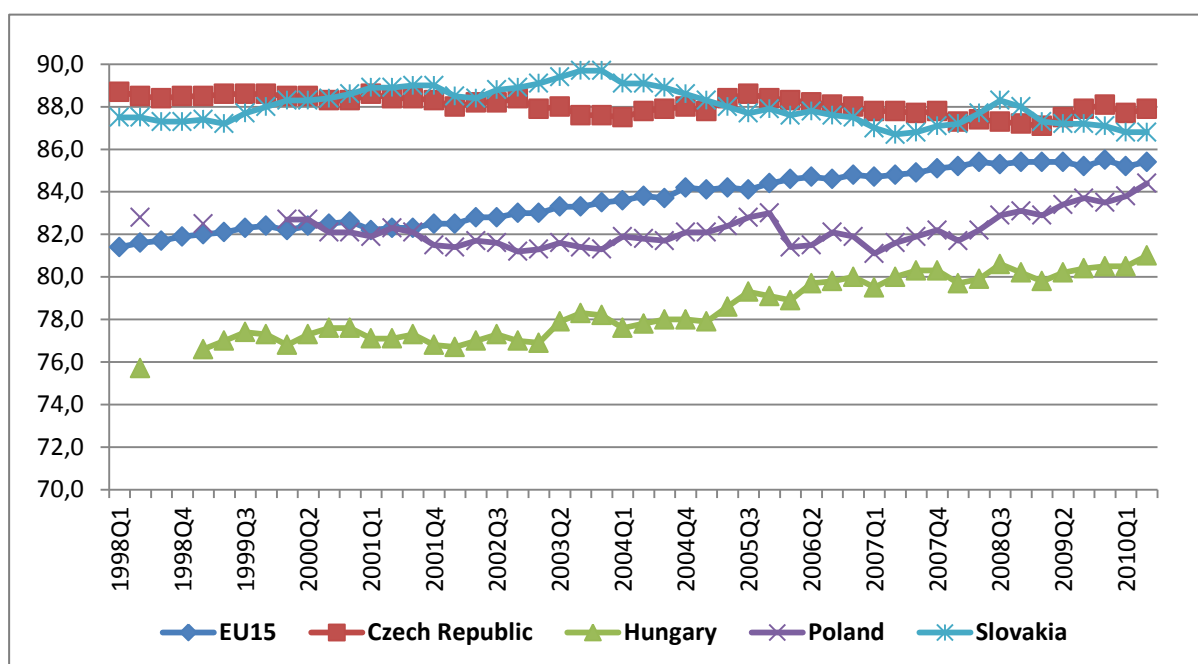


Source: Own calculations based on EU LFS.

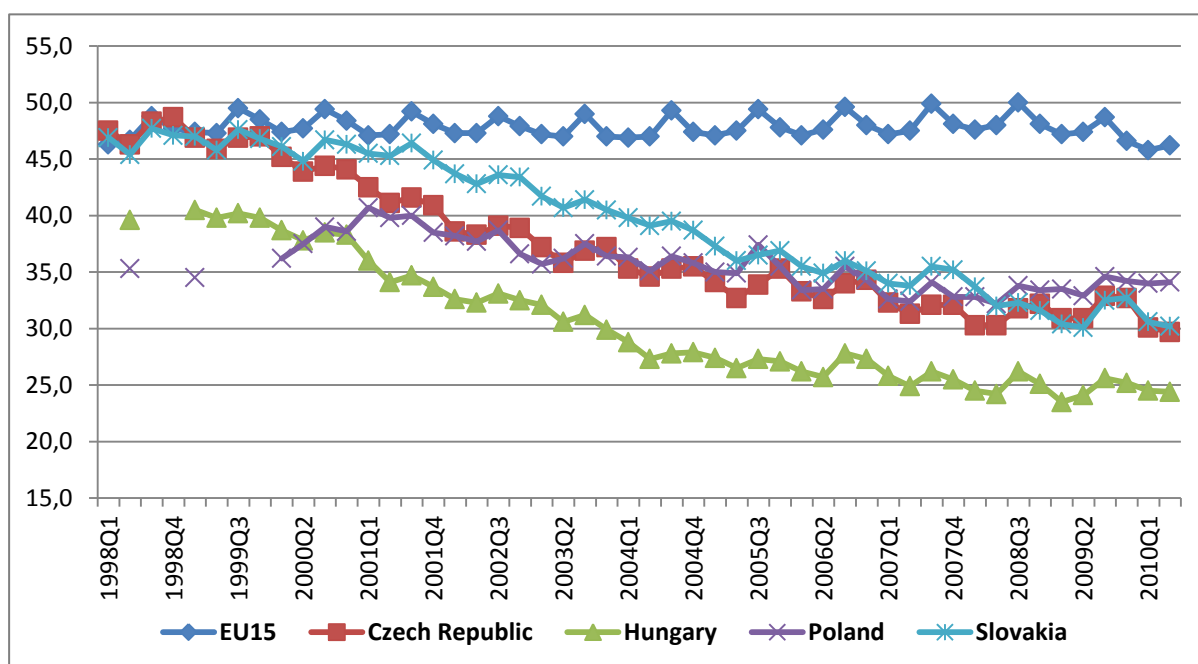
Figure 6.3 Participation rates in the Visegrad countries, 25-54



Source: Own calculations based on EU LFS.

Figure 6.4 Participation rates in the Visegrad countries, 55-64

Source: Own calculations based on EU LFS.

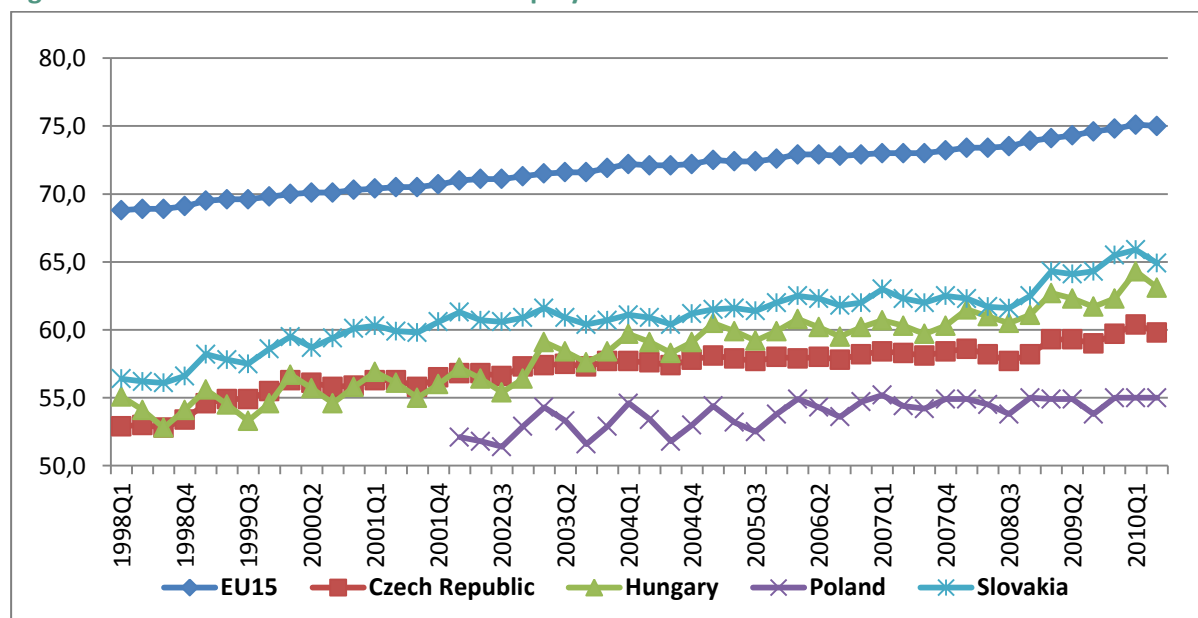
Figure 6.5 Participation rates in the Visegrad countries, 15-24

Source: Own calculations based on EU LFS.

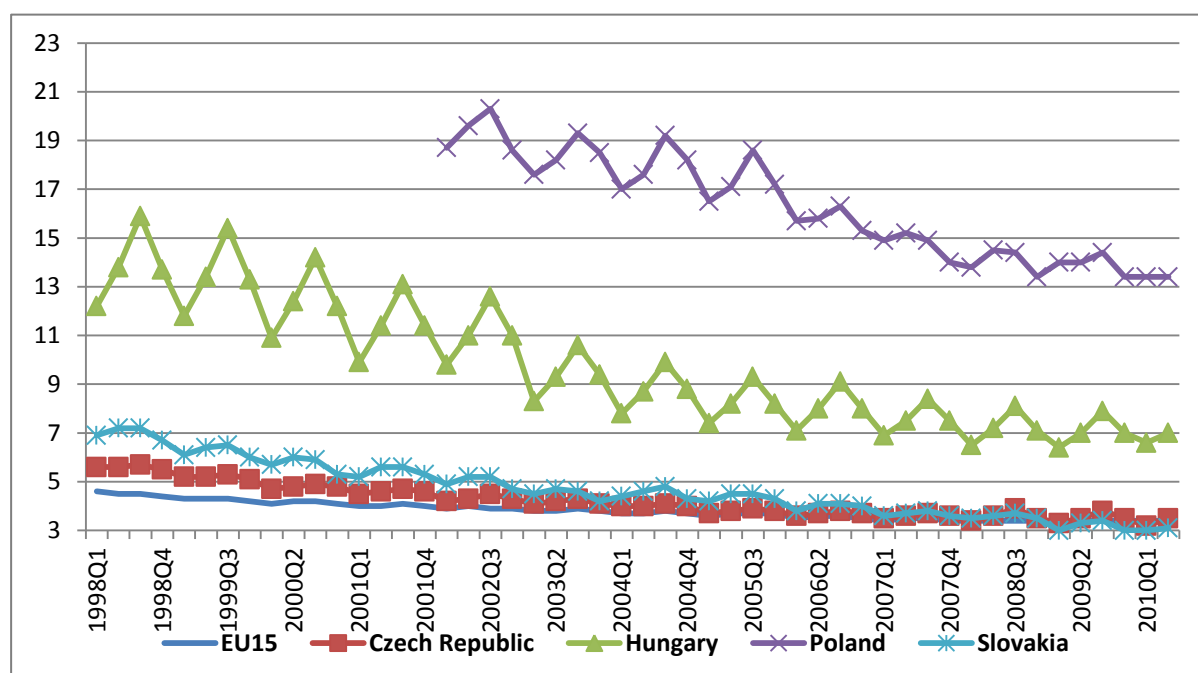
In the historical perspective it is also important to understand the degree of transformation through which the two countries have gone over the past decades. Looking at the share of workers in the service sector (Figure 6.6) we observe that both countries exhibit a relatively large and growing service sector, but the gap relative to the EU15 is has declined only moderately. Even more remarkable is the decline of the agricultural sectors in the two countries (Figure 6.7), attaining the levels typical for the EU15. From the historical perspective and for the interpretation of our findings it is important to note that the legacy of an agricultural, less-industrialized, Slovakia from the earlier 20th century has been annihilated during the past decades, with Slovakia having the largest service sector and smallest agricultural sector measured by employment among the Visegrad countries, for the latter recently even surpassing the Czech Republic as well as the EU15 average.

In both countries we observe significant positive gradients of educational attainment and labour market success, whether measured by earnings or employment probabilities. With the steeply increased university enrolment rates in both countries these gradients imply increased competition among high-skilled high-earning workers, and thus attenuation of the earnings gradient by education and lower inequality. This may also happen through decreased quality of overcrowded institutions of higher education.

Figure 6.6 Share of the service sector in employment



Source: Own calculations based on EU LFS.

Figure 6.7 Share of agriculture in employment

Source: Own calculations based on EU LFS.

While inequalities have affected the whole Czech and Slovak populations, some of the sub-populations have been more affected than others. In both countries women, the elderly and the young, the less educated, and those living in backward regions are among the most affected. Most of the Roma people are affected by severe social exclusion and poverty. This is a most serious problem in both countries, with the Czech Republic having a smaller population of the Roma.

In both countries increasing inequality during the early transition period can be ascribed to the massive transformations that the two nations went through at that time. These primarily involve price liberalization, introduction of hard budget constraints, privatization, labour market reforms, and changes in the social security system. After the initial turmoil subsided, it appears that in each country income inequalities stayed relatively stable. More recent reforms, including the adoption of flat tax rate, funded second pillar of the pension systems, and decreasing social security benefits in Slovakia may lead to increased inequality in the two countries.

6.2 The social impacts of inequality

The effects of inequality go well beyond economic categories. People at the bottom of the income distribution often suffer from material deprivation. In both countries the gains from the robust economic performance in the recent decade appear to have trickled down to the poorer echelons of

the society, as the rate of material deprivation decreased significantly in each of the countries. This decrease appears to have stalled during the crisis. Among the most affected by material deprivation belong women, the Roma people, the less educated people, and people living in less-developed regions.

The two countries also share the diminishing rate of poverty or social exclusion, with Slovakia reducing this rate from 32 per cent in 2005 to about 20 per cent in 2010, and the Czech Republic reducing it from about 20 per cent to slightly above 14 per cent during the same period. While Slovakia was reducing its poverty and exclusion rates faster, it also started at significantly higher levels. In both countries the young people appear to be more likely to find themselves in poverty or social exclusion, and to some extent this is the case also for the elderly, especially women, in Slovakia. In contrast, in the Czech Republic the elderly appear to be in a better position than any other age group.

Household structure is a key factor, and effect, of income inequality. Both countries under scrutiny suffer from an aging population and low fertility rates. In the Czech Republic fertility declined from about 1.9 in 1990 to as low as 1.1 in 1999 and bounced back afterward to about 1.5 in 2008 and since then staying there. In Slovakia it followed a similar pattern, declining from 2.1 in 1990 down to 1.2 in 2002 and increasing to almost 1.5 in 2011 (Eurostat). Both countries have experienced a significant increase of age at first marriage during the last two decades and a decrease in the number of marriages, excepting the first half of the 2000s.

Concerning health inequalities, the overall perceptions of health status have improved in both countries, although fewer females than males report good or fairly good health. The housing market in both countries has been characterized by high homeownership rate, growing number of mortgages especially in the early 2000s, increasing housing prices until 2008 followed by moderate decline, and wide regional price disparities. These housing disparities have contributed to wealth and income disparities. Combined with credit constraints, differentials in housing prices have entangled economic migration to more prosperous urban areas. During the last decade crime has been on decline in the Czech Republic, but the numbers of people in prison have been growing. The same holds for Slovakia, excepting the early 2000s.

6.3 Political and cultural impacts of inequalities

We now turn to political and cultural impacts of inequalities in the two republics. A key variable reflecting people's participation in the political life of the society is electoral turnout. We observe

similar patterns in the Czech Republic and Slovakia, whereby parliamentary elections attract the largest shares of voters and regional and European election exhibit lowest turn-out rates, with municipal elections somewhere in between. On the other hand, the gradient seems to be steeper in Slovakia, as it generally exhibits similar turn-out rates in parliamentary elections (similar in the early 1990s, considerably higher in 1998 and 2002, and slightly lower since) and somewhat higher turn-out rates in municipal elections than the Czech Republic, but the turn out rates in regional and European elections are significantly lower in Slovakia.

The urban-rural gradient appears to be rather flat in both republics. On the other hand, the educational gradient is much steeper in the Czech Republic, implying a more pronounced impact of education on inequality in electoral participation in the Czech Republic. As concerns civic participation, it is somewhat higher in the Czech Republic, which also exhibits a steeper gradient by education and moderately also by income. Both nations have experienced rather similar patterns of declining union density and union coverage. In both countries trust in other people has been generally increasing since the early 2000s, with Slovakia enjoying a considerably more significant improvement in this measure of trust, although still at somewhat lower levels than in the Czech Republic. The educational and especially income gradients are steeper in Slovakia, signifying a significant trust gap driven by these variables. Institutional trust has also been improving in the two countries, significantly more quickly and at higher levels for trust in the parliament and government in Slovakia and for justice system in the Czech Republic.

The two countries differ significantly when it comes to voters' preferences for extremist parties. While in Slovakia the majority of votes for extremists go to right-wing parties, in the Czech Republic they go to the left extreme of the spectrum. This is in fact in contrast to the widespread perception of a more right-leaning Czech Republic and more left-leaning Slovakia. But the success of the extreme left in Czech Republic and its marginality in Slovakia is less surprising when one recalls Czechoslovak election results in 1946, leading to the communist coup d'état in 1948. While the communist party won in the Czech Lands (43.3 per cent) as well as the Moravian and Silesian Lands (34.5 per cent), the Democratic Party earned a sweeping victory in Slovakia (62 per cent). The underlying explanatory factor may be a higher degree of conservatism in the Slovak society. The same factor may in fact also partly explain the higher support for right-wing extremist parties in Slovakia.

Interestingly, in spite of the adverse effects of the ongoing economic crisis, both countries exhibit declining support for extremist parties since late 2000s. In the Czech Republic, the support for extremist parties reached its pinnacle in 1992 and then again in 2002, since when it dropped to 12.4 per cent. In Slovakia, the total support for extremist parties culminated in 2006 at 15.8 per cent, since when it, quite remarkably given the developments in Europe, dropped to just above 7 per cent

in 2010 and 2012 elections, with no extremist making it into the parliament in 2012. One has to understand this developments with due caution, however. When asked about right and left preferences, a relatively stable share of Czechs, 16 to 19 per cent, identify with extreme political views on the left-right spectrum, whereas the corresponding share in Slovakia increased from 16 in 2004 to 22 per cent in 2010. In both countries the gradients by education and income are negative for the support of left-extreme parties, and positive for the support of right-extreme parties; and in case of education they are significantly more pronounced in the Czech Republic than in Slovakia. These concerns are affirmed by the statistics on tolerance to immigration, which has declined in both countries, more steeply so and to somewhat lower levels in the Czech Republic. This latter observation may be linked to the relatively steep recent increase in the number of immigrants in the Czech Republic (but not in Slovakia). In both countries the education and income gradients of tolerance to immigration are steeply negative.

The Czech and Slovak societies also differ markedly when it comes to their support for, and perceived benefits from, the European Union. While the Czech Republic can be characterized by growing Euro-scepticism, growing Euro-optimism, excepting the most recent period that witnessed some decline, characterizes Slovakia. The two countries do not markedly differ in how the important things for getting ahead in life are perceived, although in Slovakia getting a good education, working hard, knowing the right people, or being smart are, compared to the Czech Republic, viewed as relatively more important than coming from a wealthy family or being lucky. Somewhat loosely speaking, this may indicate a greater degree of belief in merit-based reward in Slovakia than in the Czech Republic. On the other hand, a somewhat higher share of people in the Czech Republic than in Slovakia think that people live in poverty because of laziness and lack willpower.

The negative perceptions of existing income inequality have been declining on both countries, from significantly higher levels in Slovakia. In both countries the educational and income gradients of these perceptions are negative. The approval of governmental redistribution of income is significantly stronger in Slovakia than the Czech Republic, with both countries sharing negative gradients by education and income. While the satisfaction with the social situation is higher and stagnating in the Czech Republic, it is growing in Slovakia. The educational and income gradients concerning this variable are rather flat in both countries.

6.4 Are Czech or Slovak policies effective in combating inequalities?

Can the two countries learn from each other's experience with policies combating inequalities; can we draw more general implications from their comparative evaluation? While the current state-of-

the-art in the literature and the available evidence do not enable us to fully address this question, based on our own analysis we are able to draw several lessons about the effectiveness of anti-poverty policies in the two countries.

First, the developments in collective bargaining in the Czech Republic and Slovakia indicate a weakening role of trade unions in facilitating more participative and equitable societies in the two countries. On the other hand, both countries apply minimum wage regulation, which may protect some workers from low-pay employment, but may also result in unemployment of others. In the Czech Republic the minimum wage as a share in average wage had been increasing until mid-2000s, since when it declined to about one third in 2012. In Slovakia, minimum wage had been oscillating around 35 to 39 per cent of the average wage until 2009 when it reached 40 per cent and stayed there since in 2010 and 2011. The experience of the two countries may thus suggest that minimum wage is protecting workers from poverty and very low pay in Slovakia to a greater extent than in the Czech Republic. However, the much higher unemployment rate in Slovakia signals that the downside of the higher minimum wage in the country may be higher unemployment, with adverse consequences for inequality and poverty.

Perhaps dating back to the early transition when the overall perception was that entrepreneurial propensity in the two countries was low and some compensation was needed, payroll taxes were designed in the way that the self-employed pay relatively lower payroll taxes than salaried employees. This has been achieved by allowing the self-employed to decide on their social contributions, obliging them to fulfill only a rather low minimum. This has in all likelihood led to increased self-employment rates in the two republics. However, it has also incentivized workers as well as employers to collude on bogus self-employment – self-employment in cases of - by all characteristics – dependent employment. Additionally, and very importantly for their future status, the social protection of the currently self-employed labour force is rather limited, and is heading for low-income or even poverty of these workers when they become dependent on social support.

One of the most influential developments for the distribution of (net) income in the two countries was the introduction of the flat income tax rate in Slovakia in 2004 and in the Czech Republic in 2006. The reforms in both countries involved an increased tax base and a greater relative reliance on consumption taxes. Several studies have concluded that the degree of redistribution declined in Slovakia when the overall effects of the reform are taken into account. While the degree of income redistribution did not go down upon the tax reform in the Czech Republic, restructuring of the tax system from income to the more regressive production and consumption taxes results in higher increase in tax burden for lower income households as well. The implication is that the tax reforms

reduce the degree of redistribution and lead to higher consumption inequality in both countries, even though they may not increase inequality in net income much if at all.

Social expenditures have in general a very significant potential to reduce income inequality. In the Czech Republic total social expenditures as a share of GDP stagnated at around 18 since 2000, increasing to 19.8 per cent in 2009. In Slovakia this measure steadily declined from 18.8 in 1995 to 15.7 per cent in 2007. On the other hand, given the strong economic growth (especially in Slovakia) the absolute social expenditures increased steadily throughout the period. Yet, the mitigating role of social expenditures on income inequalities appears to have weakened in Slovakia, but not in the Czech Republic.

Old-age pensions in both countries are a topic of heated political debate. In 2004 Slovakia introduced, besides the PAYG first pillar, a fully funded and mandatory second pillar and fully funded but voluntary third pillar. The Czech Republic plans to introduce a funded second pillar in 2013. While these developments may help to address the problem of aging in the two countries, these reforms also reduce the degree of solidarity and, given the heated political debate and frequent (threat of) changes in Slovakia, increase the degree of ambiguity and perceived riskiness of the pension system. The latter issue may increase the incentives to evade social contributions. As a result, these reforms may lead to increased inequality in the two countries.

Public expenditures on health care have been higher and increasing in the Czech Republic, whereas in Slovakia they have been stagnating. When it comes to education, both countries share the trend of increased participation in tertiary education and decreasing numbers of pupils. On this background both countries also experienced decreasing expenditures on education until 2008, with a slight increase in 2009. While part of this development can be explained by strong GDP growth prior to 2008 and a decline in 2009, these trends still signify a decreasing priority given to education and result in several problems, including deteriorating quality of especially tertiary education and negative selection into teaching occupations. Both countries share a tracking system that sorts pupils into different secondary schools, leading to increased inequality later on. These effects on inequality do not seem to be much mitigated by life-long learning, which is in both countries fairly limited.

Reference List

- Alderson, A. S., and Doran, K. (2010). How has income inequality grown? The reshaping of the income distribution in LIS countries. *Inequality and the Status of the Middle Class: lessons from the Luxembourg Income Study*, (pp. 28-40). Luxemburg.
- Atkinson, A. B. and Micklewright, J. (1992). *Economic Transformation in Eastern Europe and the Distribution of Income*. Cambridge: Cambridge University Press.
- Babecky, J., Dybczak, K. and Galuscak, K. (2008). *Survey on Wage and Price Formation of Czech Firms*. Working Papers 2008/12, Czech National Bank, Research Department.
- Boeri, T., and Terrell, K. (2002). Institutional Determinants of Labour Reallocation in Transition. *The Journal of Economic Perspectives*, 16(1), 51-76.
- Bojarski, I., Koster W. S. (2012). *The Slovak Judiciary: its current state and challenges*. Open society foundation
- Borgonovi, F. (2012). The relationship between education and levels of trust and tolerance in Europe. *The British Journal of Sociology*, 63, 146–167.
- Brook, A.-M., Leibfritz, W. (2005). *Slovakia's Introduction of a Flat Tax as Part of Wider Economic Reforms*. OECD Economics Department Working Papers, 448, 30.doi:10.1787/075008851315
- Bútorová, Z. and O.Gyarfášová (2010). *Občianska participácia: trendy, problémy, súvislosti*. Bratislava: Sociológia, 2010, 42 (5), 447 – 491.
- Constant, A. F., Kahanec, M. and Zimmermann, K. F. (2011). An expert stakeholder's view on European integration challenges. In: Kahanec, M. and Zimmermann, K. F. (Eds.), *Ethnic Diversity in European Labour Markets: Challenges and Solutions*. Edward Elgard, Cheltenham, UK, Northampton, USA
- Cornia, G. A. (1994). 'Income Distribution, Poverty and Welfare in Transitional Economies: A Comparison between Eastern Europe and China'. *Journal of International Development*, 6(5): 569-607.
- CNB (2012). *Financial stability report 2011/2012*, Czech National Bank 2012
- Čmejrek, J. (2007). Citizens' local political participation in the Czech Republic: rural-urban comparison, *Agricultural Economics*, 53 (1), 21–29
- Davidova E. et al. (2010). *Kvalita života a sociální determinanty zdraví u Romů v České a Slovenské republice*, Praha: Triton, ISBN:978-80-7387-428-5
- Drbohlav, D., Lachmanová-Medová, L., Čermák, Z., Janská, E., Čermáková, D., Dzúrová, D. (2009). *The Czech Republic: on its way from emigration to immigration country*, IDEA working paper 11.
- Drnakova, L. (2007). *Determinants of Secondary School Choice in the Czech Republic*, CERGE WP341
- Dušek, L. (2012). *Kde hledat příčiny přeplněných věznic*, IDEA 4/2012
- Evans, J. (2004). *Voters and Voting: An Introduction*, SAGE Publications Ltd

- Filer, R. K., Jurajda, Š., and Plánovský, J. (1999). Education and wages in the Czech and Slovak Republics during transition. *Labour Economics*, 6(4), 581–593.
- Franklin, M. (2007). Turning Out or Turning Off? How the EP Elections of 2004 Shed Light on Turnout Dynamics, In: Marsh M., Mikhaylov S. and Schmitt H. (Eds). *European Elections after Eastern Enlargement. Preliminary Results of the European Elections Study 2004*. Mannheim: MZES, 141-179.
- Gabal, I. (2006). *Analýza sociálně vyloučených romských lokalit a absorpční capacity subjektů působících v této oblasti*. MPSV CR
- Ganelli, G. (2006). Household wealth in the Czech Republic: A comparative perspective. *Economic Systems*, 30(2), 184-199. doi:<http://dx.doi.org/10.1016/j.ecosys.2006.01.001>
- Garner, T. I., and Terrell, K. (1998). A Gini decomposition analysis of inequality in the Czech and Slovak Republics during the transition. *Economics of Transition*, 6(1), 23-46. doi:10.1111/j.1468-0351.1998.tb00035.x
- Goliaš, P. (2011). *Prehľad ukazovateľov o financovaní školstva*. Bratislava: INEKO.
- Goliaš, P., and Kičina, R. (2005). *Slovak tax reform: one year after*. Bratislava: INEKO.
- Gurieva, S. and E. Zhuravskaya, (2009). "(Un)happiness in Transition," *Journal of Economic Perspectives*, 23(2), 143-68,
- Hayo, B. (2007). Happiness in transition: An empirical study on Eastern Europe. *Economic Systems*, 31(2), 204-221.
- Hromadková, E. and Zdenek, M. (2012): Demand Side Cost-Sharing and Prescription Drugs Utilization: Evidence from a Quasi-Natural Experiment, mimeo
- Kalíšková, K a D. Münich (2012), Czech Women: Underutilised Potential of the Country [Česky: Nevyužitý potenciál země], CERGE-EI / IDEA. http://idea.cerge-ei.cz/documents/kratka_studie_2012_03.pdf
- Münich, D., J. Straka and P. Ondko, (2012). Impact of Education on Long-term Economic Growth and Pension System Deficits [Dopad vzdělanosti na dlouhodobý hospodářský růst a deficit důchodového Systému], CERGE-EI / IDEA. http://idea.cerge-ei.cz/documents/Studie_2012_02_Vzdelanost.pdf
- JRC: Badescu M., D'Hombres B., Villalba E. (2011). *Returns to education in European countries Evidence from the European Community Statistics on Income and Living Conditions (EU-SILC)*
- Kadlečíková, J., Kriglerova G. E., (2012). *Verejná mienka v oblasti pravicového extrémizmu*, Nadácia otvorenej spoločnosti
- Kahanec, M. and Zimmermann, K. F. (2010). *EU Labour Market safter Post-Enlargement Migration*, Berlin: Springer
- Kaminska, M. E., and Kahancová, M. (2011). Emigration and labour shortages: An opportunity for trade unions in the New Member States?. *European Journal of Industrial Relations*, 17(2), 189-203.
- Kiss, G., Nagy, M., and Vonnák, B. (2006, June). credit Growth in central and eastern europe: trend, cycle or boom. In conference "Finance and Consumption Workshop: Consumption and Credit in

- Countries with Developing Credit Markets*", Florence (pp. 16-17). Retrieved from http://fma.mnb.hu/Root/Dokumentumtar/ENMNB/Kutatas/mnben_seminar/seminar_2006/mnben_vita20060505/cbinceec_v.pdf
- Kocourek, D. and Pertold, F. (2011). The Impact of Early Retirement Incentives on Labour Market Participation: Evidence from a Parametric Change in the Czech Republic, *Czech Journal of Economic and Finance*, 61(5), 467-483
- Krivý, V. (2005). Politické orientácie obyvateľov a hlavné deliace línie, In: Szomolányi, S. (Ed.) *Spoločnosť a politika na Slovensku. Cesty k stabilite 1989-2004*. Bratislava: Univerzita Komenského, p. 84-107
- Krivý, V. (2009). *Volby významné a menej významné*, www.sociologia.sav.sk/cms/uploaded/1197_attach_krivy_volby.doc
- Kyloušek, J. and M. Pink (2007). Electoral support for the Communist Party of Bohemia and Moravia in parliamentary elections in the Czech Republic after 1990, *European Electoral Studies* 2(2), 159-163.
- Lesay, I. (2006). *Pension reform in Slovakia: the context of economic globalisation*. Brussels: European Trade Union Institute for Research, Education and Health and Safety (ETUI-REHS).
- Linek, L. (2011). Proč se měnila úroveň účasti ve volbách do Poslanecké sněmovny v letech 1996–2010?. (Why Did Voter Turnout in the Czech General Elections Change between 1996 and 2010?), *Czech Sociological Review*, 47(1), 9–32
- Lovaš L. (2010). Politické postoje., In: J. Výrost a kol., *Európska sociálna sonda (ESS) 4.kolo na Slovensku*, Košice: UNIVERSUM
- Lyons, P. (2007). It's the Economy, Stupid' Popular Support for EU Accession in the Czech Republic , *Czech Sociological Review*, 2007, 43(3), 523-560
- Mareš M. (2008). Communist and Post-Communist Parties in the Czech Republic and in Slovakia, In: Backes, U., Moreau, P. (Eds.), *Communist and Post-Communist Parties in Europe*, Göttingen
- Mareš M. (2009). *National and Right Wing Radicalism in the New Democracies: Czech Republic*. Paper for the Workshop of the Friedrich Ebert Foundation on "Right-wing Extremism and Its Impact on Young Democracies in the CEE-countries". Budapest, Available from Friedrich Ebert Stiftung Büro Budapest: <http://www.fesbp.hu/archiv.php>
- Mareš, M. (2011). Czech extreme right parties an unsuccessful story, *Communist and Post-Communist Studies* 44(4), 283-298.
- Mareš, P. (1999). *Sociology of Inequality and Poverty*, Prague: Sociologické nakladatelství.
- Melicherčík, I., and Ungvarský, C. (2004). Pension Reform in Slovakia: Perspectives of the Fiscal Debt and Pension Level. Finance a úvěr - *Czech Journal of Economics and Finance*, 24(9-10), 391-404. Retrieved from http://journal.fsv.cuni.cz/storage/987_s_391_404.pdf
- Mesežnikov, G. (2009). National and right-wing radicalism in the new democracies: Slovakia, Institute for the Public Affairs.
- Mesežnikov, G. (2012). Slovak Parliamentary Elections 2012: Is Radical Nationalism Rising or on the Decline?, Slovakia, Institute for the Public Affairs.

- MF SR. (2005). *Podklad k Daňovej reforme*. Ministerstvo financií SR. Retrieved August 2012, from <http://www.finance.gov.sk/Default.aspx?CatID=3996>
- Milanovic, B. (1998). *Income, Inequality, and Poverty during the Transition from Planned to Market Economy*. World Bank Regional and Sectoral Studies. Washington, D.C.: The World Bank.
- Mishler, W., and Rose, R. (2001). What are the origins of political trust? Testing institutional and cultural theories in post-communist societies. *Comparative political studies*, 34(1), 30-62.
- Moore, D. (2005). *Slovakia's 2004 Tax and Welfare Reforms*. IMF WP/05/133.
- Myant, M. (2010). Trade Union Influence in the Czech Republic since 1989. *Czech Sociological Review*, 46(6), 889-912.
- Münich, D. and Jurajda, S. (2011): *Quarterly Report from the SYSDem Correspondent*, Czech Republic.
- Münich, D. and Jurajda, S. (2012): *Quarterly Report from the SYSDem Correspondent*, Czech Republic.
- Münich, D., Svejnar, J., and Terrel, K. (2005). Returns to Human Capital Under The Communist Wage Grid and During the Transition to a Market Economy. *The Review of Economics and Statistics*, 87(1), 100-123.
- Mysíková, M. (2007). *Trh práce žen: Gender Pay Gap a jeho determinanty*. IES Working Paper, 13. IES, Charles University, Prague.
- Mysíková, M. (2011). *Personal Earnings Inequality in the Czech Republic*. IES Working papers, 11. Retrieved August 2012, from http://ideas.repec.org/p/fau/wpaper/wp2011_11.html.
- Nádaždyová, M. (2011). *Current system of social benefits in Slovakia and proposed reforms*. Bratislava: Ministry of Labour, Social affairs and Family.
- OECD (2006). Tax Policy Reforms in the Slovak Republic. *OECD Tax Policy Analysis*, 5. Retrieved August 2012, from <http://www.oecd.org/tax/taxpolicyanalysis/37154700.pdf>
- OECD (2010). *A Family Affair: Intergenerational Social Mobility across OECD Countries*
- OECD (2011). *Divided We Stand: Why Inequality Keeps Rising?*, OECD.
- Report on Migration in the Territory of the Czech Republic in 2010* (Zpráva o situaci v oblasti migrace na území České republiky za rok 2010), Praha: Ministerstvo vnitra ČR, 2011.
- Sedláčková, M., and Šafr. J. (2008). Social Trust and Civic Participation in the Czech Republic, In Lewandowski, J. D., Znoj, M. (Eds.). *Trust and Transition*. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Sirovátka, T., Hora O., Kofroň P. (2008). Příjmová chudoba a materiální deprivace v České republice. *Fórum sociální politiky*, Praha, Výzkumný ústav práce a sociálních věcí. 2(5), 2-8, ISSN 1802-5854.
- Sirovátka, T., and Mareš, P. (2006). Poverty, Social Exclusion and Social Policy in the Czech Republic. *Social Policy and Administration*, 40(3), 288-303. doi:10.1111/j.1467-9515.2006.00490.x
- Smolík, J. (2011). Far right-wing political parties in the Czech Republic: heterogeneity, cooperation, competition. *Slovak Journal of Political Sciences*. 11(2), 99–111.

- Stachová, J., Čermák, D., and Vobecká, J. (2008). Institutional trust in the regions of the Czech Republic, In: Mayerová, V. (Ed.) *Venkov je náš svět, Countryside - our World*. Praha: Česká zemědělská univerzita.
- Styglerova, T. (2010). The Population Development of the Czech Republic in 2008. *Czech Demography*, 4
- Štefánik, M. (2011). Changes in private returns to education caused by the tertiary education expansion in Slovakia. *Review of Applied Socio-Economic Research*, 1(2), 167-176.
- TransMONEE (2004). A database of socio-economic indicators for CEE/CIS/Baltics. Florence: UNICEF International Child Development Centre. Online database.
- TransMonee (2005). A database of socio-economic indicators for CEE/CIS/Baltics. Florence: UNICEF International Child Development Centre. Online database.
- Vašečka, M. (2011). Social and labor market integration of ethnic minorities in Slovakia. In M. Kahanec and K. F. Zimmermann (eds.), *Ethnic Diversity in European Labor Markets. Challenges and Solutions* Cheltenham, UK : Edward Elgar Publishing Limited, 247-267.
- Večerník, J. (1991). Úvod do studia chudoby v Československu/Introduction Into study of poverty In Czechoslovakia. *Sociologický Časopis/Czech Sociological Review*, 577-602.
- Večerník, J. (1996). Earnings Disparities in the Czech Republic: The History of Equalisation. *Czech Sociological Review*, 4(2), 211-222.
- Večerník, J. (2001). *Mzdová a příjmová diferenciacie v České republice v transformačním období*. Sociologický ústav Akademie věd České republiky.
- Verhoeven et al. (2007). *The Health Sector in the Slovak Republic: Efficiency and Reform*. IMF Working papers, WP/07/226.
- Voda, P. and M. Pink (2011). West and East: Still the Gap? Aggregate Analysis of Electoral Behavior in Central Europe, In: *CEPSA Annual Conference 2011, Vienna, Multilevel Politics: Intra- and Inter-level Comparative Perspectives*.
- Wattenberg, M. P. (2002). *Where have all the Voters Gone?*. Cambridge, Mass.: Cambridge, Mass.: Harvard University Press.
- World Bank (2012). *Policy Advice on the Integration of Roma in the Slovak Republic*. The World Bank
- Zelinsky, T. (2012). Changes in relative material deprivation in regions of Slovakia and the Czech Republic. *Panoeconomicus*, 59(3), 335-353.

7. Appendix 1: Log Table Chapter 2 - CZ

	1990-94	1995-99	2000-04	2005-10	Earliest to latest endpoints in figure	Table / Figure in report
Gini	↗	↗	↘	→		Fig 2.2
2.1.1 Household income inequality						
Gini before taxes	n.i.	↗	→	↘	→	Fig 2.7
Gini after taxes	↗	→	→	↘	→	Fig 2.7
Poverty before taxes	n.i.	↗	→	↘	→	Fig 2.8
Poverty after taxes	n.i.	→	↗	↘	→	Fig 2.8
2.1.2 Wealth and debt inequality						
Debt to income ratio	n.i.	↘	↗	↗	↗	Fig 2.10
2.1.3 Labour market inequality						
Gross earnings (p90/p10)	n.i.	↗	↗	↗	↗	Fig 2.13
Unemployment rate	→	↗	→	→	↗	Tab 2.4
Employment rate	→	↘	→	→	↘	Tab 2.4
Self-empl.	↗	↗	↗	→	↗	Tab 2.4
2.1.4 Educational inequality						
Educational attainment	n.i.	n.i.	↗	↗	↗	Fig 2.15
Unemployment rate and education	↗	↗	↗	↘	↘	Fig 2.17

Note: n.i.=no information/ n.a.= not applicable

8. Appendix 2: Log Table Chapter 2 - SK

	1990-94	1995-99	2000-04	2005-2010	Earliest to latest endpoints in figure	Table / Figure in report
Gini	→	↗	↗	↘		Fig 2.4
2.1.1 Household income inequality						
Gini before taxes	n.i.	↗	→	↘	→	Fig 2.9
Gini after taxes	↗	→	→	↘	↗	Fig 2.9
2.1.2 Wealth and debt inequality						
Debt to income ratio	n.i.	↘	↗	↗	↗	Fig 2.12
2.1.3 Labour market inequality						
Unemployment rate	↗	↗	→	↘	↗	Fig 2.14
2.1.4 Educational inequality						
Unemployment rate and education	n.i.	n.i.	↘	↗	→	Fig 2.19

Note: n.i.=no information/ n.a.= not applicable

9. Appendix 3: Log Table Chapter 3 – CZ

	1990-99	2000-04	2005-10	Earliest to latest endpoints in figure	Table / Figure in report
Gini	↗	↗	↘	↗	Fig 2.2
3.2 Material deprivation					
Material deprivation	n.i.	n.i.	↘	↘	Tab 3.2
3.3 Cumulative disadvantage and multidimensional measures of poverty and social exclusion					
Persons under at-risk-of-poverty	n.i.	n.i.	↘	↘	Tab 3.3
3.4 Indicators of social cohesion					
No close friend	n.i.	↗	↘	↘	Tab 3.7
3.5 Family formation and breakdown, lone parenthood, fertility					
Fertility	↘	↗	↗	↘	Fig 3.7
Marriages	↘	→	↘	↘	Fig 3.9
Divorces	↘	↗	↘	↘	Fig 3.9
Lone Parenthood	↗	↗	↗	↗	Tab 3.8
3.6 Health inequalities					
Life expectancy at birth	↗	↗	↗	↗	Fig 3.10
People having a long-standing illness	n.i.	n.i.	↘	↘	Tab 3.12
3.7 Housing tenure					
Housing, House prices	n.i.	→	↗	→	Fig 3.17
3.8 Crime and punishment					
Prison population	n.i.	↘	↗	↗	Tab 3.17
Crime rate	n.i.	↘	↘	↘	Tab 3.18
3.9 Subjective measures of well-being, satisfaction, "happiness"					
Happiness	n.i.	n.i.	↘	↘	Fig 3.22

Note: n.i.=no information/ n.a.= not applicable

10. Appendix 4: Log Table Chapter 3 – SK

	1990-99	2000-04	2005-10	Earliest to latest endpoints in figure	Table / Figure in report
Gini	→	↗	↗	↘	Fig 2.4
3.2 Material deprivation					
Material deprivation	n.i.	n.i.	↘	↘	Fig 3.1
3.3 Cumulative disadvantage and multidimensional measures of poverty and social exclusion					
Persons under at-risk-of-poverty	n.i.	n.i.	↘	↘	Tab 3.5
3.5 Family formation and breakdown, lone parenthood, fertility					
Live births	↘	→	↗	↘	Fig 3.12
Marriages	↘	↘	→	↘	Fig 3.13
Average age at marriage	↗	↗	↗	↗	Fig 3.14
3.6 Health inequalities					
Life expectancy at birth	↗	↗	↗	↗	Fig 3.15
People having a long-standing illness	n.i.	n.i.	→	→	Tab 3.14
3.7 Housing tenure					
Housing prices	n.i.	↗	↗	↗	Fig 3.19
3.8 Crime and punishment					
Prison population	↘	↗	→	↗	Fig 3.21
Recorded offences	↘	↗	↘	↘	Fig 3.20
3.9 Subjective measures of well-being, satisfaction, "happiness"					
Happiness	n.i.	n.i.	↗	↗	Fig 3.24

Note: n.i.=no information/ n.a.= not applicable

11. Appendix 5: Log Table Chapter 4 – CZ

	1990-94	1995-99	2000-04	2005-10	Earliest to latest endpoints in figure	Table / Figure in report
Gini	↗	↗	↗	↘	↗	Fig 2.2
4.2 Political and civic participation						
Electorate turn up, general	↘	↘	↘	↘	↘	Tab 4.1
Electorate turn up, local	n.i.	↘	↗	↗	↘	Tab 4.1
Electorate turn up, EP	n.a.	n.a.	n.a.	→	→	Tab 4.1
Unionization	↘	↘	↘	↘	↘	Fig 4.1
Political participation (civic organizations)	n.i.	n.i.	↘	↗	↘	Tab 4.3
4.3 Trust in others and in institutions						
Institutional trust (Government)	n.i.	n.i.	n.i.	↗	↗	Tab 4.9
Institutional trust (Parliament)	n.i.	n.i.	n.i.	↗	↗	Tab 4.9
Institutional trust (Justice)	n.i.	n.i.	n.i.	↗	↗	Tab 4.9
Interpersonal trust	n.i.	n.i.	→	↘	↗	Tab 4.8
4.4 Political values and legitimacy						
Votes for extreme right parties	↗	↘	↘	↘	↘	Tab 4.12
Votes for extreme left parties	↗	↗	↗	↘	↘	Tab 4.12
EU membership approval	n.a.	n.a.	n.a.	↘	↘	Tab 4.14
Agreeing no further immigrants to be allowed to country	n.i.	n.i.	↗	↗	↗	Tab 4.15
4.5 Values about social policy and welfare state						
Income differences are too large in the country	n.i.	n.i.	n.i.	n.i.	↘	Tab 4.23
Government should reduce differences	n.i.	n.i.	↗	↗	↗	Tab 4.24
Consider the social welfare situation as good	n.i.	n.i.	n.i.	→	→	Tab 4.25
Poor are lazy	n.i.	n.i.	n.i.	n.i.	↘	Tab 4.27

Note: n.i. = no information/ n.a.= not applicable

12. Appendix 6: Log Table Chapter 4 – SK

	1990-94	1995-99	2000-04	2005-10	Earliest to latest endpoints in figure	Table / Figure in report
Gini	↗	↗	↘	→		Fig 2.4
4.2 Political and civic participation						
Electorate turn up, general	↘	↘	↘	↗	↘	Tab 4.4
Electorate turn up, local	↘	↘	↘	↘	↘	Tab 4.4
Electorate turn up, EP	n.a.	n.a.	n.a.	↗	↗	Tab 4.4
Unionization	↘	↘	↘	↘	↘	Fig 4.2
Political participation (civic organizations)	n.i.	n.i.	n.i.	↘	↘	Tab 4.7
4.3 Trust in others and in institutions						
Institutional trust (Government)	n.i.	n.i.	n.i.	↗	↗	Tab 4.10
Institutional trust (Parliament)	n.i.	n.i.	n.i.	↗	↗	Tab 4.10
Institutional trust (Justice)	n.i.	n.i.	n.i.	↗	↗	Tab 4.10
Interpersonal trust	n.i.	n.i.	n.i.	↗	↗	Tab 4.11
4.4 Political values and legitimacy						
Votes for extreme right parties	↘	↗	↘	↘	↘	Tab 4.18
Votes for extreme left parties	↗	↗	↗	↘	↘	Tab 4.18
EU membership approval	n.a.	n.a.	n.a.	↗	↗	Tab 4.20
Agreeing no further immigrants to be allowed to country	n.i.	n.i.	n.i.	↗	↗	Tab 4.21
4.5 Values about social policy and welfare state						
Income differences are too large in the country	n.i.	n.i.	n.i.	n.i.	↘	T 4.28
Government should reduce differences	n.i.	n.i.	n.i.	↗	↗	T 4.29
Consider the social welfare situation as good	n.i.	n.i.	n.i.	↗	↗	T 4.30
Important to make own decisions and be free	n.i.	n.i.	n.i.	↗	↗	T 4.31
Poor are lazy	n.i.	n.i.	n.i.	↘	↘	T 4.32

Note: n.i.=no information/ n.a.= not applicable

13. Appendix 7: Log Table Chapter 5 CZ

	1990-99	2000-04	2005-10	Earliest to latest endpoints in figure	Table in report
5.2 Labour income					
Minimum wage	→	↗	→	↗	Tab 5.1
5.3 Taxation					
Total tax receipt (per cent of GDP)	→	↗	↘	↘	Tab 5.3
Average effective tax rate, single earner 125 per cent of AW, no children	→	→	→	→	Tab 5.4
Average effective tax rate, two earners, two children	→	↗	↘	↘	Tab 5.4
5.4 Social expenditures					
Social expenditures (per cent of GDP)	→	→	↗	↗	Tab 5.5
Expenditures on Education (per cent of GDP)	→	→	→	→	Tab 5.8

Note: n.i.=no information/ n.a.= not applicable

14. Appendix 8: Log Table Chapter 5 – SK

	1990-94	1995-99	2000-04	2005-10	Earliest to latest endpoints in figure	Table / Figure in report
5.2 Labour income						
Share of minimum wage on average wage	n.i.	n.i.	↗	↗	↗	Tab 5.2
Revenues of tax income as percentage of GDP	↘	↗	→	→	↘	Fig 5.1
Implicit tax rate on labour	↗	↘	↘	↗	↘	Fig 5.2
5.4 Social expenditures						
Total	n.i.	↗	→	↗	↗	Fig 5.3
Old age	n.i.	↗	↗	↗	↗	Fig 5.3
Health	n.i.	↗	→	↗	↗	Fig 5.3
Unemployment	n.i.	→	→	→	→	Fig 5.3
Family	n.i.	→	→	→	→	Fig 5.3
ALPM	n.i.	→	→	→	→	Fig 5.3

Note: n.i.=no information/ n.a.= not applicable