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Ministerstvo financií SR / www.finance.gov.sk/ifp

# Unemployment in Slovakia

November 2014

#### Abstract

The average rate of Slovak unemployment in the last 20 years reaches 14.5%, well above the majority of European countries. This policy paper examines causes of such persistent unemployment and offers policy responses. Main findings suggest that there are three predominant causes of the unemployment presented in the order of their importance. First, very low skills and discrimination exclude Roma population from the labour market. Second, inadequate initial structure of the economy continues to hamper employment growth from the onset of the transition process. Third, high contributions and inappropriate tax-benefit system reduces job creation among low-income households. Policies should aim at (i) raising skills of unemployed Roma, educating youth and developing affirmative action policies towards integration of the entire Roma population; (ii) improving the infrastructure by directing more EU funds into the least developed regions; (iii) reducing labour cost for low-income earners and (iv) introducing in-work benefits for deprived households.

#### Acknowledgement:

The analysis benefited from numerous valuable discussions with officials from relevant institutions and experts from NGOs during field visits to Central and Eastern Slovakia. It includes meetings during June 2014 with: (i) officials from regional labour offices in Banská Štiavnica, Banská Bystrica, Spišská Nová Ves and Žarnovica; (ii) an official of National Labour Inspectorate in Košice; (iii) experts from community centres in Banská Bystrica and Spišské Podhradie; (iv) experts from ETP Slovakia, representatives of U.S. Steel Košice ("Rovnosť príležitostí" - a project to support Roma employment) and representatives of the city district in Košice-Šaca; (v) mayor of Bystrany.

The authors would like to thank M. Bialko and L. Melioris who participated on the project, and L. Fašungová, P. Goliaš, S. Mačáková, L. Mýtna Kureková, M. Páleník, L. Pástor, M. Pollák, B. Šprocha, L. Vagač, M. Vašečka for their valuable advice and suggestions.

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#### Note:

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# **Main findings:**

#### Weak labour market in Slovakia

Despite the rapid economic convergence after 1989, poor labour market outcomes remain the main structural problem in Slovakia. The average rate of unemployment in the last 20 years reaches 14.5%, well above the majority of European countries. Low turnover and weak vacancy creation lead to persistent and elevated long-term unemployment. Almost 70% of the unemployed are out of the job market for more than one year, which further deteriorates their skills and employment prospects.

# Unemployment remains high even after taken to account informal work...

Informal work is not significantly affecting the unemployment statistics. Only a small share of employees is working without any official arrangements. Other semi-informal arrangements, however, are more widespread, e.g. "cash-in-hand" contractual agreements and "false self-employment". Though having an official contract, in both cases workers and firms fail to declare the true income in order to bypass tax and social security obligations. At the same time, any kind of official contract lowers the risk of being punished by the labour inspection authorities. Nevertheless, such widespread semi-informal arrangements do not affect the unemployment statistics.

#### ...and marginally attached persons

Labour market is weak even in terms of "non-employment" statistics, which includes unemployed (i.e. active job-seekers) and the marginally attached persons (i.e. inactive but willing to work). However, the share of marginally attached persons on the non-employment is rather low compared to other EU countries meaning the non-employed in Slovakia are considered relatively more often to be active. Although the prevalence of active job-seekers among non-employed increases the unemployment rate relative to EU average, it is easier for the policy to stay in touch with active persons thus improve their employment prospects.

# Structural nature of unemployment prevails

The nature of the persistent unemployment rate in Slovakia is mostly structural. It arises because of (i) exclusion of low-skilled, uneducated and discriminated Roma population from the labour market, (ii) slow vacancy creation due to inappropriate initial structure of the economy at the beginning of the transition. Besides structural issues, unemployment stems from (iii) high contributions reducing the labour demand and from the inappropriate taxbenefit system discouraging the labour supply.

# Exclusion of low-skilled and discriminated Roma population reduces labour supply

Inappropriate labour supply, lacking skills and insufficient qualifications reduces the job-finding rate. In this regard Roma population stands out as group that is disproportionately disadvantaged in the labour market. Besides high unemployment, adult Roma population is more often discouraged from the labour market participation. The reason is the poor social environment Roma come from accompanied with the wide spread discrimination. If the Roma population on the labour market achieved the average results of the majority population, the overall unemployment rate would be approx. 4 percentage points lower. Endowing Roma with employable skills will require substantial reforms of activation policies and education system.

## Inappropriate structure of the economy hampers stronger job growth

Structural unemployment arises because of the low vacancy creation due to inappropriate initial structure of the economy. Economic changes in 1989 hit the Slovak labour market much harder than the one in Czech Republic. Sharing the same institutional environment, the labour market in Slovakia followed completely different path during onset of the transformation. Further, integration into the global economy brought positive effects on labour demand, while the global competition pressures offsets it suggesting the transition of the labour market is very slow and not over yet. Very low outflow rate (from the unemployment) may explain the higher duration of unemployment affecting mainly eastern Slovakia.

# High contributions and inappropriate tax-benefit system distort incentives

Reduction of the contributions and strictness of regulation may incentivize employers towards greater job creation. Higher health and social contributions act as a barrier to employment especially for the low-skilled as the gap between labour costs and labour productivity is substantial. Further, tax-benefit system negatively influences both financial and non-financial incentives of certain types of households, thus restricting the labour supply. Switching from inactivity to employment results in relatively low net increase in households' disposable income, especially in less-developed regions. Additionally, other supply-side factors seem to hamper regional mobility, thus negatively influencing the labour market outcomes.

# **Key policy directions:**

# Improving chances of Roma on labour market should be a priority

- Promoting access to education by preschool facilities and Roma-speaking personal assistants.
- Supporting community centres to socialize Roma youth via extracurricular activities.
- Redesigning activation works towards skill-increasing programmes.
- Ensuring legal assistance to Roma population regarding anti-discrimination law violations and establishing mediation services in areas with higher concentration of Roma population to prevent conflicts between Roma and majority

# Accumulating and directing more capital to less-developed regions

- Increasing the EU funds absorption rate by removing the institutional and administrative barriers and deficiencies.
- Prioritizing less-developed regions with EU funds and investment aid.
- Building the transport infrastructure to enhance the accessibility of the lessdeveloped regions.

# Overall reduction of health and social security contributions will strengthen job creation

- Abolishing various targeted tax-allowance programmes for specific groups.
- Reducing health and social security contributions mainly for all low-income employees.
- Easing job creation by reducing the red tape and other hiring costs for employers.

# Raising the gap between social benefits and potential income will increase financial incentives to work

- Introducing in-work benefits, which allow keeping part of the social benefits even after starting the job.
- Broadening and increasing housing allowance to foster regional mobility.
- Introducing specific programmes for low-skilled job-seekers (job search assistance, education and training).

# 1 What is the real unemployment in the Slovak Republic?

High unemployment is considered to be one of the most binding structural problems of the Slovak economy. The important question is, however, how much is the reported unemployment rate biased due to informal work and how are the data affected by the number of unemployed, who in reality are unable to take up a job (i.e. they are rather inactive). According to our estimates "the true unemployment" remains considerably high even after taking these factors into account.

# 1.1 The official statistics point to a considerably weak labour market

Slovak unemployment is one of the highest in international comparison. Over the last 20 years, the average unemployment rate in Slovakia was 14.5%, well above the OECD and EU average (OECD – 6.8%). Slovak labour market has been considerably weak even compared to neighbouring countries (Figures 1.1 and 1.2). Before the global financial crisis, Slovak unemployment had been falling sharply thanks to the buoyant economic growth and the EU membership. During this period, more than a third of all newly hired employees found its job abroad. However, the double recession in EU had a severe impact on the labour market and the sluggish economic growth during the recovery had not been sufficient to generate new jobs. The number of unemployed has reached 386 thousand in 2013, i.e. 14.1%.

#### Official data point to overall weak labour market

Figure 1.1: Average unemployment rate (%, 1993 – 2013)

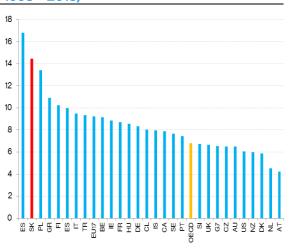
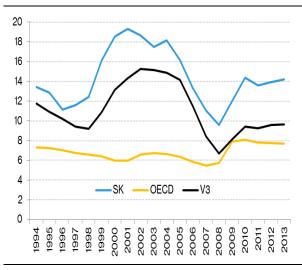


Figure 1.2: Unemployment rate (%)



Source: OECD Source: OECD

Disadvantaged groups and regions are particularly affected by the weak labour market. The employment rate of the low-skilled is only half of the OECD average while the employment rate for those with tertiary education is not significantly different. Overall, around 60% of the unemployed are low-skilled. Low turnover and weak vacancy creation lead to high long-term unemployment. Almost 70% of the unemployed are without job for more than one year, which further deteriorates their employment prospects. Long periods of unemployment have been shown to have potentially 'scarring' effects lowering future income levels, skills validity and future employability (Bell and Blanchflower, 2010). Moreover, persistent unemployment is prevalent in southern and eastern part of the country heightening regional disparities.

## Box 1: What do statisticians mean by unemployment and how is it measured?

There are two main sources of data regarding unemployment (Figure 1.3):

- 1) Administrative data collected by the labour offices;
- 2) Labour force survey data collected by the statistical office.

Central Office of Labour, Social Affairs and Family (COLSAF) considers as unemployed only those who are registered at the local labour offices seeking employment. The statistics are available on the monthly basis and hence provide an early signal on the changes in the labour market. However, these numbers are affected by various incentives to register and by administrative changes (registration requirements or unemployment benefits' changes). Thus, the data are not internationally comparable due to country-specific legislations.

**Labour Force Survey** is each quarter monitoring workforce using direct surveys in selected households. The LFS uses the standard International Labour Organization (ILO) definition, where the unemployed is a person who fulfils all three conditions:

- a) does not have a paid job;
- b) wants work and is actively looking for a job;
- c) is available for work.

The LFS data are internationally comparable.

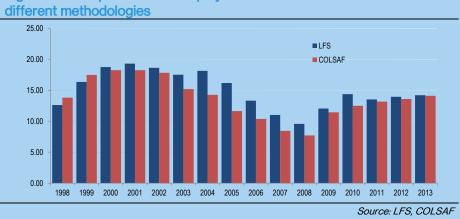


Figure 1.3: Comparison of unemployment rates in Slovakia based on two different methodologies

# 1.2 Informal workers do not significantly affect the unemployment statistics

Informal employment or hidden employment prompts concerns about workers protection and pose a negative risk regarding tax revenues. Non-registered workers are left without protection against old age, sickness, unemployment and economic downturns, while employers are facing risks of penalties from the labour inspection authorities. Informality can affect the official statistics thus overestimating unemployment as the hidden employees can be registered as unemployed. Labour informality takes up various forms, hence it is important to capture not only the size, but also different forms of informality in order to estimate its potential impact on labour market statistics. Distinction between informal workers without any contract and those who fail to declare only a portion of their income is crucial. In general, informal employment is affecting the official unemployment rate, while undeclared income leads only to under-reported real working hours.

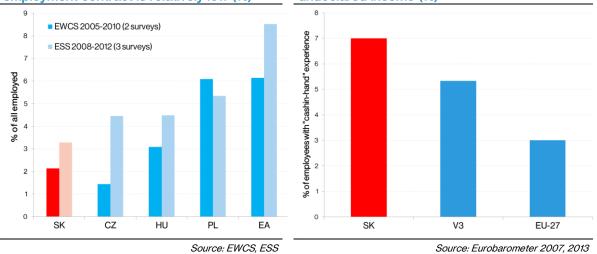
The share of unregistered workers is low...

With only a small share of employees working fully informally, the official unemployment statistics in Slovakia are not significantly biased. Under the narrow definition, an unregistered person works without any contract. According to international surveys, employment without contracts accounts for 2.1% to 3.3% of employees in the Slovak economy, which is significantly less compared to other European countries¹ (Figure 1.4). OECD research confirms that only a small share of employees is working fully informally in Slovakia, yet a large share of the workforce has undeclared income (OECD, 2008). This result is reiterated by simple estimates comparing administrative data of employment from the Slovak Insurance Agency with the Labour Force Survey².

#### Undeclared income prevalent compared to fully informal work

Figure 1.4: Share of employed without any employment contract is relatively low (%)

Figure 1.5: Higher share of employees with undeclared income (%)



Notes:

EWCS - European Working Conditions Survey; ESS - European Social Survey

Share of employed without an employment contracts also includes refusals and "don't know" answers.

#### ...but under-reporting income is more widely used

Although various forms of informality are common in the labour market, they are not affecting the unemployment statistics. Workers and firms often fail to declare the true income in order to bypass tax and social security obligations. Additionally, as opposed to non-registered work, under-reporting of income poses lower risk for employees and employers to be detected by the labour inspection authorities as they are unable to monitor the true number of hours worked. Eurobarometer surveys show more frequent experience of employees with "cash-in-hand" payment of any salary or remuneration for work in Slovakia compared to other EU countries (Figure 1.5). Contractual agreements and self-employment are especially used for under-reporting the income due to a greater flexibility of these working arrangements. Looking at the income distribution of contractual arrangements, unusual spikes around the level of EUR 159 may suggest an undeclared income in order to evade on payroll taxes and social security contributions. Since 2014, working students with income lower than EUR 159 are exempt from social contribution

<sup>1</sup> Informal employment is prevalent among workers with few job opportunities; hence relatively larger share of immigrants in other EU countries might lead to higher informality in EU compared to Slovakia.

<sup>2</sup> The estimate compares the number of employees according to the LFS data and the Slovak Insurance agency (2.Q of 2013). The difference in number of employees between the two data sources amounts to 26 thousand persons, who can be considered as informally employed.

payments. This legislative change led to a significant increase of students receiving income around the threshold of EUR 159 suggesting a part of the salary is paid "cash-in-hand" (Figure 1.6). Nevertheless, undeclared income is not affecting unemployment statistics as the evaders are considered to be official workers. An exception are contractual workers registered at the labour offices representing, however, only a small share<sup>3</sup>.

Preferential tax treatment for the self-employed spurs tax evasion and "false self-employment". There is mounting evidence that non-negligible amount of the self-employed could be considered to be "false self-employed", as they work every day for the same employer, thus bypassing tax obligations<sup>4</sup> (IFP, 2014). Moreover, the self-employed have wider opportunities to fail to declare the income and register for social security as opposed to the employees. There are especially wider opportunities to include part of the personal consumption into the business costs. In 1996 the share of taxes and social contributions paid by the self-employed was 130 % of those paid by the employees. Recently the share is around 30% (Figure 1.7). Average tax and contributions liability of self-employed persons is currently lower than in 1996. The personal income tax development suggests that despite significant changes in 2013 the room for tax evasion for self-employed persons is still high.

Figure 1.6: Income distribution for contractual arrangements (persons aged 26 years or less, 2012.4 vs. 2013.4)

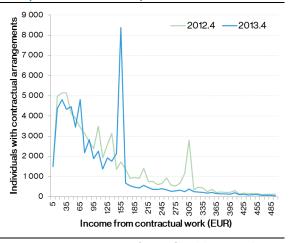
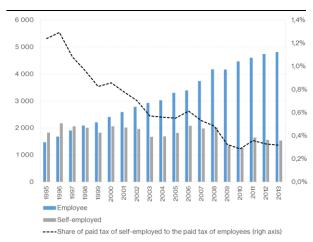


Figure 1.7: Average paid tax and social contribution



Source: Slovak Insurance Agency

Source: IFP

Seasonal and irregular work, as a part of shadow economy, is widely used in Slovakia, but it does not influence true unemployment outcomes. Because seasonal workers are mostly employed on a very short-term basis and their work effort varies considerably over time, this type of unofficial employment should not be considered as having a significant impact on labour market outcomes. Seasonal and irregular contracts are more often used in industrial sectors that exhibit strong seasonal character and are of a low-skill nature, e.g. trade, agriculture and construction (Hazans, 2011). Based on anecdotal evidence, this type of work is popular among marginalized Roma communities. Being excluded from the regular labour market, irregular work is often the only possibility to raise their disposable income (UNDP, 2012). Nevertheless, the extent of seasonal work is difficult to measure for its short-term and irregular attributes.

<sup>&</sup>lt;sup>3</sup> Average number of registered unemployed with contractual arrangements amounted to roughly 46 thousand in 2013.

<sup>&</sup>lt;sup>4</sup> Enabled by deductible expenses or generally more options how to evade on income taxation.

# 1.3 While the unemployment is high, number of marginally attached persons is low

Taking into account the number of marginally attached persons, the overall adjusted unemployment rate is even higher (Box 2). Besides the official unemployment, there is a vast number of persons considered as inactive, who are willing to work but due to different reasons they are not able to take up a job. People marginally attached to the labour force do not fulfil the ILO definition of unemployed persons, i.e. actively seeking the job. Discouraged workers, who believe no jobs are available on the market, are one example of persons marginally attached to the labour force. To increase the potential employment, labour market policies should take into account the broader term of unemployment and focus on creating and adapting job positions for marginally attached persons as well.

Using broader definition, the unemployment remains still high

The overall non-employment in Slovakia is skewed towards unemployment rather than marginalized groups. The overall non-employment is well above the OECD average, but the number of marginally attached persons is rather low (Figures 1.8 and 1.9). Slovak tax-benefit system motivates jobless persons to become unemployed rather than marginally attached, thus being excluded from the labour force. The main reason is that discouraged workers can increase their benefits within the "activation works" programme, which are conditioned upon registering at the labour office. Although the prevalence of active job-seekers among non-employed increases the unemployment rate relative to EU average, it is easier for the policy to stay in touch with active persons thus improve their employment prospects.

#### Low share of persons marginally attached to the labour force

Figure 1.8: Broader unemployment rate: unemployed + marginally attached persons (% of labour force)

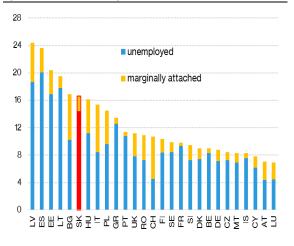
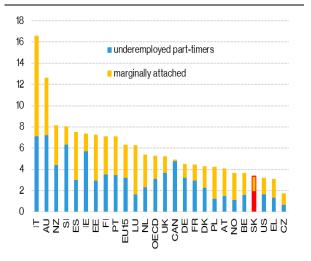


Figure 1.9: Marginally attached persons + underemployed part-timers (% of labour force)



Source: OECD Source: OECD

Share of people marginally attached to the labour force is low in Slovakia

Marginally attached and the under-employed account just for 3.5% of the labour force. Reasons why persons are willing but unable to work are following:

- **Family reasons** In Slovakia there are 18,500 people looking after children or incapacitated adults and who would require special time schedules to make their duties compatible with work.
- Illness and disability 31,000 people with illness or disability are seeking for more adaptable jobs which would allow them to work despite their disability.
- Discouragement Despite their willingness to work, they are not looking for a job
  as they think that no jobs are available. They account for 11,000 persons and
  more active labour market policies should be applied in order to motivate them.
- Under-employment Part-time workers who wish to work full-time are considered "under-employed" as they want to work more, but are not able to find a full-time job. In Slovakia there are around 36,000 underemployed part-timers.<sup>5</sup>

Slovakia is well below the EU average when it comes to persons marginally attached to the labour force and under-employed part-timers. Figure 1.10 shows the number of marginally attached persons plus under-employed part-timers as a percentage of the labour force. Only Belgium, Czech Republic and Portugal have a lower share, making Slovakia the country with the 4th lowest percentage of marginally attached plus underemployed people. The share of under-employed part-timers (1.3%) and discouraged workers (0.41%) on labour force in Slovakia is significantly below the EU average.

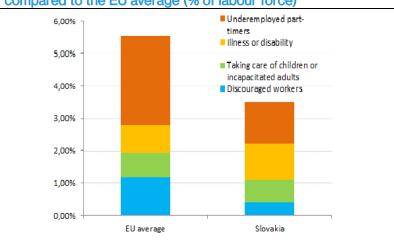


Figure 1.10: Marginally attached and underemployed are lower compared to the EU average (% of labour force)

Source: LFS, OECD

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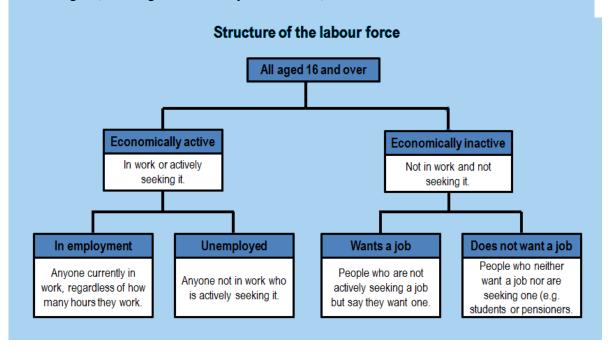
<sup>&</sup>lt;sup>5</sup> The number of underemployed is likely to be underestimated due to contractual work arrangements as these are used as part-time contracts. See http://www.finance.gov.sk/Default.aspx?CatID=7920.

# Box 2: What do statisticians mean by economically inactive persons?

The term **labour force** refers to all those over 16 years of age who are either employed, actively seeking work, or expecting recall from layoff.

Those who do not have a job and are not actively looking for work are "inactive" (pensioners, discouraged workers, students etc.) Formally it accounts for all persons who are jobless during the observation week, have not been actively searching for a job for the last 4 weeks or those who are actively seeking but are not able to start working in next 14 days.

Marginally attached workers, defined as persons out of the labour force who are willing to work and available for work, but are not actively seeking work. Reasons for people being marginally attached to the labour force might be family reasons, illness or disability or being discouraged (believing there are no jobs available).



# 1.4 The unemployment remains high even after adjusting for undeclared work and marginally attached persons

Our estimate of the true unemployment rate is 14.7% for 2013, taking into account the marginally attached and adjusting for the undeclared work. The estimate of the unemployment itself is lower compared to LFS data and COLSAF data due to undeclared work. At least for Slovakia, it can be shown that even if the full effect of the estimates is taken into account (all informally employed based on survey are deducted from unemployment), the unemployment will not decrease significantly. However, taking into account marginally attached persons, the overall unemployment rate increases to 14.7%. Such estimate remains still well above the OECD and EU average (Figure 1.11).

16% Marginally attached 14% ■ Unemployment adjusted for undeclared work 12% 10% 8% 6% 4% 2% 0% SK HU PL CZ ΕU

Figure 1.11: Adjusted unemployment rate is slightly higher than the official unemployment rate (% of labour force)

Source: OECD, LFS, COLSAF, IFP

**Adding the marginally attached and the under-employed** - The share of the marginally attached and the underemployed accounts only for 3.5% of the labour force compared to the EU average (Figure 1.10). We treat marginally attached persons as unemployed.

<sup>&</sup>lt;sup>6</sup> **Subtracting fully informal workers** - Fully informal employment is estimated according to the European working condition surveys (ECWS 2005 and 2010 average). We assume that all informal employees are officially registered unemployed. We simply calculate the number of unemployed by substracting the number of informally employed (share of survey based informally employed on labour force – LFS 2013). It means that even if the full effect of the estimates is taken into account, the unemployment will not decrease significantly.

# 2 What are the main reasons behind the high unemployment?

In general, the nature of the persistent unemployment rate in Slovakia is twofold: structural and incentive-based. Structural unemployment arises because of (i) exclusion of low-skilled, uneducated and discriminated Roma population from the labour market (labour supply) and (ii) the low vacancy creation due to inappropriate initial structure of the economy at the beginning of the transition (labour demand). Incentive-based unemployment stems from high contributions reducing the labour demand and from the inappropriate taxbenefit system discouraging the labour supply.

We indicatively rank the contribution of each labour market issue to the overall unemployment rate. We acknowledge that the number of issues can be even broader; however, our aim was to focus on major issues leading to weak labour market outcomes.

#### Exclusion of low-skilled and discriminated Roma population reduces labour supply

Inappropriate labour supply, lacking skills and insufficient qualifications leads to higher unemployment rate. In this regard Roma population stands out as group that is disproportionately disadvantaged in the labour market. Roma are low qualified and often come from socially unfavourable environment. Wide-spread discrimination leads to labour market exclusion, which further deteriorate their employment prospects. Endowing Roma with employable skills will require substantial reforms of activation policies but also of the education system.

## Inappropriate structure of the economy generates weak labour demand and few vacancies

Economic transformation hit the Slovak labour market much harder than the one in Czech Republic. Being one country until 1993, it is thus impossible to explain the divergence in unemployment rates by different institutional environment. Instead, the inappropriate initial structure of the Slovak economy might be the cause of higher unemployment rate. Having the same inflow rate (to the unemployment) as the Western economies throughout the transition process, the Slovak unemployment rate would be no different in comparison to what it had been. Due to global competition, new exportoriented enterprises generate only a weak demand for labour and thus only few vacancies.

# High contributions and inappropriate tax-benefit system distort market participants' incentives

High contributions demotivate employers to hire low-skilled job seekers. Further, tax-benefit system negatively influences both financial and non-financial incentives of certain types of households towards supplying more work, especially in less-developed regions. Policies aiming at reducing the labour costs for low-income workers, introducing in-work benefits for deprived households and improving regional mobility can have positive impact on both labour supply and labour demand.

# 2.1 Roma population is more inactive and less employed

Roma population has been identified as a group that is disproportionately disadvantaged in the labour market. Estimates suggest there are approximately 400 thousand Roma in Slovakia, while about 130 thousand of Roma are registered as jobseekers (Box 2). Moreover, a large share of the Roma population is facing labour market exclusion as labour market participation among the Roma is limited, especially for those living in marginalized localities. Low educational attainment accompanied by wide-spread discrimination acts as a barrier to formal employment.

Roma are often excluded from the labour market or unemployed

Besides high unemployment, Roma adult population faces low labour market participation. Economic activity among adult Roma is low: only 60% of the adult Roma population is economically active compared to 76% of the non-Roma population. This means that almost 40% of the Roma population is out of the labour force - neither employed, nor actively looking for a job. Yet, inactivity problem is considered to be even worse when compared to the situation of the unemployed. Inactive persons are often socially excluded, while their abilities and skills rapidly deteriorate. This is mainly the experience of the marginalized Roma communities (World Bank, 2008). Young Roma population (age 15-24) is, on average, more active due to low educational attainment, while older age cohorts exhibit a significant drop in the labour participation rate (Figure 2.1). The reason for the low participation rate is twofold: demographic structure of the Roma population and a larger share of discouraged workers.

The younger Roma population is out of the labour force mainly due to family reasons. The demographic structure of Roma population differs from the majority as it is skewed towards younger age cohorts. Around 40% of the population is below the age 15, compared to 15% of non-Roma population (Šprocha, 2014). Young population is, on average, more likely to have a family and children, which means that less time is devoted to the job search. Adult Roma are therefore more often inactive due to family reasons (40%), while among non-Roma this reason accounts only for 10% of those not looking for a job. A relatively large share of men also stated family reasons as the main barrier keeping them out of labour force. More than 10% of the working age Roma is inactive due to family reasons compared to 1% among the majority population (Figure 2.2).

## A large share of Roma is excluded from the labour market

Figure 2.1: Share of inactive on the population

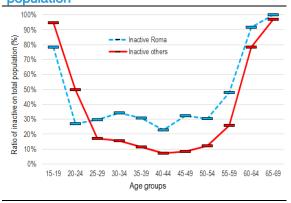
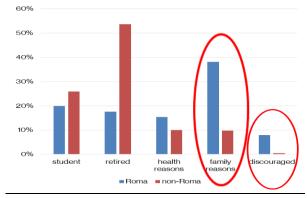


Figure 2.2: Reasons for being inactive



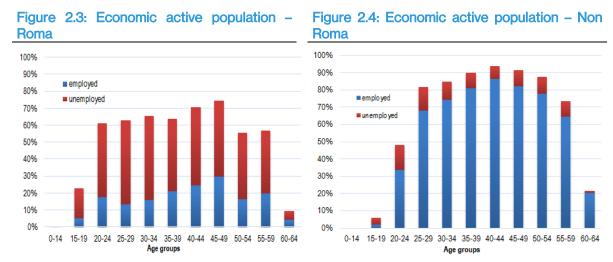
Source: IFP, LFS data

Source: IFP, LFS data

The other reason for the lack of labour market participation is the discouragement among Roma due to the scarcity of job opportunities. Many unemployed Roma have given up looking for jobs, as they do not think there are jobs available for them. This group is out of the labour force. Almost 10% of the inactive Roma is discouraged, while the discouragement is almost non-existent among the majority. Young Roma more often drop out from the education process and after the initial job searching period they soon become discouraged (Figure 2.2).

Roma who enter the labour market are mostly unemployed. Though there is a lot of inactivity among Roma, **even the active part of the population is much more often unemployed** (Figure 2.3). The employment rate of Roma aged 15-64 reaches approximately 17%<sup>7</sup>, which is very close to the World Bank's estimate of 15% (2012). The employment rate of the majority in the same age group, however, reaches almost 60% (Figure 2.4).

# Most of the economic active Roma are unemployed



Poor performance on the labour market among the Roma population can be summed in three points:

- low education attainment and qualification,
- different societal and time preferences,
- wide-spread discrimination.

Roma population lacks skills to compete on the labour market

Source: LFS. IFP

The majority of Roma population has only basic education, which often is not even finished. The overall educational attainment is very low and Roma are underrepresented among high qualified workers. Eight out of ten Roma of working age have no more than primary education (LFS data). Roma children are much more likely to be streamed into special schools for mentally disabled children or into special classes in regular schools. Inequalities are starting at the beginning of the education process. Only 28% of Roma children aged 3-6 is enrolled in preschool, less than half the rate of non-Roma neighbouring children of the same age. This share is lower even compared to Roma preschool enrolment rates in Bulgaria, Czech Republic, Romania, and especially Hungary, where 76% of Roma children attend preschool (World Bank, 2012a). Roma students also have higher dropout rates. Elementary education needs to be formally finished until the student is 16 years old, which is often too soon for Roma students.

-

Source: LFS. IFP

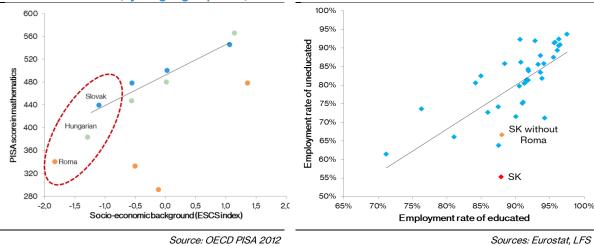
<sup>&</sup>lt;sup>7</sup> Based on LFS data.

Even if children formally finish the process of education, their skills and knowledge are below average. Children from the Roma communities arrive in primary schools with a development handicap of several years, which is difficult to catch up with. In some regions the insufficient command of the Slovak language seems to be an issue as well. This is apparent in results of PISA tests, in which the Roma children succeeded relatively less compared to others even after controlling for their socio-economic background (Figure 2.5). Insufficient language ability hampers the education and social contact at a young age and later restricts the access to the labour market itself. Nevertheless, the international comparison shows that the education and qualification are not the only problems of the Roma population, as the employment of the low-qualification persons (compared to the active population) is below average for the rest of the population as well (Figure 2.6).

## Roma population lagging already in the educational process

Figure 2.5: PISA score for different quartiles in the ESCS index (by language spoken)





Notes:

The higher value of the ESCS index corresponds with better social, economic and cultural background of students.

Roma often come from a socially excluded environment, which further deteriorates their employment prospects

Anecdotal evidence shows as well that young Roma living in the segregated settlements are exposed to societal pressure towards an early partnership or family life. This unfortunately often comes at a detriment of education and therefore a perspective of higher income. However, this phenomenon is supported institutionally: young people are motivated to establish a household, as various welfare benefits are awarded based on the household principle. Early family formation and extended households as a cultural characteristics provide both care and support in Roma communities (Frazer and Marlier, 2011). According to the regional survey, 13% of women from the majority population were married between the ages of 20 and 24 years, while in Roma communities this share amounted to about 65%. Similarly, between the ages of 15 to 19 years 15% of Roma women already got married, which is twice the share of those in the majority population (World Bank, 2012a).

attributes (%, 2011) 100 Non-Roma living nearby 90 ■ Roma 80 70 60 50 40 30 20 10 Falling behind some or Experienced hunger in At risk of poverty most utility and other payments the last month

Figure 2.7: Share of people living in households showing poverty attributes (%, 2011)

Source: UNDP/World Bank/EC Regional Roma Survey 2011

In general, people living in poverty often exhibit dynamically time-inconsistent preferences and relative impatience. The regional Roma survey in 11 EU member states shows that even the experience of hunger (i.e. going to bed hungry because of lack of money for food) is quite common among poor Roma families (Figure 2.7). Further, the vast majority of surveyed Roma households live at risk of poverty and people in poor Roma communities are therefore often unable to generate savings. In other words, they are willing to lower their present consumption only in anticipation of a significantly larger income tomorrow. This has its economic logic: people living from day to day have to focus their attention mostly towards surviving the present. The result is the vicious circle of poverty and it is likely the case of poor Roma communities. Concerning the societal and time preferences, anecdotal evidence shows that the poorest Roma population exhibits similar phenomena as the poor areas of the developing world (see Bauer et al., 2012; Bauer and Chytilová, 2013).

Wide-spread discrimination acts as a barrier to employment

The third important factor of an unfavourable Roma situation on the labour market is discrimination. Anecdotally, for certain types of jobs it is common to hire a person over the phone. However, because of her obvious ethnicity at the subsequent face to face encounter, the person is told the job vacancy has already been filled in. Discrimination of Roma, present in the rental housing market as well, has been confirmed by rigorous experiments; see Bartoš et al. (2014) for the case of the Czech Republic.

In a field experiment inspired by similar studies (McGinnity et al., 2009; Kaas and Manger, 2010) we tested discrimination of Roma job-seekers in Slovakia. The experiment was conducted between July and September 2014. First, we created six fictitious job applicants with names clearly indicating Roma and non-Roma origin. The choice of three typically Slovak and three Roma sounding names were based on results of a survey<sup>8</sup>. Additionally, we manipulated applicants' permanent address, such that the fictitious Roma applicant comes from a town which is densely populated by Roma. All other relevant personal and employment characteristics were matched, (i.e. age, gender, education, previous work experience, additional skills and interests). Total of 124 applications were sent to 62 job

<sup>&</sup>lt;sup>8</sup> We were asking the respondents to choose which names sound like Slovak and which like Roma (Slovak names: Tomáš Žilinský, Michal Kováč, Pavol Haluška; Roma names: Mário Lakatoš, Dezider Oláh, Koloman Berky).

openings advertised on the biggest job portal in Slovakia9. During the 3-month period, we obtained 66 responses including negative feedbacks and 36 interview invitations.

Table 2.1: Measuring discrimination of Roma in recruitment

	Callback rate	Discrimination ratio	Response rate	Discrimination ratio		
High school education						
Roma (N=29)	13.8%	-	21.1%	-		
Non-Roma (N=29)	41.4%	3.0**	69.0%	3.3***		
University education						
Roma (N=33)	21.2%	-	48.5%	-		
Non-Roma (N=33)	39.4%	1.9	69.7%	1.4		
All						
Roma (N=62)	17.7%	-	37.1%	-		
Non-Roma (N=62)	40.3%	2.3***	69.4%	1.9***		

#### Notes:

Callback rate defines a proportion of applicants invited to an interview for both observed groups; Response rate measures a proportion of applicants obtaining any answer, including a negative one, to their application for both observed groups; Discrimination ratio is calculated as a ratio between callback/response rate for non-Roma applicants and callback/response rate for Roma applicants.

The results of the experiment indeed indicate discrimination of Roma job-seekers in recruitment. Table 2.1 shows significantly lower callback and response rates for Roma job applicants compared to non-Roma job applicants. According to the aggregate results of the field study, 40.3% of the non-Roma job applicants were invited to an interview by companies or employment agencies compared to only 17.7% of Roma. Thus, Roma job-seekers may face additional barriers to employment compared to the majority of the Slovak labour force. Similarly, only 37.1% of Roma job applicants received some answers in respond to their applications, compared to 69.4% non-Roma. The differences in proportions tend to be even higher for people with only high school diploma, compared to those who attended a university. However, results for job applicants with a university degree do not appear to be statistically significant.

No policy action regarding the Roma situation will have a significant negative impact on public finance

If the Roma population on the labour market achieved the average results of the majority population, the unemployment rate would be over 4 percentage points lower.<sup>10</sup> There was about 277 thousand unemployed and 2 270 thousand employed persons among the active majority population (15-64 years) in 2013. Thus, the unemployment rate of the majority population in 2013 reached almost 11%, while the total COLSAF unemployment rate was 15.2%.

If the activity of Roma on the labour market does not increase in the future, the unemployment rate will remain high - around 12% (Figure 2.8). The estimate is based on the impact of the growth of the Roma population (according to Šprocha, 2014) on the unemployment rate in Slovakia up to 2030. In this scenario we assume that the labour

<sup>\*\*, \*\*\*</sup> indicate that differences in callback rate/response rate between Roma and non-Roma applicants are statistically significant at 5% and 1% level using Fisher's exact test.

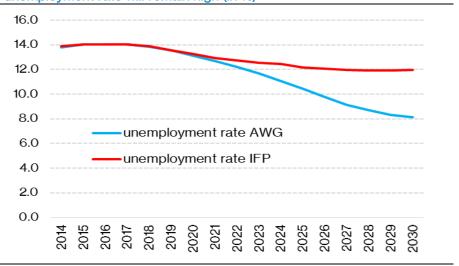
<sup>9</sup> www.profesia.sk

<sup>&</sup>lt;sup>10</sup> The estimate is based on following assumptions. There is approximately 282 thousand Roma of working age (15-64 years), the majority population of working age is about 3,575 thousand persons (Sprocha, 2014). The average number of registered unemployed according to COLSAF in 2013 was 415 thousand persons; based on ARC our best estimate is that approximately one third (i.e. 138 thousand) are Roma.

The employment rate of Roma of working age is 15% (World Bank, 2012a), therefore the rate of employment of the majority population is about 63.5% (IFP according to Eurostat data from 2013).

market indicators for the majority population will develop in line with the European Commission (Ageing Working Group) forecast. However, the activity of Roma on the labour market in this scenario will stagnate on the present levels until 2030. Consequently, the working age majority population will decrease by 10%, while the working age Roma population will increase by over 35%. Given the initial assumption, the number of the unemployed Roma will increase at the same rate. Even though the unemployment rate of the majority population is expected to drop towards 5%, this would not be enough for the total unemployment rate to decrease significantly.

Figure 2.8: If the employment of Roma does not improve, the unemployment rate will remain high (in %)



Source: LFS, IFP

#### Box 3: Roma population statistics

Significant part of the public discussion on the persistent long-term unemployment in Slovakia touches on the question of the participation of Roma population on the labour market. However, many points of the discussion are often unsupported by statistical data as the methodically sound and comparable data is unavailable in Slovakia.

In general, there are three sources of data that can be used to estimate the activity of Roma on the labour market:

- The Central Office of Labour, Social affairs and Family (COLSAF)
- Atlas of Roma Communities (ARC)
- Labour Force Survey (LFS).

COLSAF data concerning the ethnicity of job-seekers were collected in 1997 and 1998. According to those findings, one in five job-seekers was registered as Roma. These data were ceased to be collected in 1999, and are therefore unusable for the present.

The Atlas of Roma communities in Slovakia (UNDP, 2014) brings more detailed data from the Roma communities, which are not however available in the same extent for the rest of the population of Slovakia. The analytical comparison of groups is thus more difficult. The aggregate statistics however are available: there are approximately 400 thousand Roma in Slovakia according to the ARC, while about 130 thousand of Roma are registered as jobseekers. The estimate that about one third of registered unemployed are Roma can also be supported by a strong connection between the number of Roma and the total number of unemployed in the municipality. ARC shows that while Roma represent about 8% of the total population, they make up a third of registered unemployed.

The third source of data on the Roma population is the LFS, i.e. quarterly collection of data by the Statistical Office on the activity of people on the labour market according to the ILO methodology. This survey collects information on the nationality of the respondent, according to which there are 120 thousand Roma in Slovakia. However, the estimate of the Roma population does not have to be tied to the nationality of the respondent.

Since 2013 the LFS questionnaire includes the question about the language abilities of the respondents. By the command of the Roma language the Roma population in Slovakia amounts to about 200 thousand persons. Even though LFS may not catch people living in the segregated settlements, the descriptive statistics are still informative.

# 2.2 Inappropriate structure of the economy hampers job creation

Sharing the same institutional environment with the Czech Republic until 1993, the labour market in Slovakia followed completely different path during onset of the transformation. Thus, persistent unemployment rate in Slovakia might have its roots in the initial structure of the Slovak economy. Integration into the global economy brought positive effects on labour demand, while the global competition pressures offsets it suggesting the transition of the labour market is very slow and not over yet. Very low outflow rate (from the unemployment) may explain the higher duration of unemployment affecting mainly eastern Slovakia. Having the same inflow rate (to the unemployment) as the Western economies throughout the transition process, Slovak unemployment rate would be no different in comparison to what it had been.

Initial structure of the economy matters, while the inflow does not

Non-negligible part of the elevated unemployment rate in Slovakia may have its roots in the initial structure of the economy. At the onset of the transformation the Czechoslovak economy was together with post-socialistic economies relatively more capital-intensive, but inefficient (Hall and Jones, 1998). Yet, there were substantial differences between Czech and Slovak economy, with the latter being rather undercapitalized (Figure 2.9). Moreover, the entire Slovak industry was built under the socialistic regime, while the Czech lands were industrialized prior to WWII. Slovak industry was thus heavily dependent on the import of cheap energy and raw materials from the Soviet Union. Almost quarter of the machine and electrical industry in Slovakia was based on arms production, while in Czech Republic it was only 7 percent. Consequently, Czech economy was more resilient and better prepared for the international competition which came after 1989 (Stroehlein et al., 1999).

Though being the same country until 1993 and thus sharing virtually the same institutional environment, the labour market transformation in Slovakia was strikingly different compared to the Czech Republic. Czech labour market benefited from the rise in vacancies which has been persistently two to three times larger than in Slovakia (Munich and Svejnar, 2007). Figure 2.10 shows that while both economies are likely sharing the same Beveridge curve, the initial aggregate demand level was much lower in Slovakia. Therefore, the outward shift of the Beveridge curve in early 1990s caused a much greater increase in the unemployment rate in Slovakia than in the Czech Republic.

<sup>&</sup>lt;sup>11</sup> Unemployment rate in Czech Republic and Slovakia in 1990 was 0.8 and 1.5 percent respectively (Hardt and Kaufman, 1995).

Figure 2.9: Net capital stock per output is relatively low in Slovakia

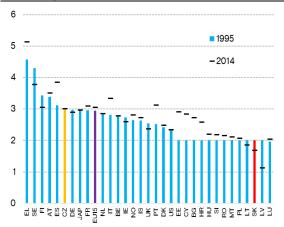
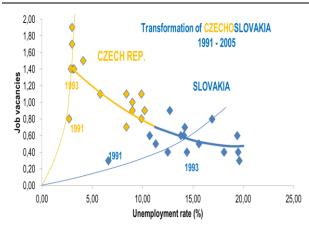


Figure 2.10: Two responses to the transformation shock in Czechoslovakia



Source: AMECO Source: Munich and Svejnar (2007)

Further, the inflow rate to unemployment is not the cause of the elevated unemployment rate in Slovakia after the collapse of socialism. Models of transformation hypothesized that the inflow rate would rise rapidly at the onset of the transformation as the workers would flow from the state sector into unemployment and then to the private sector. However, having the same inflow rate as the Western Germany throughout the transition process, Slovak unemployment rate would be no different in comparison to what it had been (Munich and Svejnar, 2007). In other words, the inflow rates in CEE countries were very close to the one in the West Germany.

Global integration increased productivity, but created no jobs

During the transformation, CEE countries experienced a rapid growth in the labour productivity accompanied by low net job creation (Figure 2.11). This process was fostered by FDI inflows, which in Slovakia and Czech Republic accounted for 4.6 and 4.8 percent of GDP, respectively (average from 1993 to 2012, Figure 2.12). Yet, the rapid growth in productivity was driven by new export-oriented sectors with relatively low labour-intensity. As stated by Onaran (2008): "positive demand effects of integration into the world economy have been offset by international competitive pressures, leading to labour saving growth without generating jobs". Thus, the outflow from unemployment got stuck at a very low rate.

Figure 2.11: Jobless growth in CEE countries

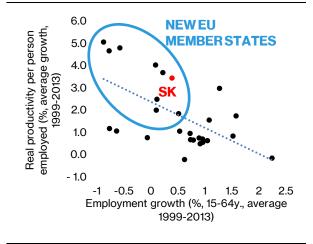
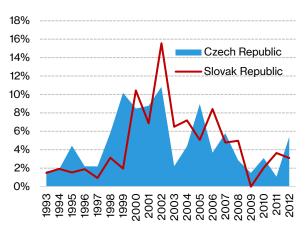


Figure 2.12: FDI inflows over GDP are similar in Czech and Slovak Republic

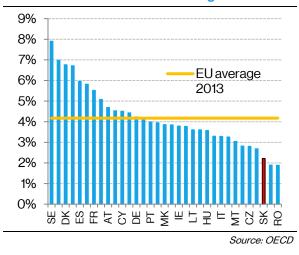


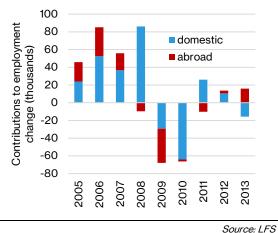
Source: Eurostat Source: OECD

In fact, Slovak outflow rate from the unemployment is one of the lowest in the EU (Figure 2.13, relative to the total number of both unemployed and employed<sup>12</sup>). Additionally, the increase in the outflow rate in Slovakia during the period of pre-crisis boom was driven as much by the employment abroad as by the domestic employment. Between 2005 and 2007, almost 40 percent of new employees found its job abroad (Figure 2.14). Hence, the domestic outflow rate is even lower than the overall outflow rate.

Figure 2.13: Share of persons working shorter than 3 months is below EU average

Figure 2.14: 40 percent of new employees found its job abroad between 2005-2007



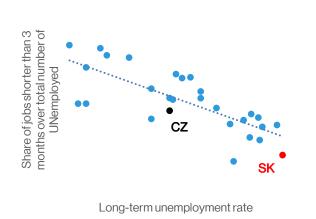


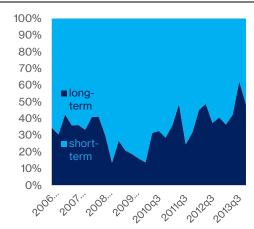
Low outflow rate increases the duration of job search in the less-developed regions

Low outflow rate may contribute to the prolonged duration of unemployment. There is a fairly strong correlation (-0.75) between the outflow rates and the long-term unemployment rates across the EU countries (Figure 2.15). Thus, the persistent long-term unemployment in Slovakia might stem not from the insufficient skills of job-seekers (labour supply problem), but rather from the fact that job-seekers are waiting too long for the vacancy to be opened (labour demand problem). In fact, currently almost fifty percent of newly hired employees were unemployed for more than one year (Figure 2.16). Hence, even the long-term unemployed are able to find a job suggesting their skills are sufficient.

Figure 2.15: Outflow rate correlates with longterm unemployment in EU (logs, 2010)

Figure 2.16: Even the long-term unemployed are able to find a job





Source: Eurostat

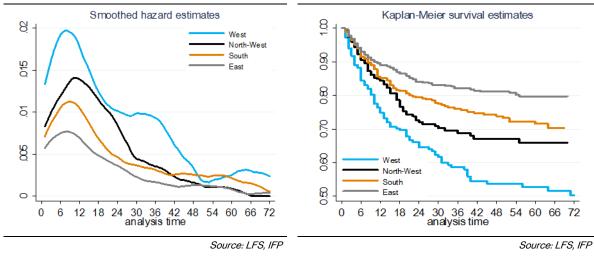
Source: Eurostat, IFP

<sup>12</sup> However, (cross-country) comparable data on outflow from the unemployment are not available. Thus, we use the Eurostat data on the number of persons who found their job within the last three months as a proxy for an outflow.

Although the long-term unemployed are able to work, the scarcity of vacancies makes them waiting in the queue especially in the East. Hazard rate of finding a job in West peaks at 2 percent while the hazard rate in the East is almost flat with a maximum of only 0.7 percent throughout 72 months of unemployment (Figure 2.17)<sup>13,14</sup>. Estimated survival functions shows that after 12 months roughly 90 percent of job-seekers still cannot find a job in the East, compared to 75 percent in the West (Figure 2.18). Strikingly, even after 3 years, 80 percent of the unemployed are not able to find a job in the East.

Figure 2.17: Flat hazard in the East highlights the demand problem (0.01 pp.)

Figure 2.18: There is substantial difference in survival rates across regions



The heterogeneity across regions is significant even after controlling for education, age and sex in the parametric estimation<sup>15</sup> (Appendix). Compared to East, looking for the job in South, North-West and West means increasing the incidence of finding one by 40, 55 and 140 percent, respectively. For instance, after six months of unemployment, a 29-44 years old male from the West with a college degree is more than twice as likely to find a job compared to someone from the East with the same characteristics. We conclude that this is the result of insufficient labour demand in the East generating only few vacancies.

<sup>&</sup>lt;sup>13</sup> Result is based on standard survival analysis from 2011q1 to 2013q4. The description of the survival data can be found in the Appendix. To simplify the analysis we drop unemployed who flow into inactivity and we divide Slovakia into for regions instead of eight: West (BA+TT), North-West (TN+ZA), South (NT+BB), East (PO+KE). Further, we used three age groups: less than 29 years old, 29-44 years, more than 45 years; and three education groups: at most basic school degree, high school degree and college degree. We treat persons in the active labour market programme as unemployed. As a form of a visual inspection of the data, we use non-parametric methods to estimate hazard ratios and survival curves across different regions, education groups, age groups and sex. Then, we use parametric estimations with various distributions and interpret the results in terms of Cox proportional hazard model. We leave a more sophisticated competing risk model for further research.

<sup>&</sup>lt;sup>14</sup> Hazard rates peak after 6 months when the unemployment benefits are no longer available to job-seekers.

<sup>&</sup>lt;sup>15</sup> The difference between males and females is not significant. The significant difference across age is rather a result of endogeneity as we did not consider important to discuss the effect of age on unemployment.

# 2.3 Employment barriers for low-skilled are still significant

Reduction of the contributions and strictness of regulation may incentivize employers towards greater job creation. Higher contributions act as a barrier to employment especially for the low-skilled as the gap between labour costs and labour productivity is substantial. Further, tax-benefit system negatively influences both financial and non-financial incentives of certain types of households, thus restricting the labour supply. Switching from inactivity to employment results in relatively low net increase in household disposable income, especially in less-developed regions. Additionally, other supply-side factors seem to hamper regional mobility, thus negatively influencing the labour market outcomes.

High contributions and regulation can affect employability of the low-skilled

High contributions reduce the job creation. Higher contributions act as a barrier to higher employment, especially for the low-skilled, as the gap between labour costs and labour productivity seems to be high. Social security contributions (as a percentage of labour costs) are among the highest within OECD countries (Figure 2.19). Since the social security contributions do not decline for lower levels of income, hiring of low-skilled job-seekers becomes relative expensive for employers, especially in lower-productivity sectors (Figure 2.20).

Figure 2.19: Employers' social security contributions appear to be high (%)

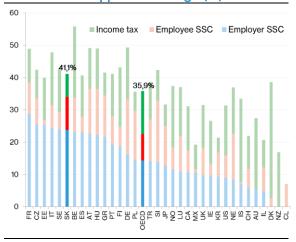
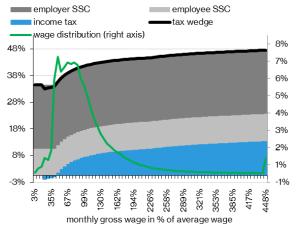


Figure 2.20: Tax wedge for low-skilled workers should be lower (% of total labour costs)



Source: OECD Economic Outlook 2013

Source: IFP

#### Tax-benefit system demotivates certain types of household

Inactivity trap of recent tax-benefit system makes low-paid jobs unattractive for certain types of household. Higher level of social transfers is associated with higher probability of being unemployed or inactive (Siebertová et al., 2014). It is a combination of tax system and rapid withdrawal of means-tested social assistance benefits that causes relatively lower net marginal increase in the disposable income when taking up a job. The magnitude of such impact appears to be similar to Czech Republic and lower than in the case of Hungary (Bičáková et al., 2008; Benczur et al., 2012). Although the inactivity trap for people in material need has been reduced significantly by the 2003 reform (Figure 2.21), it can be still considered relatively high for certain types of households. The evidence shows that the disincentive effect of the difference in net wage and lost transfers increases with lower education, lower potential labour income and income (e.g. such as pension benefits) of other persons in household (Bičáková et al., 2008). This effect strengthens considerably for

women with children and low-skilled persons. Currently, the minimum income support covers almost 200 thousand persons who are either inactive but able to work or who actively participate in the labour market, i.e. both employed and unemployed (Figure 2.22).

Figure 2.21: Development in the system of assistance in material need (measured as inactivity trap, %)

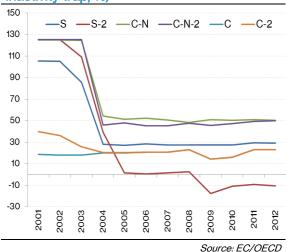
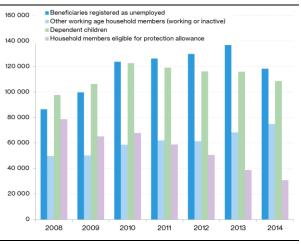


Figure 2.22: Minimum income support beneficiaries (material need assistance)<sup>16</sup>



Source: IFP

#### Notes:

The calculations does not include a special allowance (EUR 63.07 for 6 months) that represents an in-work benefit for persons taking up a job and being no longer recipients of the benefit in material need;

Figure 2.21: Assumption that person holds/takes up a job with gross earnings of 45% of average wage;

Type of households: S - single, S-2 - lone parent with 2 children, C-N - 1-earner childless couple, C-N-2 - 1-earner couple with 2 children, C - 2-earner childless couple, C-2 - 2-earner couple with 2 children (principal earner with 67% of average wage)

Activation works programme amplifies the inactivity trap effect. Activation allowance is paid to participants of small municipal works that are part of a social programme. Beside the activation allowance increases the inactivity trap, it may negatively affect participants' future employment prospects. The evidence shows that activation does not improve workers' skills. It often locks participants in local low-skilled works, thereby lowering their mobility and motivation to search for a standard job (Harvan, 2011).

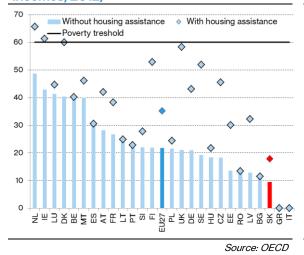
Minimum income support is inadequate compared to other OECD countries (World Bank, 2012b). Despite the potential negative impact of social assistance on work incentives, further reduction of the minimum income support is not the appropriate measure to increase work incentives of inactive or unemployed persons. Even after including supplemental housing benefit to the basic material need allowance, the overall financial support does not reach 20% of median household income for a single-member household or 25% for a couple with two children (Figures 2.23 and 2.24). Thus, policies should aim at increasing the gap between the level of social benefits and potential income rather than simply reducing the social benefits.

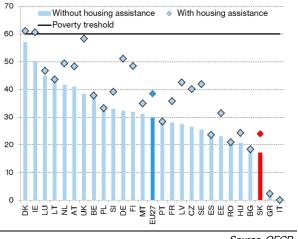
<sup>&</sup>lt;sup>16</sup> Protection allowance is provided for members of household in material need that are pensioners, disabled, pregnant women, or parents with a child below the age of 1.

#### Minimum income benefits appears to be low in Slovakia

Figure 2.23: Cash minimum income benefits for a single person (% of median household incomes, 2012)

Figure 2.24: Cash minimum income benefits for a married couple with 2 children (% of median household incomes, 2012)





Source: OECD

Notes:

Median value for EU27.

The examples do not include activation allowance for participants of public work programmes for Slovakia.

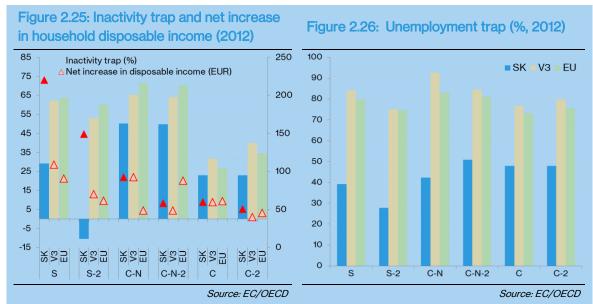
# Box 4: Tax-benefit system reduces labour supply incentives

The easiest way, how to compare interactions of taxes and social contributions with social benefits, is to look at different standardized households with pre-defined levels of income. The marginal effective tax rate (METR) indicates how much of an additional income a person would lose after finding a job either within the period of the unemployment benefits entitlement or when moving from inactivity.

Unemployment trap shows the METR for the initial phase of unemployment, during which a person is entitled to unemployment benefits. It indicates how much of an additional income a person would lose when finding a job within the period of unemployment benefits entitlement, i.e. 6 months in Slovakia.

Inactivity trap measures the METR of people who are not entitled to unemployment benefits, but are eligible for means-tested assistance in material need. The indicator therefore addresses the question how taxes and social benefits affect work incentives of people in poverty, i.e. how much of an additional gross income they can potentially lose because of the interaction between tax system and means-tested social assistance.

Using standardized household types, the Slovak tax-benefit system does not appear to reduce financial incentives to work more than in other EU countries. The METR, both for short-term and long-term unemployed, is relatively low for single persons and lone parents compared to other EU countries (Figures 2.25 and 2.26). METR increases for households with jobless members and children on welfare, therefore affecting especially women without a job. The unemployment trap for short-term unemployed tends be a minor problem mainly due to the limited 6-month period of unemployment benefits entitlement and relatively stricter conditions that need to be fulfilled prior to unemployment (Venn, 2012).



#### Notes:

The calculations does not include the special allowance (EUR 63.07 for 6 months) that represents an in-work benefit for persons taking up a job and being no longer recipients of the benefit in material need;

It is assumed that person takes up a job with gross earnings of 45% of average wage;

Type of households: S – single, S-2 – lone parent with 2 children, C-N – 1-earner childless couple, C-N-2 – 1-earner couple with 2 children, C – 2-earner childless couple, C-2 – 2-earner couple with 2 children (principal earner with 67% of average wage).

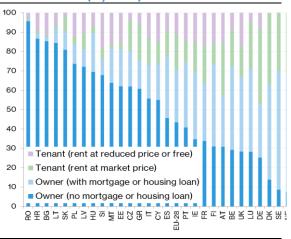
## Other factors are further deteriorating motivations for employment

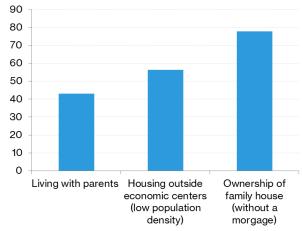
Non-financial factors negatively affect work-incentives of certain households. International comparison shows that net percentage increase in disposable income of some households, such as for single persons and lone parents, should be sufficient when moving from inactivity to employment. On the other hand, the transition from inactivity to employment is reflected in an increase of only EUR 100 in absolute terms, which may not be enough to cover additional costs related to commuting and/or relocation. Family structure, housing situation and level of infrastructure in regions together with discouraging impact of social assistance may significantly shrink financial incentives to work. Even when an individual can benefit from a substantial increase in net income by moving from inactivity to full-time employment, there are other factors that may incur additional costs to households when taking up a job.

Housing situation and under-developed infrastructure may restrain labour mobility. Although the level of loans and mortgage-financing is still below the EU average, Slovak home ownership rate exceeds 90% and is among the highest in EU. Consequently, only about 8% of population lives in rented dwellings, indicating that the rental housing market is under-developed (Figure 2.27). Yet, the elevated home ownership rate may reduce work incentives, as the transaction costs and potential capital losses associated with distant job location dampens the residential mobility (OECD, 2005). According to EU-SILC data, 43% of the unemployed live together with their parents in one household, allowing them to share living expenses (Figure 2.28). At the same time, these unemployed can be entitled to the benefit in material need as a separate household, which may potentially impact their work effort. This group includes not only the youth and graduates, but those already cohabitating with partners at a later age as well.

Figure 2.27: Distribution of population by tenure status (%, 2012)







Source: Eurostat

Source: EU-SILC 2012

Additionally, the share of population living in urban areas in Slovakia is the lowest among 31 OECD countries (Figure 2.29). In general, urbanization positively correlates with the economic growth. Empirical results show that labour productivity and wages tends to increase with the size of cities (OECD, 2014b). The reason is the spatial concentration of the economic activity (Rosenthal and Strange, 2004). Yet, there is only one metropolitan area in Slovakia (Bratislava) with only 13.4% of the country's population producing roughly 28% of the country's GDP<sup>17</sup>. In fact, 80% of municipalities in East have less than 1000 inhabitants compared to 55% in other regions (except Bratislava). Thus, the share of population inhabiting small villages is twice as large in East compared to West.

Labour mobility is the lowest among OECD countries (Figure 2.30), even if higher wages in Bratislava should attract the labour force from less-developed regions (Niebuhr et al., 2009). Thus, low labour mobility curbs the adjustment of job opportunities in the job market at the national level (OECD, 2005; Vagač, 2013). Based on the anecdotal evidence from regional labour offices, many job-seekers refuse job offers only because of commuting and costly relocation to a more distant place of work. Majority of the unemployed resides in their own family houses located mostly in areas with poor infrastructure outside of economic centres (Figure 2.28). Therefore, costs related to commuting and renting the dwelling may, at least partially, offset the net increase in income. This effect can be magnified by a considerable loss of means-tested social assistance due to the transition to employment. Residing in areas with under-developed infrastructure may significantly increase travel time to economic centres, thus having negative impact on labour mobility. Consequently, more complicated commuting to urban agglomerations results in lower economic growth (Ahrend and Schumann, 2014).

<sup>17</sup> Across OECD countries 48% of population resides in metropolitan areas (urban areas with population above 500 000), which accounts for 56% of the total GDP (OECD, 2013c).

# Low regional mobility

Figure 2.29: Share of population in urban areas is the lowest (%, 2012)

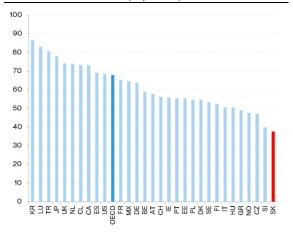
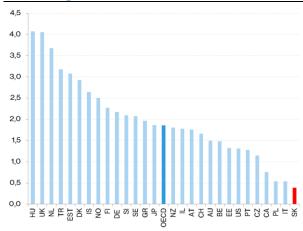


Figure 2.30: Annual regional mobility is minimal (%, average 2009-2011)



Source: OECD - Regions at a Glance 2013

Source: OECD - Regions at a Glance 2013

# 3 What should be the appropriate policy response?

Based on previous chapters, we identify four major areas the policy should focus on. (i) The priority should be given to integrating Roma population through various educational programmes. (ii) Policies should aim at efficient absorption and allocation of EU funds towards less-developed regions (iii) Further, job creation should be promoted, especially trough reduction of the overall burden levied on the low-skilled labour; yet, subsidies to specific group (e.g. youth, graduates, long-term unemployed) should be rather re-considered (iv) To improve the work incentives for low-skilled persons policies should implement inwork benefits and redesign the activation work programmes.

# 3.1 Improving access of Roma to employment should be a priority

Better statistics are important for efficient programmes

Statistics measuring Roma labour market outcomes should improve evaluation of Roma integration programmes and can help assessing the scope of discrimination. Roma population have been identified as one most disadvantageous group in the labour market. Therefore special targeted labour market policies should take place and reduction of the Roma unemployment should be one of the key policy priorities. In this regard, the first step is to have an access to high-quality and reliable data measuring labour market outcomes of the Roma population. The statistics can help regularly monitor the development among most disadvantaged group and can improve the evaluation of the various policies and Roma integration programmes. Moreover, the statistics can help better assessing the overall scope of discrimination. One of the possibilities is improving the use of primary data from the currently available source of data – Atlas of Roma Communities – and its connection to the data available to COLSAF, already at the level of primary data. Another possibility is to regularly monitor the ethnicity of job-seekers by special Labour Force Survey conducted and anonymized by the Statistical Office. The collected data will be immediately anonymised and the processes and information systems will prevent misuse of the data.

Different policies to fight discrimination should be considered. Based on our evidence (see pages 20-21), Roma appears to be treated unequal just because of their ethnicity or stereotypes that are related to Roma minority in Slovakia. Currently, the Anti-discriminatory Act represents a base legislative tool to prevent this type of discrimination. The 2011 Strategy of the Slovak Republic for Integration of Roma up to 2020 deals with additional measures that can help to improve and enforce the existing legislation. This includes mainly ensuring legal assistance to Roma population regarding anti-discrimination law violations, establishing mediation services in areas with higher concentration of Roma population to prevent conflicts between Roma and non-Roma people, or even raising media awareness about discrimination.

Nevertheless, to ensure equal opportunity rights may not be enough to ensure ethnic equality (Fryer and Loury, 2005). Even if employing in non-discriminatory environment is solely based solely on persons' productive characteristics, obtaining such characteristics is determined by the economic success of their parents. In other words, parents in marginalized Roma communities appear to be not as able to provide essential resources that can form human capital development of their children. Therefore affirmative action, i.e. positive discrimination, should be considered in some areas of public policy (education, active labour market policies).

Furthermore, as a part of policies raising media awareness about discrimination, the government could more actively publicize examples of successful Roma people. This can help to change the attitudes of the majority towards the Roma, which appears to be an important step to eliminate discrimination of Roma people.

# Box 5: Statistics regarding unemployment of minorities and foreigners

In many countries there is a possibility to identify total unemployment by using statistical surveys of households (labour force surveys in EU countries, Current Population Survey in the USA). The sample survey of population makes it possible to include also the unemployed who are not registered due to receiving unemployment benefits or participating in the programmes of labour market policies. The data enables to determine the unemployment rate also according to different characteristics, such as education, age and nationality (or ethnicity). Some countries publish the data about nationality, ethnicity or race also in connection to registered unemployment, it means mainly in the period of receiving unemployment benefit. The method used in identification of race and ethnicity in the USA and Great Britain is based on how a person identifies herself when applying for the unemployment benefit and in surveys.

Statistics of u	Statistics of unemployment of minorities and foreigners in other countries							
Country	Statistics about race, ethnicity or nationality in registered unemployment/receiving benefits							
Germany	Statistics for the group of foreigners (Ausländer) is published in connection to registered unemployment.							
Austria	Statistics for the group of foreigners (Ausländer) is published in connection to registered unemployment – countries in and beyond EEA.							
Netherlands	On its web page, the Statistical Office states the unemployment rate based on ethnicity (Native Dutch, Western foreign background, Non-western foreign background: Turks, Moroccans, Surinamese, Arubans/Antilleans, Other).							
Ireland	Statistics for the group of foreigners is published in connection to registered unemployment – Irish nationals, Non-Irish nationals (UK, EU-15 excl. UK, EU-15 to EU-28, Other nationals).							
Great Britain	Self-definition of ethnicity in registered unemployment, i.e. for example when receiving unemployment benefits. Approximately 25-26% of the beneficiaries did not state their ethnicity because they did not want or could not say (Prefer not to say; Unknown). Ethnicity stated in the statistics (Department for Work & Pensions): White: British, Irish or Other White/Mixed: White & Black Caribbean, White & Black African, White & Asian or Other Mixed / Asian or Asian British: Indian, Pakistani, Bangladeshi or Other Asian/Black or Black British: Black Caribbean, Black African, Other Black/Chinese or Other Ethnic Group: Chinese or Other Ethnic Group.							
USA	Self-definition of ethnicity and race in registered unemployment, i.e. for example when receiving unemployment insurance. Options to select ethnicity: Hispanic or Latino, Not Hispanic or Latino, Prefer not to say. Options to select race: White, Black/African American, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander, Prefer not to say. Questions about ethnicity and race are also used in monthly surveys of households – CPS (Current Population Survey) which the total unemployment rate is identified from.							

## Promoting access to education for Roma

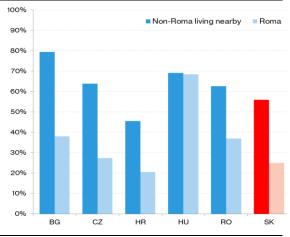
It is important to include Roma children into preschool education in order to improve their future employment prospects. Preschool education enrolment rates of Roma children amounts to only half of the rate of non-Roma children. This number is also significantly lower compared to Roma children enrolment in neighbouring countries. Meanwhile, the international evidence suggests that the preschool education significantly improves cognitive results of Roma children (World Bank, 2012a). Early intervention in terms of childhood education can be even seen as a policy generating high economic returns, since it appears to be a key element in improving later life outcome of socially disadvantaged children (Heckman and Masterov, 2007). Roma children often suffer from insufficient skills and habits when they enter into primary education. Therefore, one of the key priorities should be promoting policies aiming at increasing participation of Roma children in preschool education in order to catch up with their peers in primary schools.

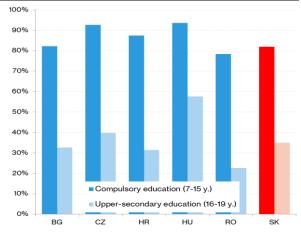
Preschool education should become compulsory and access to preschool facilities should be eased. Following policies that have been already introduced in several new EU member countries, such as Bulgaria, Poland, Romania and Hungary, introduction of obligatory pre-primary education should be considered. Hungary, with compulsory enrolment from the age of 3, has almost the same enrolment rate in kindergartens for Roma and non-Roma children (Figure 3.1). However, compulsory enrolment has to be accompanied by various supporting measures in order to improve the access to childcare facilities. Roma residing in marginalized localities have difficulties to access to child care facilities, as parents usually cannot afford commuting costs or their children are refused due to discrimination. Therefore additional measures have to take place, such as sufficient provision of childcare facilities, in-kind benefits to low-income families, raising awareness about importance of preschool education and fighting discrimination. In addition, building of new child-care facilities or extension of existing ones should be promoted in municipalities with lack of capacities for children. Less stringent regulation on maximum number of infants in one group, especially, can allow for costless extension of a number of existing childcare facilities.

Policies should focus on encouraging of high school completion. Roma children suffer from poor transition to upper-secondary education (Figure 3.2). While enrolment rate of Roma children in compulsory education is very similar to majority population (82% vs. 87%), it sharply decreases for secondary school enrolment (35% vs. 74%). There are high dropout rates among Roma students in the primary school. Lagging Roma students often reach the age of 16 without completion of lower-secondary education, thus they are not allowed to continue with their studies. Therefore prolongation of the age limit in the lower-secondary school should be considered (for instance, from the current 16 to 18). It may enable Roma children to finish compulsory education, which qualifies them to apply for higher level of education including non-diploma vocational studies, thereby improving their labour market prospects. Moreover, adequate subsidies to cover costs connected to commuting, school materials, food and other living expenses, linked to certain educational achievements can help increase the attainment.

Figure 3.1: Lower preschool enrolment rate for Roma children (%)







Source: UNDP/World Bank/EC Regional Roma Survey 2011

Source: UNDP/World Bank/EC Regional Roma Survey 2011

Targeted approach not segregation should improve educational outcomes

Most special schools and special classes in standard schools should be abolished. Segregation of Roma children in schools remains a negative phenomenon in Slovakia and also in other Eastern European countries communities (World Bank, 2012a; Fox and Vidra, 2013). While in countries, that promote inclusive education, segregation is considered as a last resort<sup>18</sup>, in Slovakia the share of Roma children in special elementary schools amounts to approximately 35%. Therefore, Roma children seem to be significantly over-represented in special school attendance, since their share in the population is only about 12% (UNDP, 2014). It is recommended to promote integrated education that, based also on evidence, seems to be effective in improving educational outcomes of both Roma and non-Roma children (Kézdi and Surányi, 2009). Furthermore, special schools are more expensive than standard schools (World Bank, 2012a); therefore resources should be directed to more targeted programmes as Roma speaking teaching assistants or subsidizing community centres.

In this regard, Roma-speaking personal teaching assistants and tutors can be employed in kindergartens and primary schools. They can help Roma children to overcome initial obstacles during their stay in classrooms, especially during their transition from preschool to primary education. In addition, special programmes, such as extended school hours, after school, summer programmes are recommended to compensate for lagging skills and insufficient opportunities for schooling outside the classroom to improve their educational outcomes (World Bank, 2012a). Thus such measures may be seen as an important element of above mentioned integrated education.

Community centres can act as a substitute for public services to deal with hugely disadvantageous position of marginalized Roma communities. Marginalized job-seekers require highly individualized and time consuming services which include specialized social work services, and traditional employment services are typically not well-placed to deliver such services. It may simply be more efficient for the Labour Offices to contract out highly specialized and intensive services rather than delivering them in-house (World Bank, 2008). Currently, community centres are carried out by non-profit, non-governmental organisations, offering various services, such as preschool and school education support, job search

<sup>&</sup>lt;sup>18</sup> World Bank (2012a) mentions 4 examples of countries (Finland, France, Italy and United Kingdom) that promote integrated education. For instance, according to the study there are only 8 special schools In Finland and 9 in Italy. In Slovakia there existed 437 special elementary school (not including special classes in standard elementary schools).

assistance, health and other advisory services. We suggest promoting activities of community centres that can help Roma to improve their access to education and labour market, for instance by substituting preschool childcare facilities, offering after school programmes for elementary students, public employment services in municipalities with under-developed infrastructure, or even personal and financial help with projects that encourage building of new homes for Roma.

## 3.2 Accumulating and directing more capital to less-developed regions

In general, there are two strategies how to endow the economy with more capital: indigenous growth (South Korean model) and foreign-led development (Irish model). The indigenous growth strategy is based on the build-up of domestic savings accompanied with active industrial policy. Yet, facing ongoing economic challenges (e.g. ageing population) and lacking proper institutional and professional capacities in Slovakia, we do not consider this strategy as currently feasible for adoption.

The strategy of foreign-led development, on the other hand, is based on contributions of EU funds and Foreign Direct Investments (Barry, 2000) what may overcome the weaknesses of the indigenous growth strategy. First, EU funds (mainly the Cohesion Fund and European Regional Development Fund) are, in fact, designed to reduce regional disparities. Second, utilizing EU funds to foster the labour market transition is possible even during the period of fiscal consolidation. Third, there is no need for massive build-up of additional institutions and professional capacities to adopt such strategy. The institutional framework for EU funds as well as for attracting the FDIs already exists; it just needs to be modified. Hence, we conclude that the strategy of foreign-led development is more suitable for Slovakia.

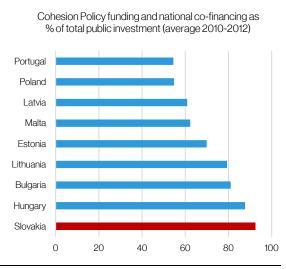
#### Spurring the regional cohesion using EU funds

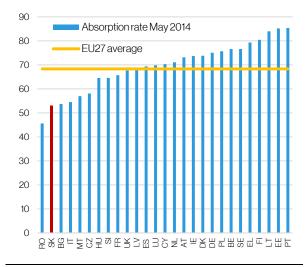
EU funds are an important component of the economic development in Slovakia, but there is a space for the improvement regarding their efficient absorption and allocation. In fact, most of the public investment in Slovakia is financed from the EU funds (Figure 3.3), which constitutes almost 20 percent of the GDP during 2014-2020 programming period (DG Regio). Nevertheless, (i) the absorption rate is low and needs to be increased; (ii) funds need to be primarily directed towards less-developed regions; and (iii) institutional framework needs to be modified to tailor less-developed regions' needs improving especially their transport infrastructure.

To increase the absorption rate the institutional and administrative barriers and deficiencies need to be removed. The project selection rate in May 2014 was 79.6 percent, which is only slightly below the EU average of 85.9 percent (DG Regio). However, the absorption rate of 53.1 percent is one of the lowest in EU (Figure 3.4). This suggests that there are substantial institutional and administrative deficiencies related to the EU-funded projects and the policy should aim to remove them to increase the public investment spending.

Figure 3.3: Most of the public investment in Slovakia is financed from EU funds







Source: DG Regio

Source: DG Regio

#### Prioritizing less-developed regions with EU funds and investment aid

The allocation of EU funds should prioritize less-developed regions. So far, the allocation of EU funds is not tackling regional disparities. In fact, EU funds are allocated rather evenly (Figure 3.5) and regional allocation within critical sectorial programmes are even widening the gap between East and West. Two-thirds of the investments from the sectorial operational programme Transportation were directed towards the North-West, while the underdeveloped South-East receives less than 30 percent of funds. In order to improve the situation, quotas for less-developed regions should be established.

Figure 3.5: EU funds are not tackling regional disparities in Slovakia

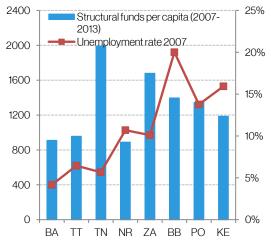
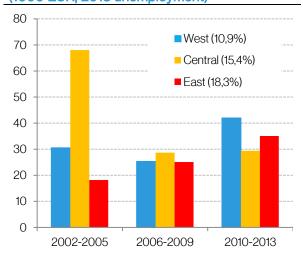


Figure 3.6: Investment aid per new created job (1000 EUR, 2013 unemployment)



Source: DG Regio, LFS

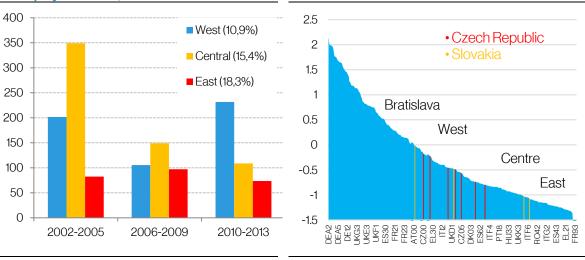
Source: SARIO, IFP

Investment aid should flow into less-developed regions. Although investment aid per new job has been rising on investment projects in the East, it has still not reached the levels seen in West (Figure 3.6). Consequently, the largest portion of jobs was created in West. This may suggest inefficient public policy as the government is not stimulating job creation in regions with high unemployment. However, the average intensity of investment aid (aid as a percentage of investment) in eastern Slovakia was 48% between 2010 and 2013, almost

reaching the EU limit of 50%. Hence, projects tend to be more labour intensive in the East (Figure 3.7) and the investment aid alone is not sufficient to provide adequate support for attracting investment in high-unemployment regions. Other policies are thus a necessary complement.

Figure 3.7: Low capital intensity of new projects in East (1000 EUR per worker, 2013 unemployment rate)

Figure 3.8: The accessibility (index) in Centre and East Slovakia is very low



Source: SARIO, IFP

Source: Annoni and Dijkstra (2013)

#### Improving the transport infrastructure

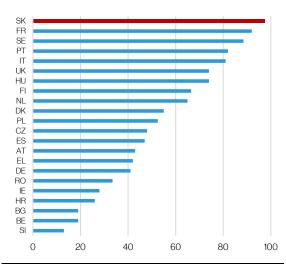
Slovak transport infrastructure is insufficiently developed, especially in the East and South-East. Employers perceive the lack of transport infrastructure as the main barrier to the job creation in the less-developed regions (PAS, 2013). In fact, the transport infrastructure is being built from West towards East in a way it is rather responding to the economic development instead of promoting it.

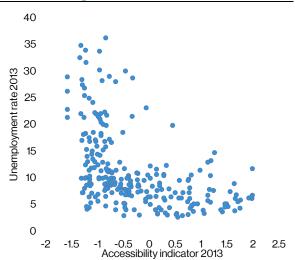
Building of the transport infrastructure should seek to enhance the accessibility of the less-developed regions of Slovakia (Figure 3.8). The accessibility is an indicator for the size of market areas, activities and opportunities which can be reached within certain period of time (or effort, distance, cost, etc.) taking into account the existing transport infrastructure in the area (Annoni and Dijkstra, 2013).

Regional disparities in Slovakia in the accessibility are actually the highest among EU countries, even if we account for the French Overseas Departments and Territories. The accessibility indicators for Centre and East Slovakia are of very low value which puts them at 207<sup>th</sup> and 213<sup>th</sup> place, respectively, among 259 evaluated EU regions (Figure 3.9). On the other hand, the capital, Bratislava, benefits from the well-developed infrastructure and proximity of Vienna, thus being at 91<sup>st</sup> place. Policies enhancing the accessibility of the Eastern regions would reduce trade costs, essentially bringing other markets closer to them. It is likely that this would improve the labour market outcome as the accessibility is negatively correlated (-0.5) with the unemployment rate across EU NUTS2 regions (Figure 3.10).

Figure 3.9: Regional disparities in Slovakia are highest in EU (accessibility: interquartile range of regions' rankings)

Figure 3.10: Negative correlation (-0.5) between unemployment and accessibility across EU regions





Source: Annoni and Dijkstra (2013)

Source: Eurostat, Annoni and Dijkstra (2013)

## 3.3 Increasing incentives for employers

Reducing contributions for the low-income earners ...

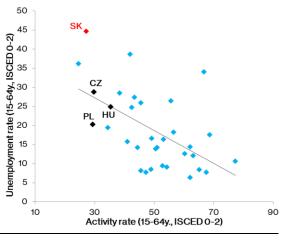
To increase the number of vacancies in the economy, we recommend reducing the contributions and thus the labour costs for the lower-income earners. Even if such policy appears to be more costly in terms of the budget constraint and in terms of deadweight loss (because part of the newly hired employees would found their job even without the policy), this policy delivers results and benefits as there are no substantial externalities nor displacement effects compared to targeted programmes. Moreover, the process of the substantial labour cost reduction can be divided into several small steps. Though within one year such a small reduction might appear to be meaningless with respect to any improvement on the labour market, several marginal steps throughout a longer period of time would have a positive impact. Additionally, the effect of the labour cost reduction for the low-income earners on employment is expected to be substantial as the activity rate of low-educated belongs to the lowest among EU countries (Figure 3.11).

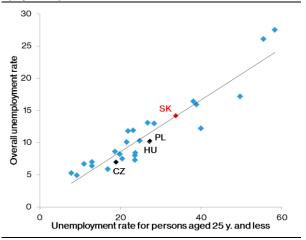
## ... without targeted job subsidies

Due to displacement effect various labour costs reducing targeted programmes should be re-considered. Currently, the labour market policy targets many specific groups, e.g. youth, graduates and long-term unemployed, among others. However, comparing the ratio of youth unemployment rate with that of the overall working age population shows Slovakia not standing out regarding the problem with youth unemployed (Figure 3.12). In addition, increasing the probability of finding a job for a specific group, such as young job-seekers, does not necessarily reduce the overall unemployment. The reason is the displacement effect (Crépon et al., 2013). Short-term subsidy for the youth employment, for instance, comes at the expense of just marginally older groups not fulfilling the criteria. Hiring subsidy for the long-term unemployed, on the other hand, reduces the employment prospects for the short-term unemployed. Instead, we recommend to adopt policies promoting an overall increase in job vacancies in the economy resulting in the decline of the overall unemployment and thus of those particular groups as well.

Figure 3.11: Low-educated job-seekers represent the most disadvantaged group (%, 2012)

Figure 3.12: Youth unemployment does not appear to prevail among different age groups (%, 2012)





Source: Eurostat

Source: Eurostat

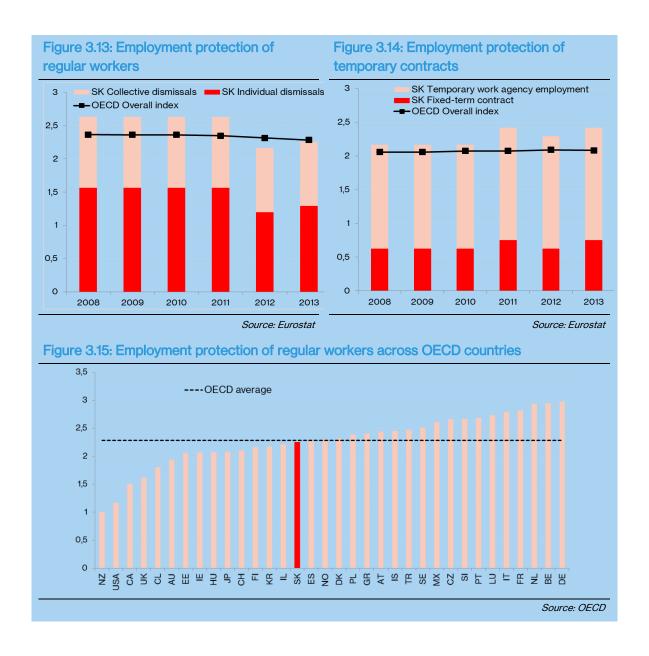
#### Labour code changes have to be considered carefully

There is no clear evidence between the flexibility of Labour Code regulation and unemployment; however, stricter labour code may have negative impact on marginalized groups. According to the literature, the link between strictness of employment protection and overall unemployment does not seem to be straightforward (EC, 2012a). Slovak labour market is in general very conservative and inflexible – job turnover and labour mobility is one of the lowest among OECD countries (Figures 2.13 and 2.30 in the section 2). Workers tend to stay with the same job for a protracted period of time. Therefore, less strict employment protection may increase labour market dynamics, thus reducing the long-term unemployment (EC, 2012b). Relaxing job protection helps reducing barriers to employment mainly for low-skilled and young job-seekers entering the labour market (OECD, 2013a). Hence, such policy would increase employers' willingness to employ even "more risky" job-seekers with higher probability of being laid off (Venn, 2009; Koeniger and Prat, 2007).

#### Box 6: Employment protection legislation (EPL)

OECD Employment protection indicators focus on costs associated with employment and dismissals (OECD, 2013b). Values of the summary indices (Protection of regular workers and Regulation on temporary contracts) and their weighted sub-indices lie between 0 and 6, where the higher number represents stricter regulation. The index measuring the employment protection of regular workers covers dismissals of individual workers and additional regulation for collective dismissals. The latter includes regulation of temporary contracts covering workers with fixed-term contracts and agency work. The EPL measures take partly into account the collective bargaining and implementation of legislative regulation in courts. The index, however, does not cover the influence and costs of unions, internal flexibility of firms, regulation of working time and restrictions for self-employment.

Figures 3.13 and 3.15 suggest that Slovakia stands amongst the OECD average in employment protection of regular workers considering the value of EPL index at 2.26 (OECD average – 2.29). Regulation of temporary contract appears to be relatively strict compared to the OECD average (Figure 3.14); however, according to Eurostat, there are only 6.8% of the total number employees with a temporary contract in Slovakia.

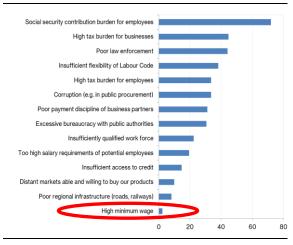


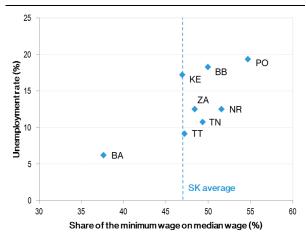
Raising the minimum wage, yet respecting employers' labour costs

Despite the fact that changes in minimum wage have only small effects on unemployment, high regional inequalities and increased risk of informal employment should be taken into account. The level of minimum wage so far has not been a significant barrier of employment. According to a survey, employers do not perceive the level of minimum wage as a significant obstacle for job creation (Figure 3.16). In addition, until 2013 the use of contractual work allowed to employ persons for even less than the minimum wage. Nevertheless, substantial increase in minimum wage can pose risk of increasing informality among workers. The international experience suggests that an increase in the minimum wage together with the tax wedge positively affects the share of informal workers on the labour force (OECD, 2008; Hazans, 2011). Moreover, significant increase in the minimum wage might affect the employment of low-skilled in poorer regions. Currently, the ratio of the minimum wage to median amounts to 49.7%; thus being similar to the OECD average (47%). However, in less-developed regions this ratio exceeds 50% (Figure 3.17). From 2015 the minimum wage will increase by a significant 8% from EUR 352 up to EUR 380. However, contributions' allowance can fully offset the increase in employers' labour costs. Together with the hike of minimum wage, it raises net income of low-income earners.

Figure 3.16: Employment barriers perceived by employers (% of respondents)

Figure 3.17: Share of the minimum wage on median wage (%, 2013)





Source: Business Alliance of Slovakia (2013)

Source: IFP, SO SR

#### Notes:

Figure 3.17: Abbreviations for NUTS-3 regions: BA - Bratislava, TT - Trnava, TN - Trenčín, NR - Nitra, BB - Banská Bystrica, PO - Prešov, KE - Košice.

## 3.4 Increasing incentives for employees

Improving motivations for the low-skilled

The inactivity trap needs to be removed by raising the gap between social benefits and potential wage in the form of in-work benefits. As shown in Chapter 2.3, for certain types of households it pays off to be inactive. To raise the incentive to work, one could recommend to reduce the level of social benefits. However, the level of social benefits for households living below the poverty line is already too low. Therefore, employment policies should rather reduce the labour cost encouraging both supply and demand side of the labour. Alternatively, in-work benefit system shall be implemented. Such system would increase work incentives of the low-skilled, while keeping the level of the basic support in proportion with median households' income.

In-work benefits for households moving from inactivity to employment can significantly increase potential disposable income, thus increasing households' motivation to seek for a job. Recently, employee tax credit and special allowance within the system of assistance in material need represent financial tools promoting employment among the low-income households. However, the maximum lump sum tax credit in 2014 is only EUR 27.60 for employees with earnings up to the level of minimum wage and it is payable at the end of a tax period. Therefore, a new measure has been put in place, which intends to increase disposable income for employees who prior to employment have been either long-term unemployed or inactive beneficiaries of the social welfare system. The measure has taken action since the beginning of 2014 and it amounts to EUR 63.07. It is offered for a period of 6 months after finding the job. From 2015 the special allowance will increase to EUR 126.14 for the first 6 months and will remain at EUR 63.07 for the following 6 months. However, the special allowance needs to be increased for multi-person households to take into account the number of household members.

Other tax-benefit tools fostering motivation to work should be revised and redesigned. To strengthen the incentives of households with children to take up a job, we recommend to redesign the child care allowance system. Under the current system, the

child care allowance is not widely used as it pays more off to use the parental allowance (Box 7). Moreover, employee tax credit and social contribution relief should be aligned with a planned health contribution allowance from the beginning of 2015 (Box 7). The intention of the new measure is to increase the net disposable income for low-income employees (Figure 3.18), while maintaining the level of labour costs for employers. In addition, all tax-benefit tools should be closely monitored and revised according to their efficiency.

Figure 3.18: Increase in household disposable income when taking up a job (EUR, PC vs. NPC 2015)

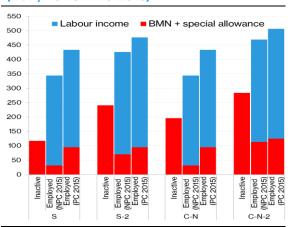
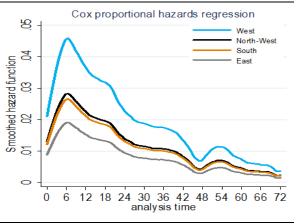


Figure 3.19: Unemployment benefit appears to affect work incentives around 6th month



Source: IFP

Notes:

Figure 3.18:

BMN – benefits in material need (incl. housing allowance); NPC – no policy change in 2015; PC – policy change in 2015 (modified special allowance + health allowance with minimum wage increased to EUR 380);

Source: IFP

Assumption that person takes up a minimum wage job;

Types of households: S - single, S - 2 - lone parent with 2 children, C - N - 1-earner childless couple, C - N - 2 - 1-earner couple with 2 children.

#### Box 7: Tax-benefit tools enhancing motivation to work in Slovakia

#### Current tools in 2014

#### Employee tax credit (ETC)

Low-income workers may claim for the ETC if they have no other income than employment income for at least 6 months during the calendar year. For annual income from EUR 2,112.00 to EUR 4,224.00 workers are eligible for the full amount of the ETC (EUR 27.62 in 2014), for annual income above EUR 4,224.00 to EUR 4,391.84 the tax credit is gradually decreased, since it is calculated as a difference between personal tax allowance and tax base of the claimant. It equals to EUR 0 if the annual earned income exceeds EUR 4391.84. If workers are employed more than 6 and less than 12 months, the ETC is paid proportionally to months worked.

#### Special allowance

Currently special allowance amounting to 63.07 € is offered for a period of 6 months if:

- a person finds a job (labour income up to the three times the minimum wage);
- prior to employment she has been long-term unemployed;
- she is a member of household benefiting from the material need assistance (MNA);
   for households remaining in the system the allowance increases entitlement to benefits.

#### Social contribution relief

In November 2013, an amendment to the Social Insurance Act introduced a temporary (i.e. one year) social security contribution (SSC) relief for employees who were previously long-term unemployed (employees: SSC are reduced from 13.4% to 0%; employers SSC reduced from 35.2% to 1.05%). Hired employees had to be registered as unemployed at least for 12 months and their income must not exceed 67% of the average wage two years ago. The measure should improve working habits and skills of the long-term unemployed.

#### Child tax bonus

The tax bonus for the entire year 2014 can be applied up to the amount of EUR 256.92, i.e. monthly EUR 21.41 for every dependent child living in taxpayer's household. One can apply for the tax bonus in case of a taxable income: from dependent activity of amount at least six times the minimum wage, or from businesses, other self-employment activities or from a rent of amount at least six times the minimum wage; and in all those cases the tax base (partial base of the income tax) is indicated.

#### Childcare allowance

With this allowance, the state pays the parent (or the natural person having custody rights) a portion of expenditures incurred in connection with childcare while in employment or in education. Financial support is usually provided for up to three years of a child's age (for up to six years of age in case of long-term adverse health conditions). The amount of monthly allowance is currently:

- at amount of demonstrated childcare costs, but not more than EUR 230;
- EUR 41.10 if the care is facilitated by a different person.

The child care allowance is not widely used as it is similar to the parental allowance (amounting to EUR 203.20 in 2014). In general, the parent taking up a job is still eligible for the parental allowance, if she can provide proper care of her child. Thus, she is motivated to apply for the childcare allowance only if it exceeds the amount of the parental allowance.

#### Upcoming tools in 2015

#### Modified special allowance (in-work benefit)

The measure intends to increase financial motivations for job-seekers who prior to employment have been long-term unemployed or inactive beneficiaries of the MNA. Income from the new employment has to exceed the minimum wage, but must be lower than twice the amount of the minimum wage. For persons either eligible for the MNA or dropouts, the special allowance prolongs from current 6 to 12 calendar months. Its amount increases to EUR 126.14 during the first 6 months and remains EUR 63.07 during the latter 6 months. This measure is targeted on regular employees only (not contractual workers), but allows provision of the allowance for part-time regular employment contracts.

## Health contribution allowance (HCA)

Authorities intend to introduce the HCA along with the increase of the minimum wage to EUR 380 for regular employees. The maximum limit of the HCA will be set at EUR 380 and phased out as income increases (an increase of EUR 1 in income will result in a decrease of EUR 2 in health contribution tax deduction), until it diminishes at the level of income amounting to EUR 570. The increase of the minimum wage to EUR 380 will formally replace the existence of the ETC. The HCA will ensure that total labour costs at the level of the minimum wage will remain unchanged. Net wages will significantly increase (Figure 3.18).

#### Increasing work incentives during the initial phase of unemployment

Unemployment benefits should be linearly decreased during the 6-month period of unemployment. Recently, the unemployment benefit amounts to about 49% of gross monthly labour income for an average worker. Unemployed persons are eligible for the benefit if they have been paying social security contribution for a least two out of three years prior to the unemployment. The benefit is payable monthly for a maximum period of 6 months. Thus, the unemployed have an incentive to stay out of the labour market for the entire period of 6 months and only afterwards apply for the job. Indeed, such behaviour is supported by the LFS data (Figure 3.19). Hence, the policy should introduce a linear reduction of the benefit in 2-month intervals, meaning that first two months the beneficiary obtains 65% of the gross monthly labour income, next two months 50% and the last two months 35%. Keeping the total amount of benefit the same (during the 6-month period), the new measure can speed up the transition to work during the early phase of unemployment.

## Redesigning activation programmes

Activation works system is inefficient due to inappropriate design. Activation works, i.e. small municipal works, are primarily organized by municipalities. According to a UNDP survey (UNDP, 2012), 47% of Roma participated in activation works compared to 5% of the majority population. Currently, however, the system represents mainly an additional social benefit for people in material need rather than a proper activation measure for the long-term unemployed and inactive individuals (Kureková et al., 2013). Further, anecdotal evidence shows that in smaller municipalities the activation works appear to be organized only proforma without any assistance and monitoring by labour offices. Though the measure is widely used (Figure 3.20), because of its poor design it does not improve employment prospects of participants. Individuals participating in the programme are locked in a low-skilled local works without any further progress in their job skills, thus reducing own chances to enter a formal job market (Card et al., 2009; Harvan, 2011).

Activation works system should be redesigned to achieve the true goal of activation. We recommend introducing a multi-level design of the activation programme for the long-term unemployed and inactive individuals. The new programme would offer more advanced tasks and consequently a standard employment contract for the most competent participants. Further, because activation works often lock participants in the local under-developed environment, regional mobility must be promoted (Figure 3.20).

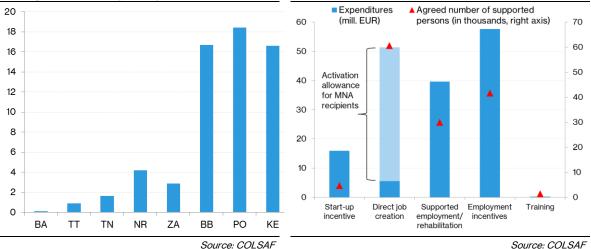
Additionally, introduction of better activation measures should replace the 2013 reform of the system of assistance in material need, which has introduced the mandatory work in order to be eligible for the basic material need allowance. As discussed above, the minimum income support in Slovakia is already quite low.

Besides multi-level activation works, other measures should be used to lower barriers to employment and to increase working skills to the most disadvantageous groups on the margin of the labour market. Authorities intend to introduce a project of so called "tailor-made" specific services based on profiling and categorization of job-seekers (Kureková, 2014). The measure will include advisory service, diagnostics and education for long-term unemployed through non-public providers of employment services. In this way, employment services can be delivered more effectively, since non-public providers, such as NGOs, may utilize already gained experience in working with their target groups (World Bank, 2008). However, the planned measure has been postponed due to implementation difficulties and its further steps should be closely monitored.

**Educational and training programmes as a part of active labour market policies should be promoted.** We propose to raise the expenditures on educational and training programmes that yield relatively better employment outcomes than other types of ALMP programmes (Boone and van Ours, 2004; Card et al., 2009). While more than one third of ALMP expenditures in EU countries on average are spent on educational and training programmes, Slovakia uses currently only 1% of the total ALMP expenditures to fund this type of instruments (Figure 3.21). To ensure the effectiveness, education and training measures should be linked to the needs of local employers.

Figure 3.20: Activation works are mostly used in lagging regions (in thousands, average number of participants 1H 2014)

Figure 3.21: ALMP expenditures and participants (2013)



Notes:

Figure 3.21: Direct job creation includes activation programmes contracted by labour offices and municipalities. Expenditures cover activation allowance for MNA recipients (EUR 46 million) and ALMP measures coordinated by labour offices (EUR 5.5 million).

## Fostering labour mobility

Public policies should promote regional mobility through the development of a rental market. Slovak labour market suffers from the lowest labour mobility among OECD countries. Yet, public support for rental housing, which spurs regional mobility, is considerably weaker than the support for home ownership (OECD, 2014a). On the top of the rental housing subsidy, individuals may claim for commuting allowance or relocation subsidy within the system of ALMPs. Nevertheless, the support is insufficient to encourage mobility due to its short-term nature.

Housing allowances should be preferred over public housing subsidies. To improve availability of public housing, policies encouraging private developers to build rental units in cities may be considered. However, the availability of public housing for poor households may create a poverty trap, since the tenants' motivation is to keep his income below the eligibility threshold for public housing. This would affect negatively work incentives and labour mobility (Huefner, 2009). Hence, instead of subsidizing public housing, the existing housing allowances should be expanded to a broader group of claimants. Currently, the housing allowances target solely the poorest households. In future, the level of support should be increased and differentiated across regions in order to be sufficient to relocate workers into regions with more job opportunities, yet with higher housing costs. The housing support should also take actual housing costs into consideration, i.e. the support should be regularly adjusted and it should be provided for longer period even after taking up a job.

## **Discussion**

Though only three predominant causes of the persistent unemployment in Slovakia were identified, there may be other factors as well. Particularly, reviewers of the analysis suggest that *inadequate education, constrained part-time work* and *lack of entrepreneurship* may hamper job creation. This section briefly discusses why we do not consider these forces as first-order.

There is no major difference in education and abilities between workers from Slovakia and Czech Republic, yet, there is a vast difference in unemployment. During identification of the causes of the unemployment in Slovakia, the analysis focused on the comparison of Slovakia with certain benchmark (e.g. EU, OECD and Czech Republic). When outcomes from both were close to each other we do not consider the explanatory factor as a relevant one. As Czech Republic and Slovakia shared the same system of education, the educational outcomes are very similar. For instance, the share of population with tertiary education across age cohorts is almost identical in both countries (see LFS, Eurostat). Further, many Slovak job-seekers were able to find their job abroad. This was particularly the case after entering the EU, but for a long time the Czech labour market is the most attractive for Slovaks. In addition, if the education would be an issue (with the exception of Roma minority), the mismatch between supply and demand would show up in the Beveridge diagram. However, Czech and Slovak economies appear to have shared the same Beveridge curve with the number of vacancies being substantially lower in Slovakia.

Though the share of part-time workers appears to be very low (i.e. 4.5 percent) compared to the EU average (i.e. 20 percent, LFS Eurostat), such measure does not account for workers with specific temporary contract, which is widely used in Slovakia. Moreover, the LFS measure of part-time workers in neighbouring countries is not significantly different from Slovakia (e.g. CZ 5.8%, HU 6.3%, PL 7.1%). Thus, we do not consider the constrained part-time work as a relevant predictor for cross-country differences in unemployment. In addition, more flexibility increases theoretically both job creation and job destruction, thus having an ambiguous effect on the overall unemployment.

By EU standards relatively few people in Slovakia considers the entrepreneurship as a desirable career path, yet starting a business seems not to be a problem. According to Eurobarometer survey (EC, 2012c), more than 75 percent of respondents thinks that self-employment is not desirable, while the average in EU reaches only 65 percent. On the other hand, 28 percent of the respondents either already started a business or take steps to starting one compared to EU average of 23 percent. In addition, results from the Eurobarometer survey are similar for both Czech and Slovak respondents, thus not reflecting the difference in the unemployment rate. Hence, to conclude that the lack of entrepreneurship is affecting unemployment further evidence is needed.

# **Appendix**

## Survival data description LFS 2011Q1-2013Q4 (see section 2.2)

		per subject			
Category	total	mean	min	median	max
no. of subjects	2520				
no. of records	2520	1	1	1	1
(first) entry time		0	0	0	0
(final) exit time		34.39405	1	15	337
subjects with gap	0				
time on gap if gap	0				
time at risk	86673	34.39405	1	15	337
failures	515	.2043651	0	0	1

		incidence	no. of	Survival time		
	time at risk	rate	subjects	25%	50%	75%
total	86673	.0059419	2520	34	•	

Results from parametric estimation of various hazard models (section 2.2)

	(1) Cox	(2) Exponential	(3) Weibull	(4) Gompertz
West	2.435*** (0.296)	2.612*** (0.318)	2.523*** (0.307)	2.447*** (0.298)
North-West	1.487** (0.189)	1.653*** (0.209)	1.583*** (0.201)	1.526*** (0.194)
South	1.396** (0.167)	1.406** (0.169)	1.402** (0.168)	1.398** (0.168)
East	1	1	1	1
Basic Edu	0.175*** (0.0367)	0.114*** (0.0236)	0.142*** (0.0297)	0.166*** (0.0347)
High School	0.483*** (0.0617)		0.452*** (0.0578)	0.464*** (0.0591)
College	1	1	1	1
Male	1.126 (0.102)	1.161 (0.105)	1.150 (0.104)	1.128 (0.102)
<29 years	1	1	1	1
29-44 years	0.534*** (0.0575)	0.363*** (0.0383)		0.493*** (0.0529)
>45 years	0.349***	0.199*** (0.0223)	0.266*** (0.0312)	0.318*** (0.0368)
N	2520	2520	2520	2520

Hazard rates; Standard errors in parentheses \* p<0.05, \*\* p<0.01, \*\*\* p<0.001

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