

***INSTITUTE OF ECONOMIC RESEARCH  
Slovak Academy of Sciences***

***Economic Development  
of Slovakia in 2013  
and Outlook up to 2015***

***Karol Morvay et al.***

***Bratislava 2014***

***Team of authors:***

Ing. Karol Frank (chapter 8)

Ing. Herta Gabrielová, CSc. (chapter 2)

Ing. Martin Hudcovský (chapter 6)

Ing. Veronika Hvozdíková, PhD. (chapter 4)

Ing. Tomáš Jeck (chapter 3 and 9)

Ing. Karol Morvay, PhD. (chapter 1 and 10)

Ing. Ivana Šikulová, PhD. (chapter 5 and 7)

***Reviewed by:***

Doc. Ing. Veronika Piovarčiová, CSc.

Ing. Štefan Zajac, CSc.

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***Translation:*** Ing. Martin Hudcovský

***Technical editor:*** Iveta Balážová

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## **INTRODUCTION**

The European economy in recent five years overcame the painful way of coming from one recession to another, a milder one. The period between these two downturns were filled with uncertainty and changes of expectations. The year 2013 was the year when Slovak economy experienced the second phase of crisis, which has been presented in various forms during last five years. However, the Slovak economy has withstood – maybe surprisingly – the second recessionary dip. At the end of the year, the outlooks got better. However, the European economy could be still easily hurt and apparition of financial turbulences will be still present for a long time.

The authors from the Institute of Economic Research SAS regularly offer their analytical view of the economic development in the past year and estimate the development for the next period. Economic growth, economic stability, production development, external economic relations, labour market parameters, prices and selected economic policy segments are reviewed every year. The publication begins with overall view on economy, and subsequently individual aspects of economy are reviewed. At the end, the overall (synthetized) look is used for interpretation of estimated outlook.

The author's collective would like to thank for advice and comments to preliminary versions of these texts.

## 1. OVERALL ECONOMIC DEVELOPMENT

This overlook of economic development belongs to period when economy finalized 20 years long stage as independently working economy. During this stage it changed from hybrid, partially transformed economy to economy which is full member of EU and eurozone and catches up the performance of its more developed partners. However, in some socio-economic parameters this “catch up” process does not appear.

In this chapter, we present overall evaluation with focus to three areas:

1. evaluation of some crucial parameters over last two decades as independently working economy;
2. selected changes of development tendencies in recent time;
3. look at performance development, macroeconomic stability and socio-economic parameters in recent time.

Following chapters subsequently focus in more details to selected questions of economic development.

### **Two Decades of Independent Working Economy: Higher Performance with the Same Employment Rate**

During twenty years of independently working Slovak economy, its performance increased comparing to all other compared economics.<sup>1</sup> (see Figure 1.1). This period was associated with strong real convergence.

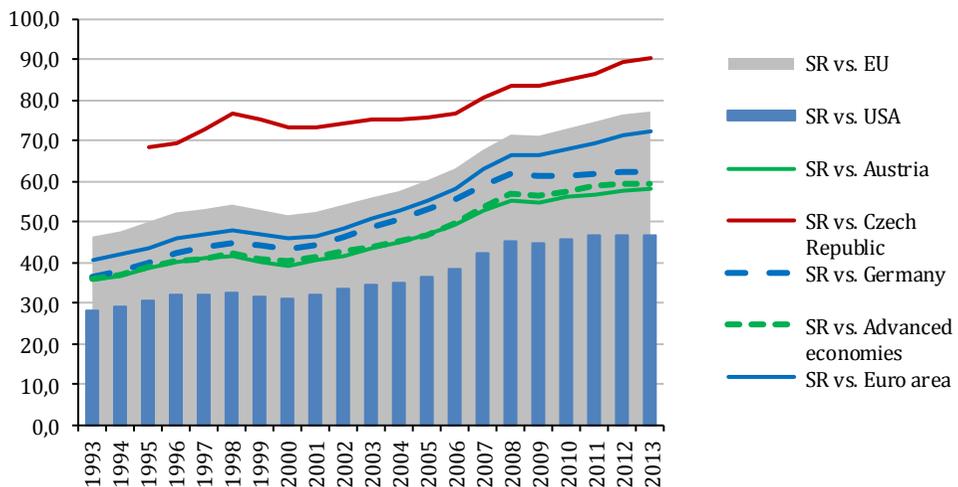
The economy of SR had been also catching up the performance of Czech economy, which used to be the common one in the past. In the period of last 4 years (after recession 2009) the real convergence developed very differently: the Slovak economy was catching up the performance of EU,

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<sup>1</sup> The performance of SR economy is compared not only with the level of EU or other groups of countries, but also with selected individual countries. The performance level of EU actually declined as consequence of its enlargement. Comparison with individual economics is not biased by this enlargement effect.

while it did not catch up the performance of USA (Economic activity in EU developed less favourably than in USA).

**Figure 1.1**  
**Two Decades of Real Convergence: GDP per capita in SR Compared to Selected Economies** (GDP p. c. in SR / GDP p. c. in selected country, %)



Source: Own calculations based on IMF WEO Database, data for 2013 are estimated by IMF.

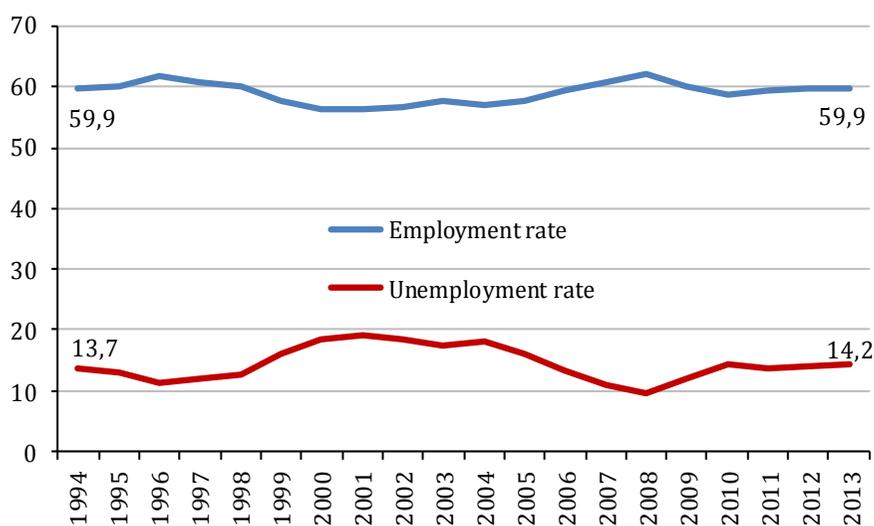
Over this period the level of real GDP per capita has increased around 125 %, average nominal wage about 363 % and consumers price level about 202 % (see Table 1.1). It is interesting that the employment rate (15-64 years) was in 2013 at the same level (59.9 %) as it was at the beginning of its measurement in 1994. However, this cannot be interpreted as stability of employment rate: there was a phase of increase and decrease (nevertheless, this does not change the merit of the problem: even after 20 years, it is still reaching the same insufficient level as years before, see Figure 1.2). The current employment has different features than before: it swept through structural changes and considerable part of it moved from not perspective activities to competitive activities. The rate of unemployment in 2013 was similar to the rate measured two decades ago. It is not our goal to analyse the development of the economy over two decades of its independence, based on this approach we can conclude the success in real convergence with lags in socio-economic parameters.

**Table 1.1**  
**Cumulative Change of Selected Parameters over 20 Years of Slovak Independent Working Economy**

Parameter	Index of cumulative change (level 1993 = 1)	Cumulative change in % (period 1993 –2013)
GDP per capita (current prices)	5.182	418.2
GDP per capita (constant prices)	2.253	125.3
Average wage (nominal)	4.625	362.5
Consumer price level	3.016	201.6

Source: Own calculations based on IMF WEO Database, data for 2010- 2013 corrected by SO SR

**Figure 1.2**  
**Development of Two Basic Labour Market Parameters: After Two Decades at Similar Rates (%)**



Source: SO SR, data based on the LFSS.

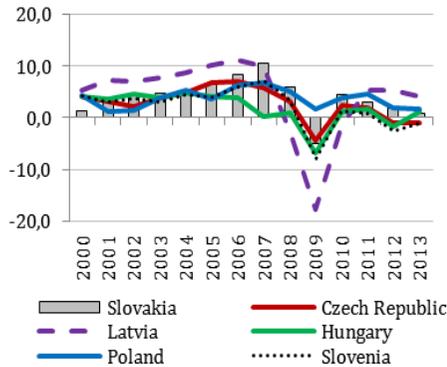
### **Crossing through “Second Bottom”**

In 2012 and 2013, European economics were crossing through “the second bottom” of crisis (considering the crisis in 2009 as first). The Slovak economy passed “the second bottom” without fall to recession even though the decrease of the growth was significant in 2013. Not all EU countries experienced the decline of real GDP during “the second bottom” (see Figure 1.3). Dynamics of real GDP in SR was significantly more

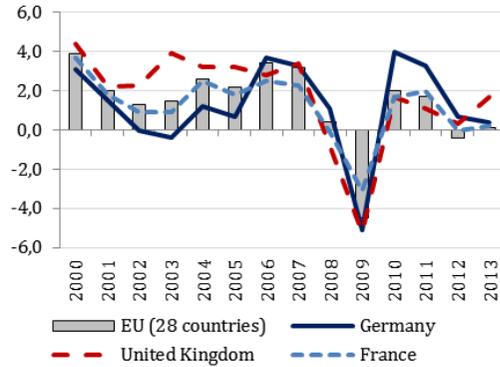
favourable in comparison to EU 28. Slovak economy resisted to decline of real GDP due to favourable export development.

**Figure 1.3**  
**Two Waves of Crisis Expressed by Real GDP Dynamics of Selected Economies** (Year-on-year change in real GDP, %)

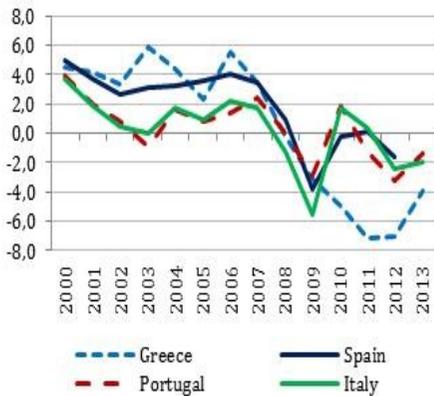
A) SR and selected economies of CEE



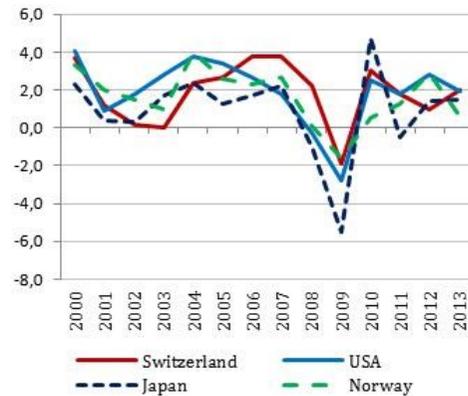
B) EU 28 and large European economies



C) South peripheral economies of EU



D) Advanced economies outside EU



Note: CEE – Central and Eastern Europe.

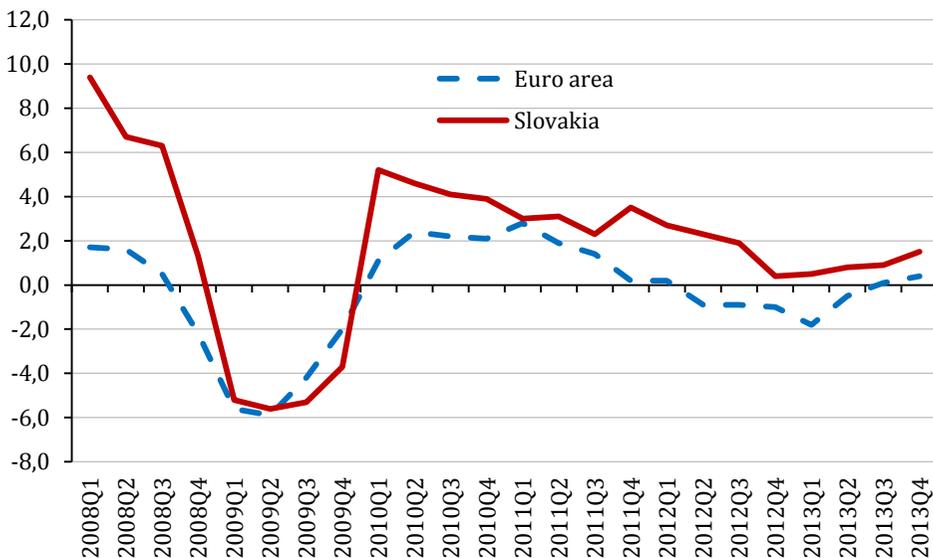
Source: Eurostat database.

The question, how the activity of main exporters could be so successful during the difficult time, we have already paid attention in previous papers about economic development of Slovakia. (see Morvay et al., 2012). We can repeat the knowledge, that companies manufacturing vehicles

located in SR are elite subsidiaries of multinational corporations, which allowed them to operate in situation when market situation forced other corporations to engage defensive politics.

Resolute and explicit formation of “first bottom” was in contrast with uncertain beginning of the “second bottom”. From quarterly data changes in real GDP, we can observe heading to “second bottom” in eurozone, and SR as well since mid-2011. The critical moment for Slovak economy probably occurred in last quarter of 2012: The eurozone was in recession during last three quarters and GDP growth rate in SR ended up just little above zero (see Figure 1.4). In first three quarters the unusual low growth rates repeated (given SR circumstances) with some signs of improvement at the end of the year. Eurozone probably also overcame the lowest point of “second bottom” in first quarter of 2013.

**Figure 1.4**  
**First and Second Wave of Crisis in Euro area and SR shown**  
**on Quarterly Data of Real GDP Change (Year-on-year change of real GDP, %)**



Source: Eurostat database.

The structure of GDP growth after recession (2009) was different from structure of growth before 2009. It is a different quality of economic growth. In Table 1.2 are displayed shares of selected components to

GDP growth in two same length periods. The first period is characterised by strong growth of economy and overall plausible macroeconomic development. The second period includes recent years (after 2009) which was influenced by problematic development and relatively poor economic growth. If we compare the structure of GDP growth, we can point out following statements:

- Utilizing production approach of GDP computation we observe that to gain one unit of GDP growth in period 2010 – 2013 it was required significantly more units of intermediate consumption growth and production growth as well compared to previous periods. For creation of 1000 EUR of GDP additional production of 3207 EUR was needed (earlier it was 2639) with consumption of additional inputs in value of 2285 EUR (earlier in was 1679). This means the economy did not increased the level of value added process and economic growth was seemingly pushed by activities demanding great amount of intermediate consumption inputs and low share of added value. For creation of one GDP unit (or added value), the higher amount of inputs and new production was needed. Additionally, the growth of net taxes on products share have increased, additional unit of GDP is linked with greater additional flow of income to public finances.
- Utilizing expenditure approach of GDP computation the unfavourable development of gross fixed capital and inventories to GDP growth is visible in later period. On the other hand, share of export has extraordinarily increased. That is the substitution effect of domestic demand by external demand. (more on this topic follows later)
- Utilizing income approach of GDP growth, we state the similar proportions of GDP growth development in both periods. The weight of significant categories, compensation of employees (income of employees), gross operating surplus (income of corporations) and mixed income (income of entrepreneurs) was roughly the same in both periods. However, these values mean another decrease in wage share which has been already low (meaning low compensation of employees share on GDP).

**Table 1.2**  
**Structure of Cumulative GDP Growth using Three Methods of Computation**

<b>Production approach</b>		
<i>One unit of GDP growth in current prices is assigned with</i>		
	period 2005 – 2008	period 2010 – 2013
Production growth	2.639	3.207
Intermediate consumption growth	1.679	2.285
Added value growth (Production – Intermediate consumption)	0.960	0.922
Net taxes on products growth	0.040	0.078
<b>Expenditure approach</b>		
<i>One unit of GDP growth in current prices is assigned with</i>		
	period 2005 – 2008	period 2010 – 2013
Consumption of households growth	0.568	0.495
Consumption of general government growth	0.162	0.019
Gross fixed capital formation growth	0.222	-0.014
Inventories and valuables growth	0.037	-0.251
Sum of domestic demand growth	0.990	0.249
Export of goods and services growth	0.942	2.801
<b>Income approach</b>		
<i>One unit of GDP growth in current prices is assigned with</i>		
	period 2005 – 2008	period 2010 – 2013
Compensation of employees growth	0.350	0.333
Gross operating surplus and mixed income growth	0.598	0.570

Source: Own compilation based on SO SR Database.

## **Misery of Domestic Demand Continued**

The economic growth of SR in the times of recessions (2010 – 2013) was very specific: it has been accompanied with unfavourable development of domestic demand (DD). Figure 1.5 shows the cumulative indexes ratios of change in components of DD and cumulative indexes of year-to-year changes of GDP (all computed using constant prices over 2010 – 2013 period). This indicator describes how the economic growth is interconnected with DD growth. In case of SR economy this connection is very adverse for DD. While cumulative growth of real GDP has increased

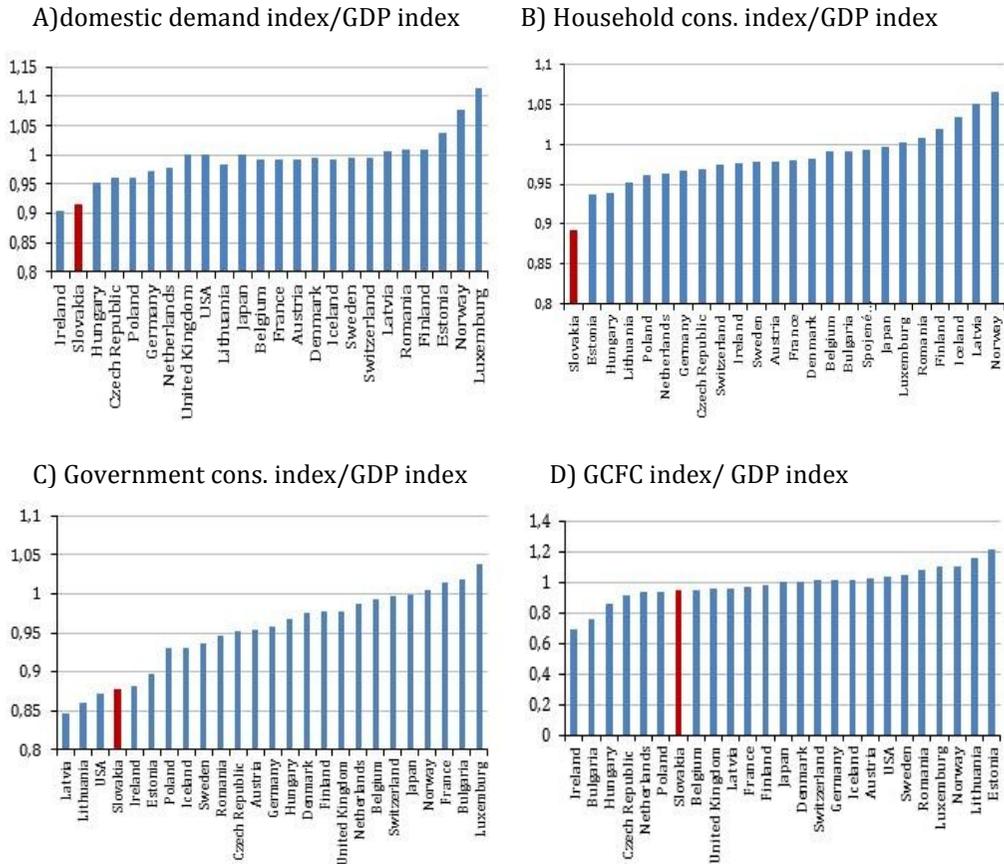
by 10,5 %, domestic demand has increased just by 1,2 %. This leads to very adverse ratio between real GDP and DD dynamics (see Figure 1.5A). By disaggregation of domestic demand into individual components, extraordinary ratio of household consumption dynamics (CH) to GDP dynamics becomes clearly visible (see Figure 1.5B). From all countries included in comparison<sup>2</sup>, the connection of economic growth and CH growth was the least favourable for consumption in SR (economic growth was connected with decrease of household consumption). Similarly, the economic growth was accompanied with decrease of general government consumption (in this case, the position of SR is not that exceptional as it is in consumption of households, see Figure 1.5C). Cumulative result of gross fixed capital formation (GFCF) is among all components of DD the most favourable (therefore, the ratio of GFCF and GDP is also the most favourable, see Figure 1.5D). However, we need to remark that this seemingly good cumulative result is connected with strong growth of GFCF during 2010-2011 and resolute fall during 2012 and 2013 (this fall becomes object of our attention hereafter).

During observed period, the ratio of export growth rate and domestic demand growth rate in SR reached extraordinary value, the highest among all countries included in comparison. (see Figure 1.6). That means the SR was country with highest substitution of domestic demand by external demand. Export and domestic demand grew in this period by rate in ratio: 1,48 : 1. It is remarkable that in this period the growth rate of external demand (expressed by export) was higher than growth rate of domestic demand in almost all studied countries. While the most significant predominance of export growth rate over domestic demand growth rate was registered in five countries of Central and Eastern Europe. Obviously, in these five countries (SR, Latvia, Estonia, Czech Republic and Hungary), the economic growth was exceptionally dependent on growth of external demand.

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<sup>2</sup> The countries included in comparison are those, which in 2010 – 2013 (some 2010 – 2012, according to data availability) have experienced real GDP growth (more precisely: cumulative index of real GDP change during this time period have been greater than 1).

**Figure 1.5**  
**Link of GDP Growth and Change of Domestic Demand Components**  
 (Ratio of real change year-on-year indexes of selected parameters).



Source: Own calculation based on Eurostat Database.

Expression of the indicators used in figures 1.5 (A až D):

- Figure 1.5A describes the ratio:  
 Index of domestic demand cumulative change / index of GDP cumulative change
- Figure 1.5B describes the ratio:  
 Index of household consumption cumulative change / index of GDP cumulative change
- Figure 1.5C describes the ratio:  
 Index of general government consumption cumulative change / index of GDP cumulative change
- Figure 1.5D describes the ratio:  
 Index of gross fixed capital formation cumulative change / index of GDP cumulative change

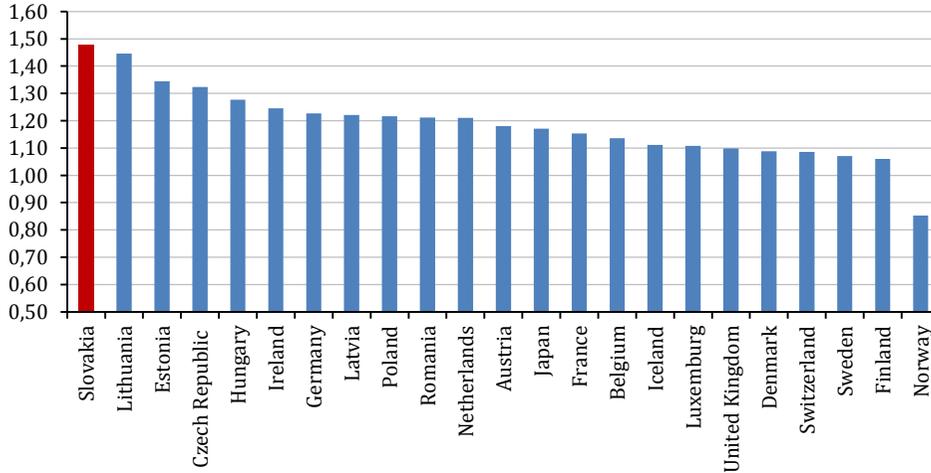
Indexes have the initial value of 1.

All indexes are derived from data with constant prices.

Figure 1.6

**Dynamics of Export in Relation with Dynamics of Domestic Demand**

(Ratio of year-to-year indexes of real changes in export of goods and services and domestic demand)



*Note:* Index of cumulative change for export of goods and services / index of cumulative change for domestic demand.

Calculated from constant prices data over 2010 – 2013 period.

*Source:* Own calculation based on Eurostat Database.

Weak domestic demand makes economic growth a vulnerable one. The stronger DD could have stabilizing effect on development of the economy. According to some analysis (e.g. Habrman, 2013), the growth of DD could have more favourable effect to creation of jobs compared to same growth of export.

Of course, there is no simple option to choose between domestic demand and external demand. Economic policy makers do not have ability to substitute one demand by another. Increase of external demand role became in certain phase of economic development (while expansion of trans-national corporation activities and incorporation to global business networks) an inevitable phenomenon. However, more balanced proportion of external and domestic demand is desired in upcoming phases.

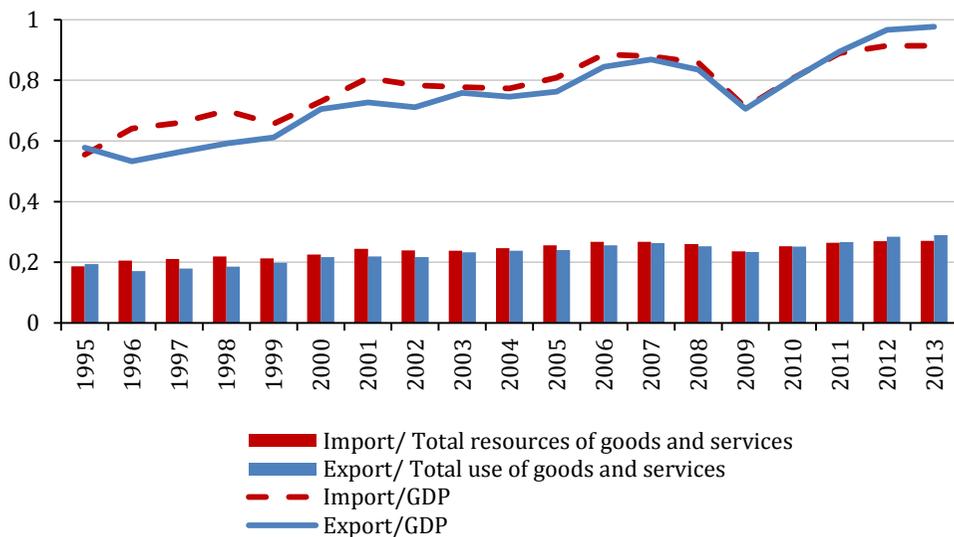
The share of export and also import of goods and services on GDP increased to record values in 2013 (see Figure 1.7). Export performance and also import intensity came close to 100 % of GDP. For better interpretation

purpose,<sup>3</sup> we express the importance of export and import by their share on total resources or total use of goods and services. By this expression, we find out the import covers 27,1 % of total resources of goods and services.<sup>4</sup> The share of export on total use of goods and services reached 28,9 %.<sup>5</sup> Both shares indicate growing tendency, but significantly lower and easily interpretable values as comparing of export and import to GDP.

Figure 1.7

**Parameters of Export Performance and Import Intensity**

(share of export and import of goods and services in GDP, as well as share of total resources and total use of goods and services)



*Note:* Categories “total resources of goods and services” and “total use of goods and services” are derived from “Goods and services account” used in the system of nation accounts. Total resources of goods and services are the sum of domestic production and import. Total use of goods and services are the sum of intermediate consumption, final consumption, gross capital formation and export. Calculated from current prices data.

*Source:* Own calculation based on Eurostat Database.

3 Possible misinterpretation of 98 % ratio of export on GDP in 2013 is that 98 % of goods and services created in SR was meant for export purpose. However, that is incorrect interpretation.

4 Total resources of goods and services = production + import of goods and services.

5 Total use of goods and services = use of intermediate consumption + final use. Final use includes final consumption, gross capital formation and export. Total resources of goods and services equals to total use of them. Based on principles of „Goods and services account“ as part of system of national accounts.

## **Change in Macroeconomic (Im)Balance: from Net Borrower to Net Lender**

In years 2012 and 2013, the character of macroeconomic (im)balance changed. We are using categories from the national accounts to evaluate the relation between savings and investments. In the period of 1996 – 2011 the Slovak economy was net borrower of loans (because the economy used more resources for capital formation than was available from domestic savings or capital transfers). It was logical phenomenon accompanying the development of economy, which was handicapped by lower competitiveness. The economy was overcoming undercapitalization with lack of own resources to invest. The amount of investments (assets formation) necessarily exceeded the amount of own resources (those are given by savings and received capital transfers). This imbalance was covered by foreign resources (the reason why economy was net borrower – it received more loans than lent). In 2012, there was a turnaround of trend and the economy was for the second year net lender of loans in 2013 as well. Similar situation happened also in other former transforming countries (see Figure 1.8). The increased value of net loans lent (+) or borrowed (-) is common feature of development of Central Europe, former transforming economics in years 2012 – 2013. Originally negative values of the indicator came close to zero or turned to be positive.

For interpretation of this phenomenon we follow dynamics of those variables, which determine the volume of net loans. The net loans are calculated as a difference between resources available in the economy for assets formation (gross savings and capital transfers) and real assets formation (mostly gross capital formation). Simply said, expressed as difference between savings and investments.<sup>6</sup>

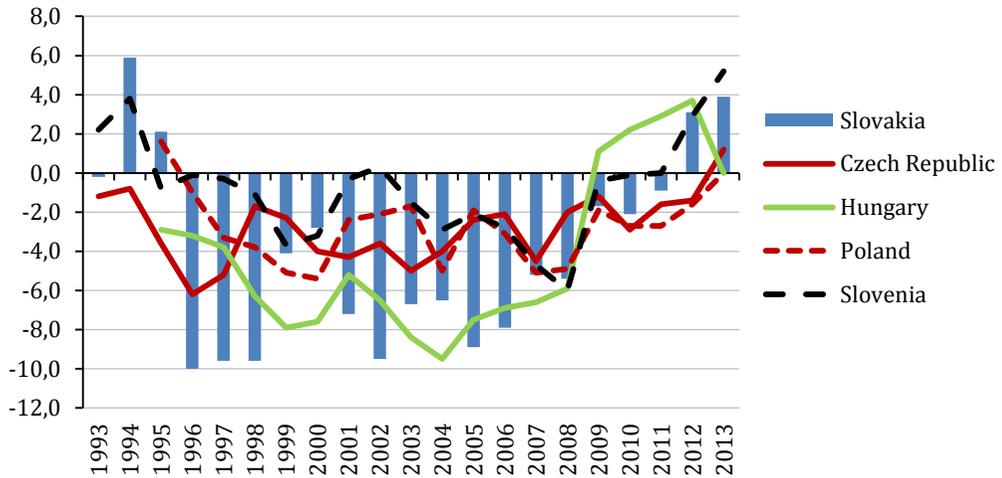
The decisive factor of SR conversion to net lender of loans was investment activity fall (decrease of gross capital formation in years 2012 and 2013). The decrease of capital formation caused that resources

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<sup>6</sup> Net loans = (gross savings + capital transfers) – (gross capital formation + net acquisitions of non-produced non-financial assets).

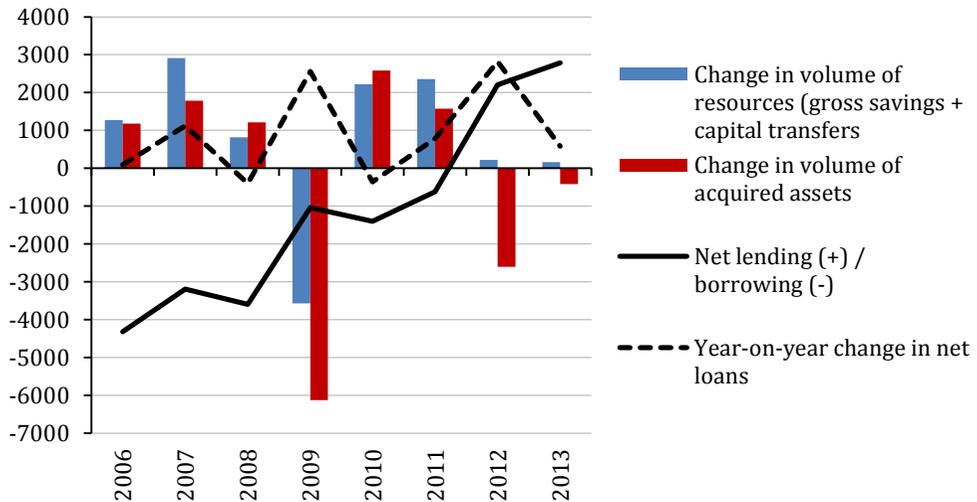
available for assets formation were not used. These resources could have been lent. It is not result of disposable resources increase, but they were not used for investment formation. (see Figure 1.9).

**Figure 1.8**  
**Net Lending (+) or Borrowing (-) (relative to GDP, %)**



Source: Eurostat Database.

**Figure 1.9**  
**Development of Parameters Influencing Balance between Savings and Investments in SR (EUR million)**



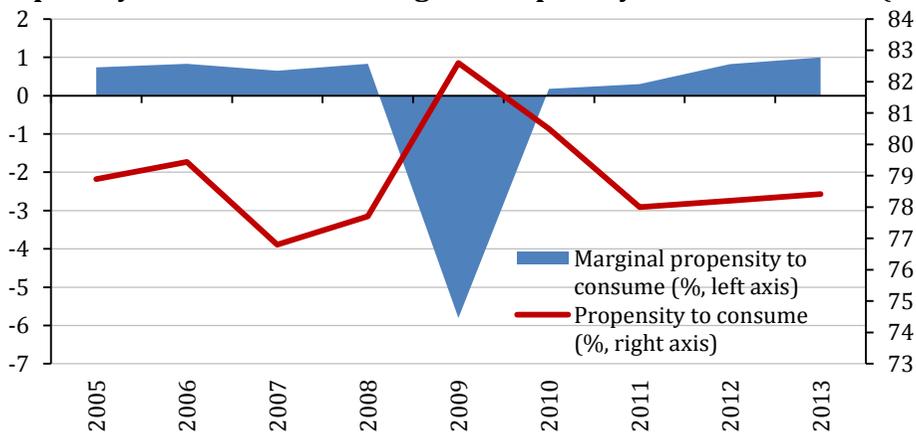
Source: Eurostat Database and own compilation based on Eurostat database.

## Propensity to Consume Increased Again Accompanied with Trust Recovery

After the recession, the lower dynamics of income along with uncertainty and distrust about further economic development led to very low marginal propensity to consume (see Figure 1.10). That means postponing of consumption and increasing share of savings in additional income (due to the prudence motive).

Figure 1.10

### Propensity to Consume and Marginal Propensity to Consume in SR (%)



*Note:* Propensity to consume is the ratio of final consumption expenditures on disposable income (current prices). Marginal propensity to consume is the ratio of year-on-year growth of final consumption expenditures on year-on-year growth of disposable income (current prices).

The marginal propensity to consume significantly increased in years 2012 and 2013. The additional consumption has copied the development of additional income. As the consumption was massively postponed in years 2010 and 2011, it is possible the additional procrastination was not acceptable any more. It is even reasonable to believe, that along with trust recovery (the indicators of economic sentiment in SR increased since the end of 2013 <sup>7</sup>), the effect of compensation for postponed consumption takes place and marginal propensity to consume will stay on high values for a while (this argument is one of determinants in our outlook at the end of this publication). The high marginal propensity to consume in

<sup>7</sup> We mean the favourable development of economic sentiment indicator and mainly its component, the trust of consumers.

year 2013 showed that almost entire additional unit of consumption enters the growth of consumption and only immaterial amount is used for saving formation. This is the opposite situation against years 2010 and 2011 when significant part of disposable income growth headed to saving growth (forced by uncertainty).

### **Slowed Growth with Signs of Favourable Turnover**

In 2013, the development of Slovak economy was mostly influenced by already mentioned overcome of lower bound of turnover in development of European economy. Once Slovak economy overcame critical moment at the turn of the year 2012/2013 (when the fall to recession was very close), the growth rate of economy became slowly increasing.

There was no such a significant change in domestic determinants of the macroeconomic development, which would strongly influence the developing trends. The domestic economic policy continued in consolidation effort of public finances (closer look related to this topic is available in one of the chapters of the publication), which has damping effect on economic growth due to domestic demand restrictions.

In macroeconomic stability area, the general movement of deep deficits stands out towards more acceptable deficitis (this is the case of public finance balance) or even move to surpluses (the case of net loans or case of export and import of goods and services balance). The strengthening of internal and external balance manifests is admittable here (mainly if we consider the inflation decrease).

The slowed growth of economy while degrading deficits in internal and external balance was accompanied with insignificant changes of socio-economic development indicators. The stagnation of working people population along with mild increase of unemployment were expected signs of passing through "the second bottom". However, the increase of real wage was a little unexpected, but with favourable effect of significant decrease of inflation rate. The rise of real wage was not caused by increase of average nominal wage, but mostly due to the inflation slow down: at the same rate of average wage growth in years 2012 and 2013 (in both 2.4 %) the development of real wage was strongly more favourable in the year 2013 (see section C in Table 1.3).

**Table 1.3**  
**Socio-economic Development of Slovak Republic during Years 2000 – 2013**

	2000	2002	2004	2006	2007	2008	2009	2010	2011	2012	2013
	<b>A. Results and factors of economic performance</b>										
GDP index; previous year = 100 <sup>1</sup>	101.4	104.6	105.1	108.3	110.5	105.8	95.1	104.4	103.0	101.8	100.9
Labour productivity index; previous year = 100 <sup>2</sup>	103.4	104.4	104.8	104.3	107.9	107.5	97.8	106.6	101.1	101.2	100.9
Domestic demand index, previous year = 100	101.2	104.0	105.8	106.5	106.3	105.7	92.6	103.7	101.0	95.9	99.2
Cost profitability in non-financial corporations; %	2.7	4.5	7.0	7.7	7.6	6.2	5.1	6.2	6.3	5.5	5.3
	<b>B. Stability indicators</b>										
Inflation rate, % <sup>3</sup>	12.2	3.5	7.5	4.3	1.9	3.9	0.9	0.7	4.1	3.6	1.5
Public finance balance/GDP, %	-12.3	-5.7	-3.3	-3.4	-1.9	-2.2	-8.0	-7.7	-5.1	-4.3	-3.0
Share of gen. govern. consumption in GDP, %	20.1	20.3	19.0	18.8	17.1	17.5	19.9	19.3	18.0	17.6	17.8
Net loans lended (+)/borrowed(-)	-2.8	-9.5	-6.5	-7.9	-5.2	-5.4	-1.7	-2.1	-0.9	3.1	3.9
Net export of goods and services/GDP, % (c.p.)	-2.6	-7.3	-2.8	-4.0	-1.1	-2.4	-0.5	-0.2	0.5	5.2	6.3
	<b>C. Social development</b>										
Year-on-year employment index, LFSS	98.6	100.2	100.3	103.8	102.4	103.2	97.2	98.0	101.9	100.6	100.0
ϕ unemployment rate, % <sup>5</sup>	18.6	18.5	18.1	13.3	11.0	9.6	12.1	14.4	13.6	14.0	14.2
Annual change in real wages, %	-4.9	5.8	2.5	3.3	4.3	3.3	1.4	2.2	-1.6	-1.2	1.0
Real wage index in national economy, 1989=100	86.9	92.8	93.6	102.8	107.2	110.7	112.2	114.7	112.9	111.5	112.6
Real consumption of households index per capita, 1989 = 100	101.1	112.3	115.4	129.8	138.8	147.3	146.0	144.6	144.8	144.3	144.1
Share of social protection expenditure in GDP, % <sup>6</sup>	14.5	14.9	12.1	12.3	10.6	10.2	12.3	12.2	12.0	12.1	

<sup>1</sup>At constant prices (year 2000). <sup>2</sup>GDP in constant prices per one worker. <sup>3</sup>Based on Harmonized Index of Consumer Price (HICP). <sup>4</sup>On loans taken from commercial banks, average per annum. <sup>5</sup>Based on Labour Force Sample Survey (LFSS). <sup>6</sup>Public finance expenditures, based on Eurostat.

Source: SO SR, NBS, MF SR.

The economy overcame “the second bottom” without jeopardizing its macroeconomic stability or without strong worsening of socio-economic parameters. This might be perceived as mild positive signal for upcoming period where the external conditions might influence economy more favourably (more in Outlook, chapter 10).

## 2. ECONOMIC DEVELOPMENT BY BRANCHES

### Macroeconomic Approach

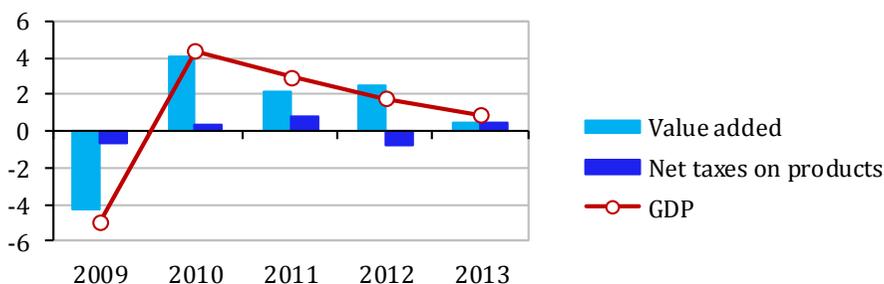
In 2013, the growth of value added as overall performance indicator of branches, unlike the previous three years (the growth 4.5 %, 2.4 % and 2.8 %) significantly slowed down to 0.5 %. However, it is still better result than the average of the Euro area (decrease by 0.3 %) and the EU 28 with average growth 0.2 % as well. In value added growth, ten countries experienced better results than Slovakia.

However, Slovakia kept a good position in overcoming of economic crisis consequences among member states of the EU. Even after slowdown in 2013, Slovakia achieves the third highest real growth of value added compared to pre-crisis period (5.3 %) after Poland and Sweden. In the EU 28, the value added formation lags to the pre-crisis level about 0.9 % and in the Euro area 1.8 %.

During 2013, real development of value added diverts from its development in previous years; particularly, unusually low (just 49 %) share of value added on GDP growth. Therefore, more than half of the GDP growth was provided by net taxes on production. On the other hand, the growth of GDP was supported by value added growth and reduced by decrease of net taxes on production in 2012 (see Figure 2.1).

Figure 2.1

**Contributions of Value added and Net Taxes on Production to GDP Growth in percentage points(p.p.) and year-on-year change of GDP in %<sup>1</sup>**



<sup>1</sup> Based on constant prices.

Source: Own compilation based on Eurostat database.

According to quarterly estimates of national accounts, the real growth of value added annually slowed down in most branches of the Slovak economy. The exception are financial and insurance activities, retaining the high rate of value added growth three years in a row, up to 12.6 % in 2013. Additionally, manufacturing resisted to slowdown and retained 3 % growth, similarly to 2012. Agriculture also shows signs of recovery. The decrease continued in construction, public services and also in other services. For more details see Table 2.1.

**Table 2.1**  
**Value Added Formation by Branches, 2008 – 2013**

	2008	2009	2010	2011	2012	2013	2013 (2008 = 100)
	Year-on-year change, %						
Value added total	6.4	-4.7	4.5	2.4	2.8	0.5	105.3
Agriculture <sup>1</sup>	11.6	-2.0	-15.1	18.1	-10.3	0.8	88.9
Industry total	4.4	-16.1	18.6	5.2	0.8	0.6	106.2
Manufacturing	7.7	-14.9	26.1	5.5	3.2	3.3	120.7
Construction	20.3	-7.6	-6.8	3.5	-2.7	-8.5	79.3
Trade, transportation and accommodation <sup>2</sup>	11.5	-7.4	1.8	-2.4	7.8	2.4	101.4
Information and communication	-0.9	9.7	0.6	3.3	4.3	2.6	122.1
Financial and insurance activities	-4.2	5.1	-6.7	8.8	9.4	12.6	131.4
Real estate activities	4.5	0.6	0.3	10.7	3.5	0.1	115.8
Professional services <sup>3</sup>	10.9	2.4	4.7	-0.7	8.4	1.8	117.5
Public services <sup>4</sup>	1.6	7.5	3.3	-4.5	-0.1	-2.1	103.8
Other services <sup>5</sup>	-21.7	33.1	2.1	7.6	4.5	-0.3	152.3

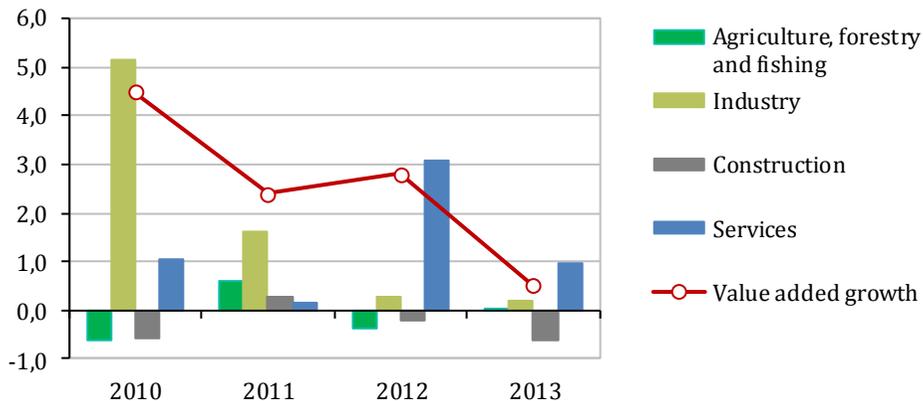
<sup>1</sup> Agriculture, forestry, fishing. <sup>2</sup> Wholesale and retail trade, repair of motor vehicles and motor-cycles; transportation, storage, accommodation and food service activities. <sup>3</sup> Professional, scientific and technical activities; administrative services. <sup>4</sup> Public administration, defence, compulsory social security; education; human health and social work activities. <sup>5</sup> Art, entertainment and recreation; other activities.

Source: Eurostat database and own calculations.

Most of the branches, as showed in Table 2.1, have already reached the pre-crisis level. The value added in manufacturing and in most of the service branches highly exceeds the pre-crisis level. The traditional services (such as trade, transportation and accommodation) the pre-crisis level exceeded just by 1.4 %, as well as public services (exceeded by 3.8 %). The agriculture and construction has not reached the pre-crisis level.

In the recovery period, branches variously supported the value added growth. While in 2010 and 2011, industry had the major role in value added growth, this role was taken over by services in 2012 and 2013 (see Figure 2.2).

**Figure 2.2**  
**Contribution of Branches to Value added Growth in p. p. and Year-on-year Change of Value added in %<sup>1</sup>**



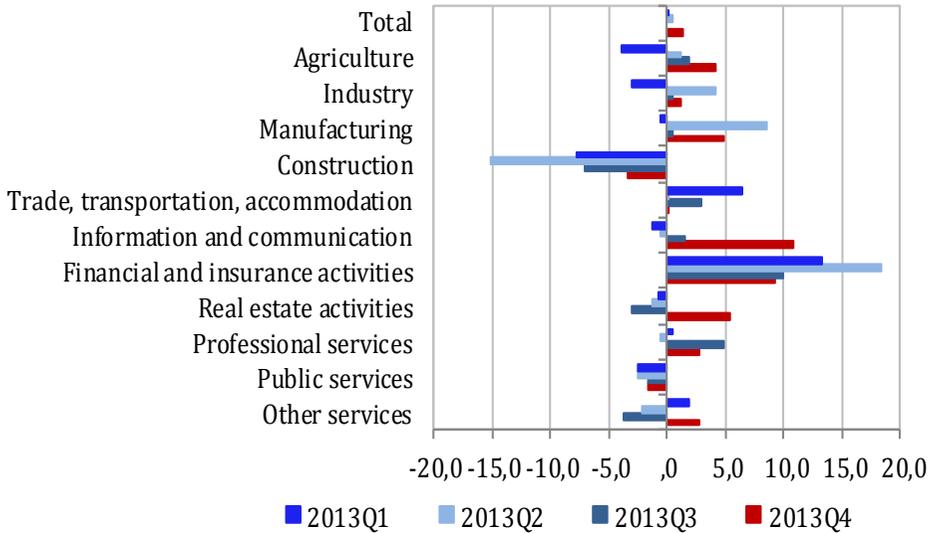
<sup>1</sup>The contributions of branches are calculated on constant prices base created by chain-linked volumes; regarding non-additive feature of chain-linked volumes there are slight differences between sum of percentage points and total growth of value added.

Source: Own compilation based on Eurostat database.

The development of 2013 quarters compared to the same period in 2012 indicates possible positive change in 2014. In 4<sup>th</sup> quarter, most of the branches were achieving positive values, the decrease slowed down in public finances and construction (see Figure 2.3).

In terms of the employment development (based on ESNA 95), after two years of growth, the employment decreased by 0.8 % in 2013. The agriculture contributed to this decrease by 4 %, industry by 46 %, construction by 29 % and services by 22 %. The employment growth was experienced in information and communication (4.4 %), in financial services (1.4 %) and in other services (1.7 %). The employment moderate increased by 0.1 % in 4<sup>th</sup> quarter of 2013.

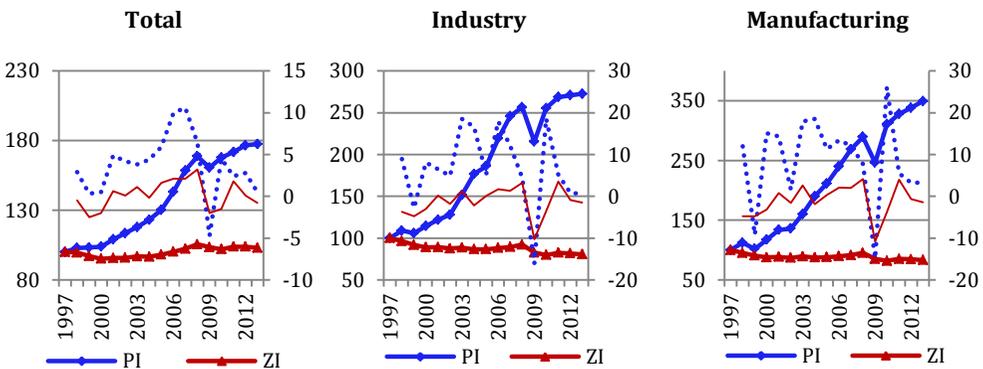
**Figure 2.3**  
**Year-on-year Change in Value added for 2013 Quarters; %<sup>1</sup>**

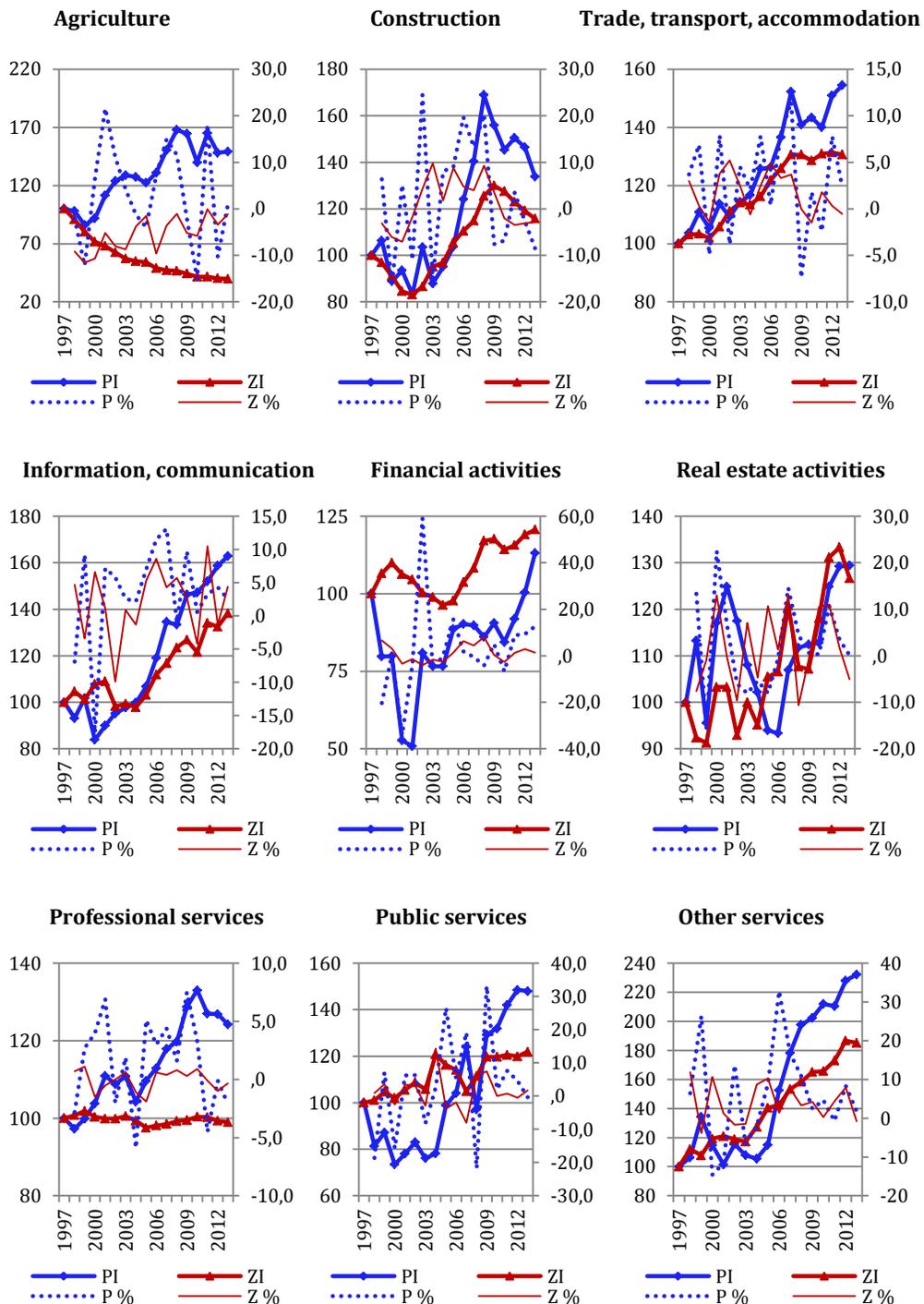


<sup>1</sup> Explanatory notes on the abbreviations of branches used in the Figure: see below Table 2.1  
 Source: Eurostat database.

We can observe long-term tendencies (1997 = 100) of value added development in constant prices (PI) and employment (ZI) by branches in Figure 2.4. Simultaneously, year-on-year change of value added (P %) and employment (Z %) are displayed on the right axis of figure.

**Figure 2.4**  
**Long-term Tendencies of Value added and Employment Development<sup>1</sup> (1997 = 100) and its Year-on-year Change by Branches, %<sup>2</sup>; 1997 - 2013**





<sup>1</sup> Based on ESNA 95 <sup>2</sup> Explanatory notes on the abbreviations of branches used in the Figures: see below Table 2.1

Source: Own compilation based on Eurostat database.

At the first glance, we can state during whole period and despite considerable fluctuations of year-on-year change in value added growth and little more balanced development of employment<sup>8</sup>, the long-term growth of value added was supreme to lower growth of employment. The rate of total value added growth increased annually by 3.7 % at average and employment just by 0.2 %. There were more favourably developing periods changing with less favourably ones during monitored timeframe. We have identified three different periods: The phase of 1997 – 2004 with average growth of value added at 3 % a year and decreasing employment (-0.5 % a year). The very successful phase of 2004 – 2008 period with average growth of value added at 8.2 % a year and employment growth at 2.3 % a year. And the third crisis and post-crisis phase of years 2008 – 2013 with low average growth at 1 % level and decreasing employment by 0.5 % a year. If we skip 2009 with the decrease of value added by 4.7 % a year and employment by 2.0 %, we find out following period (2009 – 2013) has relations between the indicators 2.5 % and -0.1 %, what is a relatively good result if we consider negative development in 2013. In conclusion, we might state, that lagging of employment development behind the value added growth is a immanent part of a developing economy. It leads to labour productivity growth and to strengthening and sustainability of competitive ability. It is naturally convenient, if this trend is taking place during growing performance and growing employment. In monitored period, this phenomenon occurred in 2001 – 2003, 2005 – 2008 and in 2011 and 2012 as well.

As we can see on Figure 2.4, this trend is advocated in particular branches by various ways. The high growth of performance accompanied with decreasing employment is typical for industry and especially for manufacturing one, thus for economy segments exposed to strong international competition. In the period of 1997 – 2013, selected indicators reached values of 6.5 % to -1.3 % in industry and 8.1 % to -1.1 % in manufacturing. Therefore, increase of employment in manufacturing is more difficult than in other branches of economy. This is supported by

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<sup>8</sup> In this part of study, we use the data about employment from the national accounts (ESNA 95), which differ from data obtained by Labour force sample survey (LFSS) or data based on corporate reports, which are used in following parts of the study.

the development during the phase of strong economic growth (2004 – 2008), when value added grew 11.1 % a year while employment 2.1 % (for increase of employment by 1 p. p., 5.2 % value added growth was required). The growth requirement for all branches was 3.6 %.

The highest long-term decrease of employment (-5.6 % a year) experienced the agriculture (over monitored period, more than 100 thousand of employees were downsized); the value added increased 2.5 % a year. This segment of economy has a significant potential for employment increase, which could be used only if major changes in agriculture production take place.

In the construction and branches of services, the value added increased along with employment (with exception of public services with slowly decreasing employment), but the value added growth was in advance of the employment growth by 1 p. p. (e.g. in construction the indicators reached 1.8 % and 0.9 %, in branch of information and communication 3.1 % and 2.0 %). The highest growth of value added and employment was experienced in segment of professional services (5.4 % and 3.9 %). The financial services are the only exception (by the given structure of branches) where the growth of value added lagged behind the growth of employment (0.8 % and 1.2 %), what was caused by strong decrease of branch performance during the financial sector recovery. In most of the branches, the positive employment changes are expected.

## **Changes in Business Sector Performance**

### ***Industry – General Slowdown***

In 2013, industry experienced major slowdown of all performance indicators compared to previous three years. The real growth of revenues for own performances and goods (now on just revenues) decreased to 0.5 %, the production growth decreased to 5.3 % (compared to 8 % in previous year) and employment kept descending. The basic overview of industry performance and especially manufacturing see in Table 2.2.

**Table 2.2**  
**Selected Indicators of the Industry Development in SR**

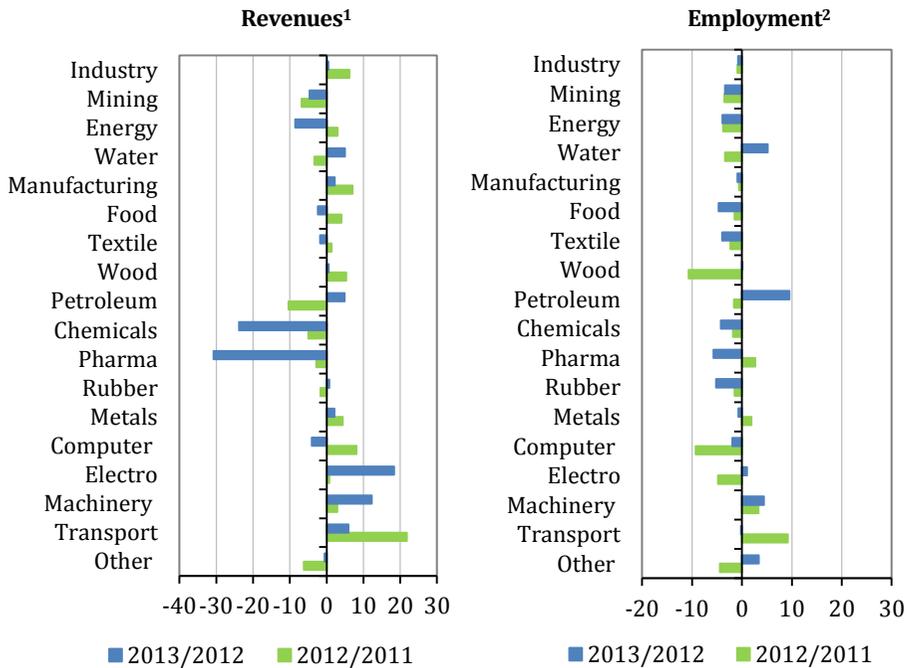
	2009	2010	2011	2012	2013	2013			
						1. Q	2. Q	3. Q	4. Q
	<b>Industry</b>								
Revenues <sup>1</sup>	-17.2	17.9	11.7	6.2	0.5	-3.4	1.6	-1.0	4.5
Industrial production index <sup>2</sup>	-15.7	8.2	5.5	8.0	5.3	2.6	2.8	4.8	10.7
Employment <sup>3</sup>	-15.0	-3.8	4.3	-0.9	-0.8	-1.7	-1.4	-0.8	1.0
Revenues (EUR billion, current prices)	57.4	67.5	76.6	82.3	82.2	20.1	20.9	19.6	21.7
Employment (in thousands) <sup>4</sup>	498	479	500	495	491	490	490	492	494
	<b>Manufacturing</b>								
Revenues <sup>1</sup>	-19.5	19.6	11.8	7.1	2.2	-2.7	3.1	1.1	7.3
Industrial production index <sup>2</sup>	-18.9	9.9	7.3	11.5	6.5	2.8	3.1	6.9	13.4
Employment <sup>3</sup>	-16.0	-3.8	5.0	-0.6	-0.9	-2.0	-1.6	-0.9	1.1
Revenues (EUR billion, current prices)	45.3	54.7	62.5	66.9	68.2	16.0	17.7	16.6	17.8
Employment (in thousands) <sup>4</sup>	448	431	452	449	445	444	444	446	448

<sup>1</sup> Year-on-year change based on constant prices. <sup>2</sup> Working-day adjusted data, year-on-year change. <sup>3</sup> Average number of employed persons based on monthly reports, year-on-year change. <sup>4</sup> Average number of employed persons based on monthly reports.

Source: Slovstat database.

Lower growth of revenues in industry compared to manufacturing was influenced by decrease in mining and quarrying (by 4.6 %) and electricity, gas, steam and air conditioning supply as well (8.5 %). The major slowdown of the manufacturing growth from 7.1 % in 2012 to 2.2 % in 2013 was experienced by almost every branch, either by decrease of its revenues or by lower growth than in previous year. Higher revenues growth was achieved just in some manufacturing segments like coke and petroleum products manufacturing, manufacture of rubber and plastic products, manufacture of electric equipment; manufacture of machinery. The strong influence to slowdown of revenues growth was significant fall in manufacture of chemicals and pharmaceutical products, the decrease of computer, electronic and optical products manufacture, as well as the change in growth rate of motor vehicles manufacture from 21.8 % to 5.9 % in 2013 (more detailed see Figure 2.5)

**Figure 2.5**  
**Year-on-year Change in Revenues and Employment, %**



<sup>1</sup> Based on revenues for own performances and goods index at constant prices. <sup>2</sup> Average number of employed persons based on monthly reports.

*Note on the abbreviations used in the Figure:*

Industry – Industry total; Mining – Mining and quarrying, Energy – Electricity, gas, steam and air conditioning supply, Water – Water supply; sewerage; waste management and remediation activities, Manufacturing – Manufacturing, Food – Manufacture of food products, beverages and tobacco products; Textile – Manufacture of textiles, wearing apparel, leather and related products; Wood – Manufacture of wood and paper products, printing; Petroleum – Manufacture of coke, and refined petroleum products; Chemicals – Manufacture of chemicals and chemical products; Pharma – Manufacture of pharmaceutical products and pharmaceutical preparations; Rubber – Manufacture of rubber and plastic products and other non-metallic mineral products; Metals – Manufacture of basic metals and fabricated metal products, except machinery and equipment; Computer – Manufacture of computer, electronic and optical products; Electro – Manufacture of electrical equipment; Machinery – Manufacture of machinery and equipment n. e. c.; Transport – Manufacture of transport equipment; Other – Other manufacturing, repair and installation of machinery and equipment.

*Source:* Own compilation based on Slovstat database.

A certain change in revenues development could be seen in 4<sup>th</sup> quarter of 2013 as indicated in Table 2.2. The main positive factor at segment level was the recovery of strong growth in motor vehicles manufacture to 17.3 % (after 3.1 %, 1.6 % and 2.7 % growth in 1<sup>st</sup> – 3<sup>rd</sup> quarters) and metals manufacture (9.5 %), as well as return to growth in computer, electronic and optical products manufacture.

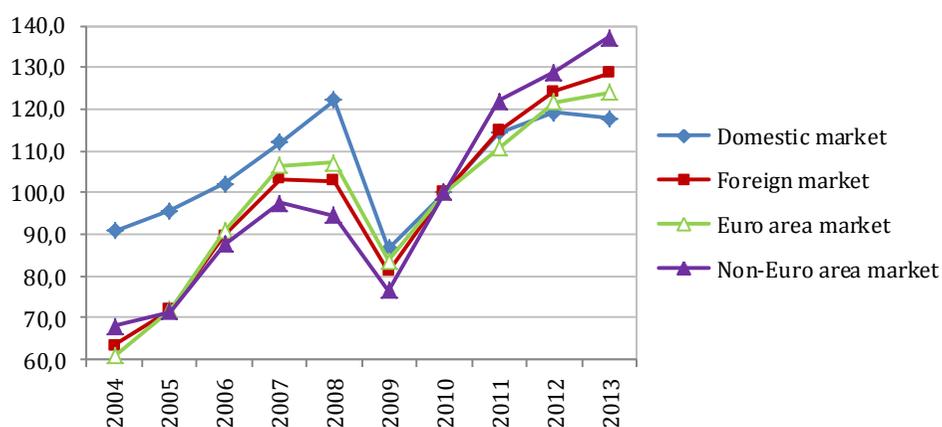
In the development of employment, long-term decreasing trend took place –decreased by 0.9 % year-on-year comparison. Within the sectors, the growth appeared only exceptionally (see Figure 2.5).

Compared to the pre-crisis level, there is still almost 95 thousand employees lacking in the industry enterprises. More favourable results were achieved in 4<sup>th</sup> quarter – number of employees increased by 1 % equals more than 5 thousand people in year-on-year comparison.

The development of revenues differentiated on individual markets in 2013. The slowdown omitted the market outside the Euro area – revenues grew a little faster than in 2012 (6.5 % against 5.6 %). The revenues growth slowed significantly on the Euro area markets (10.0 % to 2.0 %). The bad conditions had its strongest impact on domestic market; the revenues decreased by 1.2 %. In the 4<sup>th</sup> quarter of 2013, the recovery of revenues on domestic market occurred (3.9 % year-to-year) and revenues grew faster on the Euro area markets (7.0 % year-on-year), leading to positive overall growth of revenues on foreign markets (6.3 %).

Domestic market deals with deep fall in 2009 significantly slower and at slower pace than foreign markets with the pre-crisis level (currently lagged by 4 %). The foreign markets crossed the pre-crisis level by 25 %, out of which, in the Euro area by 16 %, and on markets outside the Euro area by 45 %. For more details see Figure 2.6.

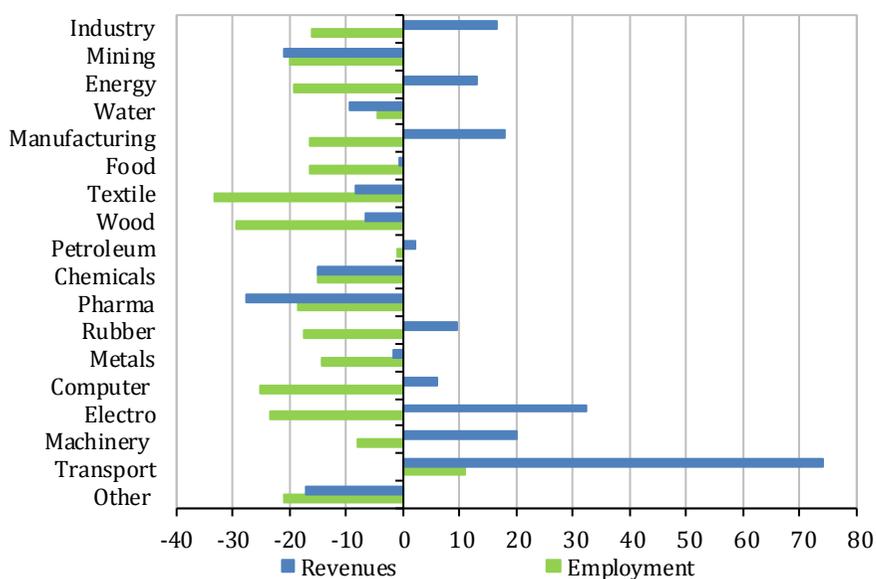
Figure 2.6  
Long-term Development of Revenues on Individual Markets, % (2010=100)



Source: Eurostat database.

Slovak economy is relatively successful in overcoming economic crisis consequences in industry performance. In 2013, revenues reached 16 % higher level than in 2008 (manufacturing almost 18 %). However, differences among segments are large – in most industry segments, the pre-crisis level has not been reached, in some segments the current level is significantly higher than in 2008 (e.g. manufacture of motor vehicles by 74 %). The “catching up” of the pre-crisis level is less successful in industry employment – the industry as whole lags around 16 % to its pre-crisis level. Beside the manufacture of motor vehicles segment, no other segment reached the pre-crisis level (see Figure 2.7).

**Figure 2.7**  
**Change in Revenues<sup>1</sup> and Employment<sup>2</sup> by Industry Branches in 2013**  
**Compared with 2008, %**



<sup>1</sup> Based on revenues for own performances and goods index at constant prices. <sup>2</sup> Average number of employed persons based on monthly reports.

*Explanatory notes on the abbreviations of branches used in the Figure: see below Figure 2.5*

*Source: Own compilation based on Slovstat database.*

## ***Construction – is the Change Coming?***

Opposite to manufacturing, which has been confronted with growth slowdown in 2013, the situation in construction mildly improved, mostly due to fact that fall has been reduced in 2013, and even experienced mild growth in the 4<sup>th</sup> quarter (for more details see table 2.3)

Table 2.3

### **Selected Indicators of the Development in Construction in the SR**

	2008	2009	2010	2011	2012	2013	2013			
							1.Q	2.Q	3.Q	4.Q
<b>Year-on-year changes, %<sup>1</sup></b>										
Production	12.0	-11.3	-4.6	-1.8	-12.5	-5.3	-11.7	-10.6	-3.6	1.7
Revenues	16.4	-13.9	-6.1	3.2	-15.2	-6.6	-9.6	-12.7	-6.6	0.3
Employment	9.1	2.0	-2.6	-3.6	-4.5	-4.0	-5.0	-5.0	-4.2	-1.9
<b>Nominal values<sup>2</sup></b>										
Production	6.3	5.7	5.5	5.5	4.8	4.6	0.7	1.1	1.4	1.4
Revenues	10.3	9.1	8.6	9.0	7.7	7.2	1.1	1.7	2.1	2.3
Employment	181	184	180	173	165	159	156	158	160	160

<sup>1</sup> Based on constant prices, in case of employment based on average number of employed persons. <sup>2</sup> Production and revenues for own performances and goods in billions of EUR. Employment in thousands of persons.

Source: Own compilation based on Slovstat database. .

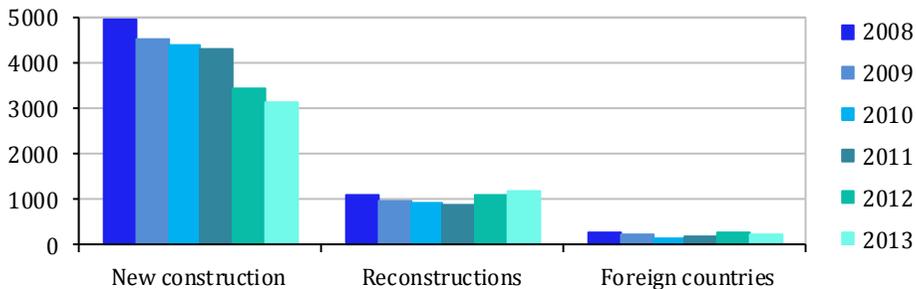
Systematic fall of construction production left deep marks in its development since 2008. The construction production decreased by 31.1 % during last 5 years. The greatest fall (see Figure 2.8) was noticed in inland constructions production focused on new construction, restructuring and modernization (more than 40 %).

The construction production focused on repairs and maintenance already increased in 2012, continued increasing in 2013, and currently overcame the level from 2008 by 3.4 %. The construction production abroad has negligible influence; currently approximately 12 % lower compared to 2008.

Long-term insufficient supply of new orders led to completely new set of problems in Slovak construction. The principle of minimal price of construction works has been enforced over expense of their quality.

In the whole supply chain (from project designers, construction contractors, material contractors and more subcontractors), the undervalued prices of constructions lead to great tension in construction funding and put its realization in required quality into jeopardy. The projects are often corrected what causes overcharging of constructions and invoke problems with additional costs funding. The whole situation is even more complicated by low payment morale – long due dates and violation of due terms (for more see CEEC Research Q1/2014).

**Figure 2.8**  
**Construction Development by Segment Activities (EUR million)**



*Source:* Own compilation based on Slovstat database.

The more favourable development tendencies in 2013 do not have to automatically mean the turnover in construction development (mainly in comparison with very unfavourable results from 2012). However, the improvement of situation is signaled by surveys in project designing and construction corporations and by the statements of their CEO's. According to them, 2014 might become the stabilization year in constructions with estimated growth at 1.6 % (according to CEEC Research, Q1/2014). The stronger growth at level 3.2 % is expected in 2015.

### ***Market Services –Positive Changes Dominate***

The market services significantly contributed to overall growth in business sector of economy in 2013. Opposite to industry, which revenues stagnated (in constant prices 0.5 %, in current prices no growth)

and employment continued to decline, overall revenues in segment of market services (in current prices)<sup>9</sup> increased by 5.7 % (compared to 6.2 % in 2012) and employment growth accelerated from 1.3 % to 2.1 %. However, different development is recorded in individual segments; this applies for revenues development as well as for employment one.

Overview of market services development and its segments are shown in Table 2.4

**Table 2.4**  
**Development of Revenues and Employment in Segments of Market Services**

	2009	2010	2011	2012	2013	2010	2011	2012	2013
	<b>Revenues, EUR billion, current prices</b>					<b>Year-on-year change, %<sup>1</sup></b>			
Trade and repair of vehicles	3.9	3.8	3.8	4.0	4.3	3.5	5.1	6.2	9.0
Wholesale	22.7	23.3	23.1	23.9	24.5	2.6	-0.8	3.5	2.4
Retail trade	17.4	17.3	17.5	17.9	18.3	-2.1	-2.4	-1.0	0.1
Accommodation	0.3	0.3	0.3	0.3	0.3	-4.4	-2.0	0.1	1.0
Food service activities	0.9	0.8	0.8	0.8	0.8	-9.1	-1.3	-0.9	0.8
Transportation and storage	5.4	5.8	6.3	6.8	7.5	7.1	9.4	8.0	10.2
Information and communication	4.9	4.5	4.9	5.2	5.4	-8.7	9.7	6.0	4.8
Selected market services	8.0	8.6	10.1	12.0	13.8	5.7	14.3	15.3	12.9
Market services total	63.5	64.3	66.8	70.9	75.0	1.2	3.9	6.2	5.7
	<b>Employment, in thousands</b>					<b>Year-on-year change. %</b>			
Trade and repair of vehicles	28	26	26	25	25	-6.8	-0.4	-5.5	-0.2
Wholesale	123	109	108	108	107	-11.3	-0.6	-0.6	-0.3
Retail trade	169	165	166	164	164	-2.3	0.8	-1.3	-0.1
Accommodation	11	10	10	11	11	-6.4	-1.0	1.4	1.6
Food service activities	36	34	34	34	34	-7.7	-0.2	0.7	1.3
Transportation and storage	115	114	116	113	117	-1.0	1.5	-2.0	3.3
Information and communication	44	39	43	46	45	-10.4	10.7	5.3	-0.9
Selected market services	165	161	169	181	192	-2.2	4.5	7.5	6.2
Market services total	691	659	672	681	696	-4.7	2.1	1.3	2.1

<sup>1</sup> Based on constant prices; year-on-year change in Wholesale; Transportation and storage; Information and communication and Market services total are based on current prices.

Source: Own compilation based on Slovstat database.

As the most significant change in individual branches development of market services could be considered the stop of revenues fall in retail

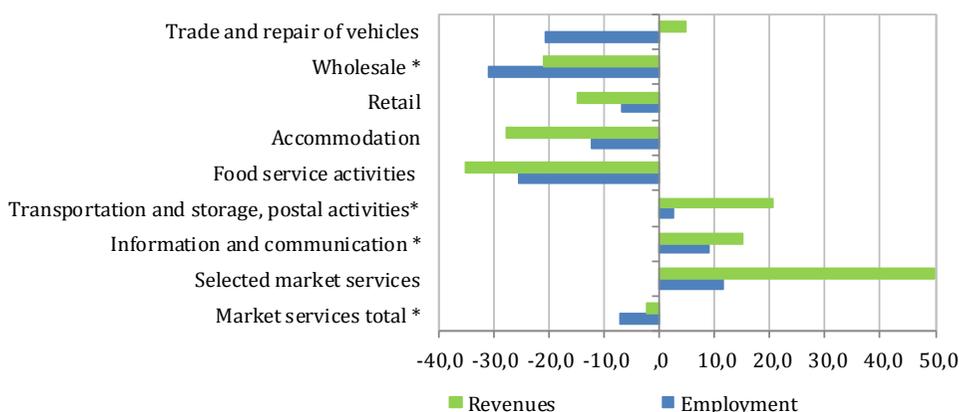
<sup>9</sup> The year-on-year changes based on current prices are used because the data for revenues in some branches of market services (wholesale, transportation and storage, information and communication) are available only in current prices.

trade since 2<sup>nd</sup> quarter 2013, as well as in food services activities. The sustainability of very fragile growth could be also considered as positive one in accommodation. Along with that, the improvement of employment was recorded also in these three segments.

The slowdown of revenues growth and decrease of employment by 0.9 % in the segment of information and communication is little surprising. The segment is basically driven by two branches: computer programming, advisory and related services (year-on-year growth by 17.8 %) and information services (year-on-year growth by 24 %); other segments (publishing services, movie creation, activities for TV and radio broadcasting, telecommunication) experienced decrease in 2013.

Opposite to industry, which very quickly levelled off the gap in performance compared to 2008, this process takes places in the segment of market services at slower pace. It has already been accomplished only in three segments (transportation and storage, post services, information and communication and selected market services), from revenues point of view, as well as the employment one (see Figure 2.9). The level of 2008 has not been accomplished basically by segments, which are somehow related to trade.

**Figure 2.9**  
**Changes in Revenues and Employment of Market Services Segments in 2013 Compared to 2008, %<sup>1</sup>**



<sup>1</sup> Percentage change of revenues based on constant prices; the segments marked \* based on current prices.

Source: Own compilation based on Slovstat database.

## ***Changes in Corporations Financial Results***

After increase of corporations total profit<sup>10</sup> in 2010 and 2011, the profit mildly decreased during last two years. The larger fall of profitability was prevented by development of financial corporations, which profit, despite worse economic situation, increased significantly in 2012 and 2013. As we found out, according to Reports on results of operations of the National Bank of Slovakia in 2008 – 2013 (NBS, 2010 – 2014) the profit growth of financial corporations positively influenced also the development of profit in NBS during last two years. NBS being not profitable would lead to financial corporations profit decrease in 2013 as well. Overall development of corporations financial situation see in Table 2.5.

**Table 2.5**  
**Development of Corporate Financial Position, 2007 – 2012**

	2007	2008	2009	2010	2011	2012	2013
	<b>Profit/loss, EUR million</b>						
Non-financial and financial corporations, total	10 887	8 905	7 353	9 144	10 764	10 472	10 412
Financial corporations	643	-579	767	554	1 125	1 614	1 874
Financial corporations without NBS <sup>1</sup>	1 289	648	697	1 070	1 202	1 415	1 384
Non-financial corporations	10 244	9 485	6 586	8 590	9 638	8 857	8 537
of which:							
Agriculture, forestry and fishing	39	156	-104	-42	61	67	18
of which: Agriculture	10	130	-104	-42	32	49	-6
Industry	5 054	3 998	2 819	3 965	4 053	4 014	3 371
of which: Manufacturing	3 171	2 355	1 026	2 153	1 983	2 284	2 259
Construction	513	678	558	584	779	557	481
Services total	4 638	4 652	3 315	4 083	4 745	4 219	4 668
	<b>Cost profitability, %</b>						
Non-financial corporations	7.6	6.2	5.2	6.2	6.3	5.5	5.3
of which:							
Agriculture, forestry and fishing	1.4	5.1	-4.6	-1.9	2.4	2.8	0.8
of which: Agriculture	0.4	5.2	-5.5	-2.3	1.5	2.4	-0.3
Industry	7.3	5.2	4.8	5.9	5.4	5.0	4.2
of which: Manufacturing	5.4	3.6	2.2	3.9	3.2	3.5	3.5
Construction	8.8	8.9	7.8	9.5	12.1	9.5	9.0
Services total	8.0	7.0	5.5	6.4	6.8	5.9	6.4

<sup>1</sup> Own compilation based on reports of NBS about profit/loss during stated years.

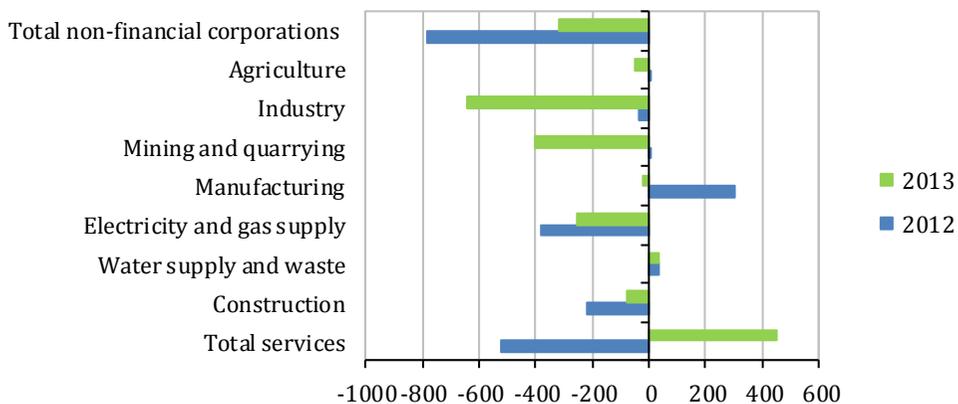
Source: SO SR (2008 – 2014).

<sup>10</sup> Positive profit/loss.

In non-financial corporations, the strong fall in profitability was recorded in 2012 and continued in 2013. While in 2012, the main drivers of profit fall were services (dominant part), the constructions and electricity and gas supply, in 2013, the main driver was industry mostly driven by electricity, gas supply, mining and quarrying. The more detailed year-on-year changes are shown in Figure 2.10.

Figure 2.10

**Profit/loss Results of Non-financial Corporations in 2012 and 2013**  
(absolute year-on-year change, EUR million)



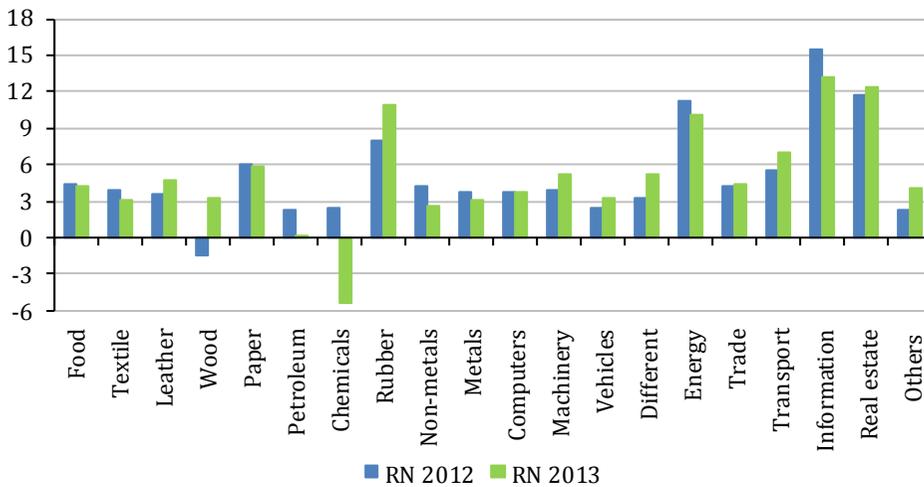
Source: SO SR (2008 – 2014).

Among loss producing branches belonged the agriculture with cost profitability (CP) -0.3 %, mining and quarrying (CP -31.3 %), after multi-year high CP (33.7 %; 32.3 % and 36.8 % in 2010 – 2012), chemicals and pharmaceutical products manufacture (CP -5.3 %), coke and petroleum products production appeared at the edge of profitability (CP 0.1 %).

The overall CP is different in individual branches. In 2013, the highest rentability in economy had the non-financial corporations in segment of information and communication (13.2 %), in merged segment – real estate activities, professional, scientific and technical activities; administrative and support services (12.4 %), in segment of rubber and plastic products manufacture (10.9 %) and electricity, gas, steam and air conditioning supply (10.1 %).

In comparison of CP in manufacturing and service sector, we find out, branches of manufacturing reach lower level of CP than in services. This applies also for some very good performing branches of manufacturing as manufacture of computer, electronic, optical products and electrical equipment (CP 4.0 %; 3.4 %; 3.8 % and 3.8 % during 2010 – 2013) and manufacture of transportation vehicles (CP 3.0 %; 2.8 %; 2.5 % and 3.2 % during 2010 – 2013). The different competitive pressure is visible between tradable and non-tradable sector of economy. See Figure 2.11.

**Figure 2.11**  
**Cost profitability (%) by Branches in 2012 and 2013**



*Note on the abbreviations used in the Figure:*

Food – Manufacture of food products, beverages and tobacco products; Textile – Manufacture of textiles, wearing apparel; Leather – Manufacture of leather and related products; Wood – Manufacture of wood and related products; Paper – Manufacture of paper and related products; printing and reproduction of recorded media; Petroleum – Manufacture of coke and refined petroleum products; Chemicals – Manufacture of chemicals and chemical products; Rubber – Manufacture of rubber and plastic products, Non-metals – Manufacture of other non-metallic mineral products; Metals – Manufacture of basic metals and fabricated metal products, except machinery and equipment; Computers – Manufacture of computer, electronic and optical products; Machinery – Manufacture of machinery and equipment n. e. c.; Vehicles – Manufacture of motor vehicles, trailers and semi-trailers and other transport equipment; Different – Manufacture of furniture, other manufacturing, and repair and installation of machinery and equipment; Energy – Electricity, gas, steam and air conditioning supply; Trade – Wholesale and retail, repairs of motor vehicles and motorcycles; Transport – Transport and storage, accommodation and food services; Information – Information and communication; Real estate – Real estate activities, professional, scientific and technical activities; administrative and support services; Other – Education; health care and social assistance, arts, entertainment and recreation; other activities.

*Source:* SO SR (2008 – 2014).

### 3. QUALITATIVE FACTORS OF ECONOMIC DEVELOPMENT

Technological and innovative development of Slovak economy, currently based on the import of foreign technology, should be compensated by more intensive development of domestic innovation capacity. It should be based on efficient domestic research and development (R&D), educated and sophisticated labour force, and the use of information and communication technologies (ICT). These qualitative prerequisites of economic development will be crucial condition of national competitiveness enhancement, higher evaluation of labour, economic growth and employment after the price and costs factors will be exploited.

Table 3.1 shows the development of selected input indicators (expenditure on R&D and R&D employees) and output indicators (domestic patent applications and research papers) of Slovak R&D in 2007 – 2012.<sup>11</sup>

**Table 3.1**  
**Selected Indicators of Research and Development, 2006 – 2011**

	2007	2008	2009	2010	2011	2012
Gross expenditure on R&D (% GDP)	0.46	0.47	0.48	0.63	0.68	0.82
Divided by sector of performance (% GDP):						
Government sector	0.16	0.15	0.16	0.19	0.19	0.20
Business enterprise sector	0.18	0.20	0.20	0.27	0.25	0.34
Higher education sector	0.11	0.11	0.12	0.17	0.24	0.28
Divided by source of funds (% GDP):						
Government sector	0.25	0.25	0.24	0.31	0.34	0.34
Higher education sector	0	0	0	0	0.01	0.01
Business enterprise sector	0.16	0.16	0.17	0.22	0.23	0.31
Foreign sources	0.05	0.06	0.06	0.09	0.1	0.15
R&D personnel <sup>1</sup>	23 437	23 641	25 388	28 128	28 596	28 880
Domestic patent applications <sup>2</sup>	240	167	176	235	223	168
Number of patent applications <sup>2</sup> per 1,000 R&D employees	10.2	7.1	6.9	8.4	7.8	5.8
Number of EPO patent applications	44	54	41	53	85	51
Academic papers <sup>3</sup>	3 651	4 262	4 122	4 499	4 812	5 057
Number of academic papers per 1,000 R&D employees	155.8	180.3	162.4	159.9	168.3	175.1

<sup>1</sup> Head Count by 31<sup>st</sup> December.

<sup>2</sup> Domestic patent applications filed at the Industrial Property Office of the Slovak Republic.

<sup>3</sup> Academic articles listed in Current Content Connect® (by 2<sup>nd</sup> April 2013), author or at least one co-author with postal address in Slovakia.

Source: IPO SR (2013); SCOPUS (2014); SO SR (2013); EPO (2014).

<sup>11</sup> Some indicators published in this chapter are 2 years lagged.

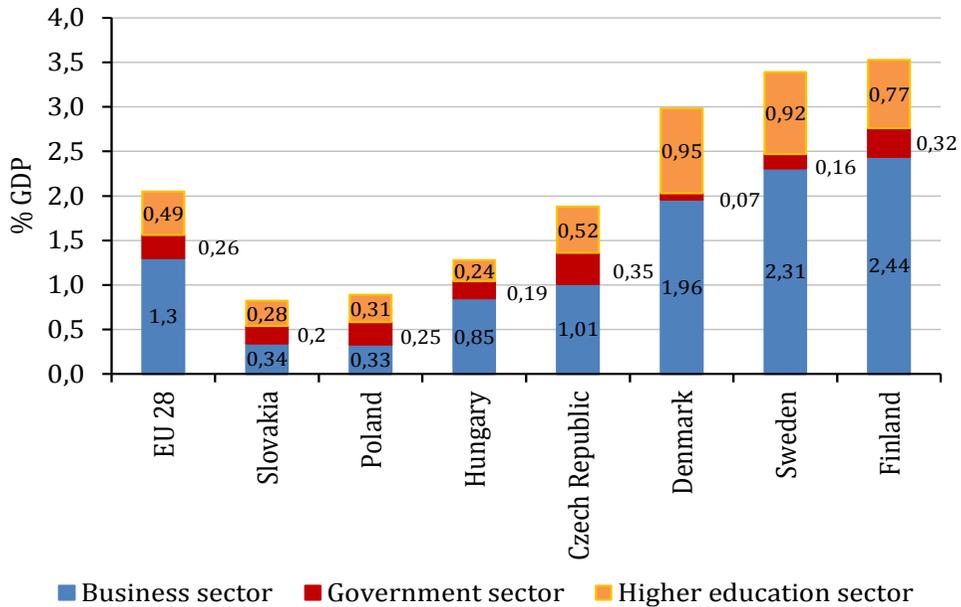
In 2012, positive trend of increasing prerequisites in innovative development field in Slovakia was the increase of gross expenditure on R&D. They grew to 0.82 % of GDP, representing the highest R&D rate in Slovakia since 1997 (in 1997 it was 1.08 %). However, Slovak economy continuously decreases the lag in R&D financing compared to the EU average. It is necessary to say the lag is still relatively large (in 2012 the intensity of R&D in Slovakia was just 40 % of the EU average).

Long-lasting structural limitation of Slovak R&D system is great share of public sector in it (this applies to the side of sources and also use of gross expenditure on R&D). Certain positive was gross expenditure of business sector increase to 0.34 % of GDP in 2012, and experienced the highest year-on-year growth since 2007; however, the share of public sector (government sector + higher education sector) still remains high.

From the sources point of view, the public sources dominated (42 %), however its share decreased in comparison to previous year. Business enterprise sources of R&D funding are stable in long-term at level 1/3 of total sources. In 2012, upward trend of foreign sources continued representing 0.15 % share of GDP being still relatively low value. We might conclude (even with comparison of high rate of Slovak economy internationalization) that from R&D funding point of view, Slovakia R&D system is relatively low internationalized; average share of foreign sources in R&D funding in the EU is 0.19 % and in small open economies is this value even higher. Low share of universities sources on R&D, in 2012 at 0.01 % level is attached with their status, funding system and insufficient ability to create their own sources (e.g. commercialization of their R&D results) which could be used for their own R&D.

Figure 3.1 shows the structure of R&D expenditure (% of GDP) from use point of view in Slovakia compared to other countries of Vysegrad group (so-called Vysegrad four – V4) and innovative advanced small economies in the EU. Slovakia lags in total expenditure on R&D not only compared to innovative advanced small economics of the EU, but also to its neighbors (Poland, Czech Republic and Hungary).

Figure 3.1  
**Structure of Gross Expenditure on R&D in 2012 by Sector of Performance in Slovakia and Selected EU Economies (% GDP)**

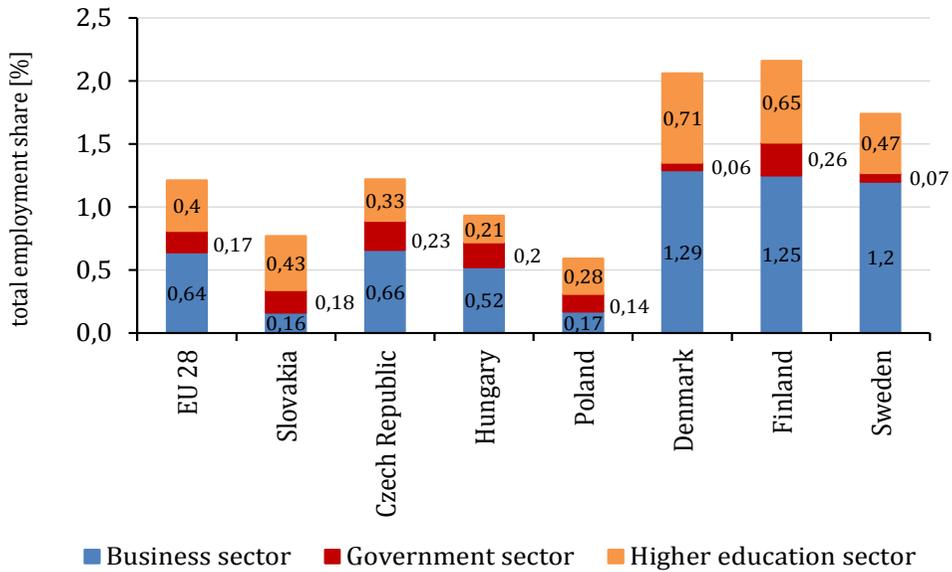


Source: Own compilation based on Eurostat database (2014).

The key factor, except the R&D sources, which increases the potential of R&D as moving force of innovations is the number of R&D employees in economy. In 2012, number of R&D employees mildly increased, however their share on total employment does not reach even 2/3 of the EU average (1.21 %) and in Slovakia just 0.77 % of total employment. Figure 3.2 shows the comparison of R&D employees by their share on total employment in Slovakia and selected countries.

In 2012, there is still great lag in Slovak share of R&D employees in business enterprise sector not just comparing to advanced economies, but also with neighboring countries (except Poland). Low share of R&D employees in business enterprise sector represents serious barrier of R&D results usage in innovation development of national economy.

Figure 3.2  
**R&D Employees in Slovakia and Selected EU Countries in 2012**  
 (total employment share)



Source: Own compilation based on Eurostat database (2014).

From innovative performance and its prerequisites point of view, there is continuous negative tendency in absolute and relative (number of patents per 1000 of R&D employees) patent performance. Patent performance measured by number of patent applications mildly decreased in 2012 to 223 domestic patent applications. That led to lower patent performance, which decreased from 8.4 in 2010 to 7.8 domestic patent applications per 1000 R&D employees. Lower patent performance is indicated by significant drop of Slovak patent applications in European Patent Office (EPO). On the other hand, Slovak scientific performance increased (measured by number of research papers in SCOPUS database per 1000 R&D employees) from 168.3 to 175.1. The patent performance is the key indicator of R&D system ability to transform results of R&D to commercialized nature. We can observe growing differences between patent and publishing activity during last two years.

In November 2013, Slovak government adopted mid-term strategy of research, technological and innovative policy – *Knowledge to prosperity* –

*Strategy of research and innovation for intelligent specialization of Slovak republic*, which represents the base for economic policy in field of funding and governing education, research, innovation and business support in 2014 – 2020. The strategic objectives are:<sup>12</sup> to deepen integration and anchor the key industry branches, which increase local added value by co-operation of local chain of contractors and support of their networking; increase of R&D contribution to economic growth via global excellence and local relevance; creation of dynamic, open and inclusive innovative society, improvement of human resources for innovative Slovak Republic.

Education belongs among key determinants of economic development. Above all, the higher education is essential assumption of qualitative human development and raise of innovative performance. Total government expenditure on education, expressed in % of GDP decreased two years in a row, and they represented just 3.8 % of GDP in 2012; Slovakia is in this indicator on very unflattering rank next to the last one among all the EU (average is 5.3 %).

The participation in lifelong learning of the age group 25 to 64 years slightly decreased from 3.9% in 2011 to 2.9 % in 2012. The decrease in this indicator just deepen lag behind the EU 28 level with participation on 9 % of the age group 25 to 64 years. In the number of lifelong learning participants Slovakia is next to last one rank among all the EU 28 countries again.

Slovakia holds relatively good ranking in number of university graduates in mathematics, science and technical science. The 17.9 graduates per 1000 of population aged 20 – 29 years in 2012 exceeds the EU average (16.8 graduates in 2011) and puts Slovakia to positive 8<sup>th</sup> rank among the EU 28. However, it is necessary to say, this indicator is decreasing for last three years. From innovative development needs point of view, there is ongoing not suitable structure of PhD graduates when share of PhD graduates in mathematics, science and technical science, industry and construction technology science was 38.5 % from all PhD graduates; while the EU 28 average was 44.6 % (2011). From the EU

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<sup>12</sup> <[www.economy.gov.sk/ext\\_dok-sk\\_ris3/142230c?ext=orig](http://www.economy.gov.sk/ext_dok-sk_ris3/142230c?ext=orig)>.

member countries, best results are achieved by France with the share of above 60 %.

**Table 3.2**  
**Selected Indicator of Education**

	2005	2006	2007	2008	2009	2010	2011	2012
<i>Total public expenditure on education (% GDP)</i>	3.85	3.8	3.62	3.5	4.3	4.5	4.1	3.8
Share of graduates aged 30 – 34 years with university degree (%)	14.3	14.4	14.8	15.8	17.6	22.1	23.4	23.7
Number of graduates in mathematics, science and technology fields (per 1 000 of the population aged 20 – 29 years; ISCED 5 – 6)	10.2	10.3	11.9	15.0	17.5	18.3	18	17.9
Number of PhD graduates in mathematics, science and technical science, industrial and construction technologies (per 1 000 of the population aged 20 – 29 years; ISCED 6)			38	34.8	35.3	35.9	37.6	38.5
Number of new PhD students per 1000 of the population aged 25 – 34 years	1.2	1.4	1.5	1.8	2.1	3.1	1.9	.
Participation in lifelong learning (% of the age group 25 to 64 years)	4.6	4.1	3.9	3.3	2.8	2.8	3.9	2.9

Source: Eurostat (2014); . – unavailable data.

The development of knowledge-based society is largely preconditioned and propelled by the use of ICT across society. Table 3.3 shows some indicators of ICT penetration in society (households, businesses and public administration). In Slovakia, number of households with Internet access increases every year (in 2013, it was 78 %, what is almost the same value as the EU 28 average). Digital literacy, expressed as the share of citizens who regularly use Internet increased to 61 % in 2013, and reaches average of the EU 28 (62 %). From ICT infrastructure development point of view, Slovakia lags behind the EU 28 average in number of households connected to broadband Internet, while it was 70 % in 2013 (average is 76 %).

**Table 3.3**  
**Selected Indicators of ICT Penetration in the Society (%)**

	2007	2008	2009	2010	2011	2012	2013	EÚ 2013
Share of households with Internet access	46	58	62	67	71	75	78	79
Share of citizens who regularly use the broadband Internet	33	44	49	58	56	60	61	62
Share of households with broadband Internet connections	27	35	42	49	55	72	70	76
Share of citizens who use the Internet to interact with public administration	24	40	38	50	48	42	33	41
Share of citizens who use <i>the Internet banking</i>	15	24	26	33	34	40	39	42
Share of citizens who use the Internet for e-commerce	10	13	16	19	23	30	30	38
Share of business revenues from e-commerce in total revenues	3	8	11	11	16	12	18	14
Share of enterprises which send or receive e-invoices	14	23	30	34	34	.	43	29

Source: Eurostat (2014).

ICT use in the business sector, measured as the share of business revenues from e-commerce in total revenues and the share of enterprises using e-invoicing, increased in 2013. The share of revenues from e-commerce increased to 18 % of total revenues (average is 14%) and the share of enterprises using e-invoicing increased to 43 % (average is 29%). We may conclude use of ICT in business sphere in Slovakia is relatively broad and in comparison with the EU 28 above average standards. In 2013, ICT use prevails in the business sphere rather than in households.

In the annual assessment of national competitiveness, the World Economic Forum (WEF, 2013) also evaluates qualitative factors of competitiveness – education, technological readiness, and innovation. According to latest report of WEF about overall competitiveness, Slovakia ranked 78th out of 144 countries and dropped to the group of those countries in transitional stage, half-driven by economic development and half-driven by innovation. Slovak education ranked 58th (fall by 4 ranks), technological readiness 52nd (fall by 7 ranks) and innovation 95th (fall by 6 ranks). In education quality pillar, the highest-ranking

indicators were Internet access in schools (31st), Local availability of specialized research and training services (61st) and education enrollment rate (49th). The lowest ranking indicators were Quality of education system (130th) and Quality of management schools (109th). In the Technological readiness pillar, significant ranking drop was in FDI indicators and technology transfer (25th, drop by 16 ranks). The lowest ranking indicator was Internet speed (91st) and Absorption of technologies at business level (72nd, drop by 13 ranks). In the Innovation pillar, Slovakia had a relatively good international position in Utility patents (39th) and Quality of research institutions (70th). The lowest ranking indicators were Government procurement of advanced technology products (134th, drop by 7 ranks) and Innovative capacity (96th). With regards to the Government procurement of advanced technology products being an active innovation policy instrument, Slovakia ranks among developing economies. Slovakia ranks in worse part of assessed economies in most indicators about innovation. The European Commission publishes an annual study, the Innovation Union Scoreboard (IUS, 2014), which assesses the innovation performance (based on 25 indicators and 8 dimensions of innovation) of the EU member countries. According to the latest assessment, Slovak economy falls into the group of moderate innovators (level below the EU average) and ranks 21st in the EU while in 2013 the Total Innovative Index of Slovak economy reached 59 % of the EU (in 2012 it was 64 %).

We may conclude in field of better use of qualitative factors for economic development, SR experienced divergent tendencies compared to other economics of the EU (despite great increase of gross expenditure on R&D and use of ICT by business sphere given Slovak circumstances).

## 4. LABOUR MARKET

Year 2013 indicated stop of gradual recovery in the labour market, which has been observed since 2010 and introduced an increase of unemployment rate; on the other hand, it brought the growth of average nominal wage in all regions and also the recovery of real wage growth. The closer look reveals that development of employment improved at the end of 2013 (and some signals of improvement outlasted also at the beginning of 2014), and that increase in unemployment rate was in fact caused only by category of unemployed longer than 2 years. At the beginning of the year, certain legislative changes took place regarding labour relations and employing, with provable effect on labour costs increase.

### Employment development

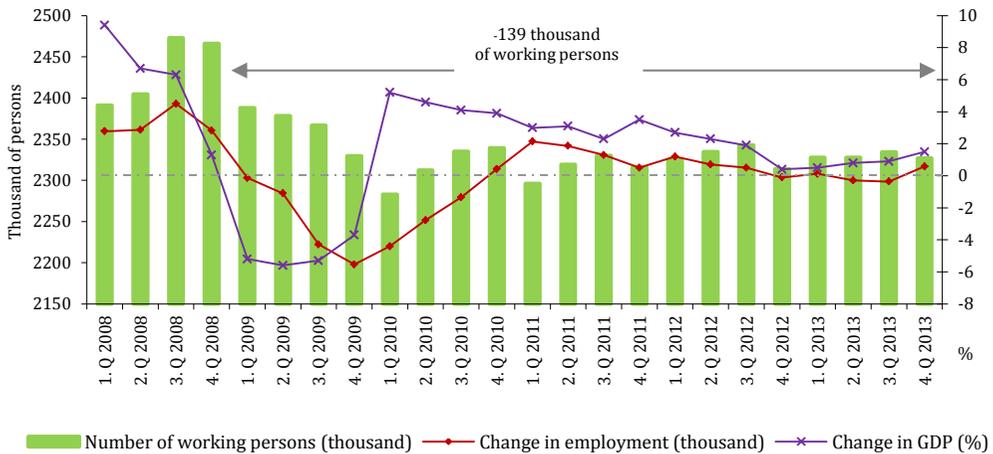
After sharp decline of employment, which reached the bottom at the turn of 2009 and 2010 (Figure 4.1), we observed the process of employment recovery since the end of 2010. In terms of fall depth invoked by crisis, it was just weak year-on-year growth of employment and even this gradual growth stopped at the year end. The results from 2013 reveal clear stagnation of employment, when year-on-year change was zero in 2012<sup>13</sup> (average annual data) and the dynamics of working person's development by quarters is more-less copying very similar trend (Figure 4.1). Also positive information from last quarter of 2013, when year-on-year growth occurred (by 0.6 %) after a half year lasting decline of employment, is relativized by the fact that this growth represents increase of working persons by 13 thousand, while the number of working persons is still lower by 139 thousand compared to the last quarter of 2008 when the economy suffered from the external shock (see Figure 4.1). For complete picture, it is necessary to note that during this period, productive age population number

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<sup>13</sup> The employment according to Labour Force Sample Survey (LFSS) calculated from total number of workers. The employment calculated just from workers on year-on-year basis decreased by 0.7 % (based on quarterly statistical reporting, where workers = employees and entrepreneurs, without persons on maternity leave; SO SR, 2014b).

decreased by 33 thousand, however, number of economic active persons increased by 13 thousand.<sup>14</sup>

**Figure 4.1**  
**Employment (Number of Working Persons) and GDP, Quarters of 2008 -2012**



*Note:* GDP based on quarterly national accounts at constant prices, reference year 2005, employment based on LFSS, 2011 data are revised on Population and Housing Census 2011.

*Source:* Based on SO SR database.

The development of recent years showed the employment reacted to economy performance fluctuations with lag of 3 – 4 quarters (we focused on this topic in last two issues of this publication, see Morvay et al., 2012). And as certain level of product growth (ibid) or production and value added growth is required to invoke the increase in employment, considering slowdown of product growth in 2012 and unchanged employment elasticity, a fade or even halt in employment growth could have been expected (which also created the base for our 2013 outlook ; Morvay et al., 2013). And actually, the economy slowdown that culminated at turn of 2012 and 2013 (GDP growth rate fell to 0.4 – 0.5 %) left the mark on half-year lasting decrease of employment in the middle of 2013.

<sup>14</sup> Analogically meaning the increase of unemployed persons not just by 139 thousand of “lost job positions (the fall of working persons), but in total by 152 thousand.

The gradual improvement of economy performance during 2013 creates the assumption for consistent recovery of employment in following period. The latest data from beginning of 2014 (the growth of industrial production index by 11 % in first two months, out of which manufacturing by 13.6 %, but also the growth of employment and average wage in most of branches in first two months of 2014) supports this optimistic assumption.

The development of manufacturing itself might be the plumbless indicator of future total employment development, as the industry segments employ above  $\frac{1}{4}$  of total working persons in Slovakia.<sup>15</sup> The deterioration or slowdown of industry growth indicators in 2013 (not production only, but revenues as well, for more details see Chapter 2) might act against the employment recovery exceeding also to 2014 (already mentioned time inconsistency of employment and performance development). The employment in industry (based on LFSS, calculated from number of working persons) decreased by 5 % on year-on-year comparison and along with construction (decrease by 3.2 %, data taken from Statistical report of SO SR, 2014b) it contributed the most to final stagnation of total employment in 2013. The signs of improvement in case of employment in industry came in second half of the year, and mostly at year-end, but only in the form of lowering the decrease. The clearer signal of recovery provides the employment calculated from the number of employed (narrower category than working persons, it includes employees and entrepreneurs),<sup>16</sup> which in case of industry fell by 0.8 % in 2013, out of which increased by 1 % rate in last quarter (for more details see Table 2.2 in Chapter 2), solely by increase in manufacturing. As we have already mentioned, trend of positive turnover at turn of the year lasted also in first months of 2014, when employment (calculated from employed) in industry increased by 1.1 % in January and by 1.4 % in February.

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<sup>15</sup> In 2013, in the segments of industry employed more than 600 thousand from total number of 2.33 million of working persons; the second branch by the number of working persons is wholesale and retail trade with 13 % of total working persons in SR.

<sup>16</sup> The employment based on LFSS calculated from working persons includes also persons on maternity leave, military personnel and working persons employed abroad less than 1 year. The employment calculated from number of employed based on quarterly statistical reporting includes employees and entrepreneurs. In 2013, there was 2.33 million of working persons, but just 2.18 million of employed.

Another interesting moment in development of employment in 2013 is re-change of employment structure as it comes to the status in employment: while in the previous year the weak growth (0.6 %) of total employment (based on LFSS) was ensured by increase in the number of employees along with the decrease on entrepreneurs (sole proprietors) - or decline of self-employed in overall, in 2013, the zero change in total employment preserved only due to growth of entrepreneurs, as the number of employees was falling. We focused on these elements of employment in last year publication (Morvay et al., 2013), where we confronted employment structure changes with generally presented assumption that enterprises prepared themselves for major changes in Labour Code, effective from 2013, already at year-end of 2012 by redundancies of employees as they expected negative effect in form of labour costs increase (for detailed information about legislative changes related to labour market see Morvay et al., 2013). The statistics from last quarter of 2012 proved the assumption to be wrong, the number of employees did not fall before the year-end (on the contrary, in fact it increased annually by 0.8 %), however, unusual fall was experienced in number of entrepreneurs – especially entrepreneurs with employees – number decreased by more than 14 %, representing the highest drop since economic crisis emerged. Therefore, if adopted changes in legislation should have resulted in lower employment before they became effective, it happened in form of termination of entrepreneurs – sole proprietors activity and mostly in case of entrepreneurs employing another employees (decrease of sole proprietors without employees was a bit less significant). But already in first quarter of 2013, immediately after legislative changes became effective, their number recovered to values from first half of 2012 and later this number not just stabilized, but significant growth in year-end of entrepreneurs with employees (12.7 %), as well as sole proprietors (2.7 % growth, however, this group is four times larger) secured already mentioned growth of total employment by 0.6 %. While total number of all self-employed increased in last quarter by more than 4 %, number of employees did not grow in any quarter of 2013.<sup>17</sup> This development should not be compared with the post-crisis substitution of dependent work by self-

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<sup>17</sup> The number of employees in 2013 changed in individual quarters with moderate dynamics, when changes fluctuated in interval 0.0 % to -0.3 %.

employment, when fluctuations in both elements of employment were much more significant (10 % increase of entrepreneurs along with 5 % decrease of employees well known from recession year 2009).

In comparison, while number of sole proprietors in average ascended annually, number of employees in micro enterprises and small enterprises (employees fewer than 20) decreased against 2012 by more than 5 %. The employment declined also in medium enterprises with number of employees fewer than 250, which together with micro enterprises and small enterprises employ 40 % of total employees in SR (based on quarterly statistical reporting of SO SR, 2014b) – from overall average annual decrease of employees (15.2 thousand) more than two thirds left from small and medium enterprises. Just to remark, at the year-end of 2013, SO SR recorded 181.9 thousand of enterprises in Organization Register, representing increase by 10.4 % against 2012. The positive information is also the growth of enterprises number in all regions of SR, out of which, the highest increase was observed in Nitra region. One third of all enterprises resided in Bratislava region, where the highest number of employees was concentrated (409 thousand of employees in enterprises with 20 or more employees representing almost one third of all employees in this enterprises category size; based on enterprises methodology of SO SR, 2014c).

The form of employment, in which the negative effect to labour costs invoked by legislative changes is undisputed, is the employment by agreements on work performed outside employment relationship. Moreover, small and medium enterprises, especially in regions with poor economic performance and higher rate of unemployment, often used this form of employment. The worker with concluded agreement on work performed or agreement on work activity who receives regular monthly income, since January 2013, has the same status as employee as regards the health, sickness, pension, and unemployment insurance. As a result, for this form of employment the full contribution obligation applies since then (while before 2013, the insurance was only 1 % from assessment base and burdened by employer) what significantly increased costs of employers. The dramatic fall of „agreement workers“ occurred right away in January 2013 – as of 31. 12. 2012 the Social Insurance Agency registered

approximately 642 thousand of agreements, in January 2013, it registered only 297.4 thousand of employees working under agreement (data for all types of agreements, numbers published by Social Insurance Agency). This fall by more than 50 % was unusually high, non-comparable with ordinary decrease of agreements at the year-end. However, the number of agreements during 2013 was uprising, as of 31. 12, there were 440.3 thousand what is still about 200 thousand of „agreement workers“ lower than in same period before the changes mentioned above regarding contribution obligation.

To what extent adopted legislative amendment (the Social Insurance amendment) influenced total labour costs can be also documented by the indicator known as „tax wedge“ – it is a tool of OECD presenting tax-contribution burden of labour.<sup>18</sup> In 2013, the tax wedge in SR in case of child-less employee with average wage was 41.1 % of total labour costs (OECD average is 35.9 %) representing 1.51 p. p. increase against previous year – it was the second highest increase of labour costs from OECD countries (after Portugal and together with the USA). Closer look to year-on-year moves in individual components creating tax wedge reveals that the whole increase was realized by rise of contributions paid by employer which increased by 1.98 p. p. according to this methodology (just for comparison, there was no other country in OECD which year-on-year increase would be on the side of employers contribution higher than 0.3 p. p.), in Portugal the tax burden of labour increased due to higher rates of income tax, and in the USA, increase of tax burden of labour was caused by termination of already established employees contribution allowances (see OECD, 2014).

## **Unemployment Development and Long-term Unemployment as Specific Problem of Slovak Labour Market**

Already mentioned improvement at the year-end of 2013 was also reflected in decrease of unemployed persons, and although it was only

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<sup>18</sup> The share of income tax, contributions of employee and contributions paid by employers on total wage costs (super-gross wage), after transfers (bonuses) adjustment, expressed in %. It mirrors the difference between total labour costs and net income of employee after taxation.

weak year-on-year decrease by 1 % (data from 4<sup>th</sup> quarter of 2013; LFSS), decline of unemployment was recorded for the first time after two years on continual increase. Moreover, unemployment rate decreased from 14.4 % (4<sup>th</sup> quarter 2012) to 14.2 % in last quarter. The signals of positive turnover in employment before the coming of 2014 are thus confirmed also on the side of unemployment.

In average of 2013, the unemployment increased though; by 2.3 % – there were 386 thousand unemployed in Slovakia, which represents 8.5 thousand more than in 2012 (for comparison, increase of unemployed was 13 thousand at that time, compared to 2011). Above all, the increase of unemployed was due to long-term unemployment, especially category of unemployed longer than 2 years. The size of other categories defined according to unemployment length contracted, however, even decrease of all persons unemployed for less than 2 years was not able to fully compensate 10 % increase of unemployment in the greatest category – category of long-term unemployed (number of unemployed longer than 2 years increased by more than 17 thousand persons).

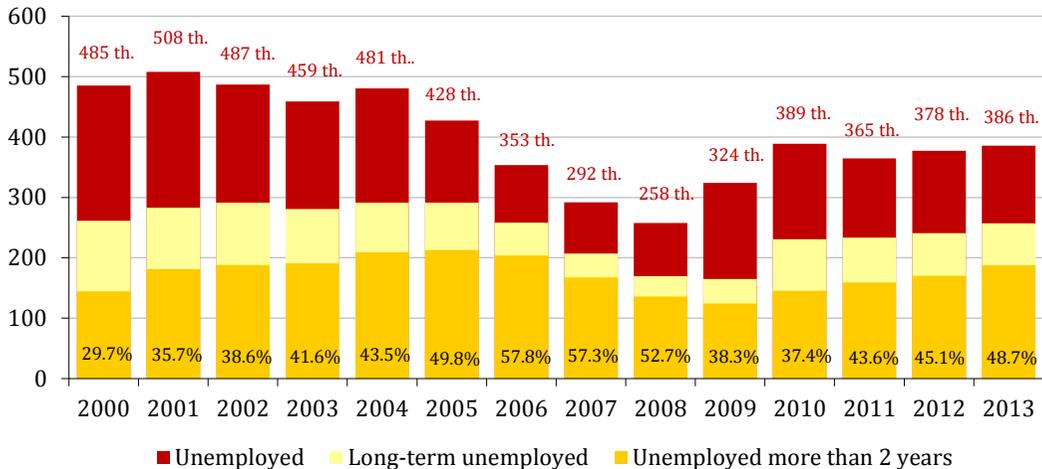
Figure 4.2 shows gradual post-crisis increase in share of this category in total unemployment; in 2013, persons unemployed more than 2 years represented almost half of overall unemployment. Together with unemployed for 1 – 2 years, total *long-term unemployment* (defined by unemployment longer than 1 year) represented 67 % of overall unemployment, which means that two thirds of all unemployed in SR belongs to the category of long-term unemployed.

Year 2009 was the only year since 1999, when share of short-term unemployment for less than 1 year (red part of columns in figure 4.2) and long-term unemployment were almost equal, as an immediate consequence of significant deterioration of conditions on labour market and fall of employment in recession year 2009. In other years, long-term unemployment stubbornly sustains the dominance – nowadays it represents two thirds of total unemployment, in pre-crisis period, characteristic by favourable development of employment, long-term unemployment represented almost three quarters of total unemployment (2006). So it is clearly recognized as a long-lasting problem of Slovak labour market and

the existence of sub-category of “unemployable” or “hardly employable” persons is proved also by Slovakia’s 10 years lasting primacy in long-term unemployment rate in the EU over the 2002 – 2012.

Figure 4.2

**Comparison of Total Unemployment and Long-term Unemployment as its Component in 2000 – 2013 (thousand persons)**



*Note:* Based on LFSS methodology, data for 2011 are revised on Population and Households Census 2011. The chart contains of total unemployed persons in SR (thousand persons) and share of long-term unemployed more than 2 years in total unemployment (%).

*Source:* Based on SO SR database (2014a).

This serious problem of Slovak labour market is linked to various factors. In long term, unemployed with no previous job experience represent 20 – 25 % of total unemployment in SR, often it is the most numerous group of unemployed in comparison with any branch (classification by economic activity in last job position). Also in 2013, the unemployed without previous job experience represented the largest group of unemployed: 90 thousand of persons without previous job experience stands for 23 % of total 386 thousand of unemployed. Even though, it is the improvement against 2012 (when they crossed 100 thousand line and one quarter of unemployed), the share of unemployed with no working habits is still high and introduces great barrier of lowering the unemployment even in times of favourable macroeconomic development.

As the number of unemployed with no previous job experience decreased, from branch point of view, the highest increase of unemployed came by those previously working in trade and manufacturing.

The problem of large share of unemployed with no previous job experience is inseparable from the question of employing persons with the lowest qualification as well as employability of graduates. As stated in last-year issue of this publication, the unemployment rate of persons with the lowest qualification<sup>19</sup> fluctuates in 40 – 50 % interval, Slovakia is European absolute leader in this area (for illustration, European average of unemployment rate of persons with low qualification did not overrun 12 % in pre-crisis period, in 2013, the average unemployment rate of low qualified persons in the EU climbed to 19.6 %; for more details about this topic see Morvay et al., 2013). We can observe improvement also in this area in recent year, the unemployment rate mentioned above declined in 2013 by 2.1 percentage point to 42.6 % (Eurostat). However, out of total number of unemployed (386 thousand), 201 thousand is still with primary education and secondary vocational education without leaving exam. It is proper to note, that the question of high unemployment of low-qualified persons in Slovakia is beside other things related to the status of Roma population in Slovak labour market. Based on the World Bank estimate (WB, 2012), around 165 thousand of Roma population in productive age is out of work. Most of them are part of economically inactive population (stopped looking for a job) or belong to the group of long-term unemployed and to the sub-group of unemployed with the longest duration of unemployment (for more to this topic see Morvay et al., 2013). We focused on youth unemployment in one of previous issues of the publication (Morvay et al., 2012), thus we just add that the youth unemployment rate (15 – 24 aged), which was after crisis increasing at much higher pace than total unemployment and which retains at one third of all economic active youth, decreased in 2013 by 0.4 p. p. to 33.6 %. Also the size of the group has contracted, the number of unemployed aged 15 – 24 declined by 2.5 thousand to 73 thousand of

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<sup>19</sup> The persons with primary or secondary vocational education, in Eurostat classification the categories 0 to 2 (Eurostat data and methodology).

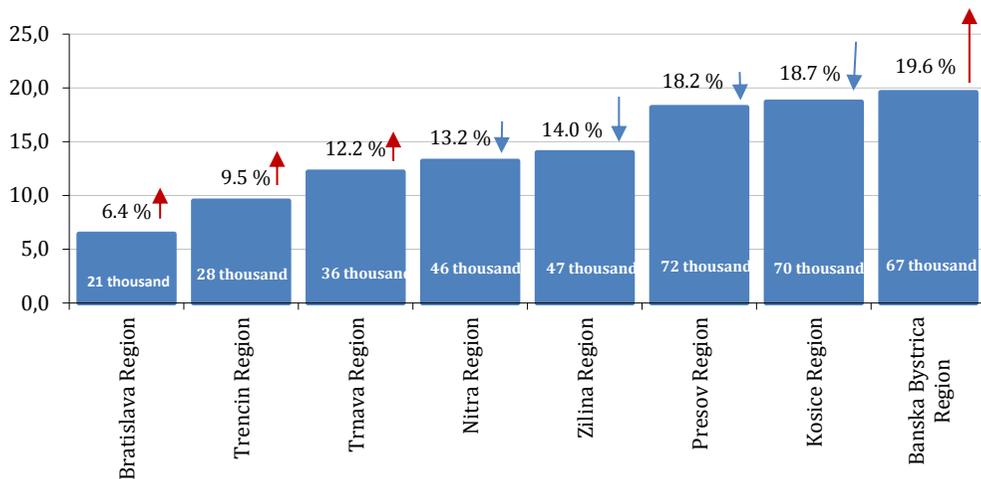
persons. Another 117 thousand of unemployed (30 % of total unemployed, represents the largest group of unemployed by age categories) were aged in range of 25 to 34. Long-lasting unfavourable condition of mentioned parts of labour force contributes to existence of problem of numerous, stable and hardly employable group of unemployed and to dominant rank of long-term unemployment in SR conditions.

The unemployment developed differently across the country. In 2013, the unemployment increased in four regions and decreased also in four regions of SR, grew mostly in regions with low unemployment rate and lower number of unemployed and vice versa. As figure 4.3 illustrates, the unemployment rate grew in regions with lowest level and the highest drop was recorded in Košice Region, the region with second highest unemployment (the size of arrow in figure indicates the scale of annual change, value in % represents final unemployment rate in 2013, the value in thousand express the group size of unemployed persons), leading to a very little decline in regional disparities in this aspect. The exception from this phenomenon is Banská Bystrica Region (BB), where the unemployment rate experienced the highest increase, from 18 % to 19.6 % in 2013, and the region overtook unflattering first rank from Košice Region (where the unemployment rate climbed to the same 19.7 % year ago). In 2013, Košice Region (KE) experienced relatively the highest progress, it lost not only first rank in unemployment rate, but also in total number of unemployed persons, where Prešov Region took the leadership (PO). However, the listed three regions still belong to regions with highest unemployment rate and highest number of unemployed with wide margin. It is necessary to mention, that the highest job vacancies increase was recorded in Prešov Region (by 46 %) and Košice Region (by 34 %), more job vacancies than in listed regions (PO, KE, BB) were just in Bratislava Region (traditionally, the region with the highest job offers, more than a half of total job vacancies are in this region).

The average nominal wage grew in 2013 at same pace as in the previous year (2.4 % growth rate), increasing from 805 to 824 EUR. The halt in real wage decline that happened to occur under pressures of consumers prices increase since the beginning of 2011, is a positive news; in

2013, the real wage consistently grew at 1 % rate (see Chapter 6 – Price development).

**Figure 4.3**  
**Unemployment Rate (%) and Number of Unemployed (thousand)**  
**in Slovak Regions**



*Note:* The regions are lined up by unemployment rate values in % (x axis) with responding column height.

*Source:* Based on Table appendix of Statistical Report SO SR (2014b).

## Average Nominal Wage Development

Based on quarterly statistical reporting, the highest improvement was experienced by employees in professional, scientific and technological activities with wage increase by 88 EUR, relatively significant growth of wage was experienced by employees in education (40 EUR), health care (by 30 EUR) and manufacturing (by 34 EUR). On the contrary, employees in financial and insurance services experienced wage decrease by 127 EUR, leading to the fall of this sector from first rank and descended to the second one with average wage 1531 EUR, behind the information and communication (1634 EUR), where average wage decreased just by 3 EUR. Similar minimal changes happened also in two of the worst earning branches – accommodation and food service activities (with wage of 513 EUR) and construction (607 EUR). The three branches, where average wage traditionally exceeds 1000 EUR threshold (beside

mentioned financial and insurance activities and ICT sector, the group includes also supply of electricity, gas and steam), were accompanied by the professional, scientific and technical activities and public administration and defence, where the average wage exceeded threshold in 2013 as well.

Long-term look at development of average month wage is showed in Figure 4.4. The figure, beside other things, illustrates slowdown of nominal wage growth dynamics after 2008, the growth rates in 2 – 3 % interval which can be observed after 2008 are incomparably lower than in pre-crisis period – during the whole decade before 2008, the growth rates were in 6 – 10 % interval.<sup>20</sup>

The regional comparison of average monthly wage development reveals, that even the average monthly wage increased in 2013 in all regions, the one and only region with average wage exceeding 1000 EUR is still Bratislava Region. It is also the only region with monthly wage higher than Slovak average. The positive news is that monthly wage grew the fastest in Banská Bystrica Region and Prešov Region, in regions where the wage is the lowest one.

**Figure 4.4**  
**Development of Nominal and Real Monthly Wage in 2006 – 2013 (EUR)**



Source: Based on SO SR database.

<sup>20</sup> At the beginning of transformation in 90's the growth rates of average nominal monthly wage reached 20 %, however, the conditions for such a dramatic changes will not repeat again (changes in employment and economy structure, income of foreign enterprises etc.)

\* \* \*

Stabilization of labour market development on turn of 2013 – 2014 led to, beside other things, positive expectations about change of domestic demand importance, as one of GDP components in process of ensuring continuous economic growth. We have already talked about unfavourable dynamics of real GDP and domestic demand development in 1<sup>st</sup> chapter (mainly due to final consumption of households). Also in 2013, the driver of growth was mainly net export, but in upcoming period, economic activity should be more and more promoted by recovering domestic demand. Reason for such an improvement can be found in increasing private consumption based on growth of real income and improvement of consumers sentiment (OECD, 2013). Even though, the process of employment fall stopped, unemployment rate remains at high level – accordingly, the development of employment might act as barrier of higher economic growth (ibid). The latest forecast of European Commission (EC, 2014) speaks also about changes in expectations about GDP components dynamics, pointing out consumers confidence was already above long-term average in second half of 2013 and considering expected growth of real disposable income and improvement of labour market, private consumption should gradually grow in 2014 and 2015. Therefore, domestic demand should overtake key role in the process of economic growth generation.

## 5. EXTERNAL ECONOMIC RELATIONS

### Balance of Payments

Within the scope of main parts of balance of payments in Slovakia, the trend from the previous year more-less continued in 2013 (Table 5.1). The balance of trade achieved historical surplus of more than 4 billion EUR, allowing surplus of current account of balance of payments sustain at the same level as in 2012, despite the balance deterioration of its other parts, mainly current transfers. Expressed by share in GDP, surplus of current account sustained above 2 %.<sup>21</sup> The balance of capital account year-on-year decreased, and in contrast to 2012, the financial account ended up with positive balance.

Table 5.1  
Main Components of the Balance of Payments Development in the SR,  
2009 – 2013

	2009	2010	2011	2012	2013
Balance of trade (EUR million)	946	779	1 016	3 556	4 284
Balance of services (EUR million)	-1 026	-744	-371	306	148
Balance of income (EUR million)	-870	-2 065	-2 887	-1 653	-1 810
Current transfers (EUR million)	-676	-422	-354	-649	-1 073
Current account (EUR million)	-1 627	-2 453	-2 595	1 560	1 548
Capital account (EUR million)	464	1 018	865	1 376	1 026
Financial account (EUR million)	2 060	2 385	3 461	-344	1 422
Current account/GDP (%)	-2.6	-3.7	-3.8	2.2	2.1

Source: NBS (2014b); SO SR (2014a); own calculations.

### Foreign Trade and Openness of the Economy

Already mentioned record surplus of balance of trade mirrored in following increase to almost 6 % of its share in GDP (Table 5.2). However, closer look to export and import volumes shows slack up of its growth

<sup>21</sup> According to actual medium-term prediction of NBS (2014a), gradual increase to 4 % of GDP and by the even more optimistic forecast of MF SR (2014) to 6 % of GDP is expected in following three years. The latest forecasts of European Commission and International Monetary Fund are more prudent.

after previous year. The export year-on-year increased by 3.6 % and import by 2.5 %, while in some months they experienced year-on-year fall. The most dynamic year-on-year growth was recorded in January and along with recovery of the Euro area at the year-end as well. December was the only month, when due to higher volume of export than import, the negative balance of foreign trade was noted. On the export side, restriction of vehicle export occurred due to planned stoppage of production in last month of the year.

**Table 5.2**  
**Foreign Trade in Goods in SR, 2009 – 2013**

	2009	2010	2011	2012	2013
Exports (EUR million, current prices)	39 721.2	48 272.1	56 783.2	62 144.0	64 361.1
Annual change (% , current prices)	-19.8	21.5	17.6	9.4	3.6
Imports (EUR million, current prices)	38 775.1	47 493.6	55 767.6	58 588.4	60 077.4
Annual change (% , current prices)	-22.9	22.5	17.4	5.1	2.5
Balance (EUR million)	946.1	778.5	1 015.6	3 555.7	4 283.7
Balance/GDP (%)	1.5	1.2	1.5	5.0	5.9
Export performance (% GDP)	63.3	73.3	82.3	87.4	89.2
Import intensity (% GDP)	61.7	72.1	80.9	82.4	83.3

Source: SO SR (2014a); own calculations.

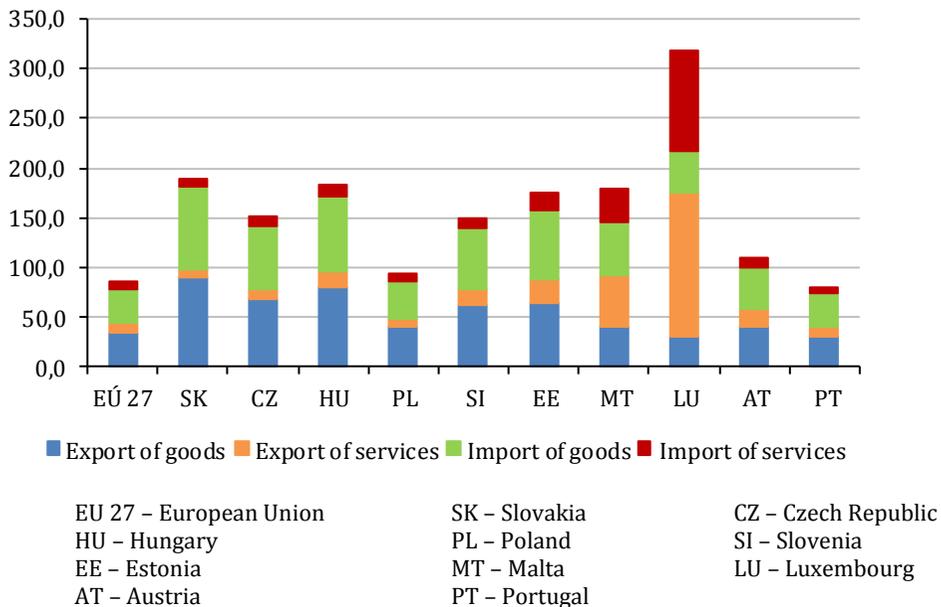
In terms of commodity structure, traditionally, machinery and transport equipment had the highest share on foreign trade of SR. This category represented 57 % of export and 42 % of import and along with chemicals contributed mostly to year-on-year growth of foreign trade. (SO SR, 2014b). On the contrary, the highest year-on-year drop was recorded in oils and fats category.

The territorial structure of foreign trade remained similar to last few years with mild decrease of EU export share (82.8 % in 2013) and import from EU (62.6 %) (SO SR, 2014a). Simultaneously, trend of foreign trade growth with China continues year-on-year, where volume of import (7.2 % of total import) still exceeds volume of export (2.5 % of total export) driven by Slovak automobile producers.

In the horizon of next three years, gradual recovery of export markets as well as increase of import due to recovery of all parts of aggregate demand is expected – NBS (2014a) and MF SR (2014) expect moderate acceleration of export and import dynamics connected to growing surplus of balance of trade relative to GDP.

Based on noted facts, export performance and import intensity of the Slovak economy continued in moderate growth in 2013, causing the openness (measured as ratio of foreign trade with goods to GDP) to score more than 172 %. When we include export and import of services, openness of the economy approaches the level of 190 % of GDP (Figure 5.1).

**Figure 5.1**  
**Openness of the Slovak Economy Compared to the EU 27 and its Selected Member States in 2013** (ratio of export and import of goods and services to GDP, %, current prices)



Source: Based on Eurostat database (2014); own calculations.

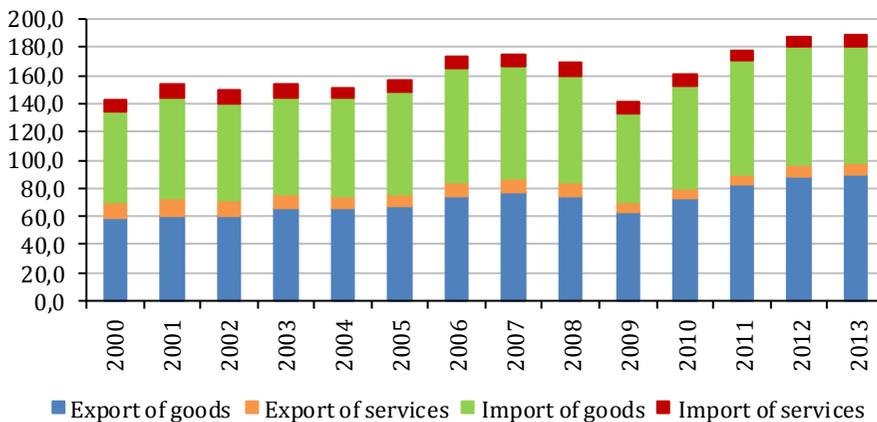
As it is clear from this figure, the Slovak economy is the most open economy among countries of the Visegrad four (V4). At the same time, after Luxemburg and (eventually Ireland) it is the second (third) most

open economy in the European Union.<sup>22</sup> From this point of view, it outruns also several even smaller economies of the Euro area (Malta, Cyprus, Latvia, Estonia, and Slovenia).

The openness of the economy grew by more than 45 p. p. since 2000 (Figure 5.2), despite its decrease in 2008 and mainly in 2009, when due to economic recession in the EU, the fall of foreign trade in the SR was recorded. Subsequently, as the European economy was recovering, the openness of the Slovak economy increased accordingly. In 2012, during the second, more moderate recession in the EU and stagnation in following year, the openness of the economy grew and according to the expected continuous faster nominal growth of export and import compared to nominal growth of GDP, its increase is also expected in following years.

Figure 5.2

**Development of the Openness of the Slovak Economy** (ratio of export and import of goods and services to GDP, %, current prices)



Source: Based on Eurostat database (2014); own calculations.

As visible in Figure 5.1, the high openness of the export-oriented Slovak economy (as well as its year-on-year growth) is driven by trade with goods,

<sup>22</sup> The high openness of the Luxembourg economy (more than 300 %) is determined by its strong focus on trade with services, mainly financial. In case of Ireland, data for 2013 were not available at the time of publication. In 2012, the openness of the Irish economy moderately exceeded the openness of the Slovak economy.

while trade with services is at relative low level in long run. In 2013, the share of services export as well as services import in GDP was similarly around 8 %, import has registered stagnation of this share since 2000 and export even share decrease.

From comparison with other comparable countries we might conclude that the Slovak economy is different in this field. With similar openness of the economy, Estonia, but also Hungary and the Czech Republic have higher share of services export and import in GDP. The only country among V4 with export and import share in GDP lower than Slovakia is Poland, whose economy with its large domestic market is the least open one in the V4 group. In the EU as unit, services export represented more than 11 % in GDP and services import more than 9 % in GDP in 2013. At the same time, the trade with services represented almost  $\frac{1}{4}$  of the total foreign trade of the EU 27 countries with goods and services, while in Slovakia, trade with services had just 8 % share. That clearly means the lowest level among the V4 group, in which, similarly to Slovenia, the share of foreign trade with services in total foreign trade is double compared to Slovakia, in case of Estonia even triple.<sup>23</sup>

## Foreign Capital

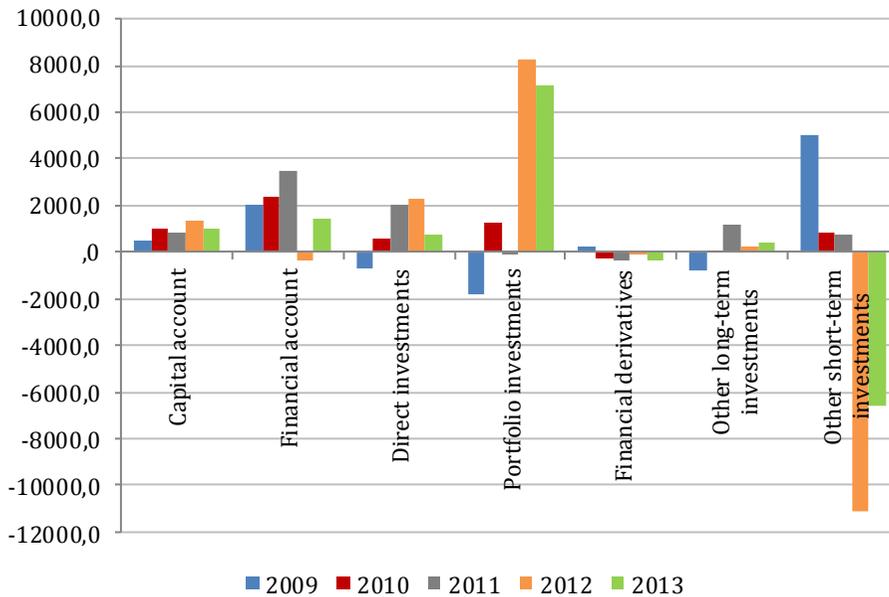
In 2013 the development of capital and financial account was more-less similar to previous year with one difference, the financial account ended up with positive balance (Figure 5.3). The contribution to that could be assigned to lower net outflow of other short-term investments, which was outweighed by new inflow of portfolio investments. They registered, similar to previous year, the inflow of resources from the NBS activities on financial markets as well as an increase of government bonds sales.

Direct investments outflowing from Slovakia to foreign countries reached positive balance at level of 320 mil. EUR in 2013. Similarly, direct investments inflowing from foreign countries to Slovakia ended up in positive balance at level of more than 440 mil. EUR, what means a year-on-year decrease of direct investments inflow to Slovakia.

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<sup>23</sup> In case of Malta, the high share of services export on total openness of the economy is determined by its orientation to tourism.

**Figure 5.3**  
**Capital and Financial Account of Balance of Payments in Slovakia**  
**in 2009 – 2013 (EUR million)**

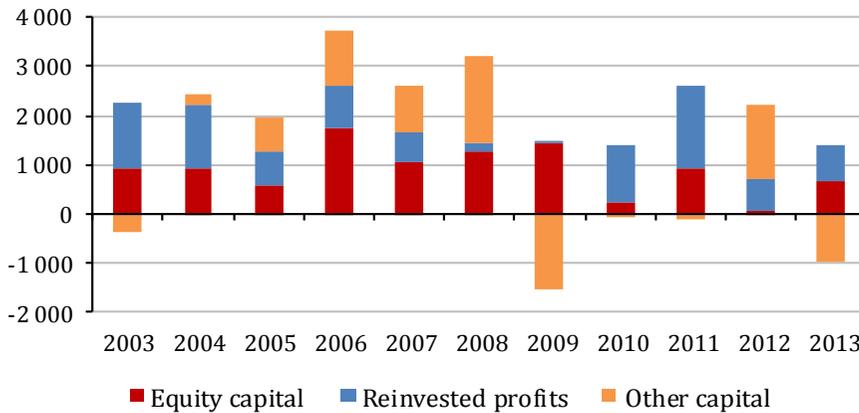


Source: Based on NBS data (2014b).

As Figure 5.4 displays, the pre-crisis level of foreign investments inflow to Slovakia has not been reached yet. After 2009, lower growth of equity capital investors was recorded, which includes capital participation in branches, all financial and non-financial deposits into basic capital of subsidiaries and associated enterprises and other capital contributions.<sup>24</sup> At the same time, the higher earning in form of dividend or earnings unpaid to direct investors was registered. The other capital including all financial operations among direct investors, its branches, subsidiaries and associated enterprises experienced the outflow of resources in 2009 and 2013 because the decline of liabilities against direct investors exceeded the decline of claims against them.

<sup>24</sup> Branch is 100 % owned by direct investor, in subsidiary enterprise the share of direct investor on capital base or voting rights is more than 50 % and in associated enterprise 10 – 50 %.

**Figure 5.4**  
**Inflow of FDI to Slovakia in 2003 – 2013 (EUR million)**



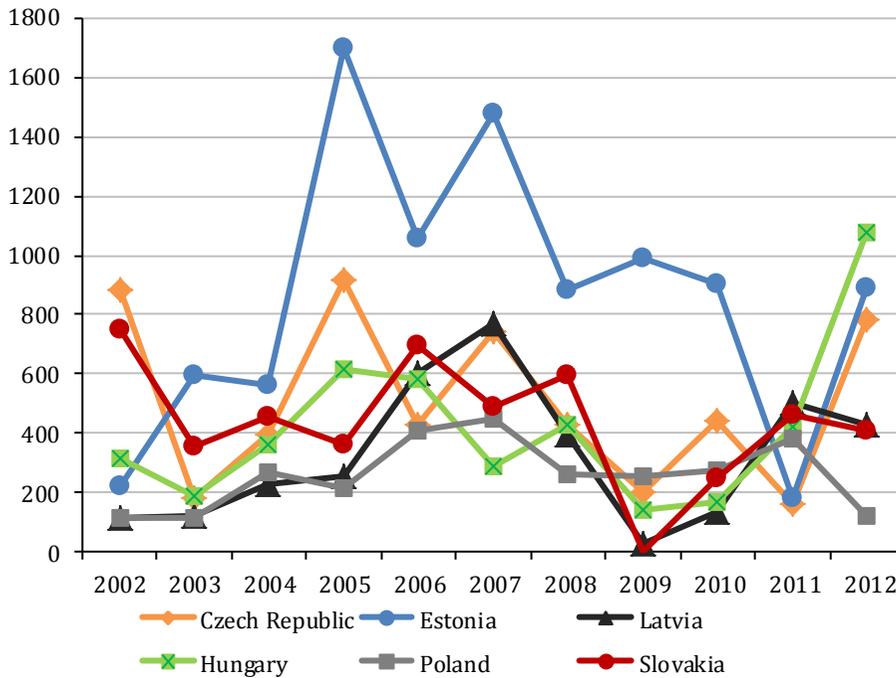
*Source:* Based on Eurostat database (2014); NBS (2014b).

Figure 5.5 describing the inflow development of foreign direct investments (FDI) per capita in Slovakia compared to selected member states of the EU confirms, that crisis outburst in Europe influenced inflow of FDI in all compared countries, although differently. Slovakia was impacted stronger than Hungary or the Czech Republic, which in contrast to Slovakia, overran the pre-crisis level in 2012.

In case of Slovakia, the question of Euro introduction influence on FDI inflow emerges. The development indicates zero effect shown on Figure 5.5; however, the possibility of even deeper fall in case of not adopting the new currency can not be excluded. It is also tough (if not impossible) to evaluate effects of the monetary union entrance on FDI inflow, due to the fact, that the Euro adoption happened at the time of crisis emerge. Besides that, FDI inflow is determined with many other (and more significant) factors beyond the official currency of the country.

In conclusion we investigate the investment position of the SR (Table 5.3), which completes the financial and capital account of balance of payments by comparison of residents investments in foreign countries (assets) with foreign subjects investments in Slovakia (liabilities). The net investment position of the SR as a result of this comparison is passive due to the higher liabilities over assets in long term.

Figure 5.5  
**FDI Inflow per capita in Selected EU Countries in 2002 – 2012 (EUR)**



Source: Based on Eurostat database (2014); own calculations.

Table 5.3  
**Development of international investment position of SR in 2009 – 2013 (mil. EUR)**

	2009	2010	2011	2012	2013 Q3
<b>Net position</b>	<b>-41 880</b>	<b>-41 612</b>	<b>-45 197</b>	<b>-45 580</b>	<b>-46 654</b>
<b>Assets</b>	<b>32 097</b>	<b>36 748</b>	<b>37 737</b>	<b>39 452</b>	<b>45 446</b>
Direct investment abroad	2 188	2 587	3 108	3 344	3 509
Portfolio investment	19 476	22 685	23 761	21 090	20 257
Other investment	9 168	9 854	8 999	13 116	20 046
Reserve assets	1 264	1 621	1 869	1 901	1 634
<b>Liabilities</b>	<b>73 977</b>	<b>78 360</b>	<b>82 934</b>	<b>85 031</b>	<b>92 100</b>
Direct investment in reporting economy	36 469	37 665	40 173	42 304	42 668
Portfolio investment	10 681	12 480	13 392	19 066	23 437
Other investment	26 827	28 215	29 369	23 661	25 994

Source: NBS (2014b).

In last five years, the highest changes among the assets parts were recorded in other investment of SR in foreign countries and among liabilities parts in portfolio investment from foreign countries to the SR, when they doubled in both cases. While portfolio and other investments had the assets and liabilities parts almost equal by the end of 3<sup>rd</sup> quarter 2013, there is an evident disproportion in FDI case. As Slovakia belongs to the net receivers of FDI in long-term, condition of direct investments from Slovakia to foreign countries is numerously lower than condition of direct investments to Slovakia from foreign countries.

## 6. PRICE DEVELOPMENT

The importance of the question about price level continuously raised during 2013 along with fears of price growth halt and possible achievement of deflation values in near future. Gradually, decreasing rate of inflation reached almost zero year-on-year changes at the end of the year, arousing fears about long-term decrease of prices in selected economy segments. That would cause serious troubles to economic growth.

### The Continuing Attenuation of Consumer Prices Growth

In accordance with development in 2012, the rate of consumer prices developed at similarly low level, annual average 1.4 %. Among main factors determining this development we consider as follows:

- ***weak domestic demand and low economic growth*** – domestic demand was held at almost constant level during whole year. This did not create inflation pressures and let the price level to disinflate. The household consumption stagnated at same level as in 2012 and economic growth was driven almost exclusively by export.
- ***no growth of regulated prices***<sup>25</sup> - the decision not to increase level of regulated prices at the beginning of 2013 did not provide inflation impulse, which in previous years usually increased inflation rate and its absence contributed to attenuation of price level growth.
- ***year-to-year decrease of fuel prices***<sup>26</sup> - in 2012, year-to-year prices of fuel rose mildly, in 2013, they experienced 3.5 % decrease compared to previous year. Both, diesel and 95 octane gasoline, have experienced this decrease in 2013. For the first time since 2009, both types of fuel scored year-to-year decrease of prices.
- ***appreciation of currency, especially EUR/USD exchange rate*** – during whole year the currency pair had rising trend, which increased

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<sup>25</sup> 0.4 % increase of regulated prices was almost not possible to feel in economy.

<sup>26</sup> Long-term contracts about import of energy raw materials as oil and natural gas from Russia are denominated in USD. Appreciation of EUR/USD exchange rate helped to lower the prices of fuel.

the price of Slovak export on foreign markets and decreased the competitiveness of Slovak products with products denominated in USD. The exchange rate of Euro was also high with other neighbouring currencies (especially CZK and HUF) which promoted so called “over custom shopping” and weakened the demand of national economy.

- ***inability to react to development by national monetary policy***<sup>27</sup> - absence of mild inflation pressures inside economy could be partly compensated by monetary policy, as was similarly done in Czech Republic. However, after accommodation of Euro as a national currency, the National Bank of Slovakia handed over the competencies in monetary policy to ECB and adapted to its monetary policy.

A fundamental change did not occur in nominal wage growth in 2013 and it grew at the same level as in 2012 (2.4 %). The growth of real wage could be assigned to decrease of consumers price growth rate. Real wages increased by 1 % compared to previous year. However, after 2 years of fall, in 2013, real wage did not get back not even to former 2010 level.

The price level in segment of food and non-alcoholic beverages grew on higher pace compared to general development of consumer prices. However, on year-to-year changes, it followed decreasing trend and grew just at 3.5 % a year (see Figure 6.1). The segment with the highest rate of consumer prices increase was traditionally the education one. It grew at 6.5 % pace which is the highest increase of prices in the segment since 2006.

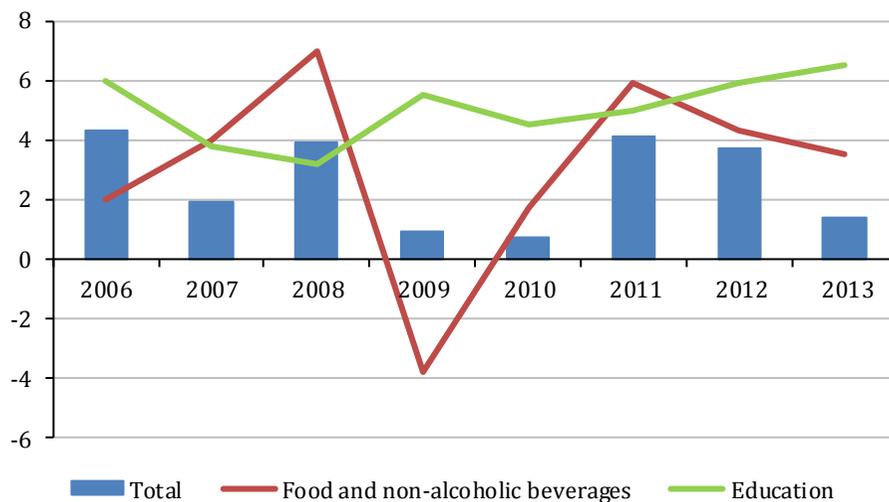
International comparison of countries after volatile period 2010 – 2012, when the inflation rate in SR was the lowest (2010) and year later almost the highest (among sample of selected countries), in 2013, all countries bear the same price development characteristic – disinflation leading to stagnation. Even countries known for higher inflation rate in long-term (especially Hungary) converged to average in 2013 and experienced almost price stagnation (see Figure 6.2). Among selected countries, Slovak Republic with 1.4 % rate has the highest growth, even more

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<sup>27</sup> For example the Czech National Bank intervened on foreign exchange market in November 2013 and in one day weakened the EUR/CZK exchange rate by more than 4 % in order to prevent a deflation.

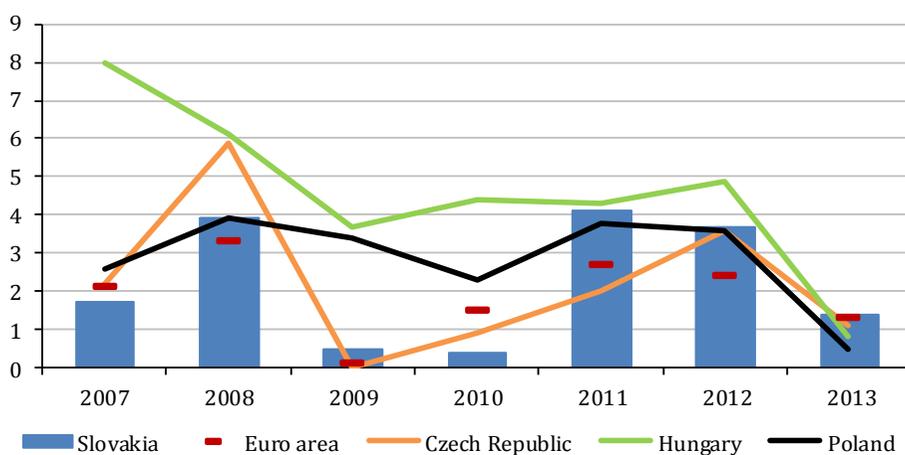
underlining real decrease of inflation rate across states in the European Union.

**Figure 6.1**  
**Year-on-year Changes in Consumer Prices Level (% , HICP)**



Source: SO SR.

**Figure 6.2**  
**International Comparison of Year-on-year Change in Consumer Prices Level, (% , HICP)**



Source: Eurostat database.

## Producer Prices Stagnated over Year

Looking at supply side of the economy, we observe mostly producer prices stagnation and significant fall in agriculture segment. After slow-down of prices growth in agriculture in 2012, the prices dropped almost 5 % in 2013. This development can be assigned to above average harvest in 2012, which pushed prices of agriculture products down.

Prices in the segment of construction were kept almost at the same level as in previous year and grew just by 0.2 %. Even decrease of 1 % in prices of construction materials could not help to construction segment stuck in recession<sup>28</sup>.

The growth of industrial producer prices in national territory completely stopped. The significant factor for this development is absence of inflation pressures mirroring low level of domestic and external demand for industrial products. The prices of industrial producers decreased by 1 % mainly due to decrease in prices of products intended for export. Export prices have volative development, which reached higher values than in national territory in previous years. However, these prices were lower in past two years . We can conclude that prices of industrial products intended for national territory seems to be more stable over time.

**Table 6.1**  
**Year-on-year Change in Industrial Producer Prices**  
(index of previous year = 100)

	2012	2013
Industrial producers prices – domestic	103.5	100.1
of which: industrial production	100.9	100.0
Industrial producers prices – total	102.0	99.0
Industrial producers prices – export	100.7	98.6
Agriculture products prices	106.9	95.1
Construction material prices – producer prices	101.5	99.2
Construction work prices	100.2	100.2

*Source: SO SR.*

<sup>28</sup> Construction segment experienced decrease 5.3 % in construction production compared to previous year.

## Prices Decreased in International Exchange

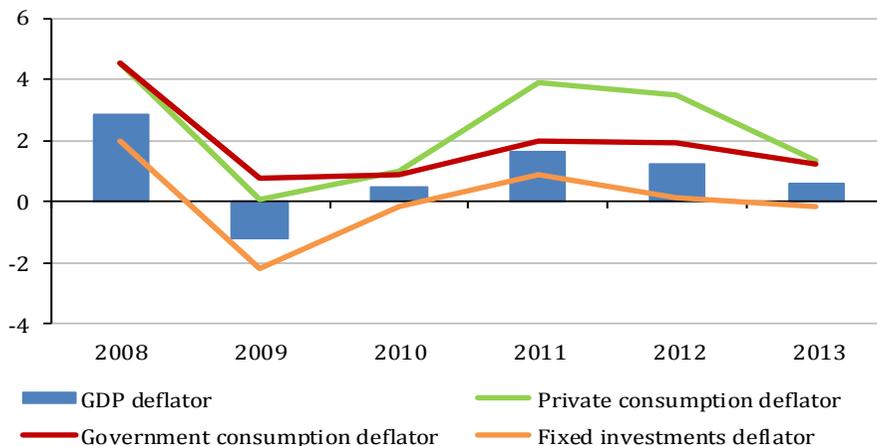
By looking at development of GDP deflators and its segments, we can notice gradual approach of price levels for products of household consumption and collective consumption realized by general government as well. After three years of growth, the prices of capital goods decreased (fixed investments deflator). As an explanation of this phenomenon, we need to look at uncertain expectations of corporations about future development of economy and reluctance to invest to new capital goods without assurance of positive economic development and ability to sell produced goods.

The development of export and import deflators were influenced by two phenomems:

1. The prices of imported and exported goods decreased by 1.2 %. The deflation of exported and imported goods appears in real economy very rarely (similarly to real economy) and it is considered to have negative influence.<sup>29</sup> The cause of this deflation can be found in low economic growth and low demand in countries, which are in partnership with SR.
2. We can state after more than decade, the ratio of imported and exported goods prices remain the same and almost “regular” worsening of terms of trade did not take place.

Figure 6.3

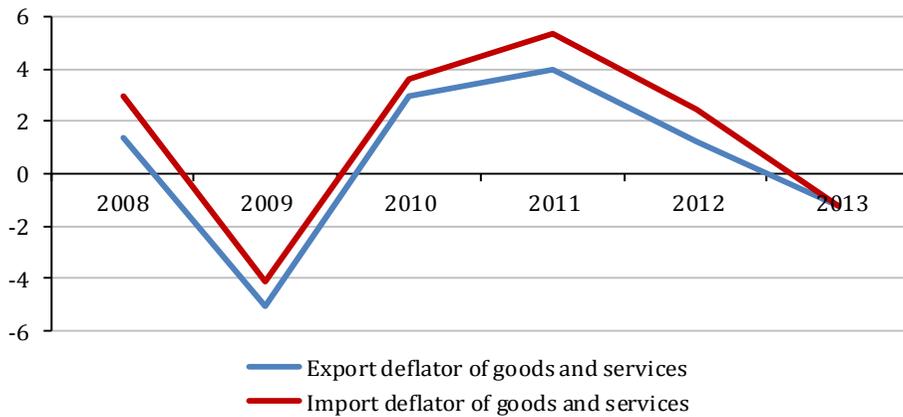
### GDP Deflator and its Selected Segments (%)



Source: IFP Ministry of Finance SR.

<sup>29</sup> During past decade the prices decreased in international exchange just once (after global economic crisis emerged).

**Figure 6.4**  
**Export and Import Deflators of Goods and Services (%)**



Source: IFP Ministry of Finance SR.

### Price Stagnation in V4 region

The comparison of price levels of neighbouring countries reveals the same development tendencies in all members of V4 group representing region of Central Europe. The convergence process of price level to average of the EU 28 stopped in SR, and diverged in case of other countries in 2012. The possible explanation of this development is an ability of other countries to control their own monetary policies at national level, while SR is obliged to align its monetary policy within the Euro area. Especially, in case of Hungary and Poland, divergent process is long lasting and since the global crisis emerge, they diverge from average. It is expected that only sustainable recovery of economic activity in upcoming years will create new inflation pressures, which would turnaround the process back to convergence to the EU 28 average.

**Table 6.2**  
**Year-on-year Change of V4 Price Levels (PPP, EU 28 = 100)**

	2008	2009	2010	2011	2012
Czech Republic	73.2	70.0	72.4	72.8	70.4
Hungary	65.9	59.6	59.7	58.8	57.5
Poland	67.7	57.3	59.8	58.8	57.8
Slovakia	65.8	68.0	66.9	67.6	67.8

Source: Eurostat database.

## **Deflation Spiral or Economic Recovery?**

The main question about future is the development of price level in upcoming years. Similar situation to the one where the Euro area is at the moment, led to long lasting deflation in Japan two decades ago, which blocked any significant recovery of economy. Even ECB confirms fears about possible development of deflation in the Euro area by its loose monetary policy and declares that it is ready to use also non-traditional tools of monetary policy in order to avoid deflation.<sup>30</sup>

On the other hand, the economic outlooks for SR towards to 2014 predict mild recovery on 2.4 % level. However, it is expected, the recovery will not have any significant influence to price level development. The recovery of inflation could be expected in later period of upcoming years, where beside external demand, the recovery of domestic demand should take place as well. Mainly, the recovery of investments and household consumption are expected to drive recovery of low rate inflation.

Since global economic crisis emerged, for the first time, the growth of household consumption might end up in positive values. Long-term postponed consumption of households could be supported by prevailing almost not growing price level and contribute to creation of gentle inflation pressures in future. This is supported also by gradually positive development of Consumers barometer in year 2013<sup>31</sup>, when people become more positive in future expectations about the development of country growth and gradually realize postponed consumption from previous periods.

Despite low inflation rate in 2013 and threat of deflation, we suppose the development of price level stays in positive values. Among main drivers determining price development will be not only economic development of export oriented countries, but also the level of domestic demand recovery with repeated absence of regulated prices adjustment which prevents the inflation pressures formation in the economy.

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<sup>30</sup> M. Draghi (ECB president) admitted, ECB is ready to use also non-traditional tools of monetary policy (eg. quantitative easing) in order to avoid the period of long lasting low inflation or deflation.

<sup>31</sup> The indicator is regularly published by Statistical Office of Slovak Republic.

## **7. MONETARY POLICY OF THE EUROPEAN CENTRAL BANK AND THE EURO AREA FUNCTIONING FROM THE SLOVAK REPUBLIC POINT OF VIEW**

During last five years, the EU is making effort to react on problems caused by the crisis, but also (and primary) by the Euro area construction with measures, whose results are questionable. The European economy stagnates after crisis overcome or experiences an anemic growth, the unemployment (especially the youth) remains at high level and government debt continues in growth, although at slower pace. The economy is not far away from deflation, fiscal rules are persistently violated, the member states have mobilized several hundreds of billions EUR via rescue mechanisms, but most of the rescued countries are struggling with persistent problems including social ones. The social aspects are gradually getting into the spotlights of the EU.

The next anti-crisis measures prepared at the European level are expected by the EU representatives and also by the member states to bring gradual solution of problems. However, the planned European measures deepening the integration in accordance with the conception of *the genuine economic and monetary union* (EC, 2012) carry, as the measures adopted so far, many risks. Due to this fact, differences among the member states are widening, the citizens distrust in the European integration is increasing and leads to Eurosceptic voice amplification.

In this chapter, we address the ECB monetary policy in 2013, as well as the current situation in the Euro area. The chapter will explain next steps towards deepening integration in Europe, point out to the importance of 2014 for future of the European integration and briefly evaluate five years of the Slovak membership in the monetary union.

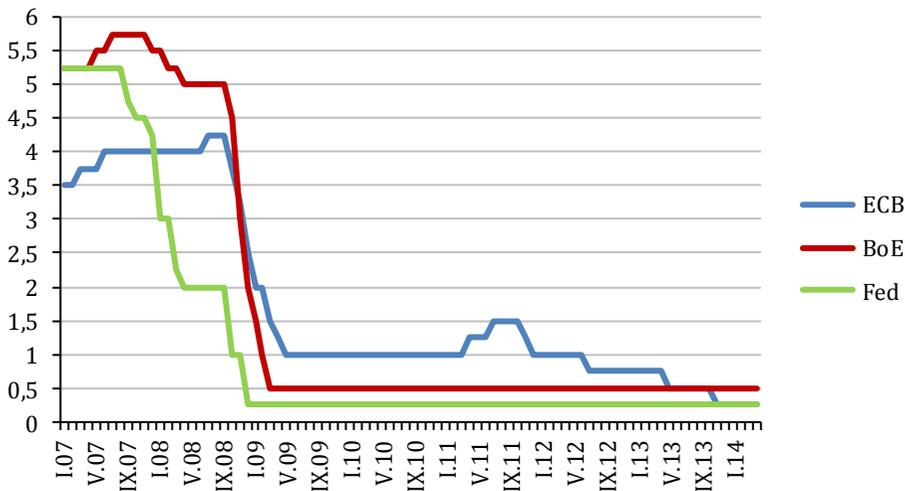
### **Monetary Policy of the European Central Bank**

The Central Bank of the Euro area repeatedly declares its readiness to support the Euro in case of need. After decrease of key interest rate to 0.5 % in May 2013, the ECB proceeded to another reduction of interest

rates to historical minimum of 0.25% (Figure 7.1). The Bank was led to this reduction due to continuous unfavourable development of the real economy in the Euro area linked to very low inflation.<sup>32</sup> As Figure 7.1 shows, while in first half-year of 2012, the ECB resisted and main interest rate was kept at minimally 1 % level, but eventually it did not avoid its significant reduction. Due to this, the key interest rate equalized to the interest rate of the Federal Reserve System (FED) valid for 5 years and decreased under the level of the Bank of England (BoE) interest rate, valid for the same time, and it is not possible to exclude that the ECB would decrease it even more if deflation threat occurs.

Figure 7.1

**Key Interest Rate in the Euro area (ECB), in the United Kingdom (Bank of England) and in the USA (Federal Reserve System) in January 2007– April 2014**



Source: ECB; BOE; FED.

The reductions of the ECB main interest rate executed during 2013 resulted in lower interest rates on inter-banking market. The banks were borrowing cheaper loans among themselves, but also to governments of

<sup>32</sup> By the year-end 2013 and at the beginning of 2014 the inflation (HICP) fluctuated under 1 % threshold, i.e. even lower to the ECB goal level than in the first 3 quarters of 2013. In some member states the negative values were noted (in March 2014 also in Slovakia).

the European countries including Slovakia. With some time lag, also the interest rates on mortgage provided by the Slovak commercial banks experienced historical minima. This happened, not just due to the ECB base interest rate reduction, which is of a short-term character, but also because the long-term loan products, including mortgage, react to changes in long-term interest rates, such as yield of government bonds. The interest rate of the ECB mirrored also in interest-bearing deposit bank products, mainly the deposits with due date less than 1 year.

Given the fact of not improving economic situation in the Euro area and continuing concerns about deflation, we might expect other steps towards restart of the economy, whose effect is uncertain, as well as the effect of the key interest rate decline. The interest rate, in case of the so-called *deposit facility*, thus the interest rate used for deposition of excessed liquidity in the ECB is at 0 % level since half-year of 2012, while in second half of the previous year it was at 0.75 % and before crisis emerge on 3 %. It is not possible to eliminate the option of its decrease to negative range, meaning that the European banks would not just receive interest, but they would have to pay to the ECB for the deposition of their excessive resources.<sup>33</sup> The ECB would intend to motivate commercial banks by these measures to use excessed liquidity in the private sphere and not to deposit it in the ECB, in order to trigger possible economy restart.

Beside the interest rate change, inflation could be increased via another round of long-term refinancing operations (LTRO), thus by provision of cheap liquidity to commercial banks with aim to support the loan activities in enterprises and households. Another option taken into account is so-called quantitative easing, i.e. increase of monetary volume in system by purchase of bonds and other assets. This questionable non-standard tool of monetary policy is being used by central banks of the USA, Japan or United Kingdom. The ECB avoided the use of this tool so far due to the pressure of the German central bank.

Intensively discussed and criticized illegality of the OMT programme (Outright Monetary Transactions), allowing the purchase of unlimited government bonds of threatened countries on the secondary markets

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<sup>33</sup> The real interest rate for *deposit facility* after inflation adjustment is already negative.

was the object of the German Constitutional Court investigation. It identified the OMT as “non-compatible” with the EU legislative, however, the final result left to the European Court of Justice, which will probably rule in favour of the ECB.<sup>34</sup> In opposite case, pressure on the weakest economies would increase again, what would threaten the monetary union as such. Although the OMT is measure, which helped peripheral countries to reduce costs of debt service and lowered risk of the Euro area break-up even without being really used by the ECB, it has no support in the European legislative.

### **Euro Area Development: Towards Deeper Integration in Europe**

While the crisis in the monetary union sustains, number of members is extended. In January 2014, Latvia became the 18<sup>th</sup> member, which had to involve also in the European Stability Mechanism (ESM). A year later, Lithuania has plans to adopt the Euro as the last among the Baltic countries. On the other hand, a debate was triggered about possible exit of the Netherlands from the Euro area and referendum about possible step out of the United Kingdom from the EU is planned in 2017. This kind of atmosphere brings more and more concerns about future direction in Europe.

The positive news is that Ireland became the first among the rescued countries of the monetary union leaving the rescue program of the Euro area countries and the International Monetary Fund (IMF) at the 2013 year-end. Portugal followed with end of the rescue program in May 2014; however, it needs to continue the reform efforts. On the other hand, greatly indebted Greece will maybe not avoid the third rescue package request. We also need to remind unprecedented solutions of the crisis in Cyprus with approved financial aid in April 2013, creating space for other “individual” problems solutions of the other Euro area countries. This also confirms that small countries are treated differently than the “systematically important” countries.

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<sup>34</sup> Besides that, the German Constitutional Court announced, that the ESM and the Fiscal Treaty is not in contradiction with the German Constitution by which the Court rejected thousands of claims.

As mentioned at the beginning of the chapter, the European integration is heading to creation of the so-called “*genuine Economic and Monetary Union*”. The priority with its creation is – after measures for completeness of the strengthened economic surveillance framework in the form of the package of the six legislative measures (*six-pack*), the package of the two legislative measures (*two-pack*) and the Fiscal Treaty – completion of the banking union. It should restrict the link between the banks and the state budgets and help to prevent from the future financial crisis. However, the progress in its completion is significantly slower than expected. After agreement about its first pillar, the single bank supervision performed by the ECB, also agreement about the second pillar in form of the Single Supervision Mechanism (SSM) has been achieved in March 2014, after long negotiations. The banks should create the common rescue fund with 55 billion EUR available by their contributions in the horizon of eight years (formerly ten). The ECB and the European Parliament (EP) requested even faster creation of the fund. The banking union should be finished by the third pillar – the common deposit guarantee schemes, which should standardize and strengthen the deposit guarantee schemes already existing at the national level.

The European banks have to pass complex tests before the first pillar launch in November 2014, consisting of evaluation of its assets and stress tests. Harmonization of the bad loans definitions and evaluation of quality and risks of some assets should strengthen confidence in the EU banking sector. The purpose of the stress tests is to find out if banks would withstand another eventual crisis. It will be the strictest testing of banks in Europe so far.<sup>35</sup> Almost 130 banks that will be supervised by the ECB in future will be the subject of testing. The three greatest Slovak banks will be also tested – Slovenská sporiteľňa, Všeobecná úverová banka and Tatra banka. As the Slovak banking sector is stable, problems are not expected. The results of testing should be available in October 2014.

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<sup>35</sup> Since the crisis beginning, the banks in Europe already passed through two tests. However, the results were doubtful, because they were not able to reveal the risks, which caused the banking crisis in Ireland and Spain. The third testing will be stricter than the two previous ones. At the same time, too strict tests might threaten the credibility of the Euro area and lead to another growth of yields from the government bonds of the peripheral countries.

Regarding the functioning of the second pillar various uncertainties exist. It is still unknown what funds troubled banks would be rescued from, until the SSM would be created<sup>36</sup> and till when the contributed funds will be sufficient. The future will show how many problems will be solved by this pillar of the banking union and how many new problems will be brought along. The most criticized fact is that the redistribution of funds from healthy to problematic banks takes place and similarly to case of the rescue mechanisms EFSF (European Financial Stabilization Facility) and ESM, the banking union formation is linked to additional strengthening of moral hazard in the Euro area.

The introduction of the disputable financial transaction tax on base of strengthen co-operation of 11 countries of the EU, previously planned in January 2014, is stuck with exceptions requested by some governments. Slovakia, along with other countries, is asking for opt-out of government bonds transactions, as well as for pension funds and some non-financial institutions, such as Slovenské elektrárne or Slovenský plynárenský priemysel, which would potentially be touched by this tax implosion, given their commodity transactions.

Even though the new Fiscal Treaty, denoted also as the Fiscal Pact, is valid since the beginning of 2013 with aim to eliminate several defects of the Stability and Growth Pact and improve the fiscal discipline, several countries are not following the rules. Some of them, including large economies such as France and Spain, managed to get postponement of the budget target fulfilment in form of deficit under the reference value 3 % of GDP. Similar postponement of aim fulfilment could not be ruled out also in case of Slovakia, which is heading towards the end of the excessive deficit procedure and its public finances currently face strong pressure of the debt brake.<sup>37</sup> The continuous non-compliance of rules at the European level linked with unequal treatment of individual countries is clearly decreasing the credibility of not only the rules themselves, but

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<sup>36</sup> During a temporary period, required funds could be derived from the national resources formed by the bank contributions, eventually also from the ESM, which is primarily designed to rescue states, not banks.

<sup>37</sup> If the public debt exceeds 57 % of GDP threshold, the government is obliged to form balanced or surplus state budget.

also of the European institutions and creates the space for future precedences.

As a part of the European semester, the European Commission published its third Allert Mechanism Report in November 2013, focused on external and internal imbalances detection in the member states. Besides the so-called scoreboard and original auxiliary indicators, the latest report monitoring macroeconomic imbalances includes the set of social indicators (the indicators linked to labour market and social situations) for the first time as another tool for scoreboard interpretation. This extension of indicators is based on efforts for strengthening the social aspects in the Economic and Monetary Union.

In sixteen countries, the EC recommended the in-depth reviews, and after detailed examination, in three of them the macroeconomic imbalances were marked as excessive (in Italy, Slovenia and Croatia). In case of Germany, the EC indicated long-lasting high surplus of the current account of the balance of payments, which in its opinion, represents a risk for the European economy. This led to increasing pressure on Germany to support domestic investments and demand.

Nor in the third report, Slovakia was included among countries, which should be deeply examined. However, the unemployment rate still exceeds the indicative threshold (Table 7.1) and remains one of the highest in the EU. The high share of long-term unemployment points out to fact, that unemployment is more of a structural than of a cyclical character. Slovakia exceeds the threshold also in net international investment position. However, the inflow of resources represents mainly investments evaluated via export, therefore from the EC point of view, situation is not critical as such.

Other indicators fluctuates within given limits. The indicator of the current account of the balance of payment deficit continued in improvement due to surplus in 2012. On the other hand, the growth of market share on global export slowed down year-on-year. The unit labour costs experienced slowdown as well, due to the growth of labour productivity. While the debt of private sector stabilized in 2012 far below the threshold (even after its decrease from 160 % to 133 % of GDP), the public sector

debt increased by almost 10 p.p. and got closer to given limit of 60 % GDP. The banking sector was evaluated as stable, while total liabilities increased year-on-year.

**Table 7.1**  
**EC Scoreboard Indicators and their (Non-) Fulfilment in Slovakia,**  
**2008 – 2012**

Indicator	Indicative thresholds	
	Euro area members	Euro area non-members
Current account balance (% GDP) <sup>1</sup>	-4 % to 6 %	
Net international investment position at the end of the year (% GDP)	-35 %	
Real effective exchange rate <sup>2</sup>	-/+5 %	-/+11 %
World export market shares <sup>3</sup>	-6 %	
Nominal unit labour cost <sup>4</sup>	9 %	12 %
Year-on-year change in house prices <sup>5</sup>	6 %	
Private sector credit flow (% GDP)	15 %	
Private sector debt (% GDP)	133 %	
General government sector debt (% GDP)	60 %	
Unemployment rate (%) <sup>1</sup>	10 %	
Financial sector liabilities (%)	16.5 %	

Indicator	2008	2009	2010	2011	2012
Current account balance (% GDP) <sup>1</sup>	-6.4	-4.7	-4.2	-3.4	-1.7
Net international investment position at the end of the year (% GDP)	-57.4	-66.7	-63.1	-65.5	-64.1
Real effective exchange rate <sup>2</sup>	25.0	27.0	10.9	3.4	-3.2
World export market shares <sup>3</sup>	52.1	39.8	31.3	21.5	4.2
Nominal unit labour cost <sup>4</sup>	6.7	10.9	9.4	5.6	0.9
Year-on-year change in house prices <sup>5</sup>	12.8	-12.8	-4.9	-5.2	-5.9
Private sector credit flow (% GDP)	11.3	3.2	2.9	2.6	3.2
Private sector debt (% GDP)	67.3	71.6	70.1	73.2	73.1
General government sector debt (% GDP)	27.9	35.6	41.0	43.4	52.4
Unemployment rate (%) <sup>1</sup>	11.4	11.0	12.1	13.4	14.0
Financial sector liabilities (%) <sup>6</sup>	8.7	-5.0	2.3	1.2	2.6

*Notes:*

<sup>1</sup> 3-year running average.

<sup>2</sup> Based on HICP/CPI deflator to 35 industrial countries – 3-year percentage change.

<sup>3</sup> 5-year percentage change, current prices.

<sup>4</sup> 3-year percentage change.

<sup>5</sup> Deflated by the household final consumption deflator.

<sup>6</sup> Year-on-year change.

*Source:* EC (2013); Eurostat (2014).

During the process of building “*the genuine Economic and Monetary union*”, the EC (2012) is expecting further fiscal and economic integration at the EU level in medium-term, including tax policy and employment policies, as well as creation of the fiscal capacity for the Euro area focused on fund provision for structural reforms in the member states. According to the plan, the introduction of common European bonds should be also considered. Subsequently, in long-term, the EC concept includes also separate budget for the Euro area and fiscal and economic union creation along with the banking union. However, in case of the common European bonds, as well as fiscal union, the member states have diametrically different opinions across the Euro area and consensus will probably not be reached for a long time. Some of the listed steps are feasible based on the valid treaties, but some will require changes, which would be without doubts a very tough process.

During last years, the European integration is deepening in various aspects; multi-speed character of the European integration is visible more and more. Nevertheless, it still remains to preserve the basic four freedoms of the EU – the free movement of goods, services, persons and capital. However, these are still problematic or not working sufficiently. The greatest shortcomings are in case of free movement of services. Cyprus closed banks during its intensive negotiation about conditions of financial aid and introduced capital controls in order to avoid massive withdrawal of deposits, restricting the free movement of capital. The free movement of persons is criticized more and more due to its use for purpose of the so-called social tourism. The immigrants are eligible for social benefits in countries of the EU, therefore some of them misuse more generous social systems of some member states (e.g. United Kingdom). It would be essential for the European institutions to focus not just on deepening the European integration, but also on basic principles of the EU functioning.

### **The Key Year 2014**

Year 2014 is (and will be) an important one for the European integration in various aspects. In May 2014, the European Parliament elections

take place and members of the parliament will represent the citizens for next five years. As the Lisbon Treaty assigned new competences to the EP, elected political parties (and not the Presidents and Prime Ministers as up to now) will propose their candidates for the President of the European Commission. As the election results to the EP will be taken into account for appointment of the European Commission President, the significance of these elections could be perceived differently. Through the EP as the only elected institution at the EU level, citizens of the member states might indirectly influence also the appointment of the European Commission President. The name of the future EC president should be announced in half of the year and the new EC should be appointed in November 2014. Needless to say, the EC is the highest executive entity of the EU, with decision-power in most cases, which significantly determines the direction of the European integration. At the end of November 2014, the mandate will expire also for the head of the European Council, consisting of presidents and prime ministers of the EU member states, who represents the EU at the highest level of international scene and whose mandate is gained by a qualified majority in the European Council.

In terms of persisting dissatisfaction with crisis solution and direction of the EU and the Euro area as such, the raise of Eurorealistics representants, but also Eurosceptical parties in the EP is expected. The Euroscepticism was previously linked just to the United Kingdom. However, continuous crisis and growing pressure on deepening the European integration causes continuously stronger negative reactions across the EU and risks about its future development and position in a global scale.

### **Fifth Anniversary of Euro Adoption in Slovakia**

The 1<sup>st</sup> January of 2014 was the fifth anniversary of Euro adoption in Slovakia. During preparation for this step some reforms took place and have happened to be contribution for the SR until nowadays. Worries about the inflation increase did not fulfil due to emerge of the crisis at the time of entrance to the monetary union. From the technical point of view, conversion to the single European currency happened flawlessly. According to the Eurobarometer survey (EP, 2013), realized in June

2013, 62 % of participants consider Euro to be important element of the European identity in Slovakia, while the EU average was only 42 % and in the Euro area 51 %. More than 50 % of participants (in the EU less than 40 %) agree with statement that the Euro mitigated the negative influence of crisis in Slovakia.

The five year period is still clearly too short period for evaluation of the Slovak membership in the monetary union. The present effects might be briefly summed up by these statements: Given the high openness of the Slovak economy, benefits of the single currency for country include decrease of transactional costs and elimination of currency risk against the Euro. However, most of the optimistic expectations from period before Euro adoption, especially positive effects on foreign trade, FDI and economic growth, have not been fulfilled yet, due to the continuous crisis.

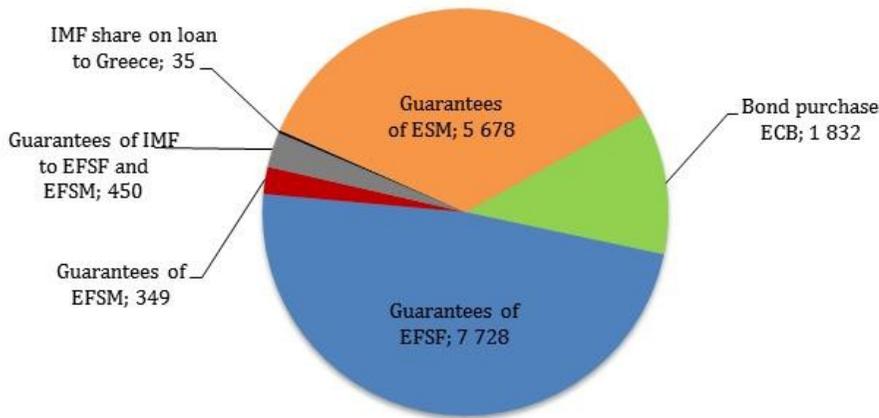
In addition, along disadvantages of Euro adoption consisting of losing sovereignty in monetary policy or loss of banking sector revenues from currency conversion, the new disadvantages arise due to inability to divert the crisis from the monetary union. During present membership of the SR in the Euro area, responsibility for debts of other states linked to unexpected costs is becoming more and more disputable question.

According to the institute INESS (2013), the purchase of bonds, guarantees and loans belonging to SR as a member of the Euro area are more than 16 billion EUR (Figure 7.2). They consists of the ECB bonds purchase to 20. 12. 2013, guarantees for the EFSF (European Financial Stability Facility; temporary Euroval) and the EFSM (European Financial Stability Mechanism as emergency loan programme of the EC), guarantees of the IMF to the EFSF and the EFSM, the IMF share on loan to Greece and guarantees of the ESM (permanent Euroval). From the listed resources, the real use was more than 4 billion EUR (Figure 7.3).

Most of the measures accepted at the European level mean deeper centralization of the Euro area with competence handed over from national level to the European one. Even though, deepening of the European integration in various areas of the economy might mean certain advantages and opportunities for Slovakia, risks caused by these processes are definitely not negligible and it is necessary to pay serious attention to them. Therefore, it would be proper to discuss at the national level

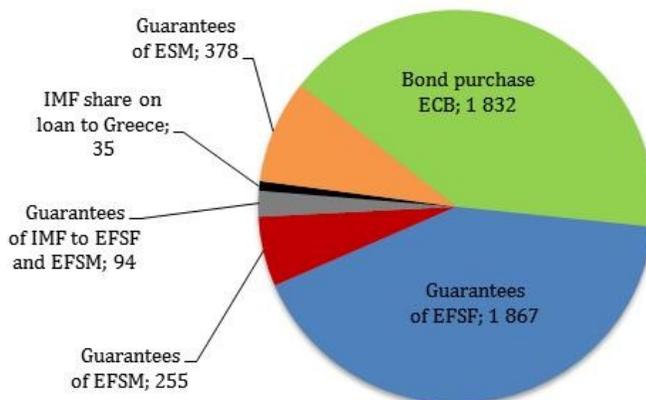
possible effects of currently realized and in short-future planned integration steps of the Euro area on the SR as member state. Based on this deep discussion, the representatives of Slovakia could communicate competent and long-term beneficial position of the SR at the European level.

**Figure 7.2**  
**Share of Slovakia on Bonds, Guarantees and Loans Purchase by Year-end 2013 (EUR million)**



Source: Based on INESS data (2013).

**Figure 7.3**  
**Actual Fund Usage Provided by Slovakia at Year-end 2013 (EUR million)**



Source: Based on INESS data (2013).

## 8. PUBLIC FINANCE

In 2013, the consolidation continued in field of public finance. The government set the specific rate of consolidation in Stability Programme of Slovakia for 2013 - 2016, which should result in “abolition of excessive deficit procedure in 2013 and form fiscal position needed for long-term sustainability of public finance” (MF SR, 2013b). The primary objective is the reduction of general government deficit under 3 % (specifically 2.9 %) and its gradual decrease in following years to 1.3 % of GDP in 2016. In 2018, the structural balance should reach 0.5 % of GDP in accordance with adopted program.

Since December 2009, Slovakia is included excessive deficit procedure; as consequence, the European Council formed the set of following recommendations:

- To eliminate the excessive deficit by 2013.
- Average annual consolidation effort should be 1 % of GDP in 2010 – 2013.
- The government should define rules for excessive deficit reduction and speed up the consolidation in case of favourable development.
- To strengthen the medium-term budgetary framework and improve the monitoring of spending during the financial year.

The specific measures in field of public finance consolidation were defined in National Reform Programme of Slovakia in 2013 and they focused on following areas:

- Fiscal rules – introduction of expenditure limits in response to obligations arising from fiscal compact and the Fiscal Responsibility Act and tighter rules for local governments.
- Adjustment of tax mix –introduction of property tax or its increase. The adjustment still did not take place due to absence of price maps, determination of property market value and potential social consequences for certain populations groups.
- Increase of tax collection efficiency, especially the value added tax, as well as direct taxes.

- Increase of public expenditures efficiency – reform of public administration ESO (possible fiscal impacts of already realized measures are still not available).
- Unification of tax, duties and social contributions collection – system UNITAS II. First steps have been made by creation of Financial Administration by uniting the Customs Directorate and the Finance Directorate.
- Profitability increase of state-owned enterprises.

### **Public Finances Management in 2013**

According to preliminary data, the general government deficit reached 2.77 % of GDP in 2013. The primary balance reached 1.11 % of GDP and structural balance 2.9 % of GDP. In order to achieve the deficit under 3% of GDP various measures have been implemented. The measures on the revenue side were as follows (European Commission, 2013):

- Taxation increase of self-employed persons (limitation of flat rate deductions);
- Increase of the banking tax;
- Introduction of special tax for businesses operating in regulated sectors;
- Changes in the second pension pillar; reduction in the contribution rate from 9 % to 4 % and creation of conditions for leaving the second pillar;
- Changes in personal and corporate income taxes.
- Sale of free telecommunications frequencies;
- Sale of emergency oil stocks;

On the expenditure side, it was mainly about:

- Reduction of current and capital transfers in the state budget;
- Reduction of local government expenditure;
- Increase of expenditures in public health insurance system;
- Cost reduction of public officials (long-term freezing of wages) and others.

Based on the above mentioned facts, we can conclude, that achievement of the planned general government deficit was a combination of long-term government tax measures, as well as, one-off measures, which brought additional revenue only in 2013. The value of general government deficit was partially achieved by one-off measures on the revenue side, while a number of still inefficient public expenditures (i.e. the health sector) have not undergone any fundamental reform. Moreover, some state-owned enterprises<sup>38</sup> have been not profitable for many years, thus creating pressure on the general government balance. These financial resources could be allocated to sectors which are traditionally under-financed.

Table 8.1

**Core Indicators of Public Administration Budget, 2008 – 2013**

Indicator	2008	2009	2010	2011	2012	2013
Net lending (+) / borrowing (-) (EUR million)	-1 397.2	-5 039.9	-5 046.4	-3 499.4	-3 230.1	-2 175.0
Net loans (+) / borrowings (-) (% GDP) <sup>1</sup>	-2.09	-8.03	-7.66	-5.07	-4.54	-2.98
Primary balance (% GDP) <sup>2</sup>	-0.84	-6.58	-6.32	-3.50	-2.68	-1.11
Cyclically adjusted primary balance (% GDP) <sup>3</sup>	-2.60	-5.57	-5.93	-3.28	-2.35	-0.33
Structural balance (% GDP) <sup>4</sup>	-3.69	-6.69	-7.13	-4.48	-4.38	-2.90
Gross general government debt (EUR million)	18 624	22 331	26 998	29 911	37 244	39 600
Gross general government debt (% GDP)	27.9	35.6	41.0	43.4	52.4	54.3
Net general government debt (% GDP) <sup>5</sup>	.	.	37.5	41.3	46.7	48.9

*Note:* 2013 data are preliminary.

<sup>1</sup> Net lending/borrowing include the second pension pillar costs (Eurostat definition).

<sup>2</sup> Primary balance is the public administration balance adjusted for interest paid.

<sup>3</sup> Cyclically adjusted primary balance is the primary balance adjusted for the cyclical component.

<sup>4</sup> Structural balance is the public administration balance adjusted for the cyclical component and the one-time effects.

<sup>5</sup> Net general government debt is the gross general government debt minus liquid financial assets.

*Source:* MF SR (2014a).

<sup>38</sup> For example, Cargo Slovakia created a cumulative loss of 273.5 mil. EUR between 2009 and 2012.

However, the conflict arises between the improvement of efficiency in state-owned enterprises and employment maintenance in these enterprises. Due to the political dimension of this issue, rational or decisive solutions cannot be expected in near future.

The consolidation of public finances is an important factor of macro-economic stability, but it should not be done at the expense of long-term investments in sectors where the modernization or infrastructural debt persists. Moreover, support of qualitative factors of economic growth, such as education, science, innovation, creative industries is in comparison with other developed countries rather low.

However, a more expansive fiscal policy is facing the constraints of the increasing volume of public debt, inefficient structure of expenditures in some areas, as well as limits imposed by the Fiscal Responsibility Act and its defined debt ceilings and resulting penalties. The development of the world economy is still volatile and introduces elements of uncertainty for fiscal consolidation, particularly in relation to economic growth and its impact on the development of revenues and expenditures of public finances in the medium-term.

### **State Budget Development in 2013**

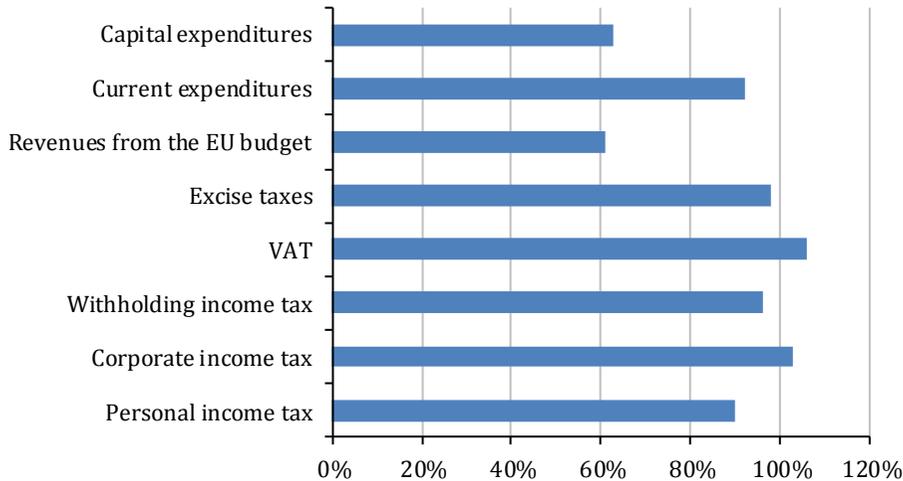
The state budget expenditure reached 14.8 billion EUR (year-on-year decrease by 5.2 %) and compared to planned expenditures were lower by 2.1 billion EUR. The current expenditure have been lower on annual basis by 5 % and capital expenditure by 6.5 %.

The highest reduction of expenditure by 1 billion EUR has been achieved in the category of goods and services. Moreover, due to favourable development on the financial markets, as well as “stockpiling” in 2012, the costs of public debt service have been lower by 160.6 million EUR. The total volume of public debt service costs reached 1.16 billion EUR in 2013.

The highest reduction of capital expenditure (1.1 billion EUR) has been achieved in the area of transfers to non-financial organizations and to corporate entities not listed in public administration.

Figure 8.1

**Fulfilment of Selected Revenue and Expenditure of the State Budget, 2013**



Source: MF SR (2014c); own calculations.

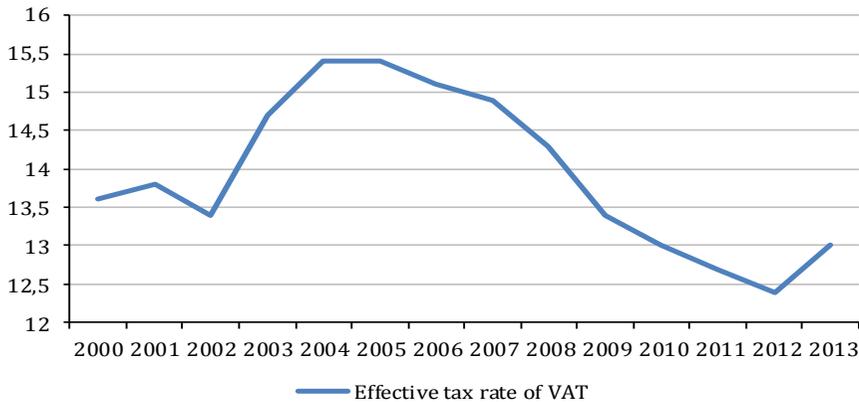
One of the important objectives of the government is to increase the efficiency of tax collection, particularly the value added tax (VAT). Institute of Financial Policy at the Ministry of Finance (IFP MF SR, 2013) estimated that the loss of revenue due to lower efficiency of VAT collection (compared to the average collection efficiency at European level) reached 1.6 billion EUR in 2010. For comparison, in 2010, the volume of tax collected from corporate income tax reached 1.25 billion EUR. The government responded to this development and adopted a set of measures to improve VAT collection:

- The introduction of financial collateral for risk individuals registering as VAT payers.
- Establishment of a company and transfer of company majority shares upon confirmation by the tax authorities.

- The definition of new crime of tax fraud and obstruction of tax administration.
- Introduction of mandatory monthly tax payment period for new taxpayers in the first 12 months.
- The reduction of quarterly VAT payers.
- The introduction of special VAT report effective from January 2014.

All the measures adopted in 2013, as well as the measures implemented in previous year, positively influenced the efficiency of VAT collection (Figure 8.2). Whether this is the signal of longer trend remains to be seen.

**Figure 8.2**  
**Effective Tax Rate Development of VAT in 2000 – 2013**



*Source:* own calculations; Eurostat; SO SR.

Despite this positive development, the state is again increasing the administrative burden and costs, especially for domestic business entities, which is gradually reflected in deterioration of business environment quality in Slovakia<sup>39</sup> (see Chapter 10). The transparency in public procurement, privatisation or restructuring of loss-making state enterprises, limitation of scandals known from media, reduction of inefficient expenditure and provision of public services adequate to the tax burden in long-term would shape the public opinion in favour of paying taxes even without introduction of new repressive measures by the state.

<sup>39</sup> Tax burden is not the only cause of decline in its quality. One of the keys issues which is contributing to loss deterioration of business environment is the low

**Table 8.2**  
**Central Government Budget Development in 2010 - 2013 (EUR million)**

Indicator	2010	2011	2012	Planned 2013	Actual 2013	% of compliance 2013	Year-on-year change, %
Total revenues	10 901	12 002	11 830	13 916.20	12 797	92.0	8.2
of which:							
1. Tax	7 962	8 700	8 463	8 912	9 135	102.5	7.9
of which:							
Tax on personal income	139	112	234	237.60	214	89.9	-8.7
Corporate income tax	1 258	1 620	1 733	1 943.3	2 002.6	103.1	15.6
Income tax collected by deduction	152	143	167	184.60	177.80	96.3	6.5
VAT	4 432	4 753	4 307	4 462.90	4 734.80	106.1	9.9
Excise taxes	1 945	2 001.7	1 979	2 018.50	1 977.00	97.9	-0.1
2. Non-tax	681	859	695	984.7	1 283.3	130.3	84.6
3. Grants and transfers	2 257	2 443.2	2 670	4 019.50	2 378.70	59.2	-10.9
of which:							
Income from EU budget	1 427	2 031.1	2 127	3 563.70	2 175.00	61.0	2.3
Total expenditures	15 337	15 278	15 640	17 001.5	14 820	87.2	-5.2
of which:							
Current expenditures	12 969	12 783	13 657	14 055	12 968.1	92.3	-5.0
Capital expenditures	2 368	2 495	1 983	2 946.3	1 854	62.9	-6.5
Deficit/Surplus	-4 436	-3 276	-3 810	3 085	2 023	65.6	-53.1

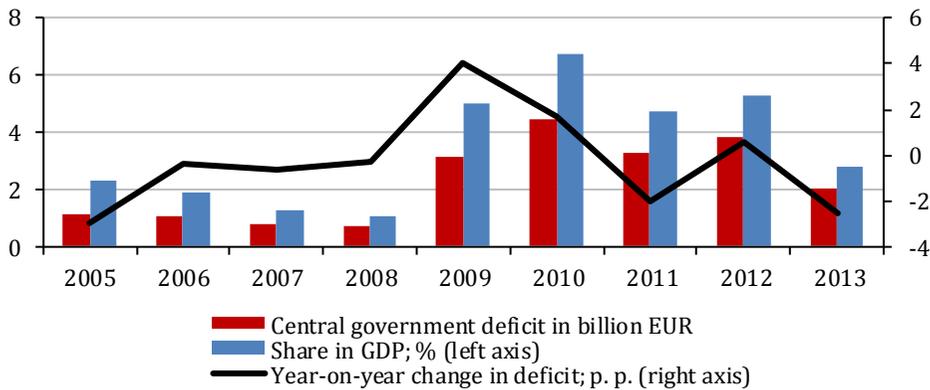
*Note:* Total revenues from tax on personal income is higher, but given that it is the revenue for regional government, the values within the state budget reaches are low. In 2013, the tax on person income contributed to accounts of regional governments 1.63 billion EUR.

*Source:* MF SR (2014c); own calculations.

## Budget deficit and central government debt

The state budget deficit reached 2.02 billion EUR in 2013, and was lower by 1 billion EUR compared to planned value. In relation to GDP, it reached 2.85% and decreased year-on-year by 2.5 p. p. (see Figure 8.3).

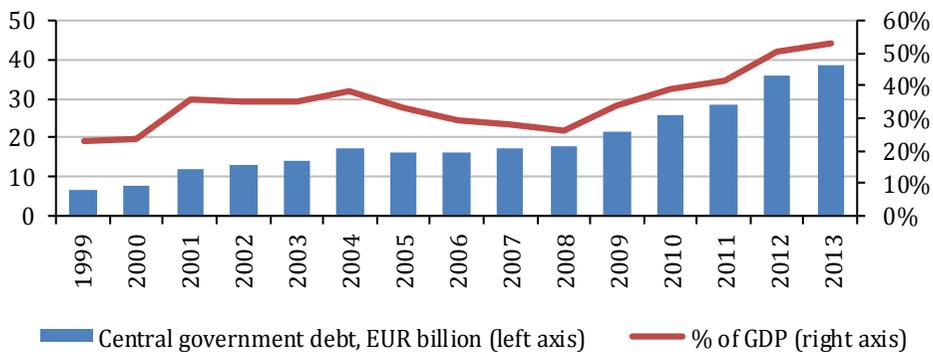
Figure 8.3  
Central Government Deficit in 2005 – 2013



Source: MF SR (2014c); own calculations.

In relation to the GDP, the debt of central government increased year-on-year by 2.9 p. p. and reached 53.2 % of GDP. Compared to previous years, this represents the second lowest increase of debt since 2008.

Figure 8.4  
Central Government Debt in 1999 – 2013



Source: MF SR (2014b); own calculations.

## Financial position of Slovakia against the European Union Budget

The Table 8.3 illustrates the financial position of Slovakia development vis-à-vis the EU budget. Since the beginning of programming period 2007 until the end of 2012, we can observe continual increase of revenue from the EU budget, particularly in chapter Cohesion for growth and employment. In 2012, the total revenues reached 1.57 billion EUR in this category and compared to previous year, they increased by approximately 50 % due to increased financial implementation of Structural Funds and Cohesion Fund.

Despite increased implementation in 2012, and based on figures for 2013, we can conclude that the implementations lagging behind and there is that the expenditure will not be carried out in some operational programmes by the end of 2015.

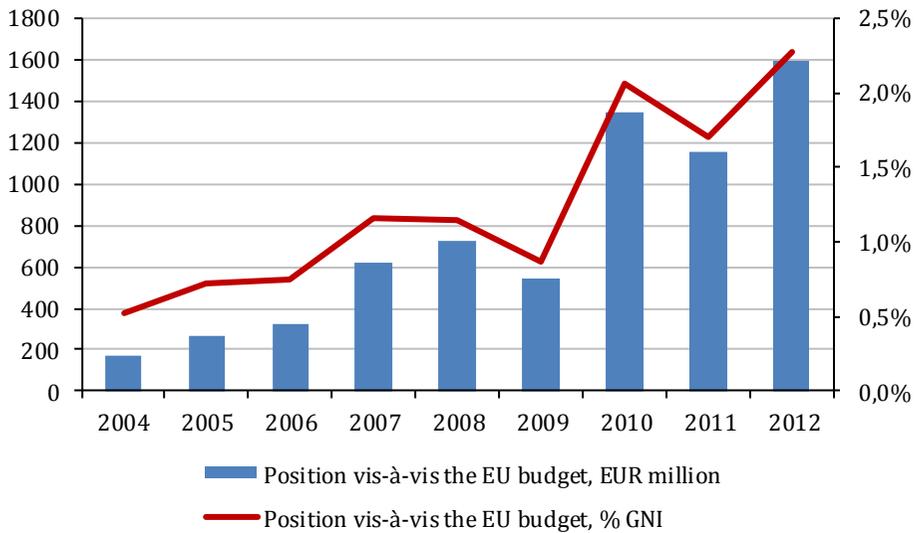
**Table 8.3**  
**Expenditure of EU budget in Slovakia in 2007 - 2013 (EUR million)**

	2007	2008	2009	2010	2011	2012
1. Sustainable growth	669	852.8	633.5	1 208	1 096.8	1 646
1.1 Competitiveness for growth and employment	33.7	43.3	48.7	11.8	40.9	70.4
1.2 Cohesion for growth and employment	635.2	809.5	548.8	1 096.1	1 056	1 575.7
1.2.1 Structural funds	451.9	510.1	385.9	633.7	917.6	1 212.9
1.2.2 Cohesion fund	183.3	299.4	198.8	462.4	138.2	362.7
2. Preservation and management of natural resources	380.5	357	513	676.5	647.9	618
3. Citizenship, freedom, security and justice	13.7	11.1	8.5	8.7	29.2	12.6
4. EU as global partner	9.9	11.5	26.6	0.3	0.5	0.5
5. Administration	9.6	9.4	10.8	11.5	10.7	9.7
6. Compensations	0	0	0	0	0	0
<b>Total</b>	<b>1 082.7</b>	<b>1 241.8</b>	<b>1 192.4</b>	<b>1 905</b>	<b>1 785.1</b>	<b>2 286.8</b>

*Note:* 2013 data are published with a time lag and were not available at the time of writing.

*Source:* European Commission (2014).

Figure 8.5

**Net Financial Position of the SR vis-à-vis the EU Budget, 2004 - 2012**

Source: European Commission DG ECFIN (2014); own calculations.

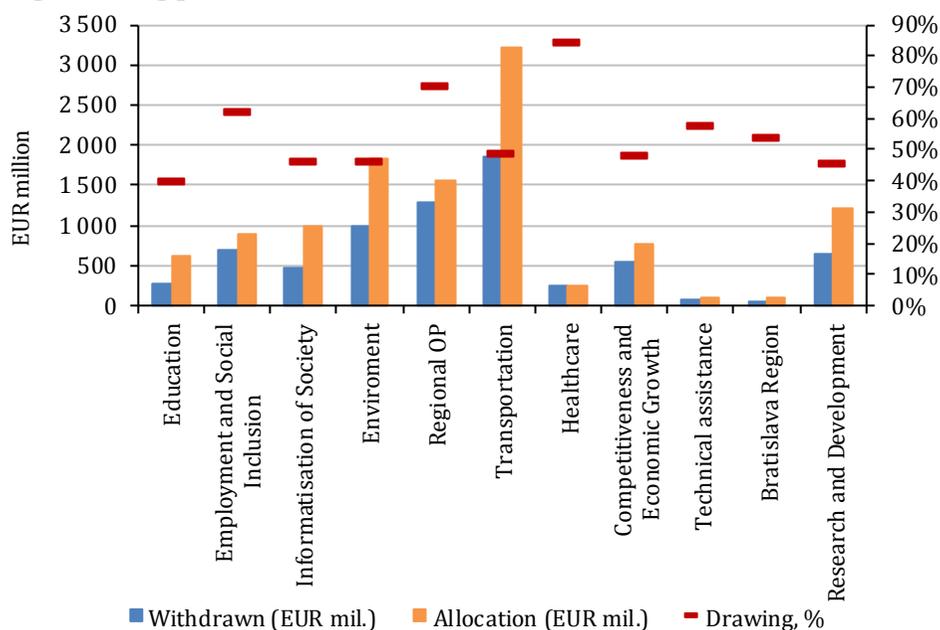
### **Cohesion Policy Implementation in the 2007 - 2013 Programming Period**

Also in 2013, the rate of financial implementation of operational programs was growing. Despite the “official” end of programming period, the year-on-year growth was just slightly higher than in previous year. Year-on-year growth of financial implementation was 14 p. p. and by the year-end, 52.5 % of commitment for 2007 - 2013 has been withdrawn.

The highest increase of resources withdrawal based on year-on-year comparison was recorded in these operation programs (OP): Informatisation of Society (18.8 p. p.), Healthcare (17.63 p. p.), Transport (16.9 p. p.), Education (13.7 p. p.), Research and Development (13.4 p. p.), Regional OP (12.4 p. p.) and Employment and Social Inclusion (11.7 p. p.).

The highest implementation rate has been achieved in the following OPs: OP Healthcare, Regional OP, OP Employment and Social Inclusion, Bratislava Region and Transport.

**Figure 8.6**  
**Financial implementation of Structural Funds and Cohesion Fund in the programming period 2007 – 2013 at the end of 2013**



Source: Central coordination authority (2013); own calculation.

The expected acceleration of financial implementation in the following years will increase pressure on absorption capacity of beneficiaries and will require substantial resources for co-financing from state government budget. However, the inflow of financial resources will have positive impact on quality of transport, educational and research infrastructure, business environment and labour market in medium-term. However, it is essential to deal with the deficiencies in the process of programming, approval, selection, implementation, monitoring and evaluation of projects and programmes.

The implementation of Cohesion policy programmes represents a unique opportunity to deal with the existing infrastructure and modernization debts in Slovak economy, to strengthen the innovation potential of domestic enterprises, to improve conditions for research and development and interconnect academic and corporate sector. The current programming period fully revealed the weaknesses in the structure of the National Strategic Reference Framework and the management of the

individual OPs. In the following 2014 -2020 programming period the narrow sectorial approach has been limited (the number of operational programmes reduced). The next programming period 2014 – 2020 could be the last period with significant financial allocations. Therefore, it is necessary to concentrate these limited resources to those areas, which are able to create the highest multiplier effects in economy.

## 9. OVERVIEW OF SELECTED LEGISLATIVE AND ECONOMIC POLICY MEASURES

In document *National Reform Programme of Slovak Republic 2013*, which is declared as major strategic basis of SR government in the field of economic development and structural policies are formulated immediate economic-policy objectives, such as sustainable growth of economy, employment and quality of life. In order to achieve objectives, the priority areas were set in 2013 as follows: “Differentiated growth-friendly fiscal consolidation; growth and competitiveness now and in the future; struggle with unemployment and social impacts of the crisis; modernization of public administration” (MF SR, 2013).

In 2012, as well as in 2013, there were adopted several Tax Law Amendments within fiscal consolidation, and some of them were focused on tax collection increase and fight against tax evasion. Most of taken measures are based on the *Action plan to fight tax frauds 2012 – 2016*. Following this, the amendment to the Income Tax Act (No. 453/2013 Coll.) was adopted. The amendment introduces so-called tax licences – businesses, showing loss will have to pay minimal tax (VAT non-payers with revenues lower than 500 thousand EUR will pay 480 EUR, VAT payers with revenues lower than 500 thousand EUR will pay 960 EUR and businesses with revenues higher than half million EUR will pay 2880 EUR). The income tax rate declined from 23 % to 22 %. Also tax records have been simplified (opportunity to keep simpler tax registry instead of obligation to keep accounts have been extended to all taxpayers), and changes happen also in the method of writing off a loss. The principles of debt taxation against trading partners changed (the intention is to increase the pressure against occurrence of secondary insolvency). A new feature is a 35 % deduction tax for payments directed to *off-shore* countries. The aim is to prevent tax evasion to so-called “tax heavens”. The assessment base of dividends decreased to 60-times of the average wage (originally it was 120-times).

Also the adoption of an amendment to the Tax Administration Act (No. 435/2013 Coll.) was intended to fight tax evasions. The amendment adopts anti-abuse measures in tax administration, establishes measures

for prevention of cash register obligation breaches, makes tax secrecy more available (expansion of entities scope that may be familiar with the tax secrecy); introduces list of taxpayers who fail to meet their tax obligations. The amendment also introduces a new institute, so-called binding opinion to realization of tax legislation, which means that “if a taxpayer is uncertain about tax consequences of its intended economic activities, he may ask the Tax Authority to explain him in binding way how an activity will be reviewed from Tax Authority point of view.” (Právne noviny, 2014). Among new features in tax administration is the possibility of re-accounting of payment mistakenly paid to account of other taxpayer and narrowing of registration obligations.

Part of the legislative changes in field of taxes was the amendment to the Act on Value Added Tax (No. 360/2013 Coll.), which brings several important changes. It introduces a new form – control report used for provision of detailed information about tax liabilities and the VAT deductions claimed to Financial Administration (form to be filed only electronically). Other innovations include the receipt of the VAT status required by law to be verified by Tax Authorities; acceleration of group registration due to another member accession; modification of registration way for taxable persons; enlargement of the taxable persons circuit liable to provide tax collateral. Regarding fights against tax evasion in VAT, the sales receipts lottery was launched (lottery should encourage consumers to demand sale receipt with every purchase and contribute to identification of “fraud” registers).

The field of public finance was influenced by the new Act No. 36/2013 Coll. about competence of Slovak Republic in ensuring fiscal responsibility in the EU. This norm regulates the competence of Slovak authorities to carry out certain rights and obligations resulting from Treaty on Stability, Coordination and Governance in Economic and Monetary Union. For example, the Act imposes an obligation for MF SR to submit programs of budget and economic partnership to EU Council and European Commission for their approval and monitoring.

In context of public administration modernization in 2013, so-called ERO (Effective, Reliable, Open Government Administration) reform program

continued. By revising the law on local government administrative (No. 180/2013 Coll.), specialized local offices of government administration have been canceled and integrated. To original 49 district offices were added 23 new district ones for integrated government administrative. The changes also affected some budgetary and allowance organizations that merged into larger units. The public administration should be influenced by adoption of new so-called Law on e-Government (No. 305/2013 on the electronic form of competence execution of public authorities). The norm codifies electronic communication within the public administration and among the authorities and entrepreneurs and citizens. It introduces new legal institutions, such as guaranteed document conversion, electronic mailbox for delivery of documents or electronic submission.

The changes in procurement have brought major amendment of the Act on Public Procurement (No. 28/2013 Coll.). The main objective of adopted changes is to achieve efficiency of public expenditures connected to strengthening of competition principles with emphasis on state interest. The amendment should ensure flexibility, active openness of public procurement processes and protect quality and honest suppliers. The motive for adoption was an effort to speed up the processes of withdrawing finances from the EU. For example, the amendment introduces new kind of sanctions; it simplifies the demonstration if requirements are met; introduces two-stage opening and evaluation of tenders candidates; it introduces ban on amendments to the price performance and the principle of price reduction with repeated orders; it strengthens the principle of best offer etc.

The Amendment to the Act about certain measures related to major investments (No. 219/2013 Coll.) expands the category of major investments (now on, construction investment with costs of 100 million EUR, which will also create at least 300 job positions). In case of construction being marked as major investment, the land can be expropriated to investor by the State. The amendment narrows the power of municipals in territorial and construction proceedings. The change was adopted with

aim to increase efficiency and realization of major investments and to make business environment more attractive.

In 2013, the banking sector was adjusted by extensive amendment to the Banking Act (No. 132/2013 Coll.). The adopted amendment prohibits banks to ask fees for management, administration and registry of credit account. It enables no fee for early repayment of a mortgage and extends the obligations of banks and subsidiaries of foreign banks.

The amendment to the Employment Services Act (No. 96/2013 Coll.) partially altered the active labour market policies. The eleven tools of active labour market policies were abolished (reason for that was low rate of usage or lack of funding from the state budget). The amendment introduced a new allowance for job retention. The eligibility for certain allowances changed, the competent authority will have competence to decide about granting from now on. The following allowances changed from obligatory to facultative ones:<sup>40</sup> allowance for self-employed, allowance for employing disadvantaged job-seekers; allowance to support the development of local and regional employment; allowance to execution of graduates practice; allowance for establishment of a sheltered workshop or sheltered work place; allowance for job retention of disabled citizen; allowance to citizen with disabilities in self-employment.

Amendment to the Act on Collective Bargaining (No. 416/2013 Coll.) extended the binding of high level collective agreements. By the amendment adoption, the employers lost an option to disagree with the extension of high level collective agreement and proposal to extend such agreement could be submitted also just by one of contracting parties (for example, the employees representatives).

Amendment to the Act on Supplementary Pension Scheme (No. 318/2013 Coll.) is changing conditions in III. Pillar. It is changing the entitlement for supplementary retirement (after one of saver conditions is met – if the saver becomes eligible for early retirement; if the saver becomes eligible for proper retirement, but after the age of 62). It also restores the tax relief if the saver is enrolled in supplementary pension scheme. The most important innovations are changes in the payments

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<sup>40</sup> <<http://www.krivak.sk/sk/legal-news.php?article=181>>.

of retirement pension, cancellation of severance payments; introduction of new benefit “early withdrawal”; reduction of annual fee for the management of contribution funds; the fee for management of supplementary pension fund will decline in 2014 from 2.34 % to 1.80 %.

The amendment to the Act on Social Insurance is also related to the field of social policy (No. 338/2013 Coll.), which brought these changes: introduction of new contribution relief for persons previously long-term unemployed; introduction of the automatic termination of voluntary insurance; the conditions for sick pay entitlement of employee softened; the amendment changes definition of self-employed and regulates the calculation of assessment base, leading to increase of minimal and maximal amount of insurance payment required to pay by self-employed.

Amendment to the Social Security Act of policemen and soldiers (No. 80/2013 Coll.) changed conditions for entitlement to retirement pension, retirement allowance and severance, as well as base for their calculation and social contribution amount. The intention of amendment adoption was an effort to reduce expenditures for the social security special system of policemen and soldiers.

\* \* \* \*

The nature of adopted laws and policy measures in 2013 was affected by the spirit of fiscal consolidation on expenditure, but also on the revenue side of public budgets. We might include among adopted measures on expenditure side the tightening of policies in social sphere (changes in active labour market policy in order to increase efficiency, targeting and preventing abuse of unemployed allowances) or changes in social security of policemen and soldiers. On the side of expenditure reductions of public administrative, the ongoing ERO reform of public administration can be included, however, its expected positive effects go beyond the horizon of one year. Several legislative measures were adopted to target improvement of budgets revenue side in 2013 – amendment to the Act on Public Procurement or planned changes of tax legislative (amendment of the Income Tax Act, VAT Act or amendment of the Tax Administration Act).

In terms of implemented economic policy and adoption of mentioned measures, the question of their impact on the business environment and competitiveness of economy was often discussed. According to several international comparisons, the position of Slovakia is getting worse in this field. The World Bank measuring the business conditions ranked Slovakia on 49<sup>th</sup> position from 189 economies within the latest rating Doing Business 2014. Compared to Doing Business 2013, Slovakia decreased in rank by 6 positions; the largest drop was recorded in terms of enterprise establishment. Similarly, in broader concept of Global Competitiveness Index (GCI) published by World Economic Forum (WEF, 2014), the position of Slovakia got worse. According to GCI 2013 – 2014, the Slovak economy ranked 78<sup>th</sup>, which is 7 ranks worse result than year before. In terms of the individual dimensions of Slovak competitiveness, legal environment of business, quality of institutions, the quality of education system or efficiency of government administration are rated as the worst areas.

## 10. OUTLOOK FOR 2014 AND 2015

The period from 2009 to 2013 was limited by two bottoms of the same crisis. The period between these two Europe-wide recessions was sort of fumbling between recovery and new recession. In this “balancing on the edge” when making our outlook for the Slovak economy the similar scenario repeated for two consecutive years (2011 and 2012): after a relatively optimistic start of the year, the situation got complicated in the second half of the year. Therefore, the forecasts for European economy, regularly published by reputable institutions were significantly corrected in the second half of the year towards less favourable values.<sup>41</sup> In 2013, the development was different: In the second half of the year the “regular” twist did not take place. Slightly optimistic assumption of economy downturn in 2013 will not be as bold as in previous year and second bottom will be overcome, did not have to be significantly corrected. The autumn forecast of relevant institutions slightly differed from those at the beginning of the year.<sup>42</sup> During the year, forecasted values shifted again towards negative, but only marginally (we cannot talk about negative reversal).

Our last year’s outlook (Morvay et al., 2013) concluded, that major slowdown in economic growth should hit the Slovak economy at time when there is possibility of gradual improvement of upturn in the Euro area. “This could mean that with onset of significant weakening of economic growth comes a hint of possible mitigation of these difficulties” (ibid, p. 120). With hindsight, we can state that critical moment in the development of the Slovak economy and the Euro area was the turn of 2012 and 2013 and during 2013, the indication of cautious turnover came. (As we already showed in chapter Overall Economic Development).

### Comparison of Previous Forecast with Real Development

Our last year’s outlook for 2013 was for a significant slowdown in economic growth followed by recovery. It was assuming also stagnation

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<sup>41</sup> These facts mirrored in our autumn update of outlooks, see Morvay et al. (2011) a Morvay, Okáli and Sikulova (2012).

<sup>42</sup> IMF (2013); EC (2013).

of employment and growth retardation of price level. The outlook has been relatively successful in prediction of changes in real GDP, change in employment or unemployment rate (Table 10.1). The estimation of price level change was a little worse. Direction of development was estimated correctly (the growth of price level really slowed down), but the anticipation of inflation slowdown was not correct. It was reflected in estimated growth of consumers' prices, but also in growth rate of nominal GDP. While the change in real GDP (where price movements do not matter) was anticipated correctly, the change of nominal GDP was overestimated due to uncertainty in the price dynamics. Although we expected slowdown in the price level growth, significant disinflation at the end of 2013 (subsequently passing to the decline in the price level) went beyond expectations.

**Table 10.1**  
**Comparison of Forecast with Real Development**

Parameter		2011 (r)	2012 (r)	2013 (f)	2013(r)
Year-on-year change in real GDP	%	3.0	1.8	0.8 to 1.5	0.9
Year-on-year change in GDP, current prices	%	4.7	3.1	2.4 to 3.1	1.5
Year-on-year change of workers, LFSS (%)	%	1.5	0.6	-0.5 to 0.3	0.0
Unemployment rate, LFSS	%	13.7	14.0	13.9 to 14.4	14.2
Average annual change of inflation measured by consumers price index	%	3.9	3.6	2.3 to 2.8	1.4

*Source:* Real data (r) for 2011– 2013 based on SO SR, forecast (f) based on Morvay et. al (2013).

## **Effects of External and Domestic Economic Environment**

Given the extraordinary and still increasing sensitivity of Slovak economy to external influences, we base our outlook on assessment of

external conditions. During assessing external influences we pay special attention to the European Union (or the Euro area) and Germany. We might conclude that external environment treated Slovak economy unfavourably five years in a row (despite that, the Slovak economy was increasing its export performance). The influences from the external environment were turning in favourable direction during the creation of this outlook. It is particularly important that in the projections of relevant institutions is ruling the consensus regarding to improvement of macroeconomic development in EU. In the forecasts of three selected institutions (IMF, EC, IFW)<sup>43</sup> we find a rare consensus: the growth rate of real GDP in Euro area should increase above 1 % (coincidentally all institutions forecasted 1.2 %, but it is not essential), which would be significantly better than the decline of 0.4 % in 2013. In 2015, the economic growth in the Euro area could further slightly accelerate (Table 10.2). The European Commission (EC, 2014) found that a strengthening economic growth in EU is increasingly driven by domestic demand. In 2014, domestic consumption as well as capital formation should increase and thus reduce the dependence of economic recovery just on the external sector. It is important (also European Commission, 2014) that economic growth is returning to several “vulnerable” EU Member States and the convergence of growth rates across Europe can be expected. The European Commission talks about taking the trip to the “gradual normalization”. However, mentioned forecasts highlight that economic recovery is fragile; the crisis consequences are still hampering the economy’s dynamism and especially job creation (and this constraining influence persists).

Some signs of slight recovery in European economy reflected in these indicators, which data were already available at the time of outlook preparation. At the beginning of 2014, the level of industrial production was at higher values than in same period of 2013 (Figure 10.1).

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<sup>43</sup> We selected the three institutions of various nature: global financial organization (IMF), European authority (EC – European Commission) and German research organization (IFW - Institut für Weltwirtschaft).

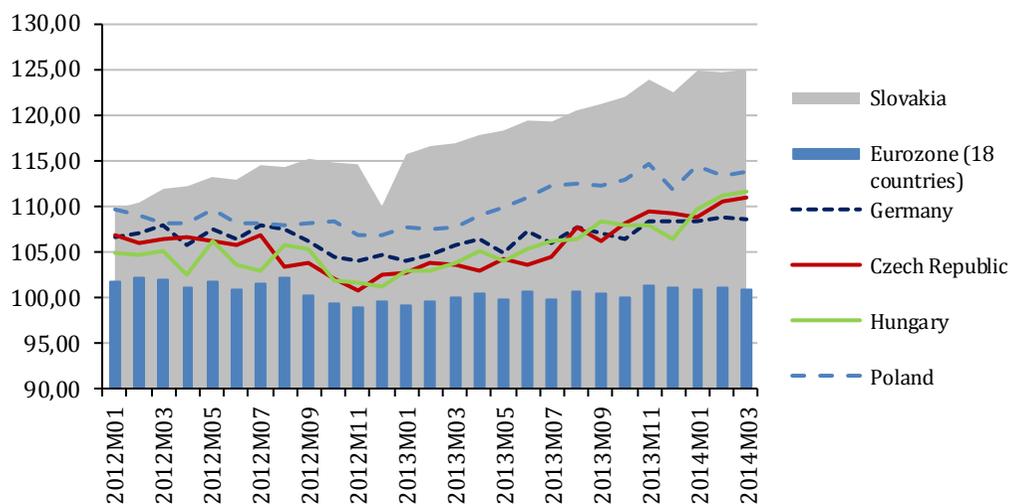
Table 10.2

**Expected Real GDP Change in the Euro Area and Germany**

	2013		2014 projection	2015 projection
<b>Euro area</b>				
Real GDP, year-on-year change, %	-0.4	IFW	1.2	1.7
		EC	1.2	1.8
		MMF	1.2	1.5
<b>Germany</b>				
Real GDP, year-on-year change, %	0.4	IFW	1.9	2.5
		EC	1.8	2.0
		MMF	1.7	1.6

Source: IFW (2014), March 2014;  
European Commission (2014), February 2014;  
IMF (2014), April 2014.

Figure 10.1

**Industry Production Index (2005 level = 100)**

Source: Eurostat database.

At the same time with a slightly more favourable development of external determinants, we might also talk about more favourable influence of the domestic ones. Significant progress in fiscal consolidation (although, with uncertain exact values of the government deficit – see below) with the arrival of the second half of political cycle give a chance to mitigation of restrictions. Economy dynamics may be affected by damping

effect of administrative and tax burden of business activities in past two years (complicated tax administration, introduction of contributions levy on some kind of income, complicated administration of contributions levy, higher rate on income tax of legal entities...). These and similar measures demotivate in times of necessity to promote confidence in economy. Some measures (from 2012) increased the administrative and financial costs of employment.

As years 2012 and 2013 are characterized by adverse impact of external and domestic factors (mutually completing each other in their damping influence), at the time of this outlook preparation, it is very likely to occur some sights of current improvement in both groups of factors.

### **Expected Development of Basic Macroeconomic Parameters**

The data already available about the Slovak economy in first months of 2014 are supporting the reasoning of prudent favourable turnover. Data shown in Figure 10.2 result in more favourable development in early 2014 than in 2013 for all monitored indicators of sectors activity. There was even a hint of possible recovery of construction branch, which has been in recession for long time. Significantly better results were also achieved in retail sales.

Since 2009, the accumulated balance of foreign trade significantly increased in first three months of year (Figure 10.3). This repeated also in first three months of 2014, when the cumulative trade surplus of foreign trade (preliminary 1 246.8 million EUR) exceeded again the balance from the same period of previous year. This probably means that net export contributes favourably to economic growth again.<sup>44</sup> If the information about the reduction in unemployment rate (Figure 10.4), and about increased retail sales and improved consumer confidence are added, we

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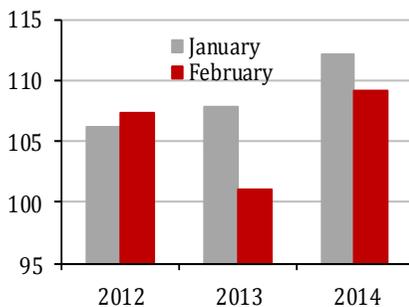
<sup>44</sup> However, the foreign trade balance is not identical with so-called net export (the balance of foreign trade is difference of export and import of goods, net export is the difference of export and import of goods and services). Moreover, the foreign trade balance is available only in current prices and therefore it cannot indicate the contribution to real GDP change (which is in constant prices).

might expect the favourable contribution of net export domestic demand to economic growth. In addition, that may be the significant change of economic growth quality compared to previous two years. Economic growth was driven entirely by net export, it could be based on several pillars: the growth of net export, but also growth of domestic demand (at least some parts of it) in near future.

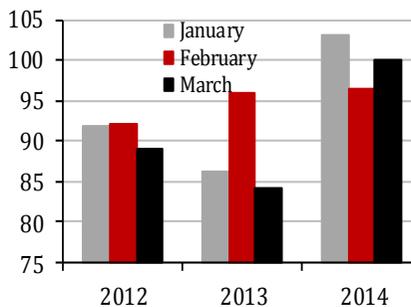
Figure 10.2

**Dynamics indicators of selected branches** (year-on-year indexes, same period of previous year = 100)

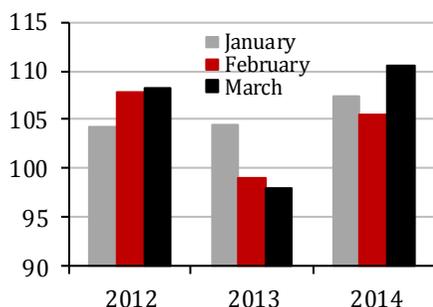
**A. Manufacturing**



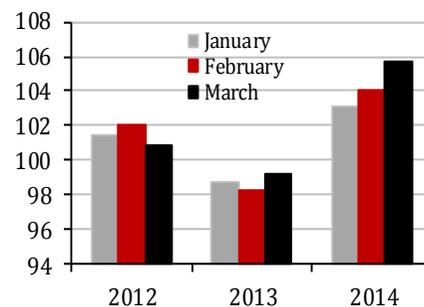
**B. Constructions**



**C. Wholesale sales**



**D. Retail sales**

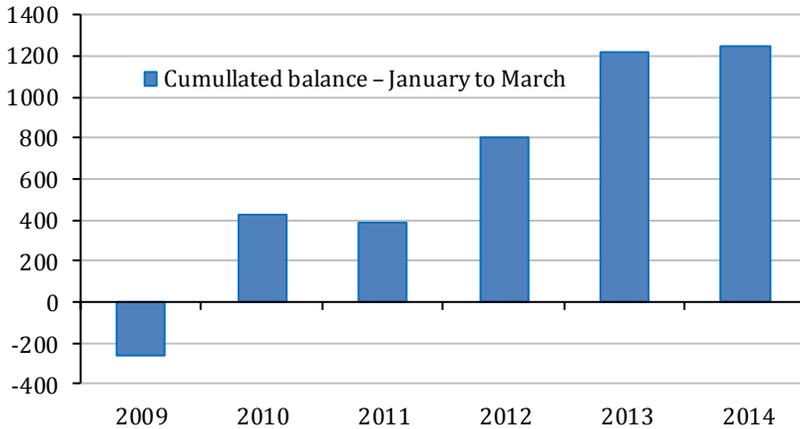


*Note:*

- The figure A shows the index of Manufacturing (same period of previous year = 100, non-seasonally adjusted).
- The figure B shows the index of Constructions (same period of previous year = 100).
- The figures C and D show the year-on-year index of sales (same period of previous year = 100, current prices).

*Source:* SO SR.

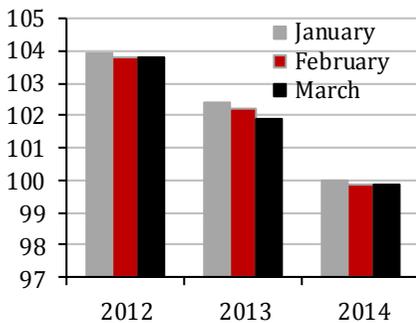
**Figure 10.3**  
**Cumulated Balance of Foreign Trade in First Three Months of Year**  
 (billion EUR)



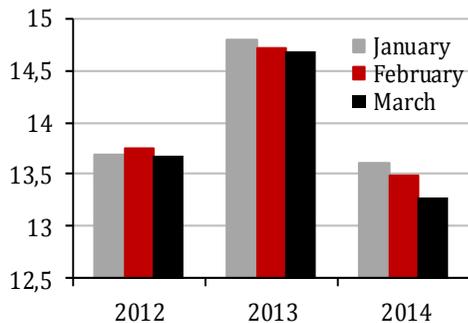
Source: SO SR.

**Figure 10.4**  
**Selected Indicators of Market Balance**

**A. Inflation rate**



**B. Unemployment rate**



Note: Inflation rate measured by CPI (year-on-year index, same period of previous year = 100).  
 Unemployment rate measured by registered disposable job applicants (Labour office methodology).

Source: SO SR; Central office of Labour, Social Affairs and Family SR.

The development of Economic Sentiment Indicator and the volume of new orders in industry were more favourable at the beginning of 2014 than in same period of previous year (Figure 10.5). Both indicators

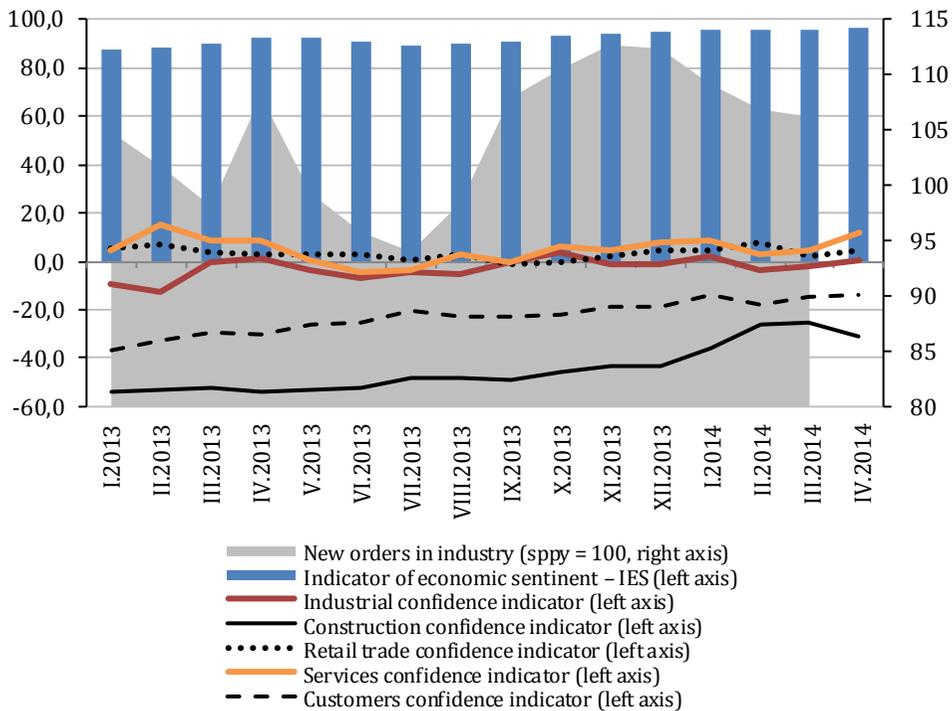
should be able to indicate, in which way will some indicators of real economy develop in short-term.<sup>45</sup>

We might conclude that sentiment indicators, as well as real economy indicators, for first months of 2014 support the thesis of the turnover towards more favourable development is emerging in 2014 (compared to previous year).

Figure 10.5

**Selected Leading Indicators for SR: New Orders in Industry and Indicator of Economic Sentiment (IES)**

(left axis: index, 2010 level = 100; right axis: index, same period of previous year = 100)



Source: SO SR.

<sup>45</sup> Economic Sentiment Indicator is measure based on subjective answers and inevitably influenced by moods and subjective perception (it measures these moods). Dynamics of new orders is (on contrary to climate indicators) measure of probable future production without influence of subjective perception of participants.

In the development of macroeconomic parameters are following tendencies expected (Table 10.3):

- It is very likely that growth rate of economy will be in 2014 significantly higher compared to 2013. This is supported by so-called quick estimate of GDP for first quarter from May 2014 (SO SR). Economic growth will be driven by both internal and external demand. We expect some stabilization of economic growth rate with gradual acceleration in medium-term horizon. Our estimation of real GDP growth rate is comparable with the estimates of other institutions (Table 10.4) and can be described as slightly more optimistic (as other estimates were developed before our estimation, we could take into account some recent information about the positive trends in domestic economy).
- The inflation rate will remain at extremely low level; the only currently recognizable inflation risk is development of fuel prices (due to the tension between Russia and Ukraine). Significant adjustments of administered prices absent and anti-inflation effect has also relatively weak domestic demand. If the government deficit would be under 3 % in GDP, the decline of VAT rate to 19 % would act as another anti-inflation impulse.
- Labour market indicator might be developing in more favourable way than in 2013. After stagnation of number of workers, we expect slight increase (in 2015 this increase could be even stronger). Additionally, the unemployment rate might decrease by approximately half percentage point in each year. We expect that unemployment rate already reached its “local maximum” in 2013. However, we do not expect any significant increase of average nominal wage growth so far (it is blocked by weak performance of economy growth combined with high rate of unemployment). While the exceptionally low price dynamics persists, it is likely that the real wage will grow.

**Table 10.3**  
**Forecast of Selected Macroeconomic Parameters Development**

Parameter		2012 (r)	2013 (r)	2014 (f)	2015(f)
Year-on-year change in real GDP	%	1.8	0.9	2.2 to 2.7	2.9 to 3.5
Year-on-year change in GDP, current prices	%	3.1	1.5	2.7 to 3.8	3.2 to 5.4
Year-on-year change of workers, LFSS	%	0.6	0.0	0.3 to 0.8	0.5 to 1.0
Unemployment rate, LFSS	%	14.0	14.2	13.3 to 13.9	12.7 to 13.3
Average annual change of inflation measured by consumers price index	%	3.6	1.4	0.2 to 0.8	1.6 to 2.4

*Source:* Real data (r) for 2012 – 2013 based on SO SR, forecast (f) based on authors.

**Table 10.4**  
**Expected Changes of Real GDP in SR in Forecasts of Various Institutions**

	2013		2014 forecast	2015 forecast
Year-on-year change in real GDP (%)	0.9	External institutions		
		EK	2.3	3.2
		IMF	2.3	3.0
		IFW	1.7	3.2
		Domestic institutions		
		IFP	2.3	3.0
		NBS	2.4	3.3
		Selected banks	2.2	3.0

*Source:* European Commission (2014), February 2014;  
IMF (2014), April 2014;  
IFW (2014), March 2013;  
IFP (2014), forecast of Committee for macroeconomic forecasts, February 2013;  
NBS (2013), P1Q 2013;  
Macroeconomic forecasts of selected banks (2014), Banks average, April 2014.

### ***Factors of Favourable and Non-favourable Deviations***

Positive and negative deviations are linked to possible events, their occurrence is possible at this time and their realization would not be a surprise. We are not focused on every conceivable positive or negative effects, but only to those, which are specific for upcoming period.

We have already mentioned in section on overall economic development the possible effect of postponed consumption compensation. If in the period 2010 – 2013, the consumption was postponed (due the motive of prudence), it is possible that the improvement of consumers confidence will cause a period of relatively stronger growth in consumption (a stronger one with regards to economic development) in which, the postponed consumption will take place. Such a “compensation wave” of increased consumption would contribute to stronger economic growth.

Similar effect of “postponement” could also involve the investment expenditures (the fall of gross fixed capital formation in period 2012 – 2013 could be an indication). The decline of gross fixed capital formation in previous period could trigger the increase of investment demand at a time when the economic expectations significantly improve.

At the time of this outlook preparation, the outcome of public finance management was uncertain in 2013. There was a scenario in which the government deficit has been reduced to value significantly below 3 % of GDP (MF SR reported 2.77 % of GDP). However, there were some doubts about correctness of this value.<sup>46</sup> If this substantial improvement of public finances would be confirmed in 2013, the mitigation of restrictive effect of fiscal policy could take place in 2014 – 2015. On the contrary, non-confirmation of this favourable outcome could be related with further restrictions.

Since the beginning of 2014 (Figure 10.4), the year-on-year decrease of consumers prices level could be perceived in Slovak environment as threat to future development, but also as possible supporting factor of

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<sup>46</sup> In the time of this text preparation the report of EU Authorities was expected (so-called notification). It should confirm the value of public finance balance. In time of closer of this text, the message was published, in which the spring forecast of EC is based on values of public finance deficit below the threshold 3 % of GDP in 2014 and 2015. The option of excessive deficit procedure termination of SR becomes more realistic (see MF SR, 2014).

growth acceleration. The drop of price level could be considered as threat if the customers start to believe that price decline is longer and more significant process and would lead to convenience of postponed purchases. However, as we do not assume that customers would consider the decline of price level as long lasting and significant phenomenon, and also take into account postponed consumption (explained elsewhere), we do not consider this short-term decline in the price level as a serious threat to the recovery of economic growth. Short-term decline in the price level does not have to indicate the onset of economic downturn (although the media presented this phenomenon in such a way). The decline of price level can even work as short-term consumption support: if the decline is considered as short-term phenomenon, it could be perceived as the “right moment” for compensation of slack consumption. Analytical review of NBS (2014) considers a long-term decline of price level as unlikely and therefore serious consequences in the real economy are very unlikely as well.

Any further increase of tax wedge or contribution levy, but also administration burden on business could be considered as risk. Several economic policy measures from period 2012 – 2013 had disincentive effect on business activity or employment. We assume, the government currently starting second half of its electoral cycle will refrain of similar disincentive steps that hinder the economic activities.

\* \* \* \*

After probable overcome of the “second bottom”, there comes a period where the economic growth can be stabilized. This means the economic recovery, but the rates of economic growth are likely to reach values, which would be considered as unattractive before 2009. It is a challenge for economists and policy-makers to ensure the stability of the economy and improve socio-economic parameters even at this stage of relatively weak economic growth.

## REFERENCES

### References (1st Chapter):

EUROSTAT (1995): Európsky systém účtov ESA 1995. Available at: <[www.rozpočet.sk/app/docFile?docFileName=/docs/ESA\\_1.doc](http://www.rozpočet.sk/app/docFile?docFileName=/docs/ESA_1.doc)>.

EUROSTAT DATABASE: Annual National Accounts. Available at: <[http://epp.eurostat.ec.europa.eu/portal/page/portal/national\\_accounts/data/database](http://epp.eurostat.ec.europa.eu/portal/page/portal/national_accounts/data/database)>.

EUROSTAT DATABASE: European Sector Accounts. Available at: <[http://epp.eurostat.ec.europa.eu/portal/page/portal/sector\\_accounts/data/annual\\_data](http://epp.eurostat.ec.europa.eu/portal/page/portal/sector_accounts/data/annual_data)>.

HABRMAN, M. (2013): Vplyv exportu na pridanú hodnotu a zamestnanosť v slovenskej ekonomike. [Working Papers 53.] Bratislava: Institute of Economic Research SAS. ISSN-1337-5598.

MORVAY, K. et al. (2012): Hospodársky vývoj Slovenska v roku 2011 a výhľad do roku 2013. Bratislava: Institute of Economic Research SAS. ISBN 978-80-7144-196-0.

ŠÚ SR: Databáza Slovstat. Available at: <<http://www.statistics.sk/pls/elisw/vbd>>.

WIIW (2014): Investment to the Rescue. Economic Prospects for Central, East and Southeast Europe. Vienna: WIIW, March.

### References (2nd Chapter):

CEEC RESEARCH (2014): Kvartálna analýza slovenského stavebníctva Q1/2014. <[www.ceec.eu](http://www.ceec.eu)>.

EUROSTAT (2013): Statistical Database. Available at: <[http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database)>.

NBS (2010 – 2014): Správa o výsledky hospodárenia NBS za roky 2009 – 2013. Available at: <[http://www.nbs.sk/\\_img/Documents/ZAKLNBS/PUBLIK/BROZURY/VYS\\_HOSP13.pdf](http://www.nbs.sk/_img/Documents/ZAKLNBS/PUBLIK/BROZURY/VYS_HOSP13.pdf)>.

SO SR (2013): Slovstat Database. Available at: <<http://www.statistics.sk/pls/elisw/vbd>>.

SO SR (2009 – 2013): Štatistická správa o základných vývojových tendenciách v hospodárstve SR v 4. štvrťroku 2008 – 2013. Bratislava: SO SR 2010 – 2014.

### **References (3rd Chapter):**

EUROSTAT (2014): Statistical database. Available at:  
<[http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database)>.

EPO (2014): European Patent Filings per Country of Origin.  
<<http://www.epo.org/about-us/annual-reports-statistics/statistics/filings.html>>.

EC (2014): Innovation Union Scoreboard 2014. Brussels: European Commission. ISBN 978-92-79-34662-0. 94 s.

IPO SR (2014): Výročná technická správa Úradu priemyselného vlastníctva Slovenskej republiky. Patenty a úžitkové vzory 2012. Bratislava: Úrad priemyselného vlastníctva Slovenskej republiky. Available at:  
<[https://www.indprop.gov.sk/swift\\_data/source/pdf/vyroczne\\_technicke\\_spravy/patenty\\_2012.pdf](https://www.indprop.gov.sk/swift_data/source/pdf/vyroczne_technicke_spravy/patenty_2012.pdf)>.

ME SR (2013): Poznatkami k prosperite – Stratégia výskumu a inovácií pre inteligentnú špecializáciu Slovenskej republiky. Bratislava: Ministry of Economy SR. Available at:  
<[www.economy.gov.sk/ext\\_dok-sk\\_ris3/142230c?ext=orig](http://www.economy.gov.sk/ext_dok-sk_ris3/142230c?ext=orig)>.

SO SR (2013): Ročenka vedy a techniky 2013. Bratislava: SO SR, 86 s. ISBN 978-80-8121-260-4.

WEF (2013): The Global Competitiveness Report 2012 – 2013. Geneva: World Economic Forum. ISBN-10: 92-95044-35-5.

WEF (2014): The Global Competitiveness Report 2013–2014. Geneva: World Economic Forum. ISBN-10: 92-95044-73-8.

### **References (4th Chapter):**

EUROPEAN COMMISSION (2014): Slovakia – Growth to pick up in 2014. Winter Forecast 2014 – EU Economy: Recovery Gaining Ground. Available at:  
<[http://ec.europa.eu/economy\\_finance/eu/forecasts/2014\\_winter\\_forecast\\_en.htm](http://ec.europa.eu/economy_finance/eu/forecasts/2014_winter_forecast_en.htm)>.

EUROSTAT (2014): Labour Force Survey Database. Available at: <[http://epp.eurostat.ec.europa.eu/portal/page/portal/labour\\_market/introduction](http://epp.eurostat.ec.europa.eu/portal/page/portal/labour_market/introduction)>.

MORVAY, K. – FRANK, K. – GABRIELOVÁ, H. – HVOZDÍKOVÁ, V. – JECK, T. – OKÁLI, I. – ŠIKULOVÁ, I. (2012): Hospodársky vývoj Slovenska v roku 2011 a výhľad do roku 2013. Bratislava: Institute of Economic Research SAS. ISBN 978-80-7144-196-0.

MORVAY, K. – FRANK, K. – GABRIELOVÁ, H. – HVOZDÍKOVÁ, V. – JECK, T. – OKÁLI, I. – ŠIKULOVÁ, I. (2013): Hospodársky vývoj Slovenska v roku 2012 a výhľad do roku 2014. Bratislava: Institute of Economic Research SAS. ISBN 978-80-7144-207-3.

ECD (2013): Slovak Republic. In OECD Economic Outlook. Volume 2013/2. Paris: OECD (Preliminary Version).

OECD (2014): Taxing Wages 2014. <<http://www.oecd.org/tax/taxing-wages.htm>>.

SOCIAL INSURANCE AGENCY IN SLOVAKIA (2014): Available at: <[www.socpoist.sk](http://www.socpoist.sk)>.

SO SR (2014a): Slovstat Database; Available at: <[www.statistics.sk](http://www.statistics.sk)>.

SO SR (2014b): Štatistická správa o základných vývojových tendenciách v hospodárstve SR v 4. štvrťroku 2013. Č. 4/2013. Bratislava: SO SR, March 2014.

SO SR (2014c): Správa o hospodárskom vývoji v krajoch SR za rok 2013. Bratislava: SO SR. Súborné publikácie 2014.

WB (2012): Policy Advice on the Integration of Roma in the Slovak Republic. Washington, DC: The World Bank – Europe and Central Asia (ECA), 49 p.

### **References (5th Chapter):**

EUROSTAT (2014): Statistics Database. <[http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database)>.

MF SR (2014): Makroekonomické prognózy, február 2014. Bratislava: MF SR. Available at: <<http://www.finance.gov.sk/Default.aspx?CatID=9537>>.

NBS (2014a): Strednodobá predikcia 1Q 2014. Bratislava: NBS.

<[http://www.nbs.sk/\\_img/Documents/\\_Publikacie/PREDIK/2014/P1Q-2014.pdf](http://www.nbs.sk/_img/Documents/_Publikacie/PREDIK/2014/P1Q-2014.pdf)>.

NBS (2014b): Balance of Payments Statistics. Bratislava: National Bank of Slovakia. Available at: <<http://www.nbs.sk/sk>>.

SO SR (2014a): Economic Development of SR Indicators. Bratislava: SO SR. Available at: <<http://portal.statistics.sk>>.

SO SR (2014b): Development of Foreign Trade in December and year 2013. Bratislava: SO SR.

### **References (6th Chapter):**

IFP (2014): Makroekonomické prognózy. 32. zasadnutie výboru pre makroekonomické prognózy (Február 2014). Available at: <<http://www.finance.gov.sk/Default.aspx?CatID=9537>>.

MF SR (2014): Makroekonomické prognózy, február 2014. Bratislava: MF SR. Available at: <<http://www.finance.gov.sk/Default.aspx?CatID=9537>>.

NBS (2014a): Mesačný bulletin NBS – 03/2014. Bratislava: NBS. Available at: <[http://www.nbs.sk/\\_img/Documents/\\_MesacnyBulletin/2014/protected/mb0314.pdf](http://www.nbs.sk/_img/Documents/_MesacnyBulletin/2014/protected/mb0314.pdf)>.

NBS (2014a): Strednodobá predikcia 1Q 2014. Bratislava: NBS. Available at: <[http://www.nbs.sk/\\_img/Documents/\\_Publikacie/PREDIK/2014/P1Q-2014.pdf](http://www.nbs.sk/_img/Documents/_Publikacie/PREDIK/2014/P1Q-2014.pdf)>.

SO SR (2014): Spotrebiteľský barometer rok 2013. Bratislava: SO SR. <<http://portal.statistics.sk/showdoc.do?docid=62028>>.

SO SR (2013): Slovstat Database. Available at: <<http://www.statistics.sk/pls/elisw/vbd>>.

### **References (7th Chapter):**

EUROPEAN PARLIAMENT (2013): Eurobarometer. Date of data collection: 7. – 23. 6. 2013. Available at: <[http://www.europskyparlament.sk/sk/informacie\\_o\\_eu/prieskumy\\_eurobarometra.html;jsessionid=57636482CEC90E95A02A164C59CFF98C](http://www.europskyparlament.sk/sk/informacie_o_eu/prieskumy_eurobarometra.html;jsessionid=57636482CEC90E95A02A164C59CFF98C)>.

EUROPEAN COMMISSION (2013): Report From The Commission to the European Parliament, the Council, the European Central Bank and the European Economic and Social Committee. Alert Mechanism Report 2014. Brussels, COM(2013) 790 final.

< [http://ec.europa.eu/europe2020/pdf/2014/amr2014\\_en.pdf](http://ec.europa.eu/europe2020/pdf/2014/amr2014_en.pdf)>.

EC (2012): Konceptia rozsiahlej a skutočnej hospodárskej a menovej únie: spustenie celoeurópskej diskusie. Brusel: EC. Available at:

<[http://europa.eu/rapid/press-release\\_IP-12-1272\\_sk.htm](http://europa.eu/rapid/press-release_IP-12-1272_sk.htm)>.

EUROSTAT (2014): Statistics Database. Available at:

<[http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database)>.

INESS (2013): Euro kríza. Projekt INESS. Účet za euro. Available at:

<<http://eurokriza.sk/ucet-za-euro/>>.

<[www.bankofengland.co.uk](http://www.bankofengland.co.uk)>.

<[www.ecb.int](http://www.ecb.int)>.

<[www.euractiv.sk](http://www.euractiv.sk)>.

<[www.federalreserve.gov](http://www.federalreserve.gov)>.

### **References (8th Chapter):**

MF SR (2013a): Národný program reforiem Slovenskej republiky 2013 Bratislava: Ministry of Finance SR. Available at:

<<http://www.finance.gov.sk/Default.aspx?CatID=5197>>.

MF SR (2013b): Program stability SR na roky 2013 – 2016. Bratislava: Ministerstvo financií SR. Available at:

<[http://ec.europa.eu/europe2020/pdf/nd/sp2013\\_slovakia\\_sk.pdf](http://ec.europa.eu/europe2020/pdf/nd/sp2013_slovakia_sk.pdf)>.

MF SR (2014a): Fiškálne indikátory. Bratislava: MF SR. Available at:

<<http://www.finance.gov.sk/Default.aspx?CatID=6004>>.

MF SR (2014b): Dlh ústrednej správy Slovenskej republiky. Bratislava: MF SR. Available at:

<<http://www.finance.gov.sk/Default.aspx?CatID=7319&id=2013>>.

MF SR (2014c): Plnenie štátneho rozpočtu. Bratislava: MF SR. Available at: <<http://www.finance.gov.sk/Default.aspx?CatID=4103>>.

CENTRAL COORDINATION AUTHORITY (2014): Stav implementácie ŠF a KF k 31. 12. 2013. Available at: <<http://www.nsrr.sk/cerpanie/>>.

EUROPEAN COMMISSION (2014): Financial Programming and Budget - Financial Report for Financial Year 2012. URL: <[http://ec.europa.eu/budget/biblio/documents/2012/2012\\_en.cfm](http://ec.europa.eu/budget/biblio/documents/2012/2012_en.cfm)>.

EC (2013): Posúdenie národného programu reforiem a programu stability na rok 2013 pre Slovensko. Available at: <[http://ec.europa.eu/europe2020/pdf/nd/swd2013\\_slovakia\\_sk.pdf](http://ec.europa.eu/europe2020/pdf/nd/swd2013_slovakia_sk.pdf)>.

IFP MF SR (2013): The Estimate of the Value Added Tax Revenue Loss. Bratislava: Institute for Financial Policy MF SR Available at: <[http://www.finance.gov.sk/en/Components/CategoryDocuments/s\\_LoadDocument.aspx?categoryId=614&documentId=426](http://www.finance.gov.sk/en/Components/CategoryDocuments/s_LoadDocument.aspx?categoryId=614&documentId=426)>.

### **References (9th Chapter):**

MF SR (2013): Národný program reforiem Slovenskej republiky 2013. Bratislava: MF SR. Available at: <<http://www.finance.gov.sk/Default.aspx?CatID=5197>>.

ŠTULRAJTEROVÁ, J. (2013): Novela zákona o službách zamestnanosti. Krivak & Co Legal News. Available at: <<http://www.krivak.sk/sk/legal-news.php?article=181>>.

WEF (2014): The Global Competitiveness Report 2013 – 2014. Geneva: World Economic Forum. ISBN-10:92-95044-73-8.

PRÁVNE NOVINY (2014): Závazné daňové stanoviská Finančného riaditeľstva Slovenskej republiky. Available at: <[http://www.penonline.sk/20130530411/pravne-oblasti/financne-pravo/spravy/zavazne-danove-stanoviska-financneho-riaditelstva-slovenskej-republiky#.Uz\\_dkFcxhqI](http://www.penonline.sk/20130530411/pravne-oblasti/financne-pravo/spravy/zavazne-danove-stanoviska-financneho-riaditelstva-slovenskej-republiky#.Uz_dkFcxhqI)>.

### **References (10th Chapter):**

EUROPEAN COMMISSION (2013): Autumn Forecast 2013 – EU Economy: Gradual Recovery, External Risks. Available at: <[http://ec.europa.eu/economy\\_finance/eu/forecasts/2013\\_autumn\\_forecast\\_en.htm](http://ec.europa.eu/economy_finance/eu/forecasts/2013_autumn_forecast_en.htm)>.

EUROPEAN COMMISSION (2014): Winter Forecast 2014 – EU Economy: Recovery Gaining Ground. Available at: <[http://ec.europa.eu/economy\\_finance/eu/forecasts/2014\\_winter\\_forecast\\_en.htm](http://ec.europa.eu/economy_finance/eu/forecasts/2014_winter_forecast_en.htm)>.

- IFP (2014): Makroekonomické prognózy. 32. zasadnutie výboru pre makroekonomické prognózy (február 2014). Available at: <<http://www.finance.gov.sk/Default.aspx?CatID=9537>>.
- IFW(2014): Konjunktur im Euroraum im Frühjahr 2014. Available at: <[http://www.ifw-kiel.de/wirtschaftspolitik/konjunkturprognosen/konjunkt/2014/Konjunkturprognosen\\_Euroraum\\_3-14.pdf](http://www.ifw-kiel.de/wirtschaftspolitik/konjunkturprognosen/konjunkt/2014/Konjunkturprognosen_Euroraum_3-14.pdf)>.
- IMF (2013): World Economic Outlook. Transitions and Tensions. October 2013. Available at: <<http://www.imf.org/external/pubs/ft/weo/2013/02/>>.
- IMF (2014): World Economic Outlook. Recovery Strengthens, Remains Uneven. April 2014. Available at: <<http://www.imf.org/external/Pubs/ft/weo/2014/01/>>.
- NBS (2014) Macroeconomic Projection of Selected Banks (2014). Available at: <<http://www.nbs.sk/sk/statisticke-udaje/vybrane-makroekonomicke-ukazovatele>>.
- MF SR (2014): Slovensko by malo patriť medzi premiantov Európskej únie. Správa Tlačového odboru MF SR z 5. 5. 2014. Available at: <<http://www.finance.gov.sk/Default.aspx?CatID=38&id=686>>.
- MORVAY, K. – OKÁLI, I. – GABRIELOVÁ, H. – ŠIKULOVÁ, I. – FRANK, K. (2011): Aktualizácia výhľadu vývoja slovenskej ekonomiky do roku 2012. Ekonomický časopis/Journal of Economics, 59, č. 8, s. 856 – 865.
- MORVAY, K. – FRANK, K. – GABRIELOVÁ, H. – HVOZDÍKOVÁ, V. – JECK, T. – OKÁLI, I. – ŠIKULOVÁ, I. (2013): Hospodársky vývoj Slovenska v roku 2012 a výhľad do roku 2014. Bratislava: Institute of Economic Research SAS. ISBN 978-80-7144-207-3.
- MORVAY, K. – OKÁLI, I. – ŠIKULOVÁ, I. (2012): Zrýchlenie rastu ekonomiky sa znovu odkladá na neurčito. Aktualizácia výhľadu vývoja slovenskej ekonomiky do roku 2013. Bratislava: Institute of Economic Research SAS. Available at: <[http://ekonom.sav.sk/uploads/journals/191\\_aktualizacia\\_vyhladu.pdf](http://ekonom.sav.sk/uploads/journals/191_aktualizacia_vyhladu.pdf)>.
- NBS (2014): Strednodobá predikcia 1. Q. 2014. Available at: <[http://www.nbs.sk/\\_img/Documents/\\_Publikacie/PREDIK/2014/P1Q-2014.pdf](http://www.nbs.sk/_img/Documents/_Publikacie/PREDIK/2014/P1Q-2014.pdf)>.

## AUTHORS

**Ing. Karol Morvay, PhD.**, is a graduate of the University of Economics in Bratislava. He also completed his doctorate with specialization in economic policy at the same university. He mainly focuses on macroeconomic analysis, forecasting, labour market issues and socio-economic development. He is employed in Economic Institute SAS since 1996 and since 1997 has been a regular co-author of this publication. Since 2009 he has become a leader of authors team of the publication *Economic Development of Slovakia*.

**Ing. Karol Frank, PhD.**, is regular employee of Economic Institute SAS since 2003, his PhD obtained on the University of Economics in Bratislava in 2010. His research activity is devoted to the public finance issues and the cohesion policy of the European Union. He is co-author of the publication *Economic Development of Slovakia* since 2003.

**Ing. Herta Gabrielová, CSc.**, graduated from the University of Economics in Bratislava in 1966. She is working in the Economic Institute SAS since 1960; during years 2002 – 2009 she worked as Deputy Director of the Institute. She focuses on analysis of structural changes in the Slovak economy as well as in international context and related economic policies. She participates on the publication *Economic Development of Slovakia* since 1993.

**Ing. Martin Hudcovský**, is employed at the Economic Institute SAS since 2013. Currently, he studies PhD study at the University of Economics in Bratislava. His research focus is primarily on low labour intensity of economic growth. He is a new member in the collective of *Economic Development of Slovakia* co-authors.

**Ing. Veronika Hvozdíková, PhD.**, is employed in the Economic Institute SAS since 2002. Her doctoral studies in external form were completed at the Faculty of International Relations, University of Economics in Bratislava. One of the research areas is the human factor issues in national and interna-

tional context with implication on the competitiveness of the economy and labour market. She participates on publication Economic Development of Slovakia since 2010.

***Ing. Tomáš Jeck, PhD.***, is regular employee of Economic Institute SAS. He completed his doctoral studies at the University of Economics in Bratislava in 2010. His research activity is devoted to the field of innovation development. He is co-author of the publication Economic Development of Slovakia since 2007.

***Ing. Ivana Šikulová, PhD.***, works at the Economic Institute SAS where she also completed post-graduate studies in the World Economy field. Her research focuses on the issues of European integration empathising on functioning of the Euro area and Slovak Republic as its member. In the framework of national economic research she mainly concentrates on relations of other countries with Slovak economy. She is member of co-authors team of the publication Economic Development of Slovakia since 2007.

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Šancová 56, 811 05 Bratislava 1

Phone: 42-1-2-52 49 54 80, Fax: 42-1-2- 52 49 51 06  
E-mail: karol.morvay@savba.sk  
<<http://www.ekonom.sav.sk>>