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Economic Development of Slovakia in 2014 and Outlook up to 2016

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CONTENTS

INTRODUCTION

Another regular annual assessment of Slovak economic development comes at time when there is more optimism in the European economy, whilst some of risk factors that have caused recent debt crisis are still present. At the time of actual economic recovery, chronic problems of the Eurozone have overlapped, but have not been eliminated.

The Slovak economy passed through two bottoms of the same crisis: a deep one in 2009 and shallow one in 2012/2013. There has been reported simultaneous positive development of substantial performance and stability indicators in 2014. The Slovak economy has accelerated its growth, while there has been a number of phenomena that are a bit "new" or "different" compared to current development: Employment has better responded to macroeconomic development, price level has not increased, economic growth was not driven by exporters but by domestic market, fiscal policy ceased to dampen the economy after years. Even insignificant improvements are perceived with optimism after approximately five years of mistrust and uncertainty. A number of phenomena occurred which necessarily brings question whether they are able to persist or if they were just short-term fluctuation in unstable economy.

The analysis of Slovak economic development by Economic Institute, SAS is regularly published since 1993. It evaluates the level of economic development and economic performance, internal and external balance, economic policy, labour and financial markets development as well as measures that have changed economic environment. The conclusion outlines expected development in 2016.

1. OVERALL ECONOMIC DEVELOPMENT

The European economy went through second bottom of recession in years 2012 – 2013 (the first one was at significantly lower level in 2009) and the economy was already on upward direction in 2014 (details e.g. IfW (2015) or Ifo (2015). This fluctuation was observable also in the Slovak economy: economic growth significantly slowed down at the turn of 2012/13, but then accelerated in 2014 (in line with expectations). However, more interesting topic than the actual economic growth acceleration is its accompanying phenomena and mostly this topic is covered in the chapter.

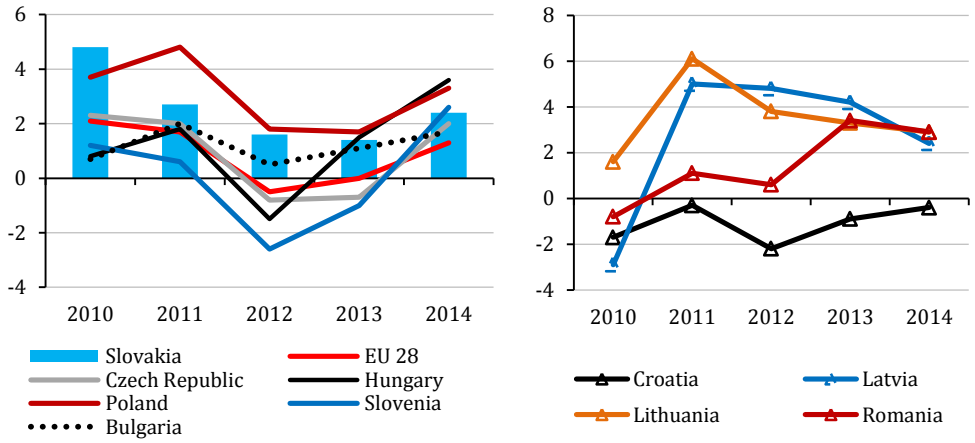
In this chapter, we present comprehensive evaluation focused on relevant issues of economic performance and economic level, macrostability and development of socio-economic parameters. After this overview chapter, there are selected issues of economic development further discussed in following chapters.

The economy growth sped up...but it mainly had different nature

As already outlined above, the economic growth of the European economy accelerated in 2014, as well as the Slovak one within it. The Slovak economy belongs to the group of Central and Eastern Europe (CEE), where overcome of bottom and its following recovery is clearly visible in 2012 and 2013 (Figure 1.1a). However, no such growth acceleration appears in another group of CEE economies (Figure 1.1b). This suggests that acceleration of economic growth could be considered as a common feature of the V4 economies, but not a common feature of development in broader CEE region. At the same time, the Slovak economy has lost its earlier position of "growth leader" in the CEE region. GDP growth rates place the Slovak economy more closely to the middle of all CEE countries (Figure 1.2)

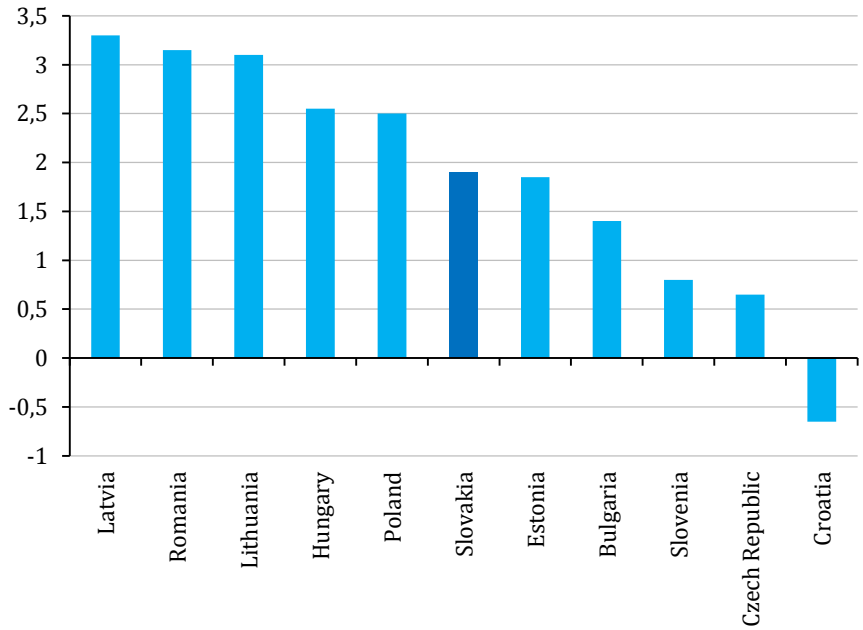
Figure 1.1
Overcoming of „Second Bottom" in CEE Countries (changes in real GDP, %)

a) Group with bottom overcome b) Group with different development



Source: Eurostat database.

Figure 1.2
Average GDP Growth Rate in 2013 – 2014 in CEE Countries



Source: Own calculations based on Eurostat.

However, when evaluating data about changes in performance and economic level, it is necessary to bear in mind ESA 2010 methodology adaptation, which has changed values of variables (value of GDP mostly increased). This needs to be born in mind in case of any analysis confrontation (or any other current analysis) with the older ones. The problem may arise only when comparing data regardless methodology change. Please note that significant part of values and trends being mentioned in the publication cannot be mechanically compared to those ones in similar analysis stated earlier.

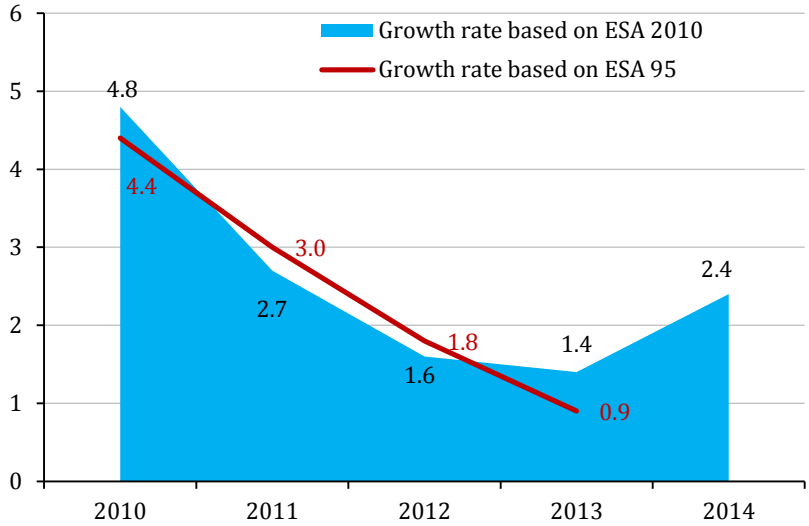
This phenomenon is captured in figures 1.3 and 1.4. The transition from reporting in the earlier methodology (ESA 95) to more advanced one, ESA 2010, has brought increase in nominal GDP in 2013[1] from 1 % to 5 % (the only exception among the CEE countries is Latvia, where adaptation of new methodology has caused decrease of nominal GDP by 0,5 %; see Figure 1.4). Even in more advanced EU economies, the adaptation of ESA 2010 caused shift in GDP values to higher ones (with Luxemburg being an exception). Such methodological change induced by correction of GDP data means, among other things, also:

- all ratio indicators decline when expressed as percentage of GDP;
- there is a risk of misinterpretation of development trends in economic growth (it is evident when e.g. nominal GDP is compared to real GDP growth, see Figure 1.4);
- there is also a risk of misinterpretation of some structural movements in formation and use of GDP. E. g. use of ESA 2010 data decreases export performance of the Slovak economy (ratio of exports of goods and services on GDP) compared to values presented in previous methodology.

Due to risks above, it is important to take into account the methodology change which leads to improvement of national accounts system, when interpreting values on economy performance level.

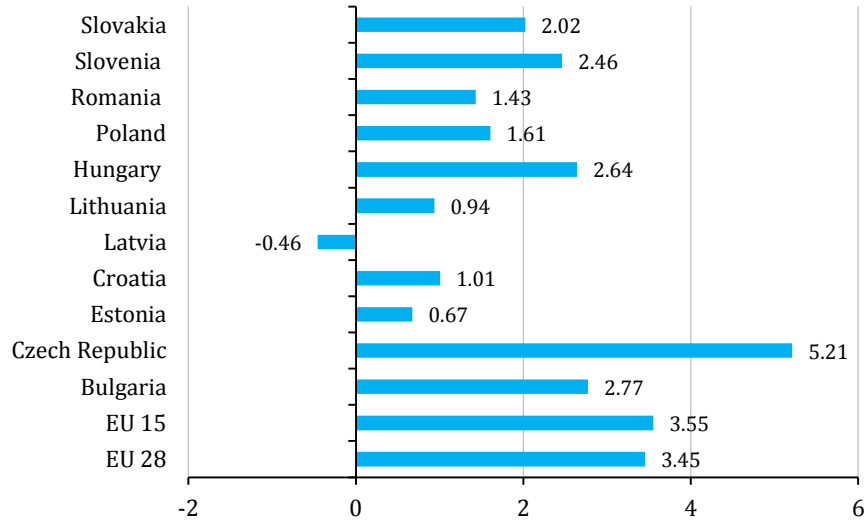
[1]Such comparison of data is possible only till 2013.

Figure 1.3
Differences in Reported Dynamics of GDP by Use of Different Methodologies



Source: Eurostat database.

Figure 1.4
Difference between the Value of Nominal GDP by Use of Different Methodologies for the Year 2013 (%)

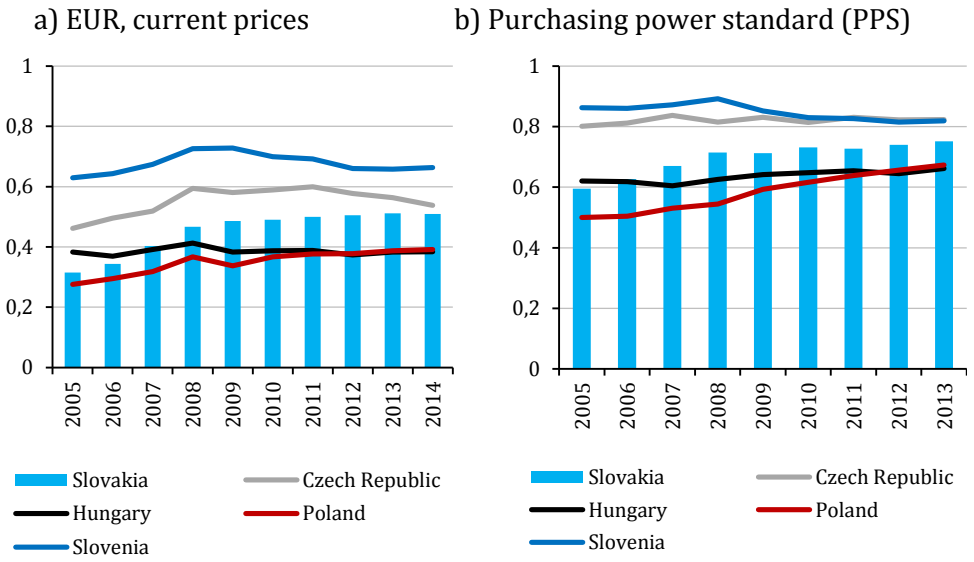


Note: Range (in %) in which use of newer methodology of GDP (ESA 2010) exceeds GDP under previous methodology (ESA 95). The value of GDP under the old methodology was higher only in the case of Latvia.

Source: own calculations based on Eurostat.

The economic level of Slovakia (measured as GDP per capita) reached 50,9 % of the economic level of the EU 28 in terms of current prices in EUR (data for 2014); However, it reached 75.2 % of the EU 28 economic level in terms of purchasing power standard (data for 2013[2]). It is important to state, that regardless the measure used, gap between the performance of the Slovak economy and others economies of CEE with the highest values (Slovenia and Czech Republic – see Figure 1.5a and 1.5b) was decreasing.

Figure 1.5
Development of Relative Economic Level (GDP per Capita) **in CEE Countries; EU 28 = 100**



Source: Eurostat database.

As already indicated, the acceleration of economic growth in Slovakia was associated with significant changes in the nature of growth, but also in changes of other macroeconomic parameters. The acceleration of growth itself is not that interesting phenomenon without consideration

[2]Data expressed in purchasing power standard takes into account differences in the price levels of compared economies and it is more suitable for comparison of economic performance. At the time of this text preparation, however, last available value was for year 2013.

of these phenomena. Among relevant changes in the nature of growth and related macroeconomic parameters can be considered:

- Significant strengthening of domestic demand (both consuming and investing);
- Improvement of several indicators of macroeconomic stability;
- Improvement of employment and income indicators development;
- Transfer of growth to other branches (compared to the previous period).

We pay attention to these four phenomena in the following part of this chapter.

Is this the end of domestic demand misery?

After several years of stagnation or even decline in components of domestic demand, in 2014, the domestic demand was driving force of economic growth. Vice versa, an external demand (represented by export of goods and services), which determined economic growth of Slovakia in past years did not play such an important role. As shown in Table 1.1, the share of domestic demand contribution to GDP growth was negative in years 2012 and 2013: thus the GDP growth was accompanied by a decrease in domestic demand[3] (in other words: the GDP grew despite domestic demand was declining, as a result of strong growth impulse provided by external demand). In 2014, the change is very significant: a unit of GDP could be accounted with 1.14 units of domestic demand change (bottom row of Table 1.1). This means that domestic demand was the sole driver of GDP growth (when evaluating GDP from its usage side).

[3]In our last years' analysis (Morvay et al., 2014), we have pointed out that "misery of domestic demand continued" and stated that "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)… a 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…by disaggregation of domestic demand into individual components, extraordinary ratio of household consumption dynamics (CH) to GDP dynamics becomes clearly visible…From all countries included in comparison, 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)." (p. 13).

Another different thing is clear from the data in Table 1.1: There are concentrated data only for those CEE countries, which experienced positive economic growth in 2013 and 2014 (there are excluded economies where no growth occurred as we are unable to evaluate changes in nature of economic growth). In each of these CEE countries, the role of domestic demand has been underlined. In 2014, the share of domestic demand growth to total GDP growth was higher in all cases compared to previous year. Thus in all CEE countries which achieved economic growth in 2013 and 2014, such growth was supported by enhanced domestic demand expansion.

Table 1.1
The Share of Domestic Demand Growth to GDP growth

	2011	2012	2013	2014
Bulgaria	0.06	6.80	-1.48	1.65
Estonia	1.46	1.00	0.55	2.22
Latvia	2.12	0.54	0.77	0.85
Lithuania	0.97	-0.05	0.86	1.53
Hungary	-0.10	1.90	0.72	1.09
Poland	0.82	-0.21	0.14	1.37
Romania	1.07	-0.76	-0.27	0.97
Slovakia	0.39	-2.56	-0.01	1.14

Note: Year-on-year growth of domestic demand in current prices in EUR / year-on-year growth of GDP in current prices in EUR.

Source: own calculations based on Eurostat.

By closer look at domestic demand in the Slovak economy, we can observe positive turn in development of all three basic components (Table 1.2). However, especially significant was the turn in gross fixed capital formation. This means after two years of decline in investment activity, the volume of the fixed investments increased in 2014.

A significant turn in gross fixed capital formation took place in all the V4 countries. It was an expected phenomenon after previous attenuation of investment activity supported by improved expectations and prospects for future development.

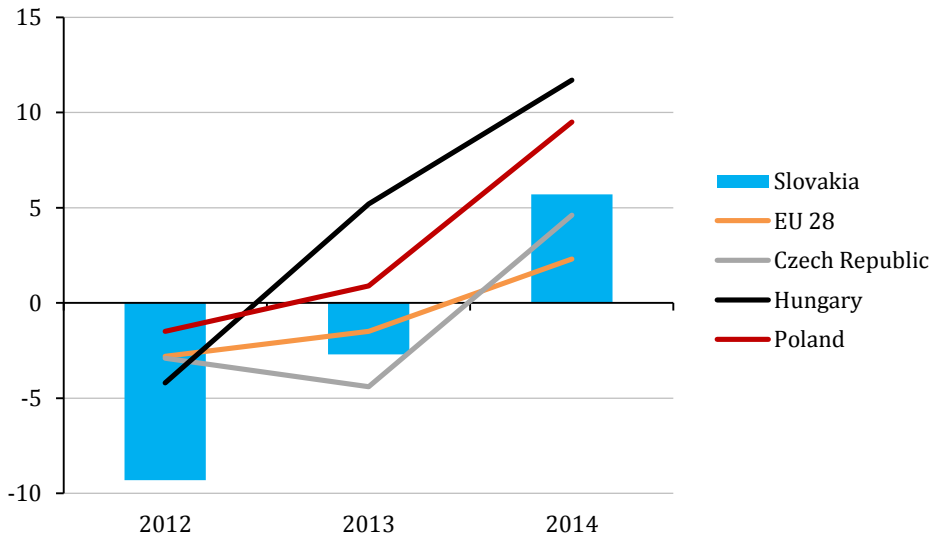
Table 1.2
The Characteristic of Changes in the Components of Domestic Demand in the Slovak Economy

	2010	2011	2012	2013	2014
Domestic demand total					
Y-o-Y change in volume	*4.3*	*1.0*	*-4.1*	*0.0*	*3.0*
Share on GDP growth	0.07	-0.15	-0.23	0.30	0.32
Final consumption of households					
Y-o-Y change in volume	*0.1*	*-0.7*	*-0.4*	*-0.7*	*2.2*
Share on GDP growth	0.01	-0.14	-0.15	-0.29	0.50
Final consumption of government					
Y-o-Y change in volume	*1.7*	*-2.1*	*-2.0*	*2.4*	*4.4*
Share on GDP growth	0.33	1.04	-1.41	-0.40	0.49
Gross fixed capital formation					
Y-o-Y change in volume	*7.2*	*12.7*	*-9.3*	*-2.7*	*5.7*
Share on GDP growth	0.39	-2.56	-0.01	1.14	0.39

Note: Year-on-year changes in volume are in constant prices (chain linked of volumes) Shares on GDP growth are expressed in same way as in Table 1.1

Source: own calculations based on Eurostat.

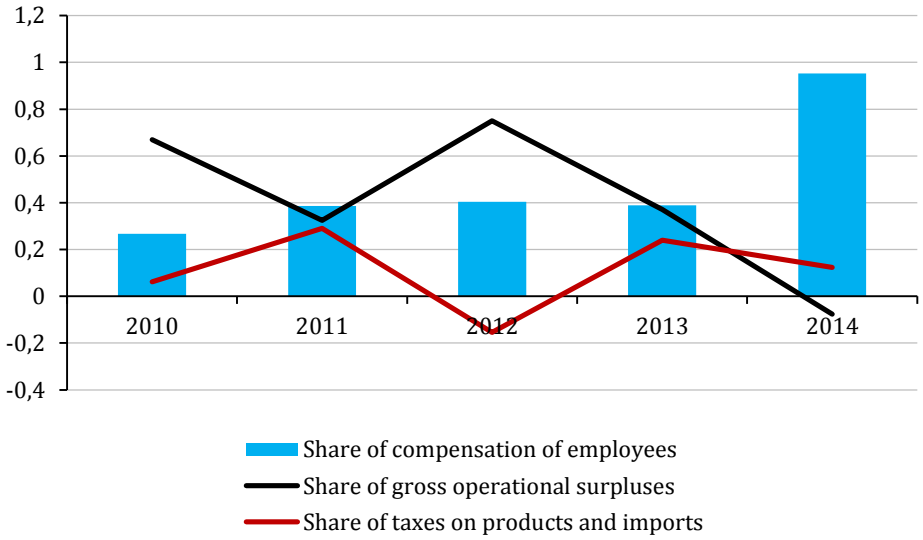
Figure 1.6
Year-on-year Changes in Gross Fixed Capital Formation
(%, based on real values)



Source: Eurostat database.

Different look at the structure of GDP growth (using structure of generated revenues) reveals extremely high share of employees compensations to GDP growth. Such share is exceptional in the environment of the Slovak economy – the share of employees compensations used to be very low in the past years [4] (Figure 1.7). High share of employees compensations to GDP growth appears to be related to relatively strong employment growth along with enhanced growth of wage levels (see other chapters, mainly the one elaborating labour market).

G r a f 1.7
The Share of Selected Types of Revenue to GDP growth



Source: Own calculations based on Eurostat.

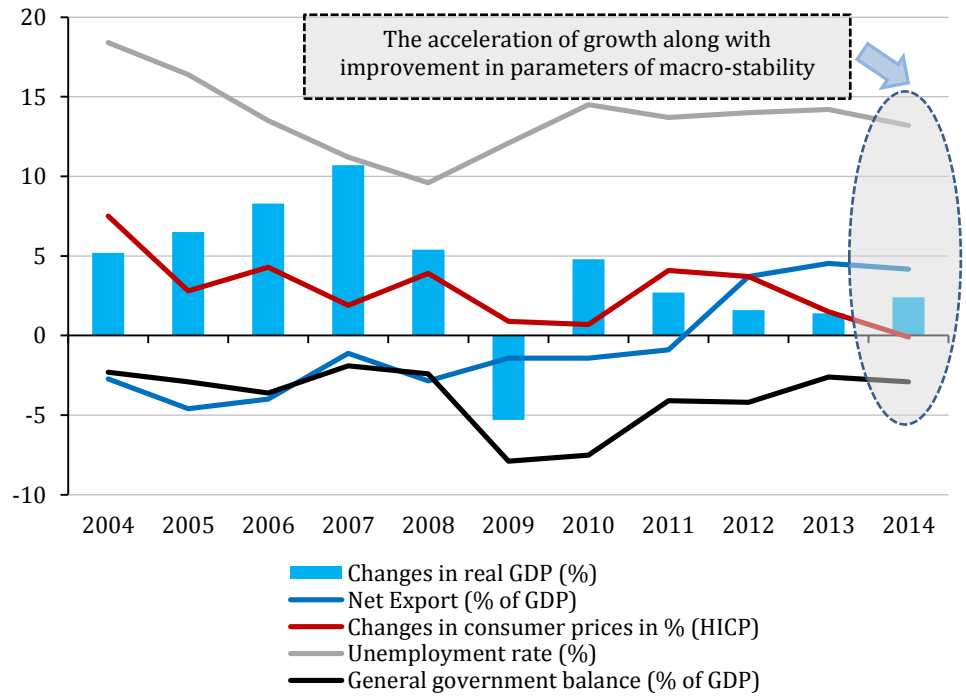
Enhanced macro stability; in some areas even too much

Basically, a desirable and positive accompanying feature of enhanced economic growth could be considered the improvement in several parameters of macroeconomic stability (balance), as shown in Figure 1.8.

[4] This phenomenon is also interesting due the fact, that acceleration of economic growth use to be associated with decrease in the share of compensation of employees on GDP (so called "anti-cyclical behaviour of wage quota). Therefore, increase of GDP growth pace associated with increase in share of compensation of employees is an unusual phenomenon caused by specific situation described in chapter "Labour market".

In 2014, there was a decline in the unemployment rate, a decrease in inflation rate (close to the deflation threshold), the general government deficit was kept in acceptable limits and export and import of goods and services remained positive (net export). An enhanced macroeconomic stability can be generally considered as a sign of improved quality of economic growth. However, an interpretation of complete absence of inflation is problematic. Despite initial fears of economic recovery incompatibility with zero inflation (or even deflation), such a low inflation was rather growth supporting than harming. Postponed consumption (due to uncertainty in the economy) combined with growing incomes, improved expectation and retreat of inflation helped to the recovery of households consumption. It was confirmed, that zero inflation (or weak deflation) does not necessarily have to be a factor preventing economic recovery (more details in chapter "Price development".)

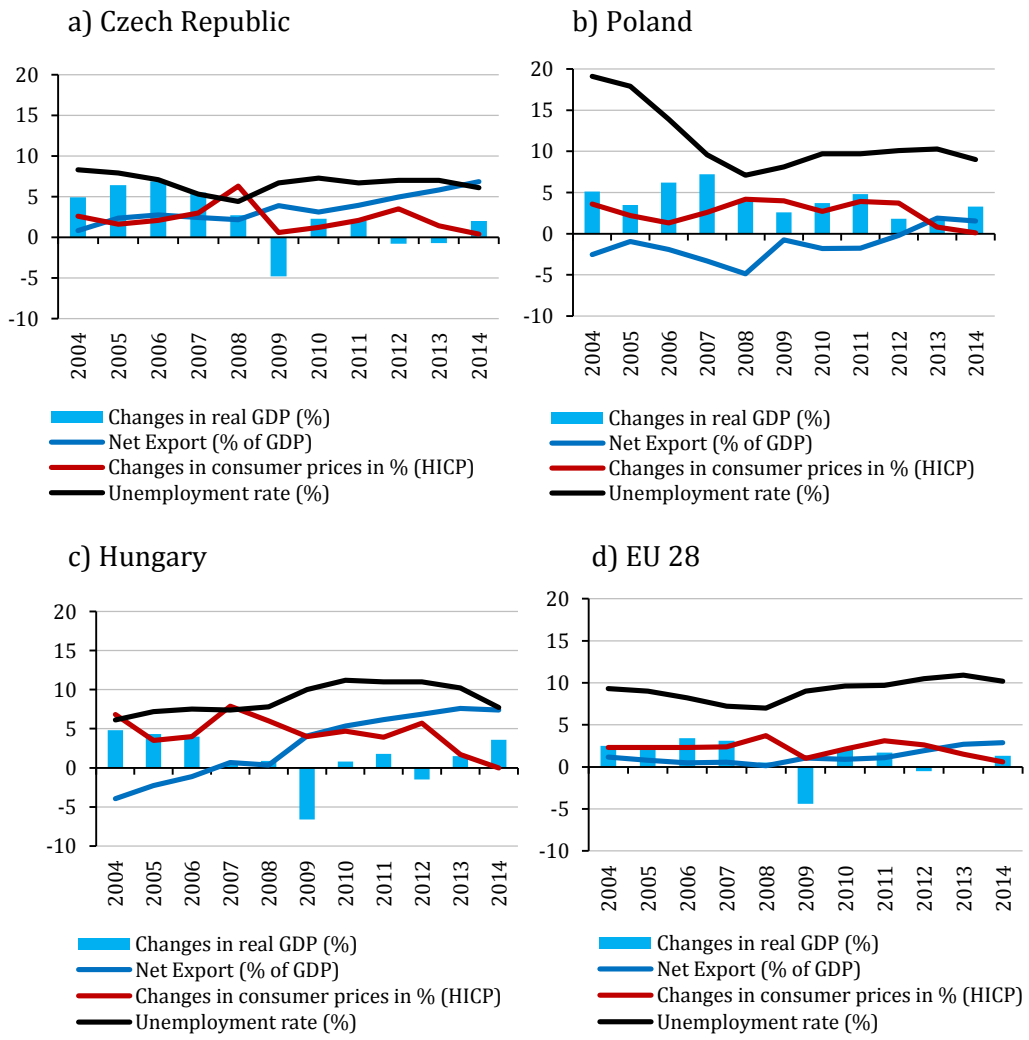
Figure 1.8
The Economic Growth and Selected Parameters of Macro-stability in the Slovak Economy



Source: Eurostat database, MF SR and own calculations.

It is remarkable, how similar is the development of the V4 economies in macro-stability area in 2014. We can observe that various trends occurred in the whole group of the V4, such as significant disinflation (retreat of inflation close to the deflation threshold), reduction of unemployment rate and surplus in the balance of goods and services (Figure 1.9). This represents strengthening of the macroeconomic balance in the whole V4 region (but the situation is similar for whole EU 28).

Figure 1.9
The Economic Growth and Selected Parameters of Macro-stability



Source: own calculations based on Eurostat.

Better impact on employment and income than expected

In 2014, an important feature of economic developments was the improvement of labour market and income growth parameters. In particular, the employment growth was above expectations. In the past, the employment growth was only weakly tight to the growth performance of the economy; thus it was quite surprising to see that acceleration of economic growth in 2014 was accompanied by relatively strong growth of employees. The economic growth remained despite an acceleration rather low (by the standards of the Slovak economy) and far below the levels which used to form so-called threshold for employment growth (see e.g. Hudcovský, 2015 or Morvay, 2012).

We can presume that an ability of the Slovak economy to expand by spasmodic increases of labour productivity with little involvement of additional employees is gradually diminishing. Such capacity was primary located in export-oriented industries with dominant global companies. The potential for such growth must necessarily fade out along with the closure of so-called technological gap (the reduction of technology lag). Temporary return of such growth can be imaginable only in case of new large multinationals arrival (regarding to their technology and market, Slovak output can expand along with expansion of productivity with relatively low employment growth). However, this was not the model of economic growth in 2014. As proven earlier above, the growth was invoked primarily by domestic demand and not expansion of exporters. In comparison to previous years, the growth occurred in other branches of economy (see below), which are by the nature of their business activities more labour demanding. Therefore, their growth is more labour intensive. After considering all these contexts, the growth of employment accompanied by relative low GDP growth is not so surprising.

The recovered growth of households consumption (considered as indicator of material) can be induced by higher income of household sector or a higher marginal propensity to consume. In case of Slovak economy, both reasons were fulfilled.

1. The year-on-year growth of disposable income has increased. Such increase can be attributed to more favorable development of employment

and wages. The share of employees' compensations to increase of current households' income proves this fact. (Figure 1.10)

2. The marginal propensity to consume has increased (from additional unit of household income, the higher share was consumed). That is indicator of better expectations (retreat of caution) and expression of delayed consumption compensation.

So the financing source of households consumption increased along with share which households spend from additional income on consumption.

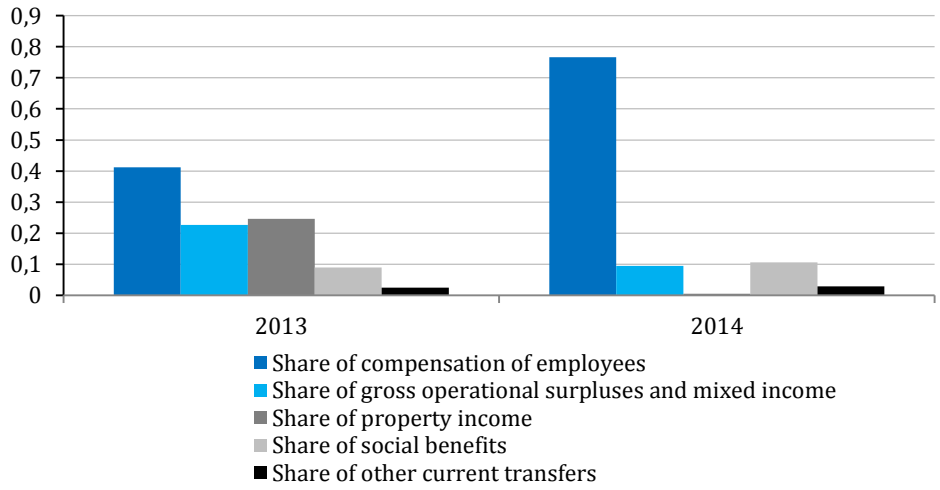
Table 1.3
Selected Parameters of Income, Consumption and Savings

	2011	2012	2013	2014
A) Change in disposable income (EUR mill.)	784.06	625.36	902.99	1 643.42
B) Change in final consumption of households (EUR mill.)	1 229.39	1 186.62	225.02	872.40
C) Change in gross savings (EUR mill.)	-445.33	-561.27	677.99	771.00
Marginal propensity to consume (B/A)	1.567	1.897	0.249	0.531
Marginal propensity to save(C/A)	-0.568	-0.898	0.751	0.469

Note: Change represents year-on-year increase or decrease.

Source: own calculations based on Statistical Office of SR.

Figure 1.10
The structure of current income growth in household sector



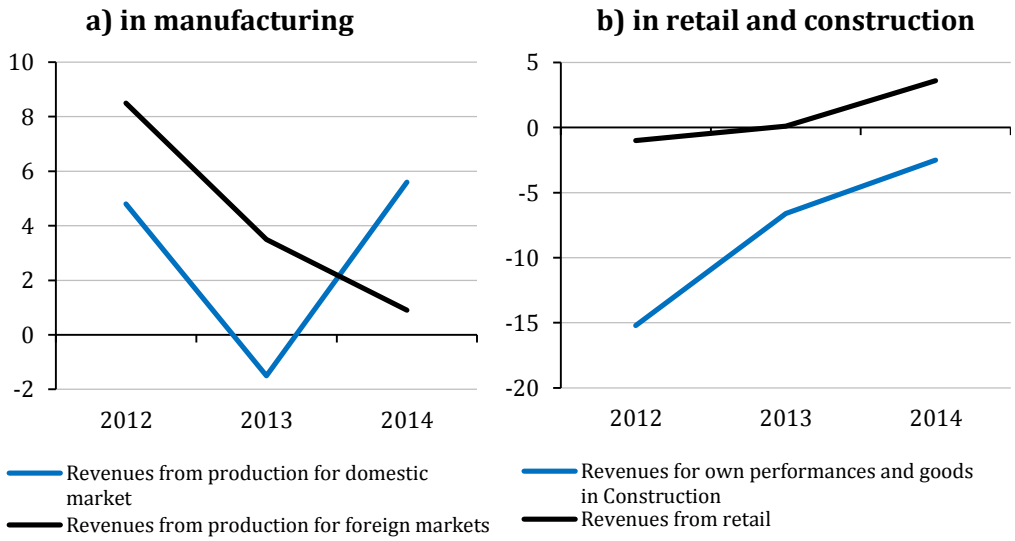
Source: own calculations based on Statistical Office of SR.

Growth got into other branches

The changed structure of demand naturally reflected also in the dynamics of output of sector categories. As at the time of this text preparation, there were not sufficient detailed data about GDP were available, we utilize the data on the development of the revenues.

The development of revenues was very different in industry based on relation to the domestic market or the foreign one. The revenues in the domestic market rose sharply (which relates to the recovery of domestic demand mentioned earlier) and the growth of foreign market revenues was slowing down (Figure 1.11). Also here, it is obvious that it was not the growth based on exporters (which frequently appeared in the past of Slovak economy). The growth of final household consumption mentioned earlier has its reflection in the improvement of retail revenues.[5] Obviously, retail was a branch, which flourished in 2014. In construction, the drop being present in former years was just reduced.

Figure 1.11
The Development of Revenues in Selected Branches
(Year-on-year changes; %, constant prices)



Source: Eurostat database, Statistical Office of SR database.

[5]Obviously, retail revenues does not mean the same thing as final consumption of households. However, the overlap between these categories is apparent.

A closer look at development in the industry shows that growth was driven by branches that produce goods intended for intermediate consumption and durable consumer goods (in both cases, the expansion was in revenues from domestic market). Less favorable was the development of those sectors that produce capital goods and non-durable consumer goods (e.g. negative revenue development of food production).

In conclusion, economic growth formed in 2014 as such, brought most benefits to manufacturers oriented on domestic market and retail production. The development was less favorable for producers who are export-oriented, as well as for construction.

Table 1.4
Revenues in Manufacturing by Purpose of Goods (year-on-year changes in %, data adjusted by number of work days)

	2012	2013	2014
Revenues of goods for intermediate consumption			
Domestic market	-3.2	-0.1	12.2
Foreign market	1.1	-0.7	3.0
Revenues from the production of capital goods			
Domestic market	15.2	7.0	2.3
Foreign market	15.4	6.8	2.5
Revenues of durable consumer goods			
Domestic market	43.3	-30.3	10.6
Foreign market	5.9	-0.2	4.6
Revenues of non-durable consumer goods			
Domestic market	4.5	-3.3	-2.2
Foreign market	13.4	-7.1	-3.7

Source: Eurostat database.

Summary table 1.5 provides selected parameters of macroeconomic development (in terms of performance, stability and socio-economic development). The main point of the table, and whole chapter as well is current improvement of economic dynamics and accompanied indicators of stability and socio-economic development. The whole range of these phenomena are discussed further in following chapters of this publication.

Table 1.5
Socio-economic development of Slovakia in 2005 – 2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
	Indicators of economy performance									
Index of real GDP ; sppy = 100[1]	106.5	108.3	110.7	105.4	94.7	104.8	102.7	101.6	101.4	102.4
Relative economic level (GDP per capita in PPS; EU 28 = 100)	59.5	62.7	67.1	71.4	71.2	73.1	72.7	74.0	75.2	
Relative economic level (GDP per capita in EUR; EU 28 = 100)	31.5	34.4	40.3	46.7	48.6	49.0	50.0	50.6	51.1	50.9
Index of domestic demand; sppy = 100	108.4	106.4	106.6	105.9	92.7	104.3	101.0	95.9	100.0	103.0
Real labour productivity change; index sppy = 100[2]	104.8	106.1	108.4	102.2	96.6	106.4	100.9	101.6	102.2	101.0
	Indicators of stability									
Inflation rate; %[3]	7.5	4.3	1.9	3.9	0.9	0.7	4.1	3.7	1.5	-0.1
General government balance/GDP; %	-3.3	-3.4	-1.9	-2.2	-8.0	-7.7	-5.1	-4.3	-2.9	-2.6
Share of government consumption in GDP; % (curr.p.)	18.1	18.5	16.8	17.1	19.7	19.2	18.3	17.8	18.1	18.5
Net lending (+)/borrowing (-)	-6.5	-7.9	-5.2	-5.4	-1.7	-2.1	-0.9	3.1	3.9	
Net exports of goods and services / GDP; % (curr.p.)										
	Indicators of social development									
Annual index of employment, sppy = 100[4]	100.3	103.8	102.4	103.2	97.2	98.0	101.9	100.6	100.0	101.4
Change in number of employees; in thousands[4]	45.8	85.2	55.9	76.5	-68.0	-48.3	.[5]	13.7	0.3	33.7
ϕunemployment rate; %[4]	18.1	13.3	11.0	9.6	12.1	14.4	13.6	14.0	14.2	13.2
Annual change of real wages; %	2.5	3.3	4.3	3.3	1.4	2.2	-1.6	-1.2	1.0	4.2
Annual change of disposable income of households; %	5.9	4.3	10.2	5.7	0.4	2.9	-2.1	-2.4	1.7	3.6
Index of real household consumption / population	5.8	5.8	7.5	5.8	-0.8	-0.1	-0.1	-0.6	-0.9	2.1
Share of public expenditure on social protection in GDP; %	12.1	12.3	10.6	10.2	12.3	12.2	12.0	12.1	12.3	

[1] Calculated by chain-linked volumes, ESA 2010, sppy – same period of previous year. [2]real GDP per 1 employee. [3] Based on Harmonized Index of Consumer Prices (HICP); sppy = 100. [4]Based on Labour Force Survey (LFS). [5]In 2011, the number of employees was corrected, so it is not possible to calculate year-on-year increase of employees in period 2010/2011. *Source:* Statistical Office of SR, MF of SR, Eurostat database.

* * * *

Probably the most important of what happened in 2014 in the Slovak economy is that parallel slight acceleration of economic growth occurred with favorable changes in macro-stability and especially the parameters of employment and income. Thereby, we do not consider reached level as satisfactory or development of these indicators to be smooth; for now, we can consider it as simultaneous development of some indicators in favorable direction. The nature of economic growth has changed in comparison to previous years: enhanced growth was driven by domestic market (domestic demand), while in the previous periods was dependent on external demand. Following chapters provide partial views on the changes in development trends. The outlook at the end of the publication aims to provide answer to the question whether such trends can be sustainable or they will change in near future.

2. QUALITATIVE FACTORS OF ECONOMIC DEVELOPMENT

Technological and innovative development of the 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 the economic development will be crucial condition of national competitiveness enhancement, higher evaluation of labour, the economic growth and employment once the price and costs factors will be exploited.

T a b l e 2.1
Selected Indicators of Research and Development, 2008 – 2013

	2008	2009	2010	2011	2012	2013
Funding of R&D:						
Gross R&D expenditure (% GDP)	0.46	0.47	0.62	0.67	0.81	0.83
Divided by sector of performance (% GDP):						
Government sector	0.15	0.16	0.19	0.18	0.20	0.17
Business enterprise sector	0.20	0.20	0.26	0.25	0.34	0.38
Higher education sector	0.11	0.12	0.17	0.23	0.28	0.27
Divided by source of funds (% GDP):						
Government sector	0.24	0.24	0.31	0.33	0.31	0.32
Higher education sector	0	0	0	0.01	0.01	0.02
Business enterprise sector	0.16	0.17	0.22	0.23	0.31	0.33
Abroad	0.06	0.06	0.09	0.1	0.15	0.15
R&D personnel[1]	23 641	25 388	28 128	28 596	28 880	27 823
Outputs of R&D:						
Domestic patent applications[2]	167	176	235	223	168	184
Number of patent applications[2] per 1,000 R&D employees	7.1	6.9	8.4	7.8	5.8	6.6
Number of EPO applications	54	41	53	85	52	51
Number of articles in top 10% journals[3]	577	611	633	641	723	660

[1] Head Count by 31st December.
[2] Domestic patent applications filed at the Industrial Property Office of the Slovak Republic.
[3] Number of scientific papers in 10 % of most cited world journals by citing database SCOPUS.

Source: IPO SR (2015); OECD (2015); Yearbook of S&T (2014); EPO (2015).

Table 2.1 shows the development of selected input indicators (expenditures on R&D and R&D employees) and output indicators (domestic patent applications and research papers) of Slovak R&D in 2008 – 2013.[6]

The key indicator of innovative development, gross expenditures on R&D experienced some stagnation in its growth, amounting to 0.83 % of GDP[7] in 2013. Comparing to relatively optimistic year-on-year growth in 2011/2012, it meant weakening of dynamics in desired increase of R&D expenditures. Lagging of Slovakia in R&D funding persists and remains one of the main limiting factors of innovative development. In 2013, the intensity of Slovak R&D was only 41 % of the EU average.

The structural weakness of Slovak scientific research system is the high share of public sector (in terms of funds and sources of gross expenditures on R&D). The positive of 2013 (as well of 2012) was continued growth of expenditures share allocated to business sector (0.38% of GDP), while both components of the public sector (government + higher education sector) experienced a fall in R&D intensity.

In terms of sources funding, the share of two sectors – business and non-business (government, public and higher education) gradually equalized in 2013. In 2013, after long time (last in 2003), the share of business funds for R&D (40 %) are higher than funds from public resources (39 %). The share of foreign sources of R&D funding is the same as in 2012; 0.15 % of GDP, being still relatively low value among the EU countries. A potential of foreign resources increase might be seen in higher rates of international cooperation utilization of Slovak R&D and in increased inflow of business R&D investment from abroad (average share of foreign funds in R&D financing in the EU is 0.19 % of GDP; in small open economies of the EU is this value placed higher). The share of universities resources on R&D still remains low, due to their status, funding methods, as well as insufficient ability to create their own resources (e.g. commercialization of research results) that could be used on their own R&D.

[6] Some indicators published in this chapter are 2 years lagged.

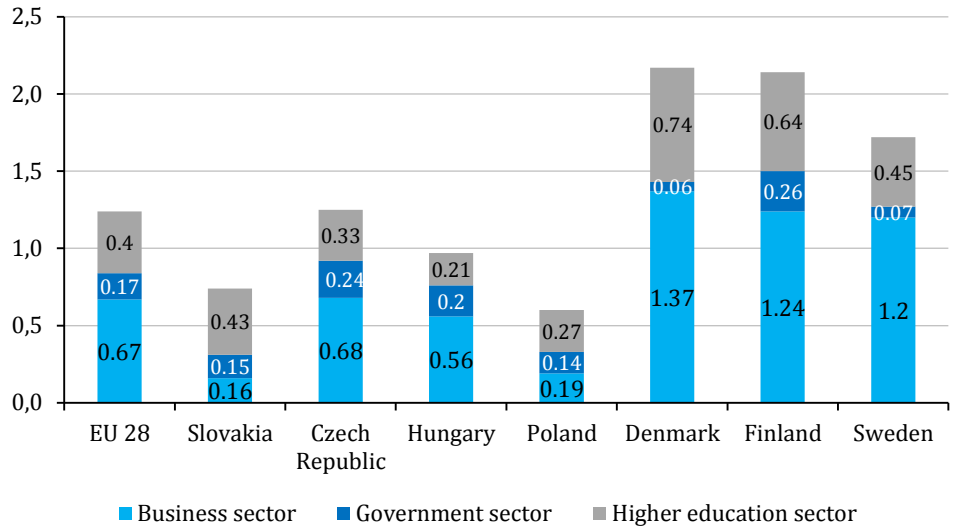
[7] This value is provided by Eurostat, Statistical Office of SR in Yearbook of Science and Technology provides a slightly higher intensity; 0.85 %. In this chapter, we utilize data reported by Eurostat.

Also in this evaluation year, the dominance of the EU funds in the financing of Slovak R&D persists mostly due to implementation of Operational Programme Research and Development and Operational Programme Competitiveness and Economic Growth. The investments mainly flow into physical infrastructure development and reducing deficits of instrument and ICT equipment. Interventions are focused on the development of large number of existing or new institutional platforms of R&D (centers of excellence, competence centers or science parks). The result is, in terms of Slovakian circumstances, supernumerary institutional R&D network.

Another key factor, beside expenditures on R&D, indicating potential for development as a driver of innovation is the number of scientific researchers in the economy. A negative phenomenon of 2013 was the decline in R&D personnel, mainly due to the headcount reduction in natural, technical, medical, pharmaceutical and agricultural sciences. On the other hand, the number of employees increased in the social and human sciences. The decrease in total number of researchers was also reflected in relative decline of its share in employment (5 % decrease compared to 2012; the EU recorded increase by 2 %). Figure 2.1 shows the proportion of researchers on total employment in selected countries of the EU 28. The characteristic feature of the Slovak economy, beside low proportion of researchers in total employment, is also the sector of higher education being disproportionately represented. The share of business R&D expenditures in employment is still the lowest one in V4.

The main limiting factor, in terms of potential innovative performance is long-term poor patenting activity. The patenting activity measured by the number of domestic patent applications slightly increased in 2013 compared to 2012. The number of applications was 184, reflecting the increase in patent productivity, which came to 6.6 domestic patent applications per 1,000 R&D staff. R&D performance measured by the number of publications in the 10% most cited scientific journals decreased, however, it is still the second highest one in past six years.

Figure 2.1
R&D Employees in Slovakia and Selected Economies of the EU in 2013 (total employment share)



Source: Own compilation based on Eurostat database (2015).

Among key determinants of the economic development belongs education. In particular, a higher education is a prerequisite for quality human capital, thus also improvement of innovation performance.

Table 2.2 lists selected non-financial indicators of the education system. The first two indicators represents *Europa 2020* objectives – reduction of early leavers in schools and increase the share of population with tertiary education. A certain downside is slowly increasing population of early school leavers, it was 6.6 % in 2014 (preliminary data). The target value for Slovakia is to stabilize this value on 6 % by 2020. On the contrary, the growing trend was experienced in the share of 30 – 34 years population with tertiary education (27 % in 2014; preliminary data). The target value for Slovakia (and for the EU 28 as well) is 40 %. In terms of potential human capital creation, it is important that the economy would have a high proportion of graduates in mathematics, natural and technical sciences. In this area, Slovakia still slightly lags behind the EU average (90 %). Slovakia is among the countries with a high proportion of university students studying in another European country. The share of

Slovakian students studying abroad is several times higher than the EU average (SVK 14.3 %; EU 3.5 %). Although we have data only up to 2012, a growing trend is evident. Such a high proportion is specific within the V4 (other V4 countries have the share even less than the EU average).

Table 2.2
Selected Non-financial Indicators of Education

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Share of population with early school leave in cohort 18 – 24 years (%)									
EU 28	15.3	14.9	14.7	14.2	13.9	13.4	12.7	11.9	11.3
Slovakia	6.6	6.5	6	4.9	4.7	5.1	5.3	6.4	6.6
Share of 30 – 34 years old population with tertiary education (%)									
EU 28	.	.	31.2	32.3	33.6	34.7	35.9	36.9	37.6*
Slovakia	.	.	15.8	17.6	22.1	23.2	23.7	26.9	27.0*
% of mathematic, nature and technological sciences (ISCED 5-6) in total graduates (%)									
EU 28	22.3	22.2	21.9	22.1	22.1	22.5	22.8	.	.
Slovakia	23.6	23.4	20.8	20.6	20.8	20.3	20.6	.	.
% of students studing abroad									
EU 28	2.6	2.7	2.7	2.8	3.1	2.9	3.5	.	.
Slovakia	10.2	10.2	10.7	11.4	12.5	13.4	14.3	.	.
Participation in lifelong education (% of 25 - 74 years old)									
EU 28	8.5	8.3	8.4	8.3	8.1	7.9	8.1	9.4	9.5*
Slovakia	3.7	3.6	3.0	2.5	2.5	3.5	2.7	2.6	2.6*

Source: Eurostat database (2015), **.** – data not available.

In the long term, this cound mean a risk and significant weakening of development factors in Slovakia (brain drain). Slovakia lags behind the EU 28 in participation on lifelong education (27 % of educated among 25 – 74 years old). This could be a barrier not only for innovative progress and desired structural changes, but also for solving the problems of the labour market.

The development of knowledge based society is largely subject to dynamic use of ICT in all spheres of society. Table 2.3 presents some indicators of ICT penetration into society (households, businesses and public administration). The number of households with internet access increased in Slovakia. In 2014, the growth stopped at the same value as in 2013, 78 % is a value very close to the EU 28 average. Digital literacy, which can be derived from the share of citizens who frequently (daily) use internet, slightly grew in 2014 to level of 62 %, almost reaching the

EU 28 average (65 %). In terms of new ICT infrastruction creation, Slovakia got closer to the EU 28, when number of households with access to broadband internet was 76 % (the EU average is 78 %).

T a b l e 2.3
Selected Indicators of ICT penetration into Society (%)

	2008	2009	2010	2011	2012	2013	2014	EU in 2014
Share of households with Internet access	58	62	67	71	75	78	78	81
Share of citizens who regularly use the Internet	44	49	58	56	60	61	62	65
Share of households with broadband Internet connections	35	42	49	55	72	70	76	78
Share of citizens who use the Internet to interact with public administration	40	38	50	48	42	33	57	47
Share of citizens who use the Internet banking	24	26	33	34	40	39	41	44
Share of citizens who use the Internet for e-commerce	13	16	19	23	30	30	31	41
Share of business revenues from e-commerce in total revenues	8	11	11	16	12	18	13	15

Source: Eurostat database (2012).

ICT use in the business sector, measured as the share of business revenues from e-commerce in total revenues decreased to 13 % in 2014. However, we may conclude that use of ICT in business sphere in Slovakia (in internal processes, customer or public administration communication) is relatively broad and in comparison to the EU 28 is above average standards. In 2014, ICT use in Slovakia prevails in business sector rather than in households.

In the annual assessment of national competitiveness, the World Economic Forum (WEF, 2015) also evaluates qualitative factors of competitiveness – education, technological readiness, and innovation. According to latest report of WEF about overall competitiveness, Slovakia ranked 75th out of 148 countries and again, after one year outage returned back to a group of economies whose development is according to WEF methodology driven by innovation (a group of 37 countries). Slovak higher education and training ranked 56th (improvement by 2 ranks), Technological

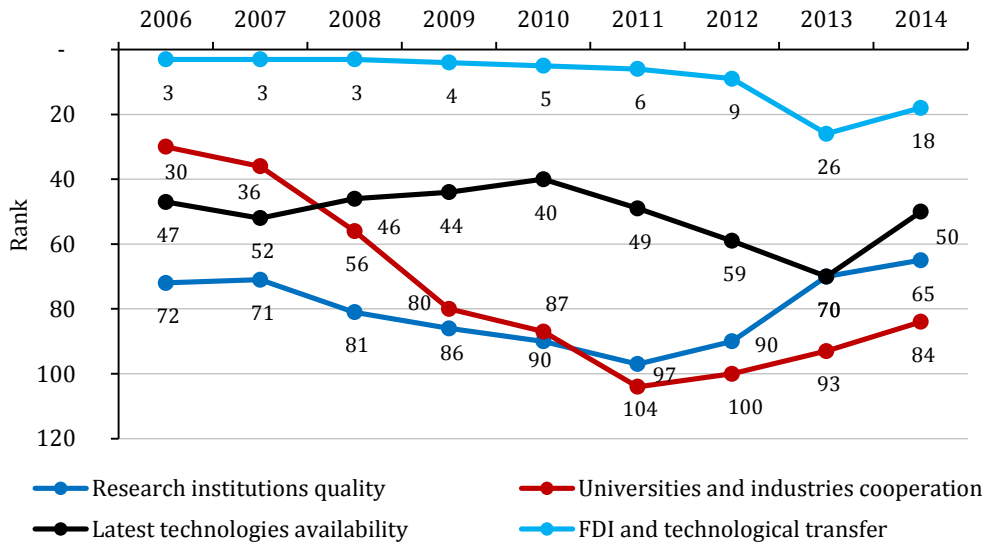
readiness 52nd (same as in 2013) and Innovation 78th (improvement by 17 ranks). Within the higher education and training quality pillar, the highest-ranking indicators were Internet access in schools (31st), Availability of specialized research and training services (45th) and education enrollment rate (51th). The lowest ranking indicators were Quality of education system (125th) and Quality of management schools (102nd). In the Technological readiness pillar, significant ranking improvement was in FDI indicators and technology transfer (18th, improvement by 7 ranks). Relatively well performing ranking indicator was Internet use (26th) and Number of broadband mobile internet (36th). In the Innovation pillar, Slovakia had relatively good international position in PTC patents (39th) and Quality of scientific research institutions (65th). The lowest ranking indicators of innovative development were Government procurement of advanced technology products (117th) and Innovative capacity (89th). With regards to the Government procurement of advanced technology products being an active innovation policy instrument, Slovakia ranks among developing economies. In most indicators about innovation, Slovakia ranks in worse part of evaluated economies. On the other hand, Technology transfer of FDI is the best evaluated factor, from the ones listed above. This indicates ongoing model of technological and economic catching up process of the Slovak economy.

Figure 2.2 shows the evolution of selected indicators of innovation and technological development in Slovakia by WEF.

The basic overview of the Slovak economy structure in terms of technology and knowledge intensive factors is provided in Table 2.4. Despite the lack of (quantitative and qualitative) national factors (R&D/education), we can observe quite comparable structure in some ways of the Slovak economy. In recent period it was mainly the employment in high/medium-high industries that reached/outperformed the EU 28 average. The distance between the Slovak export oriented industries with high level technology decreased compared with the EU 28 average (52 % in 2012 to 62 % in 2013). The share of knowledge-intensive activities (i.e. industries with at least 33 % share of university graduates), which is one of

national objectives of the Europe 2020 was at 85 % level of the EU 28 average.

Figure 2.2
Development of Some WEF Qualitative Indicators of the Slovak Economy



Source: WEF (2015).

Table 2.4
Selected Indicators of Technological Intensity in Slovak economy

		2008	2009	2010	2011	2012	2013
Knowledge intensive activities (% of total employment)	EÚ 28	34.0	35.0	35.2	35.5	35.6	35.6
	Slovakia	28.0	29.1	30.3	30.5	29.8	30.1
Knowledge intensive activities – Business services (% of total employment)	EÚ 28	13.2	13.4	13.4	13.6	13.8	13.8
	Slovakia	10.0	10.1	10.1	10.4	10.1	9.6
Employment in high level technology sectors (% of total employment)	EÚ 28	3.7	3.7	3.7	3.8	3.9	3.9
	Slovakia	3.6	3.5	3.8	4.1	4.0	3.6
Employment in sectors with high and medium-high technology (% of total employment)	EÚ 28	5.9	5.6	5.6	5.6	5.6	5.6
	Slovakia	10.2	8.6	8.6	9.7	10.2	9.8
Export industries with high technologies (% of total exports)	EÚ 28	15.4	17.1	16.1	15.4	15.7	15.3
	Slovakia	5.2	5.9	6.6	6.6	8.2	9.5

Source: Eurostat (2012).

* * * *

When evaluating the previous period, even now, we cannot state any significant change in the development of qualitative factors of the economic development. The negative was a stagnation in the growth of R&D share and decline in R&D personnel (in absolute and relative terms). The unsuitable structure of R&D personnel with weak representation of business sector is persisting structural deficiency of Slovak R&D. A continuing moderate growth of the business sector in R&D funding might be the beginning of changes in structure of R&D funding. However, the desired effect will not be achieved without an absolute expenditure growth (either in business sector or total one). A continuing convergence can be observed in the field of ICT penetration. In terms of knowledge and technological intensity of the Slovak economy, a positive development was noted in share of knowledge-intensive activities and export industries with high technology. There is also a positive situation in employment within high and medium-high technology sectors. Such relatively favorable structure is rather due to the impact of FDI than the national quality factors. In 2014, the economic development indicates (changing the nature of economic growth sources or decline in FDI inflows) possible weakening of existing innovation and technological catching up factors – imports of complete technologies from abroad. This can create a pressure on efficient domestic R&D and innovation system, which should become one of the key factors of the economic growth.

3. EXTERNAL ECONOMIC RELATIONS

The development of economic transactions between residents of Slovakia and the Rest of World (RoW) residents did not bring any substantial changes in 2014. Balance of goods repeated the result of the previous year, when once again ended with a surplus exceeding 3 billion EUR, which corresponds to less than 5 % of GDP (Table 3.1).[8] However, the surplus of current account was significantly lower in comparison to 2013, reaching only 0.2 % of GDP.[9] On the other hand, the financial account ended with more than double surplus.

Table 3.1
Main Components of the Balance of Payments Development in the SR, 2010 – 2014

	2010	2011	2012	2013	2014
Balance of goods (EUR million)	62	114	2 651	3 482	3 456
Balance of services (EUR million)	-744	-370	306	267	32
Balance of income (EUR million)	-2 065	-2 887	-1 629	-1 621	-2 600
Current transfers (EUR million)	-422	-353	-648	-1 073	-844
Current account (EUR million)	-3 170	-3 497	679	1 055	114
Capital account (EUR million)	1 018	865	1 376	1 026	637
Financial account (EUR million)	2 385	3 461	-257	1 422	2 960
Balance of goods/GDP (%)	0.1 %	0.2 %	3.7 %	4.7 %	4.6 %
Current account/GDP (%)	-4.7 %	-5.0 %	0.9 %	1.4 %	0.2 %

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

To the year-on-year (y-on-y) deterioration of the current account development contributed mainly the results of its two components. The higher passive balance of the balance of income, where deficit of investment income balance strongly outweighted the surplus of employees compensations. The second component contributing to y-on-y deterioration of current account was the balance of services with its lower surplus. The positive balance of transport services along with a slight sur-

[8] NBS expects the balance of goods surplus over 4 % of GDP for another three years (NBS, 2015b).

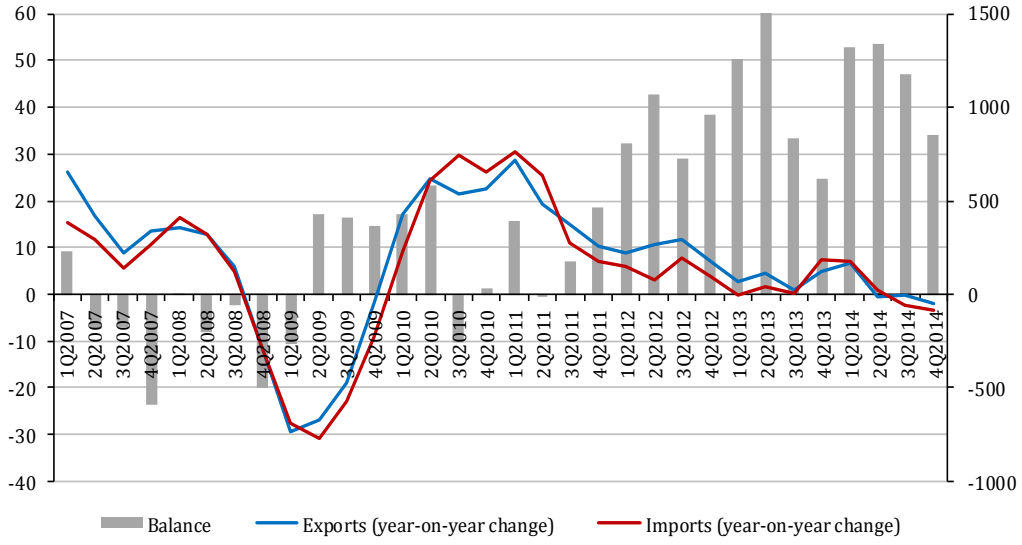
[9] NBS estimate for the next three years ranges from 0.6 % of GDP in 2015 to 1.2 % of GDP in 2017 (NBS, 2015b).

plus in the balance of tourism almost balanced with the deficit in the category of "other services together". Slightly lower deficit in comparison to the previous year was noted in the current transfers category mainly due to the development of government transfers, where the y-on-y growth of revenue and a decrease of expenditures occurred.

Foreign Trade with No Significant Change

After a gradual slowdown of foreign trade dynamics in the past two years, only slight y-on-y increase in exports and imports occurred in 2014. Relatively weak GDP growth, similar to year 2013, meant the stabilization of export performance and import intensity of the Slovak economy (i.e. the ratio of export or import to GDP). The exports and imports continued in y-on-y growth in the first quarter only; in the following quarters, a stagnation or even decline were experienced in both cases (Figure 3.1).

Figure 3.1
Year-on-year Growth Rates of Exports and Imports (left axis, %) **and Foreign Trade Balance** (right axis, EUR million) **in Individual Quarters of 2007 – 2014**

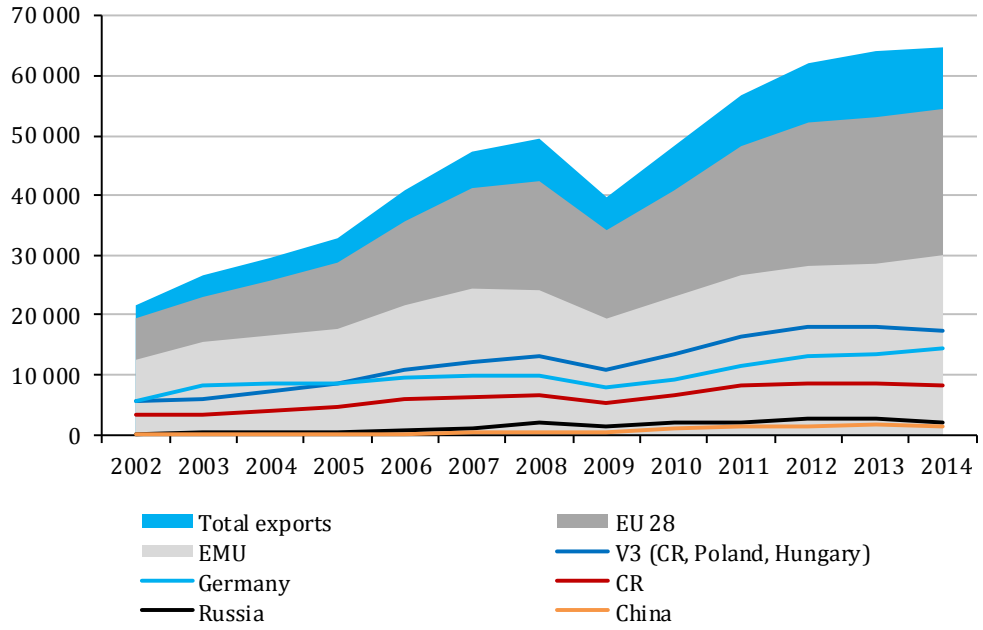


Source: Based on NBS data (2015a).

The weakening of EUR/USD[10] exchange rate which has occurred in recent months could encourage export from Slovakia to certain countries outside the Euro area, e.g. in case of Slovakia's largest car manufacturer Volkswagen, which exports, beside others markets, also to the USA. The exchange rate development of single European currency against US dollar will also reflect in increase of import prices; not only from the USA, but also from other countries, where trades are done in USD.

As shown in Figure 3.2 and 3.3, the EU share in the Slovak foreign trade (exports and imports) was similar to the previous period in 2014. More than four fifths of the Slovak export were accounted to the EU member states (about 84 %). To the Euro area countries (EMU) goes 46 % of the total SR export, out of which almost half to Germany (Figure 3.2).

Figure 3.2
Development of Teritorial Exports Structure (EUR million)



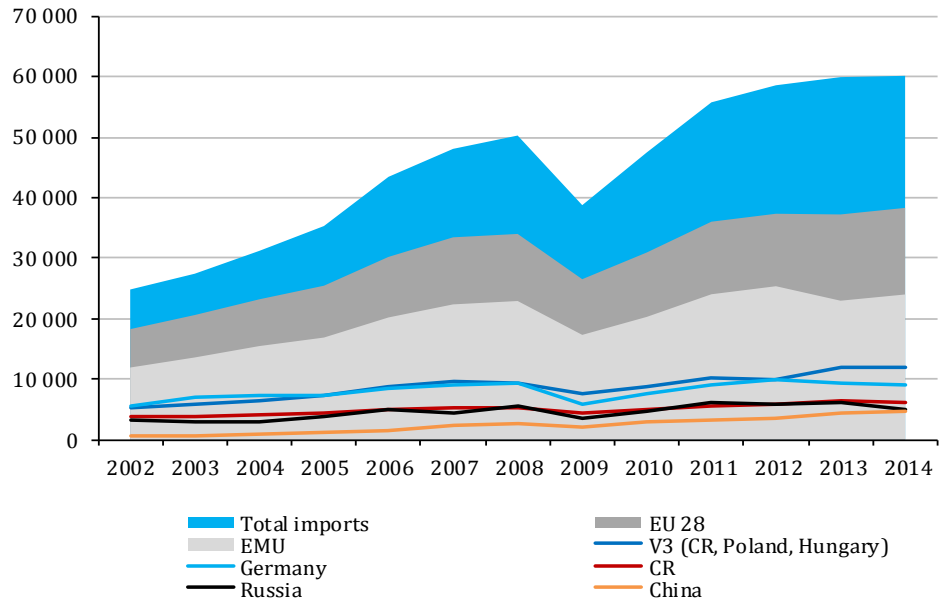
Source: Based on NBS data (2015a).

[10] The reasons of such development are elaborated in chapter 4.

An important place, among export markets of Slovakia, continues to be neighboring economies of the Czech Republic, Poland and Hungary (V3) whose share is more or less stable (27 % in 2014) and almost half of this export goes to the Czech Republic. The share of China in total exports from Slovakia, as the most important Asian market, is above 2 %, but does not continue to grow yet. The share of the Russian Federation decreased to 3.2 % in 2014, while in the second half of the year was kept below 3 %. This may be result of its economy fall, as well as deteriorating relations between the EU and Russia .[11]

Figure 3.3

Development of Territorial Structure of Imports (EUR million)



Source: Based on NBS data (2015a).

[11] In summer of 2014, Russia introduced the embargo on the import of certain groceries from the EU countries, but also from the USA and Canada. It was a retaliation for sanctions that Western countries have imposed on Russia for the annexation of the Crimea and its next moves related to the armed conflict in eastern Ukraine. The Russian market can be classified as major outlet for Slovak production of passenger cars (especially for KIA Motors and Volkswagen), as well as consumers electronics. The Slovak economy is dependent on supplies of Russian oil and gas and also very open to other larger European economies, which may experience more direct impact of Russian sanctions than Slovakia. In case of sanctions expansion and their continuation, as a result of tense relations between the EU and Russia, the direct and indirect effects could not become negligible (not only) for SR foreign trade (export and import).

The EU has systematically lower share on the total imports of Slovakia than on total exports. It is less than two-thirds. Imports from the Euro area accounts for 40 %, of which more than a third is import from Germany (15 % of total imports). The country with the second highest share of Slovak imports is the Czech Republic (10 % in 2014) and third one is Russia (8 %).[12] China and South Korea are slowly catching up to Russia in terms of export volumes to Slovakia.

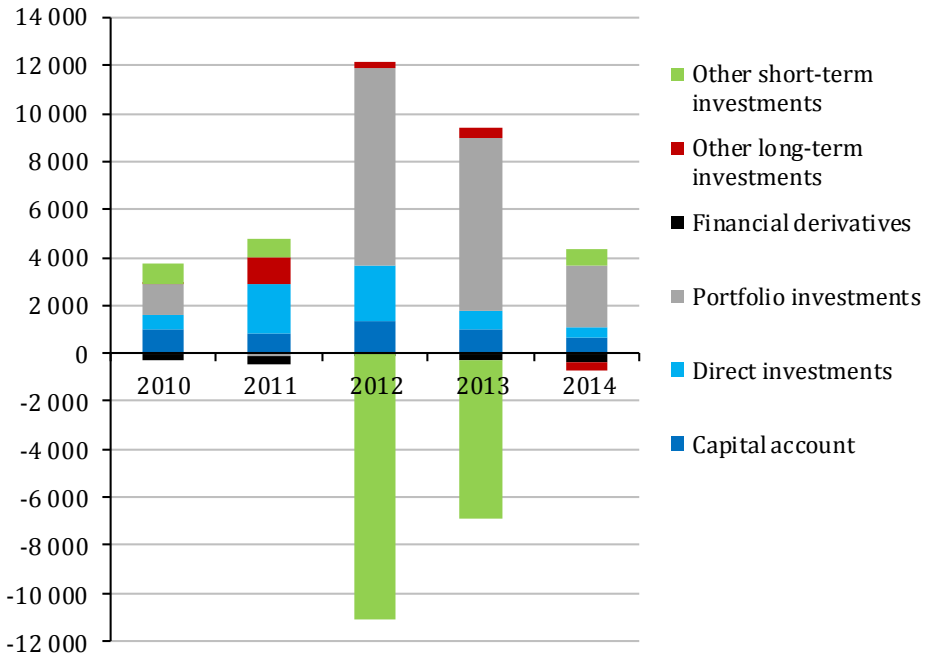
In 2014, the commodity structure of Slovak exports and imports continued in the trend from the previous years with the highest share of machinery (33 % share in exports, 31 % in imports) and transport equipment (26 % share in exports, 13 % in imports) in the foreign trade total (SO SR, 2015). The third highest share of exports reached basic metals and their products (10 %), and mineral products in imports (12 %). In year-on-year comparison, the highest growth rate in exports was weapons and ammunition category and in imports works of art category. A rising trend was also noted in footwear and textiles categories. However, the shares of these commodity groups in the SR foreign trade total, and hence their contributions to the year-on-year growth, are small.

Foreign Capital

A closer look at the financial account of the balance of payments reveals items which contributed to a different development in 2014, compared with previous two years. While other long-term investments experienced, after a few years, negative balance again, the other short-term investments ended up with positive balance in contrast to the years 2012 and 2013 (Figure 3.4). Net inflows of direct investments was related mainly to relatively high volume of reinvested earnings in the Slovak Republic probably due to positive expectations of investors. Although direct or portfolio investments did not overcome the amouth of their positive balance from the previous year, due to net inflows in other investment , the financial account ended up with a higher surplus.

[12] This fact confirms high risks for Slovakia as a result of tense relations between the EU and Russia.

Figure 3.4
Capital and Financial Account of the Slovak Republic in Years 2010 – 2014
(EUR million)



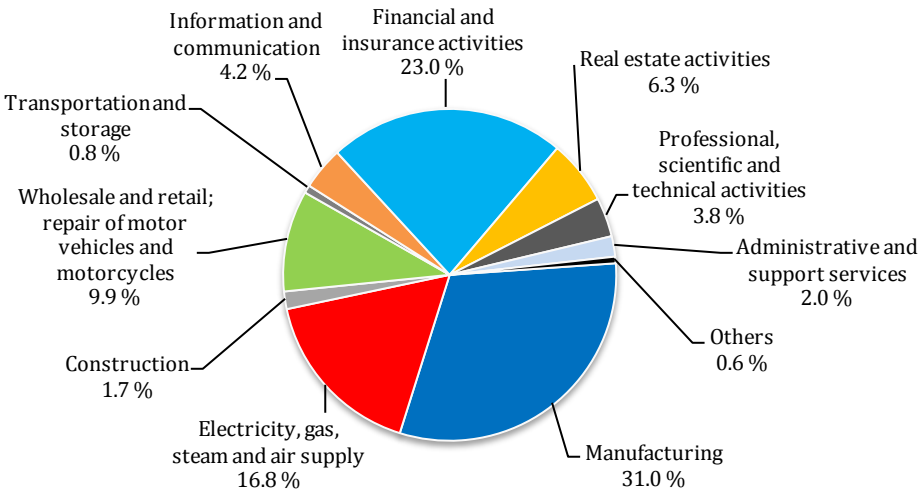
Source: Based on NBS data (2015c).

Due to the continuing strong concentration of foreign direct investments (FDI), especially in Bratislava region, regional disparities in SR persist. Since the beginning of this millennium, Bratislava region share in the total FDI has not decreased, but even slightly increased up to almost 70 % in 2012. Regions of Prešov and Banska Bystrica still remain in the worst position. Several measures, which have been taken to promote the inflow of FDI into less developed regions in recent years, are thus below expectations.

As can be seen in Figure 3.5 based on NBS data (2015c), FDI in Slovakia were allocated mainly to the tertiary sector (more than half), then to manufacturing (almost one third) and energy industry (one sixth). Having such structure of FDI, Slovakia ranks in CEE region to the economies with a relatively high share of industrial production (like the Czech Republic and Poland) and lower share of the tertiary sector (although it

represents more than 50 % of Slovak FDI) in total inflow of FDI yet. The dominant FDI within the service sector is a financial intermediation followed by wholesale and retail. Financial and insurance activities achieved higher share of FDI in tertiary sector among the CEE countries only in Slovenia and slightly lower share in the Czech Republic. According to Eurostat (2015), FDI oriented on manufacturing are represented by metals and metal products (one third), a quarter share of petroleum products, chemicals and pharmaceutical products. Production of motor vehicles is represented by one fifth.

Figure 3.5
Structure of FDI by Branches (as at 31. 12. 2012)



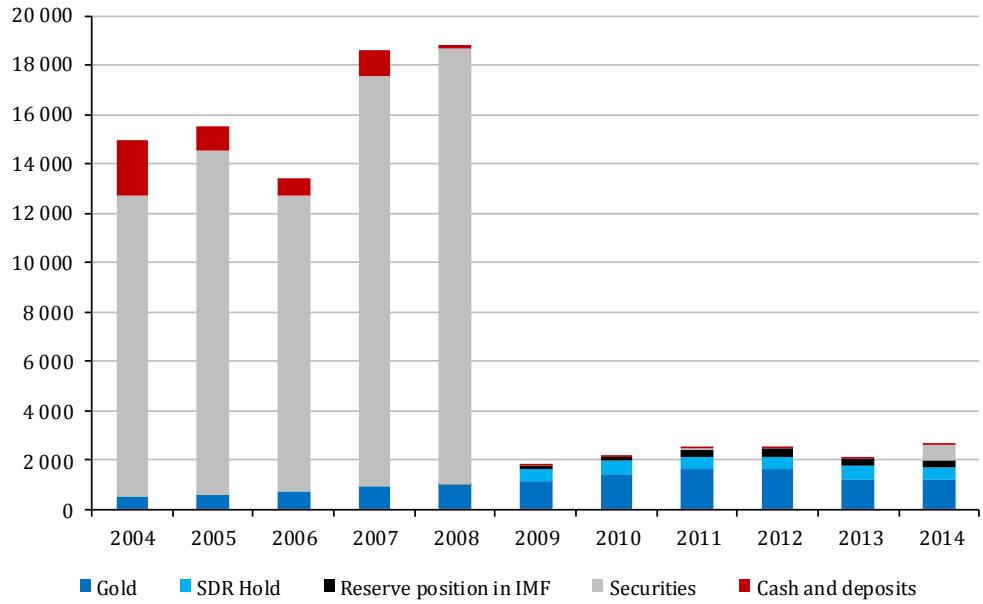
Source: Based on NBS data (2015c); own calculations.

The Increase in Foreign Exchange Reserves of the National Bank of Slovakia

An inseparable part of the annual balance of payments is the change in foreign exchange reserves of a central bank (reserve assets). They play a key role in international liquidity and also serve to balance the imbalance. In 2014, NBS foreign exchange reserves grew to more than 2.6 billion USD (Figure 3.6). Having such a growth, they reached the highest

level since 2009, also given the active balance of payments. At the end of 2014, almost 50 % of the reserves accounted for the oldest part of foreign reserves – gold reserves.[13] A quarter of reserves accounted for a foreign exchange (mainly securities and in less extent also cash and deposits), 18 % holdings of SDR (Special Drawing Rights) and 11 % reserve position on International Monetary Fund.

Figure 3.6
Development of NBS Foreign Exchange Reserves (USD million)



Source: Based on NBS data (2015c).

As it is evident from Figure 3.6, the entry into the Eurozone in 2009 caused significant change in the volume and structure of foreign exchange reserves of NBS. With regards to the statistical requirements of the European Central Bank (ECB) on the European System of Central Banks (ESCB) in the field of balance of payments and foreign exchange

[13] In 2014, the proportion of gold reserves to NBS foreign exchange reserves was the lowest since Slovakia's integration into the Euro area. The development of its market share more or less mirrored the development of the gold price, so until 2012 the share grew and then decreased for another two years. At the end of 2014, the NBS foreign exchange reserves contained gold valued at 1.22 billion USD.

reserves, NBS changed the methodology of reporting foreign exchange reserves. As of 1st January 2009, only foreign assets in foreign currency (i.e. other than the euro) on non-residents of the eurozone could be considered for foreign exchange reserves of the NBS. Comparing to the methodology applied in foreign exchange reserves prior the entrance to the Euro area, there was (regarding previously given high proportion of assets denominated in the euro) a significant reduction in the volume of foreign exchange reserves (NBS, 2009).

At the same time, one of the tasks of the Eurosystem (consisting of the ECB and the national central banks of the EU countries that have adopted the euro) is to conduct foreign exchange operations, keep and manage the official reserves of the Euro area countries. Even NBS had to contribute to the ECB's foreign reserves (forward to the central bank part of its own reserves) once the country entered the Euro area. In exchange, NBS received interest bearing claims on the ECB, denominated in euro, in volume corresponding to the total amount of its contribution to foreign exchange reserves.

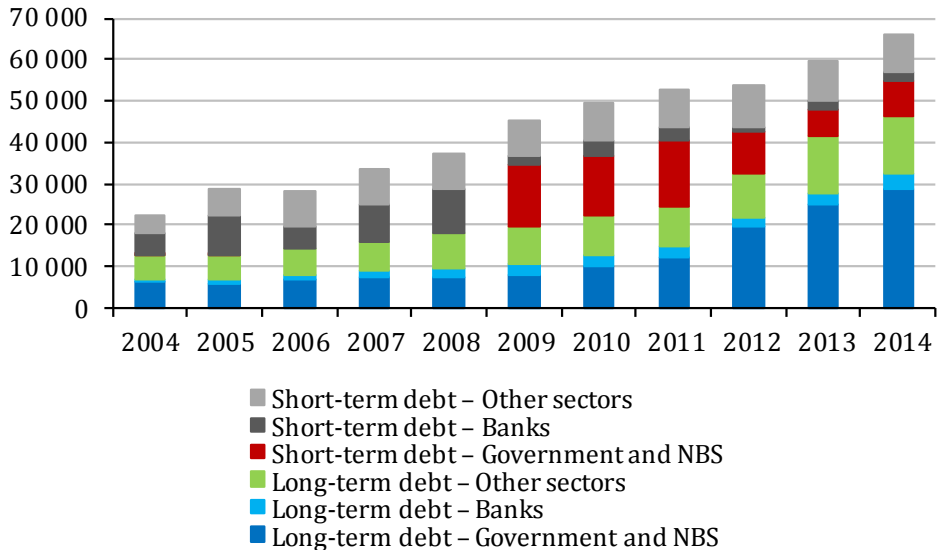
Ongoing Growth of Foreign Debt

Foreign (external) debt of the SR, i.e. debt of domestic entities to foreign ones, is gradualy increasing (Figure 3.7). The adoption of euro in 2009 also reflects on its development by significant increase in short-term external debt of NBS. It did not use existing foreign exchange reserves to cover their liabilities to domestic commercial banks, but borrowed funds from the Eurosystem. Consequently, the share of gross foreign debt to GDP exceeded the internationally accepted limit of 60 % in 2009 (Kyjac, 2014).

Gross external debt of Slovakia increased also in the following period, including 2014, when it reached over 66 billion EUR, representing 88 % of GDP. Out of it, 70 % consist from long-term debt (mostly government debt) and the rest of the debt is a short-term one. In comparison with the previous year in absolute terms, most significant increase of long-term and short-term debt was recorded in Government and NBS, in relative terms, also in case of both long-term and short-term debt of banks. The

foreign debt of other sectors has stabilized. Given the fact of relatively fast pace of increase in foreign debt and persisting risks of its future development, it is necessary to pay increased attention to all factors that influence foreign debt. Of course, while assessing the evolution of debt, it is necessary to take into account the purpose and the usage efficiency of borrowed resources.

Figure 3.7
Development of Slovakia's Foreign Debt (EUR million)



Source: Based on NBS data (2015a).

* * * *

While in the past "post-crisis" years the foreign trade was a growth driver of the Slovak economy, the export lost its dynamics in 2014, which resulted in reducing the contribution of foreign trade to GDP growth. However, the foreign trade contributed to the favorable development of macroeconomic stability in 2014, when the balance of goods retained positive balance from the previous years (nearly 5 % of GDP). In the event that economic recovery in the Euro area occurs in context of ECB monetary policy, which would positively influence foreign demand of Slovak business partners, such favorable development of foreign trade balance could continue in the following years.

4. EUROPEAN CENTRAL BANK MONETARY POLICY AND THE EURO AREA DEVELOPMENT FROM THE SLOVAK REPUBLIC POINT OF VIEW

On January 1st 2014, five years have passed since the adoption of the single European currency in Slovakia and on May 1st of the same year a decade from the Slovak Republic entrance into the European Union (EU). The involvement in the integration process in Europe has brought not only benefits and a favorable environment for further development of the Slovakian economy, but also a number of obligations, constraints, challenges and risks.[14]

The EU economy has still not overcome crisis and situation in several of its member states remains extremely unfavorable. Despite the strongly expansionary monetary policy of the ECB, the euro area economy more or less stagnates after two overcame recessions and experiences low inflation (or deflation). The challenges and problems of different countries and those at the EU level (indebtedness of government and private sector, unemployment and others) and new growing risks beyond its borders are added, including tense relations with Russia.

The chapter pays attention to monetary policy of the ECB, which significantly interferes with development in the euro area and its member states in recent years. The chapter also deals with expectations and actual problems associated with current, extremely loose monetary policy. Furthermore, we are dealing with current situation in the Euro area, which remains fragile and uncertain; a continued deepening of European integration and approaching, historically the first Slovak presidency in the EU Council in the second half of 2016.

Loose monetary policy of the ECB

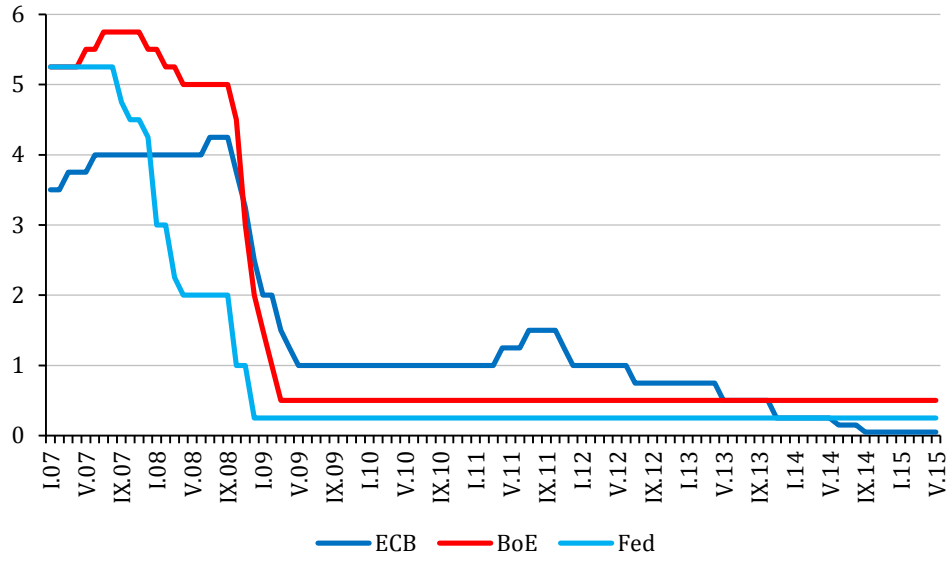
While at the beginning of the financial crisis, the ECB was more or less in seclusion, later it responded to the situation by taking a number of

[14] The analysis of the Slovak membership in the EU and the Euro area is provided in the publication Šikulová et al. (2014).

non-standard measures to support sluggish economy of the euro area. In addition to the changes in interest rates, the longer-term refinancing operations, purchases of selected assets and provision of liquidity to banks in monetary union was carried out.

During the year 2014, the ECB responded to continuing unfavorable economic situation in the euro zone accompanied by low inflation (even deflation) by another two reductions of the key interest rate. The first reduction, from 0.25 % to 0.15 % was realized in June, the second one, by a further 10 basis points in September (Figure 4.1). Since then, the key interest rate is at its lowest level in history of the ECB. It is not just below the rate of Bank of England, but also below the rate of US Federal Reserve where, in contrast with the ECB, a gradual tightening of monetary policy is expected.

Figure 4.1
Key Interest Rate development in euro area (ECB)**, in Great Britain** (Bank of England) **and in USA** (Federal Reserve System)



Source: Based on ECB, BoE, Fed.

Along with last year's reductions in the key ECB interest rate, another reduction of deposit interest rate took place (deposit facility) to a new historical minimum. In June 2014, the deposit interest rate got into negative numbers for the first time at level -0.10 %, and in September down to -0.20 %. Thus, the European banks do not just receive any interest if they deposit their excessive funds in the ECB like in previous two years, but they have to pay for these safe deposits to the ECB. By this approach, the ECB tries to motivate commercial banks to lend their excessive funds to private sector (and stimulate economic growth) and not to deposit them in the ECB itself. However, this ECB policy of low rates does not produce desired results.

So far, the ECB tried to boost the economy through a number of non-standard measures, which will be (or should be) just temporary ones. As of June 2014, they include also Targeted Longer-Term Refinancing Operations – TLTRO planned for 2014 - 2016. They are aimed at bank loan provision to non-financial private sector of the euro area. This is a new form of LTRO (Long-Term Refinancing Operations) with aim to support the real economy. In total, eight programs of TLTRO will be implemented and all will be due in September 2018.

The ECB intended to contribute to the increase of liquidity in the market and consequently support economic recovery and avert risk of deflation by purchases of securities (consisting of bank loans packages) type ABS (Asset Backed Securities). This might be considered as a form of quantitative easing. This measure was criticized mainly by German economists, who pointed out to the risk of possible low quality securities purchase. That would lead to transfer of credit risk from commercial banks to the ECB.

The existing measures of the central bank to deliver low-cost liquidity to financial markets did not meet optimistic expectations, as only a small portion of funds was released into the real economy. Therefore in January 2015, the ECB approved the program of quantitative easing (QE), which was launched in early March. It can be described as an unprecedented step in the history. It will be realized via national central banks purchases of government and corporate bonds in the amount up to 60 billion

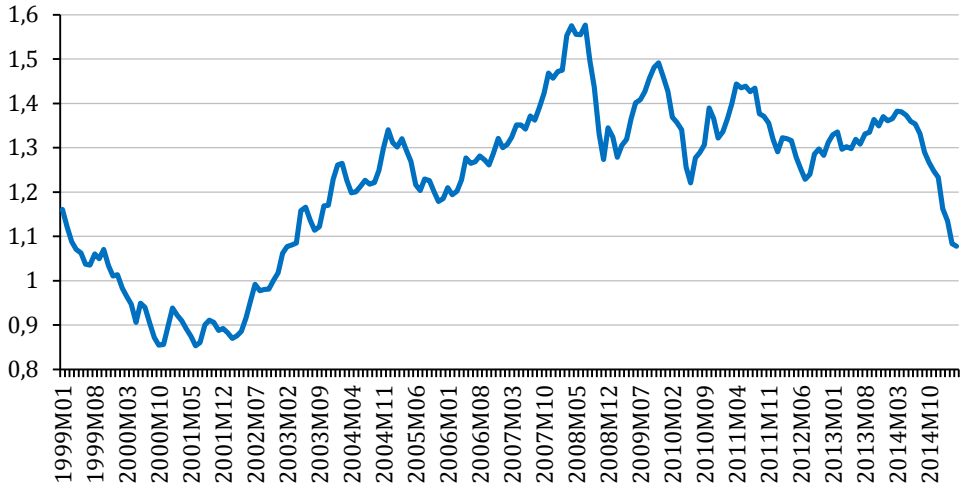
EUR per month. The program should be in place at least until September 2016 (representing 1100 billion EUR of newly created money), or until price level correction takes place to the level in line with ECB's inflation target right below 2 %. The ECB is interested in safe bonds with a maturity from 2 to 30 years. Volumes of bond purchases by member states will be derived from shares of national banks in ECB's capital. In case of Slovakia it is 0.77 %.

The aim of QE is like in previous ECB measures to combat deflation, boost consumption and investment and thus the real economy, including the creation of new jobs. While quantitative easing has been carried out by several central banks (USA, Japan, Great Britain), significant differences are not just in differences among the economies, but also in timing of this step, which might be considered in the eurozone as delayed. The results of QE are highly likely to be different than e.g. in USA and optimistic expectations may remain unfulfilled.

US Fed refrained from QE at the end of 2014 and due to favorable development of economy, the rise of interest rate could be expected during the year 2015. Fed's monetary policy tightening along with further monetary easing of the ECB creates a strong pressure on the EUR/USD, which has dropped to nearly 12-years minimum and gets closer to the parity where it was last seen in 2002 (Figure 4.2). The depreciation of the euro might, on the one hand, boost economy through export from the euro area countries. Many member states are highly opened economies, but several of them have relatively low share of export to the countries outside the euro area. This fact reduces the potential positive effects of the euro's depreciation on the performance of monetary union economy.[15] On the other hand, the depreciacion of exchange rate has negative effect on prices of goods and services imported from USA and some other countries outside the euro area, which affects not only large importers, but also regular consumers.

[15] In recent years, the EUR/USD has repeatedly fell relatively sharply, while subsequently no significant recovery in the eurozone economy occurred.

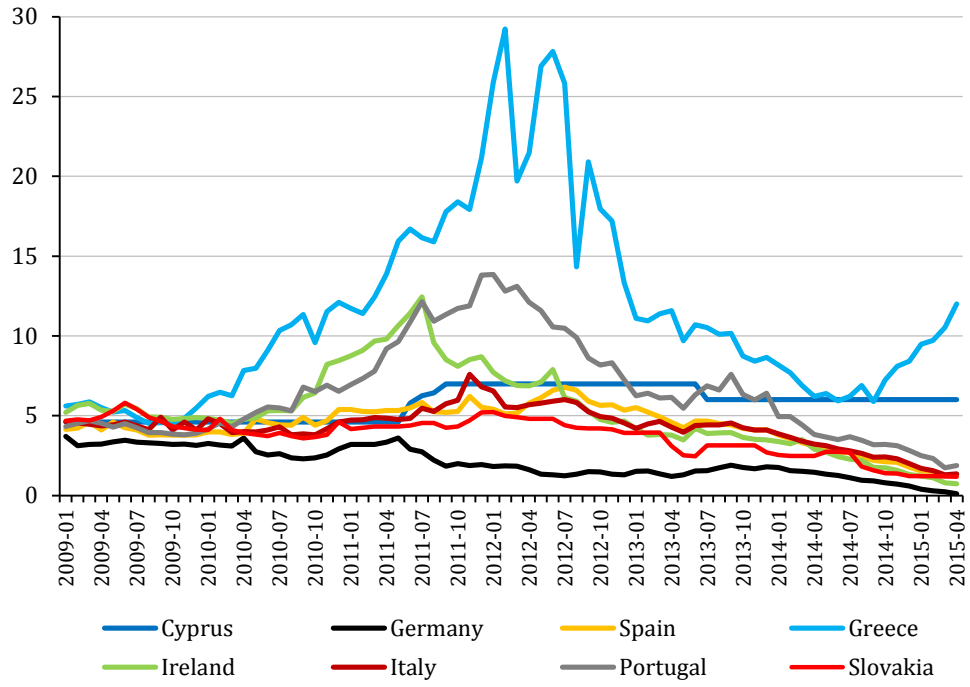
Figure 4.2
The Exchange Rate of USD/EUR since the Start of the Economic and Monetary Union



Source: Based on Eurostat database (2015).

Quantitative easing, as well as previous ECB measures of expansionary monetary policy contributed to further reduction in interest rates. As the short-term interest rates are on their technical minimum, currently, the reduction of long-term interest rates takes place including interest rates on 10-years government bonds of the euro area countries (Figure 4.3). Greece is an exception, where the situation is extremely tense. Yields on 10-year bonds of PIGS countries ranged from 0.7 to 1.9 % in April 2015, Slovak bonds were remunerated at 1.2 %. For some core countries of the eurozone, especially Germany, but also Luxemburg, Netherlands, Austria, Finland and France, the rates are very close to zero, even negative in case of shorter maturities. Slovakia has already taken place in this group. QE policy could also lead to cheaper loans for corporations and households in Slovakia, including mortgages, which are still among the highest ones in the eurozone. Reduction of debt services costs due to expansionary monetary policy of the ECB is not correspondent with reality and may act as an disincentive for reform efforts of most indebted countries in monetary union.

Figure 4.3
Development of Interest Rates on 10-years Government Bonds in Selected Euro Area Members (%)



Source: Based on ECB database (2015).

The risks of QE include the excessive acceleration of inflation and thus degradation of savings. In case of deposits in EUR, the degradation occurs due to EUR/USD depreciation essentially even today. On the other hand, savings of depositors denominated in USD are appreciating. Quantitative easing can also contribute to economy overheating and create price bubbles in the markets, e.g. bubbles in the real estate market through low interest rates on mortgage loans. At the same time, the decline in bond yields can negatively affect the revenues of pension savings, because the pension companies invest in this type of debt securities as well. The risks of the QE program also include the time and manner of its completion and subsequent effect on the monetary union economy.
QE policy implementations have already encountered problems stemming from the lack of bonds meeting criteria of the ECB, i.e. the bonds should have yield higher than existing deposit interest rate of the

bonds should have yield higher than existing deposit interest rate of the ECB (-0.20 %) with maturity of 2 – 30 years. These criteria reduce the amount of bonds which qualify for ECB purchase, particularly for Germany. Interests on bonds with two-years maturity is approaching threshold -0.20 % also in case of Finland, Netherlands, Austria, Belgium and France. Therefore, it is not certain if the ECB with currently applicable criteria will meet planned volume of bond purchases during the period of QE program implementation, i.e. until September 2016.

Development in the Euro area Remains Complicated and Uncertain

The euro area is still unable to significantly boost economic growth, reduce unemployment and stabilize the debt burden. The consolidation is also complicated by low inflation or even deflation. The European economy should be stimulated by investment package worth 315 billion EUR, which was approved by the European Council in December 2014. The package should involve funds from the European Investment Bank, the EU, member states and private investors and banks. The investment plan should be based on the three pillars, the first one is establishment of the new European fund for strategic investments (June 2015), the second one is creation of projects database and the third one the improvement of investment climate. By 2017, funds should be mobilized for investments at least in amount of 315 billion EUR. They should be directed to infrastructure, energy, research, innovation and the digital agenda. However, planned investment package has already faced criticism, particularly with regard to its efficiency and availability of funds.

Among the member states of the euro area, the main focus in recent months was on the country with the highest public debt – Greece, which still faces the risk of insolvency. After two rescue programs worth in total 240 billion EUR realized since 2010, there is a chance it might need a third package of aid. So far, the euro area agreed on four month extension of the second rescue program, which was supposed to be completed in February 2015. The price of negotiated extension for the Greek government is waiver of a number pre-election promises and submission of reforms

list planned to be implemented. In order to release another tranche of aid, the approval of reforms plan by creditors and start of their implementation in Greece is necessary. The current situation reflects to some extent in the evolution of interest rates on the 10-years Greek government bonds (Figure 4.3), as well as in intensive discussions about possible exit of country from the euro area. Any Greek debt relief would mean that the European Financial Stability Facility (EFSF, the temporary bailout fund), in which the guarantees include also those of the SR, would lose resources. If these guarantees apply, Slovakia would have to send to the EFSF funds which would be used to pay bonds issued in order to help Greece. However, the public debt of the SR would be not impacted, as the guarantees are already counted in it.

While in case of Greece, the discussion about its possible exit from the euro area continues, the euro area keeps on its expansion. After Latvia has adopted the single European currency in 2014, on 1st January 2015, Lithuania as the last of the Baltic countries became member of the Economic and Monetary Union bringing number of eurozone countries to nineteen. Its gradual expansion creates not only quantitatively larger, but also qualitatively different monetary union with a higher degree of heterogenity. This increases the requirements for implementation of common monetary policy, coordination of national fiscal policies as well as coordination in other areas of economic policy. Consequently, this might change the balance of costs and benefits associated with the membership of individual countries in the euro area.

The creation of banking union, which represents one of the steps towards to so-called Genuine Economic and Monetary Union, continues slower than expected. In November 2014, out of three pillars in the banking union, there was a launch of the first one. The largest European banking groups had previously undergo comprehensive tests consisting of asset quality assessment and stress tests. The role of the stress tests was to determine whether and how banks would withstand another possible crisis. Eventually, 25 out of 130 failed to pass the stress tests. These results are not that bad to significantly increase distrust of markets and led to a renewed increase in bond yields of peripheral countries. The

results are also not that favorable, so they would not lead to fundamental doubts about the credibility of the tests. However, the banks testings were criticized e.g. because they do not include the scenario of deflation, which at first did not appeared to be unlikely in 2014 and then it became a reality. In case of application of such scenario, the test results would be worse with high probability. Among others, the stress testing conclusions confirmed that the Slovak banking system is in good condition.

Macroeconomic Imbalances in Slovakia from the View of the European Commission

In November 2014, the Commission published its fourth Alert Mechanism Report, which is a part of the European Semester and shall aim to detect possible external and internal imbalances of member states economies. Neither this time, the Commision did not include Slovakia among the countries in which in-depth investigation is necessary. Table 4.1 shows the development of indicators that the European Commision follows in the evaluation of macroeconomic imbalances. Since the integration to the euro area in 2009, Slovakia exceeds specified thresholds (overrun is marked in red) in case of two indicators. Namely, net international investment position (threshold of 35 %) and unemployment (10 %). According to the latest available data, the development of these indicators have not improved. In the report from November 2014, the European Commision draws attention not only to long-term unemployment, but also to the serious problem of youth unemployment in Slovakia.

All other monitored indicators, like in previous two years, do not exceed the indicative thresholds. In case of the current account balance, due to repeated surplus a further improvement was recorded in monitored indicator (three-year moving average) in 2013, while Slovakia's market share in world exports slightly decreased. The development of price and cost competitiveness indicators (real effective exchange rate, nominal unit labour costs) does not invoke any concern. Similarly, the development of house prices, where prices stabilized in 2013 after several years of sharp decline. The indebtness of private and government sec-

tor is still holding below established thresholds, but in case of government debt, the trend continues in fast approach to critical value - 60 % of GDP. The situation in banking sector remains favorable, liabilities of financial sector slightly decreased in 2013.

Table 4.1
(Non)compliance of scoreboard indicators of EC in Slovakia
(overrun of given limits marked red)

Indicator	2009	2010	2011	2012	2013
Current account balance (% of GDP)[1]	-4.7	-4.2	-4.4	-2.9	-0.7
Net foreign investment position at the year's end (% of GDP)	-66.7	-62.3	-64.9	-62.2	-63.8
Real effective exchange rate[2]	24.8	12.8	5.0	1.9	2.5
Market share in world export[3]	39.8	31.3	21.5	4.2	-2.2
Nominal unit labour costs[2]	11.1	9.7	6.3	1.2	2.5
Annual change in housing prices[4]	-12.8	-5.0	-5.2	-5.9	-0.5
Private sector credit flows (% of GDP)	3.1	3.1	2.7	3.1	5.4
Private sector debt (% of GDP)	70.2	68.7	71.1	71.2	74.8
General government sector debt (% of GDP)	35.0	40.2	42.9	51.9	54.3
Unemployment rate (%)[1]	11.0	12.1	13.4	14.1	14.0
Liabilities of financial sector (%)[5]	-4.9	2.0	1.0	2.8	-0.3

Legend:
[1]Three-year moving average.
[2]Three-year percentage change.
[3]Five-year percentage change, curr. p.
[4]Adjusted by household final consumption deflator.
[5]Annual change.

Source: European Commission (2014), Eurostat (2015).

Upcoming Presidency of the SR in the EU Council

In the second half of 2016, for the first time, Slovakia will take the Presidency of the EU Council, which represents the member states. The Slovak Republic will preside over the Council in the trio, along with the Netherlands (the presiding country period January – June 2016) and Malta (January – June 2017). During six months, Slovakia will manage and organize the work of the Council in its individual ministerial formations, as well as communicate with the European Commission, the European Parliament and other European institutions.

Slovakia has been preparing for this task since 2012. Possible priorities of the Slovak presidency are energy industry, fight against tax evasions or water. The presidency of Slovakia is not only a great challenge, but also an opportunity to promote country abroad, strengthening the position of Slovakia in the EU, highlighting and taking forward its national interests at the EU level.

* * * *

In conclusion, we might say that the eurozone continues in implementation of measures that fail to address deep economic problems of the monetary union, and after which sooner or later, further steps will be required to undertake. With high probability, the quantitative easing policy will not bring any substantial improvement. An assumption of improved economic development is, along with steps of the ECB, further reform effort of national governments, which is rather weakened by currently implemented monetary policy.

At the same time it remains uncertain, whether current composition of the euro area will be preserved. In the event of voluntarily or involuntarily exit of a country from the eurozone, new question arises, namely which country (countries) will follow. Once the process of the eurozone shatter would begin, it could become challenging or even unrealistic to stop this process. This would have serious consequences on all member states, including Slovakia. The future balance of costs and benefits of Slovakia's membership in the EU and the eurozone will not depend only on factors which are more or less beyond control of the SR (in particular the overall economic development of the EU). They will also depend on the ability of Slovakia and its representatives to define the interests of the SR and subsequently promote them at the European level; given the small size of the Slovak economy, preferably in cooperation with other countries.

5. PRICE DEVELOPMENT

The inflation rate was one of priority issues not only in Slovakia, but also in the whole Euro area in 2014. The concerns about its negative impact on economic growth when achieving deflation forced the ECB to continue in strong monetary expansion and introduction of new non-standard measures oriented on price level increase in upcoming period. A strong negative deflation impact did not take place in Slovakia and we may conclude that stagnant price level was rather supporting economic growth due to its stimulation of domestic demand.

Total stagnation of consumer prices

In 2014, a consumer prices growth completely stopped and averaged on marginal deflation value of -0.1 %. Important determinant of such development can be identified as:

- *The collapse of oil prices* – at the beginning of 2014, oil price was at the level of 106 USD / barrel. At the end of year it was only 52 USD / barrel, which partly reflected in fuel prices. The price of petrol Natural 95 decreased during the year by 6.1 %, diesel even by 8.9 %.
- *The decline in regulated industries prices* – stagnation at the price level was driven by drop of regulated industries prices by 0.9 %. So typically inflationary factor contributed to a decline of price level in 2014. It was only the second decline in prices of these industries since 2002.
- *The strong domestic and low foreign demand* – domestic demand has become the main driver of economic growth in all his components. Thus, concerns about formation of deflationary spiral from last year were proved wrong and robustness of domestic demand influence price level positively. In case of inflationary impulses absence from the side of domestic demand, y-o-y prices development would end up in bigger deflationary values. On the contrary, the major Euro area economies experienced very low economic growth[16], which reflected in the size of foreign demand.

[16] The German economic growth was gradually declining during the year, Italy was in recession and France on its threshold.

- *The drop in rail transport prices* – mainly due to administrative action of Slovak government[17], but also an escalation of competition with a new private operator arriving to the market by the end of 2014 contributed to a decline in rail transport fares. In November, fare dropped by 12 %, in December by 7 %.
- *The decline in food prices* – food prices similarly to regulated industries prices experienced a y-o-y decline by 0.8 %. The importance of this decline appears by look at weights in consumer basket; food and soft drinks are the second largest item (16.3 %) in consumer's basket.
- *The depreciation of exchange rate EUR / USD* – a gradual depreciation of currency pair EUR/USD has affected the inflation positively. The depreciation of exchange rate, on the one hand supported competitiveness of domestic exporters outside the Euro area, on the other hand, import prices have increased which has been reflected in overall inflation. The exchange rate EUR / USD depreciated from originally 1.35 EUR / USD to 1.12 EUR / USD by the year end. That represents a decrease of 17 %. However, other important trading countries outside the Euro area did not follow this trend and EUR appreciated against CZK by 1.2 %; PLZ by 3.1 % and HUF by 6.3 %.

The growth rate of nominal wage was 4.1 %, the fastest one since 2008. However, for the first time in Slovakian's history, the growth rate of real wages reached a higher value than nominal one – 4.2 %. Of course, it is necessary to attribute such development to overall price level, which amounted to a marginal decline of 0.1 %.

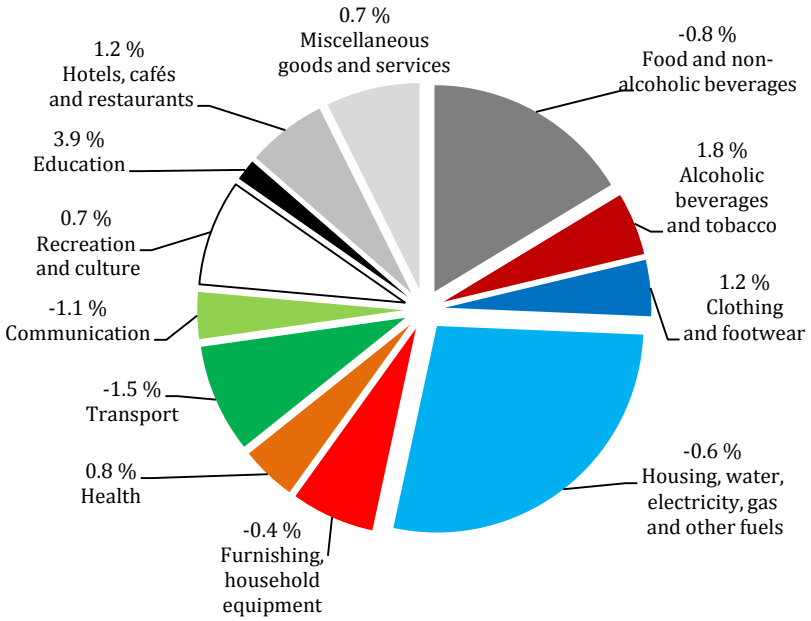
The Figure 5.1 shows y-o-y changes in 2014 price level based on different components of CPI indicator.[18] The size of each category share is adequate to weight of category in overall price level change. In cumulative total, almost two-thirds of whole index (62 %) have decreased in prices while remaining one-third contributed to price level by increase of prices in its categories. The largest decline was recorded in Transport category by 1.5 % y-o-y. On the contrary, the most contributing category to inflation increase was already traditional category Education. Prices

[17] As of 17th November 2014, zero fare for students and elder people was introduced on trains of state carrier.

[18] CPI – *Consumer Price Index.*

increased by 3.9 % in this category. While greater number of categories experienced a decline in price level, it was balanced by stronger growth of prices in remaining categories. This led to situation when decline in one part of index was balanced by growth in other part, what resulted in final stagnation of price level.

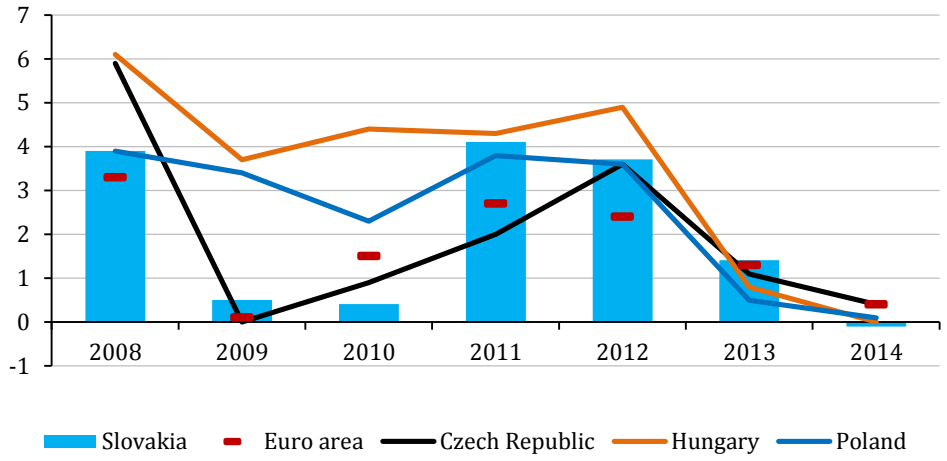
Figure 5.1
Year-on-year Change of the Price Level in CPI Categories
(size of categories are based on their weights in the CPI)



Source: SO SR (2014).

Price levels outside the Euro area in geographically close countries developed in almost identical way as in Slovakia. This is proven by convergence in price levels of all selected countries close to zero or by small difference between the lowest and highest inflation rate of only 0.5 p. p. (Figure 5.2). The fact that inflation rate is way below its ECB target is proven by average inflation rate of the Euro area, which scored only 0.4 %.

Figure 5.2
International Comparison of Year-on-year Change in Consumer Prices Level, (%, HICP)



Source: Eurostat (2014).

Producers prices declined significantly

Look at supply side of the economy provides us similar information about price development as it was on demand side, but it even further emphasizes prices decline in the economy. Producers prices of agricultural products dropped again. A crucial role in development was played by above average harvest in 2013. In comparison with previous year, the harvest increased by 13.4 %, which created enormous pressure on price decline. In total, prices of agricultural products declined by almost 8 %.

In the construction sector, which is in recession for second year in a row, price of construction works increased by 1.3 %. That is the only price increase in all selected sectors of producers prices. On the contrary, prices of construction material continued to fall, which begun already in 2013 and declined by 3 %.

Prices in the industry decreased in both domestic and foreign goods after previous stagnation in 2013. In total, a decline amounted to 3.5 %. In previous year, the main determinant of such development was mostly decrease in products prices intended for export. However, in 2014, both types of goods (for domestic and foreign markets) contributed to the

decline in price level roughly with the same proportion. On the one hand, even boosting domestic demand was not sufficient to secure price increase. On the other hand, weak external demand caused by economic problems of main trade partners did not create sufficient impulse for price increase of goods intended for export.

Table 5.1
Year-on-year Change in Industrial Producer Prices
(index of previous year = 100)

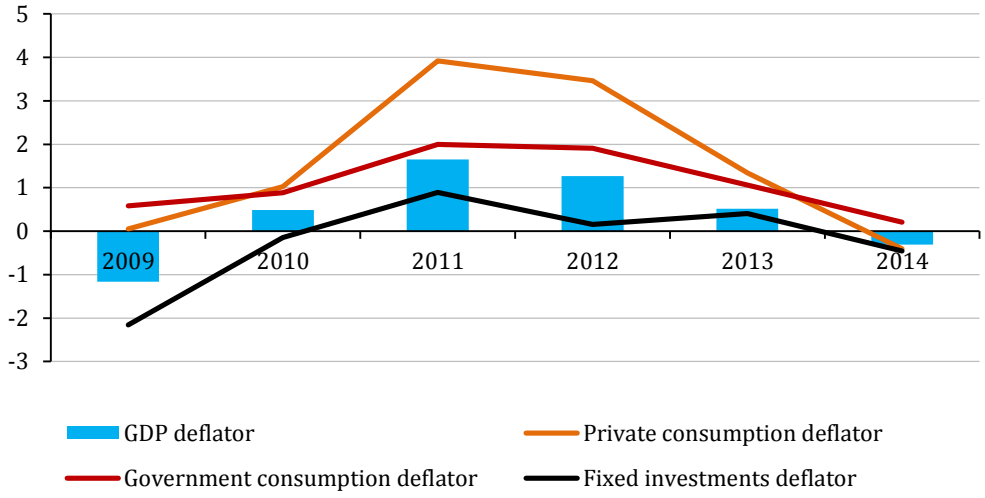
	2013	2014
Industrial producers prices – domestic	100.1	97.6
of which: industrial production	100.0	99.0
Industrial producers prices – total	99.0	96.5
Industrial producers prices – export	98.6	96.7
Agriculture products prices	95.1	92.2
Construction material prices – producer prices	99.2	97.3
Construction work prices	100.2	101.3

Source: SO SR (2014).

The price decline accompanied almost entire domestic demand

The development of domestic demand components deflators suggest that general decline or stagnation of prices is spread across whole economy. The disinflation trend, which occurred in domestic demand components since 2012 was completed by fall into deflation in its two components in 2014. The largest decline occurred in a component of private consumption (1.7 p.p.) followed by decline of capital goods prices (0.9 p.p.). Lower prices of private consumption goods can be associated with decline of essential goods such as food and housing. In case of capital goods, certain influence on price decline had low base interest rate, which was kept at historic minimums in 2014. The only component of domestic demand which continued in inflationary values was the consumption of government expenditures. However, it also experienced a drop in prices by 0.9 p.p.

Figure 5.1
GDP Deflator and its Selected Components (%)



Source: MF SR (2015).

Prices in international trade declined even faster than in 2013. They achieved the fastest drop in prices of all deflators when prices of imported goods and services decreased on average by 3.8 % and goods intended for export by 3.5 %. Such development undermines the original hypothesis of importing inflation from abroad, which should be invoked by currency depreciation. Thus, the inflation development was not even "improved" by relatively high import intensity of production due to decline in *input* prices.

A positive development can be seen in terms of trade which describes a ratio of export and import prices. For the first time since 2005, there was a positive development in terms of trade, which is a unique phenomenon in the Slovak economy environment. It means that for the same amount of export products, a country can import larger amount of another products. Logically, this is a result of development in deflators when there was a greater fall of import products prices than in export products prices (the difference between deflators is 0.3 p.p.). It is necessary to remind that the appreciation of USD/EUR exchange rate took place in late 2014 and continued in 2015, so it was not able to fully reflect in terms of trade during analysed year 2014. The exchange rate

appreciation is usually accompanied with deterioration in terms of trade development as import into the country becomes more expensive and export outside the Euro area cheaper.

Figure 5.4
Export and Import Deflators of Goods and Services (%, left axis);
Terms of Trade Development (%, right axis)

Source: MF SR (2015).

The Continuing Price Divergence from the EU 15 Average

Deeply feared price convergence of V4 countries to the average of developed western countries the EU 15 did not take place even in 2013.[19] In contrast, since 2011, this process completely stopped and divergence in average price levels occurred in each country of V4 group. The greatest average decrease against the EU 15 average was recorded in Czech Republic followed by remaining three countries, in which the average price divergence did not exceed 1 p.p. It will be interesting to observe how current deflation in SR or price stagnation in CZ, HU and PL will reflect in this indicator in the future. The original EU 15 countries recorded

[19] The Eurostat publishes results of average price levels with one year's delay. This is the reason why 2013 data are published as the latest date available.

mostly very small positive growth in price level, therefore, we can assume that the divergence process continued also in 2014.

Table 5.2
Year-on-year Change of V4 Price Levels (measured by purchasing power parity) **to the EU 15** (PPP, EU 15 = 100)

	2009	2010	2011	2012	2013
Czech Republic	66,1	68,3	68,2	66,1	64,2
Hungary	56,3	56,4	55,9	54,8	54,2
Poland	54,1	56,4	55,5	54,3	54,0
Slovakia	64,2	63,2	64,9	64,3	63,9

Source: Eurostat (2014).

Non-inflationary Economic Growth?

Long term achievement of inflation low levels, or price level stagnation is expected to gradually reduce positive effects of such development on household consumption. The residents are gradually getting used to a non-inflationary environment and lose their motivation to buy goods and services due to their affordable prices. Similarly, there emerges a discrepancy between perceived and official inflation rate reported in statistics. Despite the fact that according to official statistics, the average price level is stagnating or deflating, a perception of inflation rate is differentiated in population. This reflected in the consumer barometer survey, when values in survey about current inflation rate were much lower than in 2013 – this means that consumers perceive inflation rate to be higher than reported.

However, the most important question regarding price developments remains. It is the role of price stagnation impact on the country economic growth. Despite initial fears, the deflationary marginal values in 2014 did not negatively impact consumer behaviour and rather supported the volume of domestic demand. In 2015, the forecasts predict the stagnation of inflation levels with value close to zero, mainly due to the collapse of oil prices, which gradually reflects in the economic development. On the contrary, even more relaxed monetary policy of the ECB along with positive consumer sentiment (SO SR, 2015) affecting domestic demand is

predicted to act pro-inflationary and offset deflationary pressures from oil and energy prices fall.

A predicted acceleration of economic growth with major trade partners should contribute to growth of foreign demand in 2015. In combination with domestic demand, they should contribute to return of price level to a target close to 2 % in upcoming years. We assume that the prices stagnation, which occurred in 2014 will continue in 2015, particularly due to low oil prices and is expected to have a positive impact on GDP growth of the country. IFP of Ministry of Finance works with the assumption that oil price trend is likely to accelerate GDP growth by 0.3 p.p. (MF SR, 2015).

One of main factors, which will affect price level in the future is the size of households final consumption, but also final consumption of government due to pre-election year. Among other significant factors are the recovery of main trade partners demand; monetary policy of the ECB and real wage growth which will play important role in determination of changes in price level.

* * * *

Price development directly supported economic growth in Slovakia in 2014, mostly by motivating people to realize postponed consumption from past. The size of final consumption was the main driver of domestic demand, which in the absence of foreign demand significantly contributed to the country economic growth. This helped to change the nature of economic growth, which showed higher quality features in comparison to previous periods.

6. DEVELOPMENT OF SELECTED FINANCIAL MARKETS INDICATORS

The development in financial markets largely reflects the state of real economy and without its existence, it would be impossible to allocate savings for investments in market economy. Recent financial and economic crisis has shown how fundamentally the financial market problems can occur in the real economy. The impacts of financial crisis on the Slovak economy had just such character, as domestic banking sector was not exposed to problems with non-performing loans and was not extensively involved in trading with so-called exotic financial market instruments. The crisis showed up in Slovakia with certain lag and was not invoked by problems of domestic financial sector as this was the case in many developed economies. The important stabilizing factor of the Slovak Republic financial sector was the rescue of some commercial banks by government using public finances at the beginning of new century and their following privatization by foreign owners.

We paid attention to the development of financial sector in the monograph Economic Development of Slovakia in 2012. We have come to following conclusions in the monograph (Morvay et al., 2013):

- A continual growth of household's deposits endures, but there is a change in its structure in favour of deposits with a shorter notice period. The indebtedness of population increases as well along with volume of non-performing loans.
- The deposits from non-financial sector show signs of volatility, as well as overall decline in their volume since 2008.
- The average level of interest rates on consumer loans is significantly higher in comparison with the Euro area average. Also the volume of mortgages showed higher interest rates compared with the Euro area average.

It is appropriate to analyse changes that have occurred in this area in last two years with some hindsight, although in a broader perspective from 2010 or 2011 and confront them with the above mentioned findings of 2012.

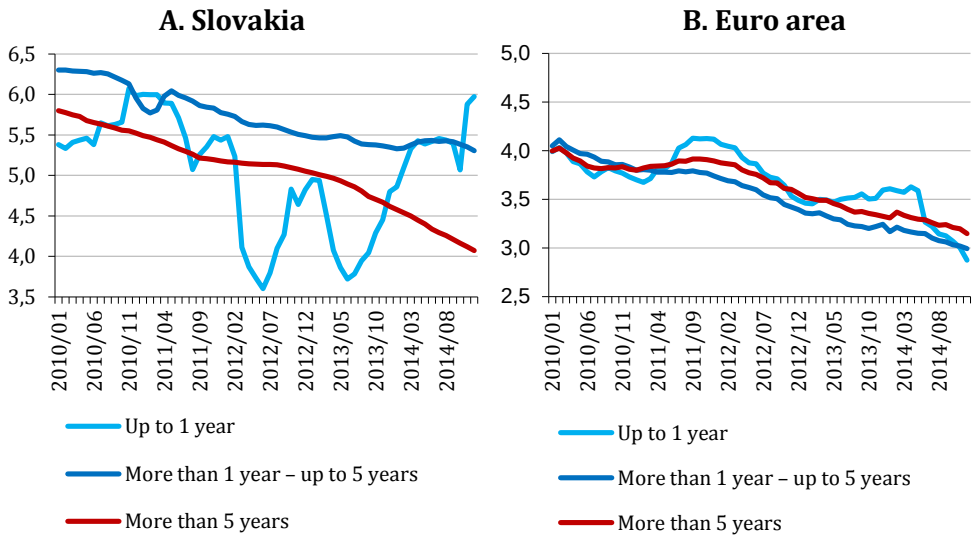
Therefore, in the following chapter we will discuss in detail the analysis of following selected indicators:

- Changes of interest rates of already granted and new loans to households in the Euro area average,
- Changes in volume and structure of already granted and new loans to households and non-financial corporations,
- Changes in volume and structure of population deposits and non-financial corporations.

The Development of Interest Rates on Loans in Slovakia and the Euro area

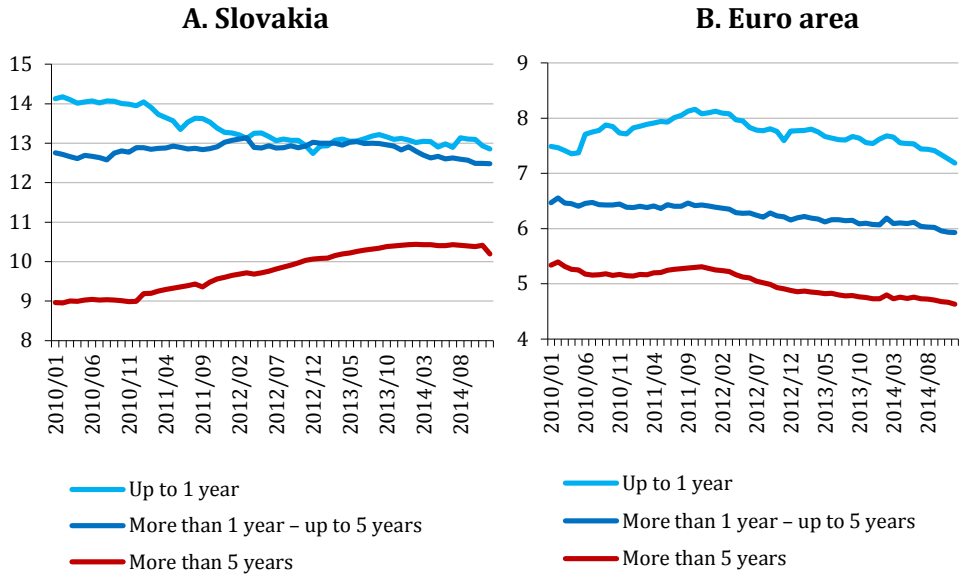
Figure 6.1 and 6.2 shows the development of interest rates on loans for housing and consumer loans in Slovakia and the Euro area. The development of interest rates over the last year confirms the trend of higher interest rates for both types of loans in comparison with the Euro area average.

Figure 6.1
Interest Rates on Loans (stocks) **in % p. a. – Housing loans**



Source: NBS (2014).

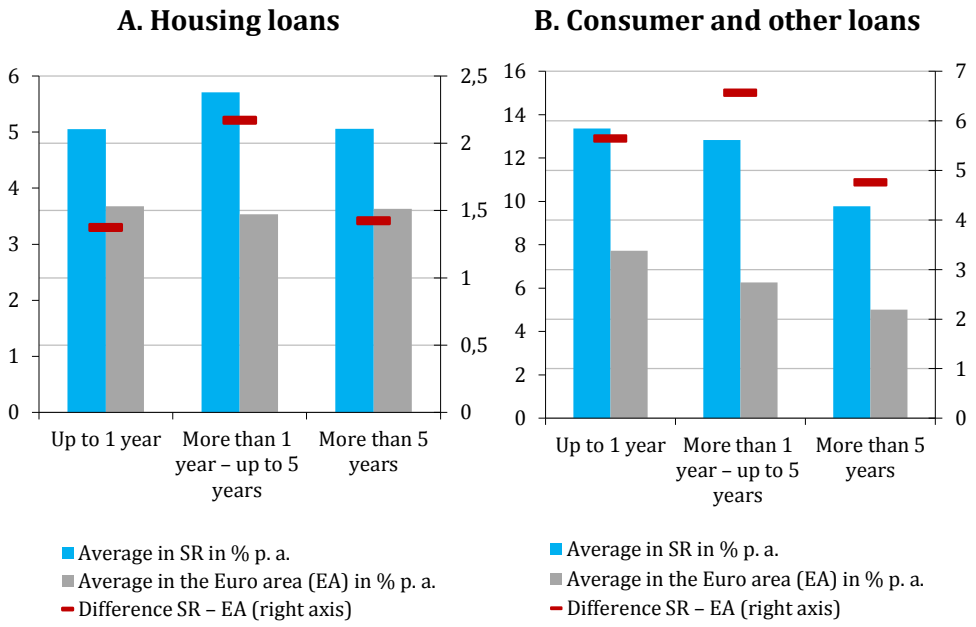
Figure 6.2
Interest Rates on Loans (stocks) **in % p. a. – Consumers Loans**



Source: NBS (2014).

A closer look at level of interest rates on loans granted to households reveals that Slovak households are exposed to significantly higher interest rates of loans drawdown in comparison with the Euro area average. This difference is particularly significant in consumer and other loans, but also for housing loans. In the period 2011 – 2014, the difference in interest rates of already granted consumer loans with a maturity of 1-5 years in SR and the Euro area was already 6.6 percentage points (p.p.). In case of housing loans, the difference represented 2.17 p.p. In case of other maturities, these differences are lower, but still at level, which is still not well argued by commercial banks. The interest rates on already granted loans would require a survey by relevant institutions overseeing the financial market as well as the antitrust authorities. The loans offer and interest rates level is in fact still low competitive, the banks are applying significantly higher interest rates on their branches in Slovakia than abroad.

Figure 6.3
A Comparison of Average Interest Rates for Slovakia and the Euro area
(Loan stocks)

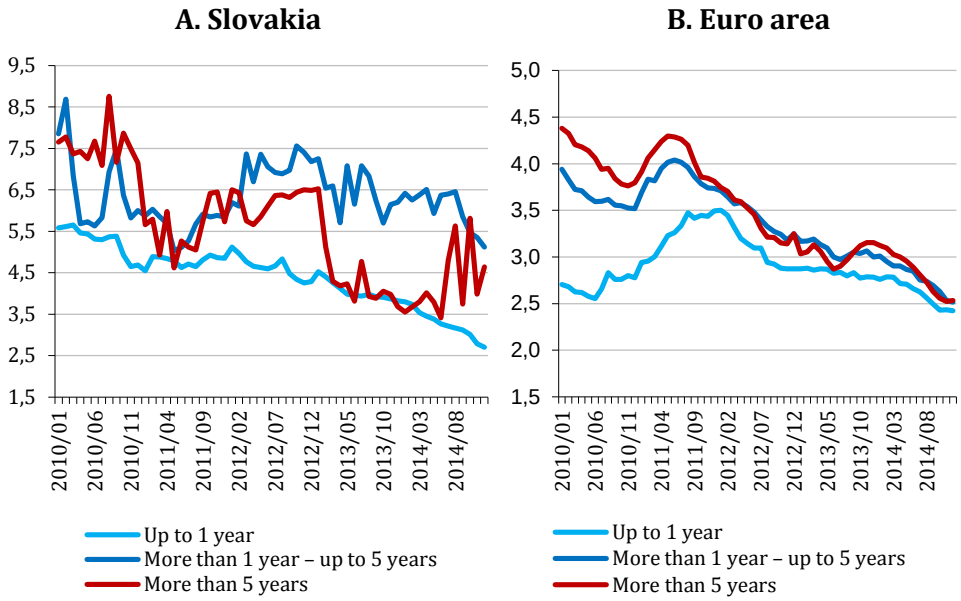


Source: NBS (2014); own calculations.

In case of housing loans, a gradual decline in remuneration of loans with a maturity over 5 years can be observed. While in 2010, the average interest rate reached 5.8 %, in 2014, the average interest rate represented 4.07 %. A decline in interest rates has been driven by several factors. In case of loan fixation termination, legislative changes enabled mortgage refinancing in another commercial bank with no extra fees. This created a higher competitive environment and also pressure for interest rates decrease. Expansionary monetary policy of the European Central Bank (ECB) also created suitable conditions for the interest rates decline.

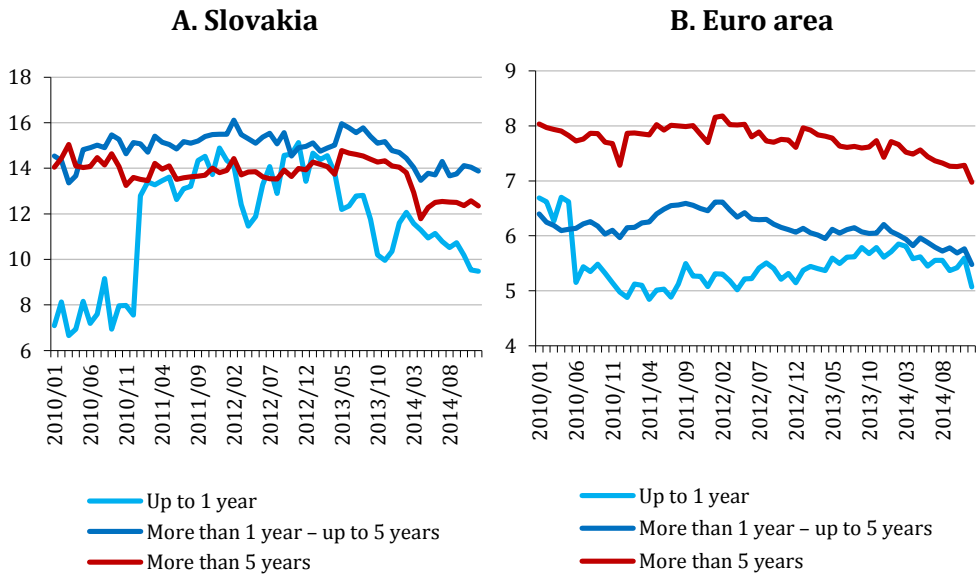
The level of interest rates on housing loans experienced decline in analysed period (Figure 6.4). For loans with maturity over five years, the interest rate declined by 3 p.p. The loans with maturity up to 1 year, the interest rate experienced decline by 2.87 p. p. While in case of housing loans we can observe gradual approach to the Euro area average, in case of consumer and other loans their development is more volatile.

Figure 6.4
Interest Rates of Loans (New Loans) **in % p. a. – Housing loans**



Source: NBS (2014).

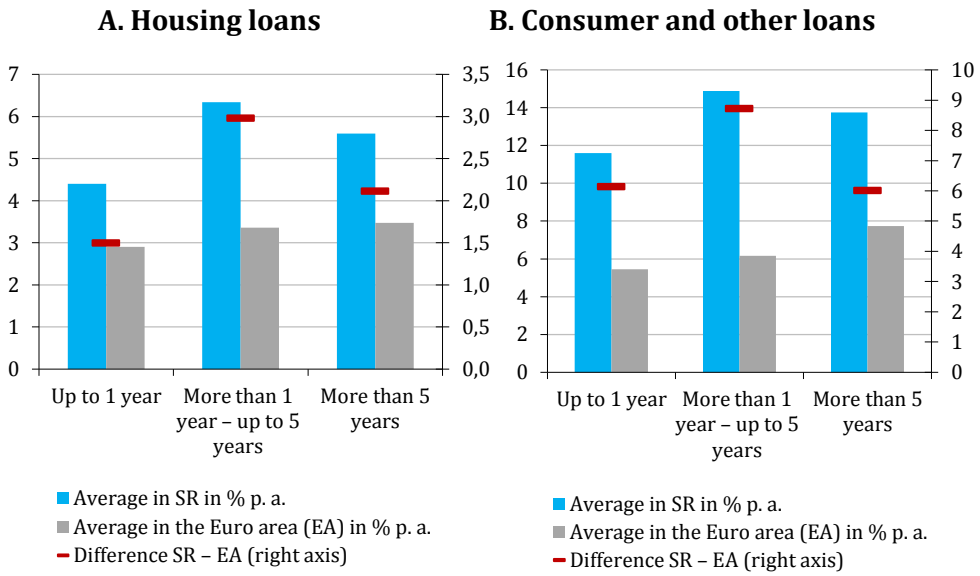
Figure 6.4
Interest Rates of Loans (New Loans) **in % p. a. – Consumer loans**



Source: NBS (2014).

In case of consumer loans with maturity up to 1 year, the average interest rate increased from 2010 to 2014 by 2.39 p.p. The loans with maturity of 1-5 years declined mildly by 0.66 p.p. There has been a decline for loans with maturity more than 5 years by 1.69 p.p. The development of the average interest rates in the Euro area is declining in comparison with Slovakia for both type of loans, housing loans and consumer loans. The average interest rate on housing loans with maturity more than 5 years reached level 2.53 % by the end of 2014 and compared to SR was lower by 2.11 p.p. In case of consumer loans, the difference is even more significant.

Figure 6.6
Comparison o Average Interest Rates for the SR and the Euro Area
(new loans)



Source: NBS (2014), own calculation.

The difference in interest rates between Slovakia and the Euro area in case of consumer loans with maturity over 5 years reached 5.38 p.p. For loans with maturity of 1-5 years, the difference is even greater reaching 8.4 percentage point. In case of loans with maturity up to one year, the difference is 6.15 p.p. This significant gap is in current situation (historically low

interest rates of the ECB) hardly tenable by specific conditions of the Slovak market.

The Development of Loans and Deposits in the Years 2011 – 2014

The lending activity largely reflects the state of the economy, especially of market players willing to take the risk of loan repayment. In case of Slovakia, we can see a gradual volume growth in all types of tracked loans. While in 2011, the total volume of loans lent to households reached 17.1 billion EUR, in 2014, the volume increased to 23 billion EUR. This increase can be mostly accounted to housing loans which increased in analysed period by 5 billion EUR followed by consumer loans with increase of 1 billion EUR.

Table 6.1
Status of loans granted in the years 2011 – 2014 – households (EUR million)

	Total loans	Consumer loans	Housing loans	Other loans
	Households			
2011	17 188	3 219	12 320	1 648
2012	18 774	3 517	13 701	1 556
2013	20 550	3 782	15 304	1 465
2014	23 050	4 276	17 364	1 410

Source: NBS database.

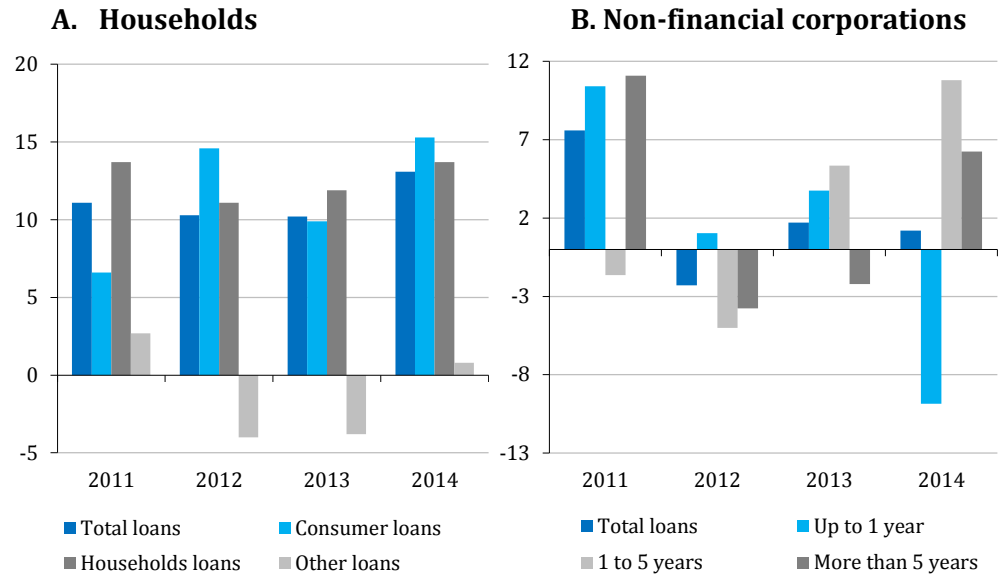
Tabuľka 6.2
Status of loans granted in the years 2011 – 2014 – non-financial corporations (EUR million)

	Total loans	Up to 1 year	1-5 years	>5 years
2011	16 194	5 773	3 790	6 631
2012	15 685	5 818	3 553	6 314
2013	15 772	5 982	3 651	6 139
2014	15 707	5 281	3 935	6 491

Source: NBS database.

The opposite trend was recorded in the non-financial corporations. The total volume of loans fell by 487 million EUR from 2011 till 2014, mainly due to a decrease in loans with maturity up to 1 year by 492 million EUR. On the contrary, an increase by 145 million EUR was recorded for loans with maturity between 1 to 5 years. In case of loans with maturity more than 5 years, there has been a decline in volume by 140 million EUR.

Figure 6.7
Annual increase (decrease) in loans between years 2011 – 2014 (in %)



Source: NBS, own calculations.

Households Deposits

Households deposits recorded growth of 3.3 billion EUR in analysed period (Table 6.3 and Figure 6.8). A closer look at the structure of deposits reveals that the highest increase was recorded in deposits repayable on demand by 3.4 billion EUR, while the highest annual increase was by 12.7 % in 2014. Also a significant increase was recorded in this year in deposits with a notice period of 3 months by 20.9 % and deposits with a notice period above 3 months by 5.7 %.

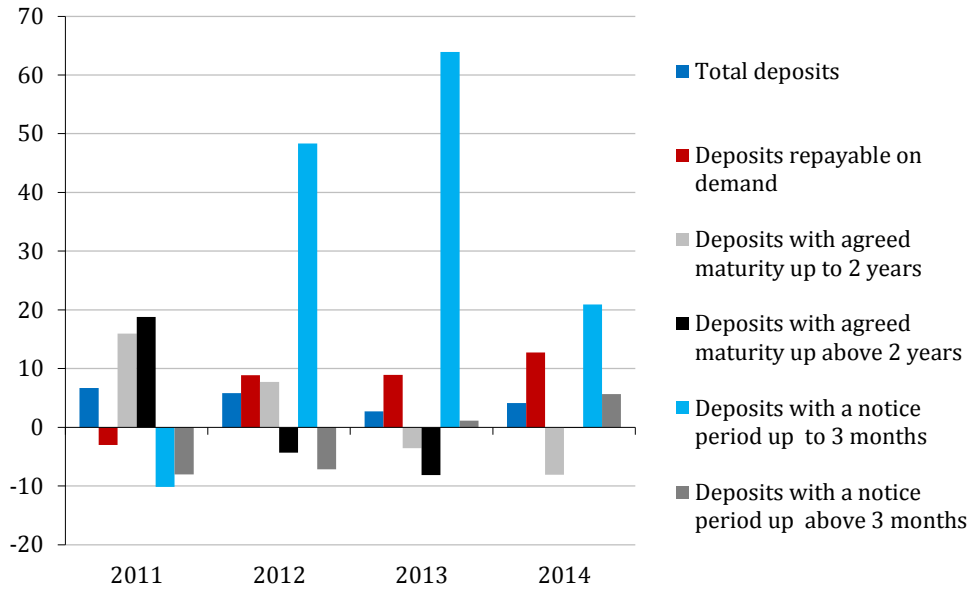
In total, the deposits repayable on demand increased during analysed period by 33.7 % to 13.5 billion EUR. A significant increase was also experienced in deposits with a notice period by 194 %, from 500,7 million EUR to 1471.8 million EUR. The most significant decrease by 12.2 % and 4.53 % was recorded for deposits with agreed maturity over 2 years and up to 2 years.

Table 6.3
Households Deposits in 2011 – 2014 (status to the 2014 year-end)

	Total deposits	Deposits repayable on demand	Deposits with agreed maturity		Deposits with a notice period	
			Up to 2 years	Above 2 years	Up to 3 months	Above 3 months
2011	25 226,8	10 145,1	8 166,1	5 658,2	500,7	756,7
2012	26 696,2	11 042,7	8 795,4	5 413,1	742,6	702,4
2013	27 412,7	12 029,5	8 483,8	4 971,8	1 217,2	710,3
2014	28 546,7	13 562,8	7 795,9	4 965,7	1 471,8	750,5

Source: NBS (2014).

Figure 6.8
Annual Changes in Households Deposits Volumes in 2011 – 2014
(EUR million)



Source: NBS (2014), own calculations.

Deposits from non-financial corporations increased from 2011 to 2014 by 1.3 billion EUR or 14.5 %. There was a gradual decline in the structure of deposits with an agreed maturity up to two years of 445 million EUR, and deposits over two years by 21.8 million EUR. The highest increase, similarly to households sector, was recorded in deposits repayable on demand. In total, these deposits increased by 1.7 billion EUR i.e. 25.5%. The highest increases in this category of deposits were made in 2011 and 2012, largely at the expense of deposits with a three months notice period.

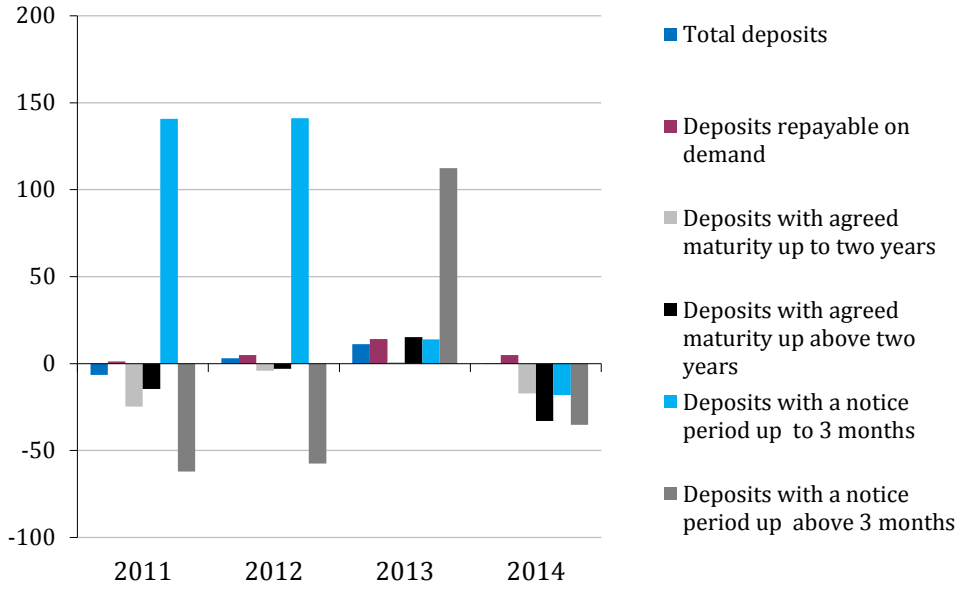
Table 6.4
Deposits of Non-finacial corporations in 2011 – 2014
(status to the 2014 year-end)

	Total deposits	Deposits repayable on demand	Deposits with agreed maturity		Deposits with a notice period	
			Up to 2 years	Above 2 years	Up to 3 months	Above 3 months
2011	9 393.7	7 035.7	2 239.1	86.9	31.6	0.1
2012	9 686.1	7 378.2	2 147.4	84.3	76.2	0.0
2013	10 765.1	8 414.5	2 166.6	97.1	86.7	0.1
2014	10 756.5	8 827.2	1 793.2	65.0	70.9	0.1

Source: NBS (2014).

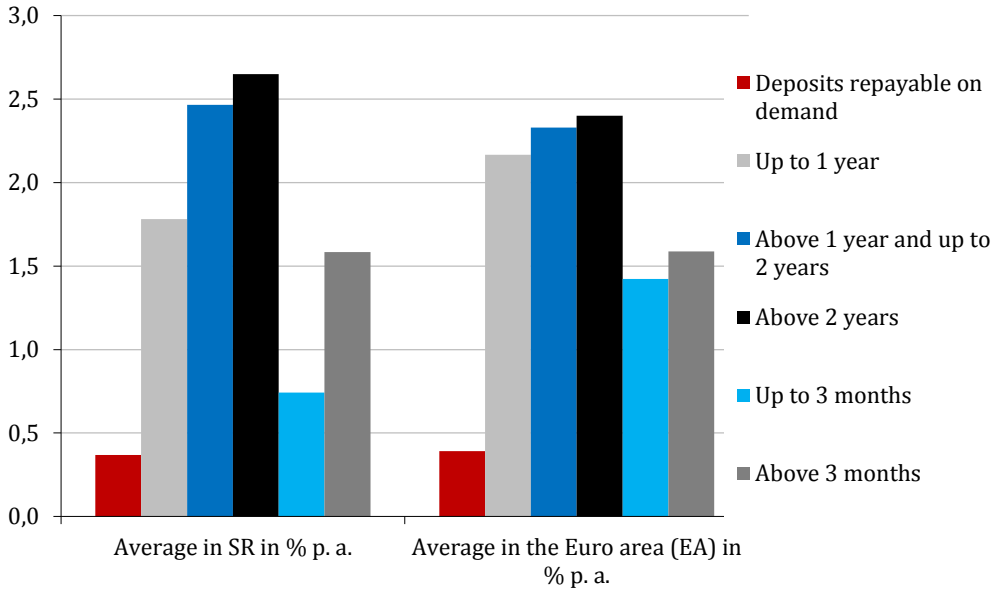
By look at the level of interest rates on deposits, we can conclude that the diversion of households and non-financial companies from deposits with a longer notice period towards deposits repayable upon demand is understandable, given a small difference in the interest rates of individual deposits. The development of interest rates on deposits in Slovakia, unlike loans, copies the development in the Euro area with only slight deviations. Standard deviation of the differences between interest rates of different types of Slovak household's deposits and the Euro area average ranged from 0.07 to 0.43.

Figure 6.9
Annual Changes in Non-financial Corporations Deposits Volumes in 2011 – 2014 (EUR million)



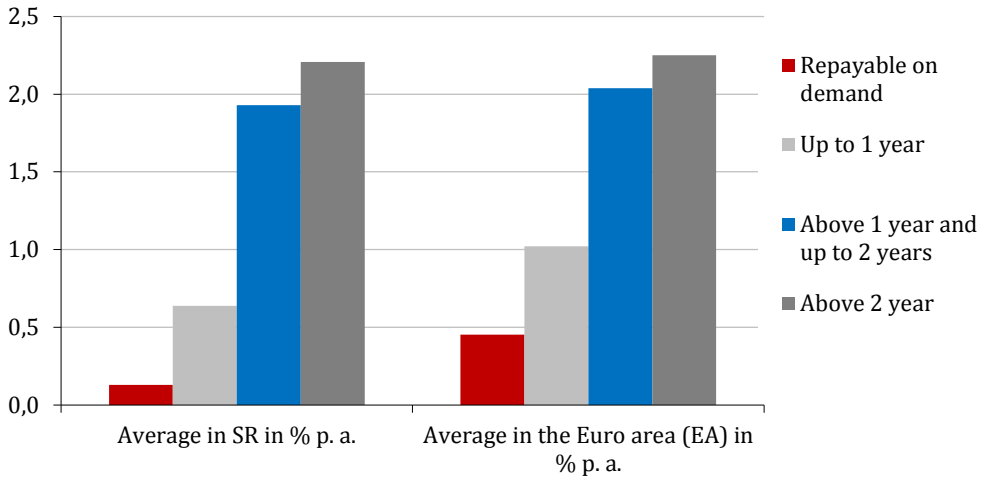
Source: NBS (2014), own calculations.

Figure 6.10
Development of deposits interest rates average in 2010 – 2014 (%, p. a.)



Source: NBS (2014), own calculation.

Figure 6.11
Development of Non-financial Corporations Deposits Interest Rates Average in 2010 – 2014 (%, p. a.)



Source: NBS (2014), own calculations.

It is clear from the analysis that interest rates on deposits follow the interest rate developments in the Euro area, while there is still an obvious imbalance between the interest rate of loans to households in Slovakia, compared with the average of the Euro area rates. Nevertheless, there is a growing demand for consumer loans from households. We can also observe a significant increase in volume of housing loans (the part of this is due to the refinancing of original loan). Increased lending activity of households is also reflected in the change of economic growth quality (more in Chapter 1), as part of households consumption is currently covered by these loans.

In conclusion, we can say that most of the findings that we have indicated at the beginning of this chapter and were based on the conclusions of Economic Development in 2012 are still valid. There is still a significant difference in the borrowing rate between the Slovak Republic and the Euro area average, this difference is most pronounced especially in the field of consumer loans to households. In case of interest rates on deposits, we can observe a departure from deposits with a longer notice period toward deposits repayable on demand. This is mainly due to the low interest-bearing deposits with a longer notice period, which does not encourage savers to store money for a longer period of time.

7. PUBLIC FINANCE

The development of public finance was influenced by several external and internal factors in 2014. The major change was the introduction of new ESA 2010 methodology, which resulted in the revision of basic macroeconomic indicators and naturally affected the data reported with regards to management of public finances. The major changes include (SO SR, 2015):

- Research and development is recognized as capital formation.
- Weapon systems in the government sector are recognized as capital assets.
- Sector classification of state, public and private units.
- The indexed debt instruments – a new estimation method of accrual interest. Accrual interest is the difference between the issue price and the expected price changes on the markets. Deviation is considered as a gain or loss from debt instruments holding.
- Super dividends – the change of dividends comprehension from public corporations to government sector, which are considered as yield on assets instead of income transfers from property.
- Special Drawing Rights (SDR) of the International Monetary Fund (IMF) are considered to be assets and liabilities – each country holding the SDR is reporting them as a liability to other countries representing their commitment to the IMF.
- Current tax loans – the whole amount of loans in this category is recognized as subsidies or social benefits and other.

The changes mentioned above along with changes in the calculation of nominal GDP or GNI have been reflected in the public finances. Change in methodology has brought the growth of nominal debt by 0.3 % of GDP. The most significant in this increase is the inclusion of the National Motorway Company in the general government sector (increase in debt by 0.5 % of GDP). On the other hand, the reclassification of hospitals and change in recording of suppliers credits reduced debt by 0.3 % of GDP. The revision of nominal GDP amount had the most significant impact on

the government debt to GDP ratio. The change of GDP calculation contributed to a decline of debt by 1.1 % of GDP. Therefore, the public debt reached 54.6 % of GDP in 2014, which enabled the government to abolish 3 % binding of expenditures and still to be in accordance with rules of the Fiscal Responsibility Act. Also the obligation of local governments not to increase annual expenditures of their budgets was removed due to this methodology change.

Another important factor setting the framework for assessing the fulfilment of so-called medium-term objectives of public finances management of the Euro area countries (MTO – Medium-Term Budgetary Objectives) was the publication of detailed guidance from the European Commision (EC, 2015).

The guideline was published in January 2015 and explains in details the assessment of member states fiscal position in terms of investments, structural reforms and cyclical effects. It is about rules interpretation of preventive and corrective part of the Stability and Growth Pact (SGP), in which it is possible to deviate from the MTO.

Investment clause: in terms of interpretation, the investments shall be eligible within the emerging EU fund for strategic investments as well as investments (co-financing) of the member states under cohesion policy, trans-european networks and tool "Connecting Europe".

The clause of structural reforms defines possible temporary deviations from the MTO under the following conditions (preventive part of the Stability and Growth Pact):

- Reforms must have fundamental character.
- They must have direct long-term positive impact on the public finances.
- Reforms must be fully implemented.

Activation of this clause is only possible in case that the member state presents detailed and critical medium-term plan of structural reforms (as part of the National Reform Programme), which contains credible deadlines for approval and implementation of reforms. An essential part is the quantification of reforms impact on medium-term fiscal objectives and potential economic growth. In case of non-fulfillment of given tar-

gets, the EC will pursue with necessary measures – it will issue a warning followed by draft of recommendations for the EU Council, that member state should take appropriate corrective measures within 5 months period.

Table 7.1 captures mechanism for assessment of fiscal positions of individual countries under preventive arm of the SGP and based on given intervals it provides expected values of fiscal consolidation of relevant countries within cyclical effects clause application.

Table 7.1
Annual Fiscal Adjustment of the Structural Deficit in Terms of the Medium-term Budgetary Objective (MTO) **in the Preventive Part of the Stability and Growth Pact** (SGP)

		Required yearly fiscal correction	
Period	**Conditions**	**Debt below 60 % and no risk of sustainability**	**Debt above 60 % or the risk of sustainabillity**
Exceptionally poor	Real growth < 0 or output gap <-4	No fiscal correction required	No fiscal correction required
Very poor	-4 ≤ output gap < -3	0	0.25
Poor	-3 ≤ output gap < -1.5	0 if growth is below potential, 0.25 if growth is above potential	0.25 if growth is below potential, 0.5 if growth is above potential
Normal	-1.5 ≤ output gap < 1.5	0.5	> 0.5
Good	Output gap above ≥ 1.5 %	> 0.5 if growth is below potential, ≥ 0.75 if growth is above potential	> 0.75 if growth is below potential, ≥ 1 if growth is above potential

Source: European Commission (2015).

By look at current development in the budgetary discipline field, we may conclude that several countries do not respect the medium-term objectives of fiscal consolidation. On the one hand, the EC guidelines provide clear rules for member states and introduce an element of flexibility. It takes into account current economic development of member countries and provides space for automatic stabilizers reaction. On the other hand, the financial rules adopted in response to the debt crisis in

the Euro area are to some extent not that strict and may cause decrease in consolidation efforts also in other EU countries. A crucial factor affecting the credibility of the EC in assessing fiscal discipline of the member countries will be strict enforcement of these modified rules without exception. However, the development in recent years shows that despite revised SGP rules, some member states are not in a position to consolidate public finances at a pace that would serve the MTO.

Development of the public finances in 2014

According to preliminary data, the deficit of Slovak public finance was 2.93 % of GDP in 2014. The deficit was higher by 0.03 p.p compared to the target (Table 7.2). In terms of the MTO fulfillment, the consolidation efforts deteriorated by 0.6 according to preliminary data.

Table 7.2
Development of the General Government Budget Deficit in 2008 – 2014

Indicator		2008	2009	2010	2011	2012	2013	2014
Net lending / borrowing	EUR mill.	-1 555	-5 076	-5 032	-2 887	-3 046	-1 933	-2 199
Net lending / borrowing[1]	% GDP	-2.30	-8.00	-7.50	-4.10	-4.20	-2.63	-2.9
Primary balance[2]	% GDP	-1.00	-6.50	-6.20	-2.60	-2.40	-0.70	-1.10
Cyclically adjusted primary balance[3]	% GDP	.	.	-6.00	-2.10	-1.60	0.60	0.20
Structural balance[4]	% GDP	.	.	-6.70	-4.10	-3.50	-1.30	-1.90
Gross general government debt	EUR mill.	19 205	22 923	27 622	30 485	37 618	40 178	40 400
Gross general government debt	% GDP	28.2	35.9	41.1	43.5	52.1	54.6	54.1
Net general government debt[5]	% GDP	22.8	32.2	37.6	41.3	45.9	48.2	50.9

Note: 2014 data are preliminary.
1 Net lending/borrowing including the second pension pillar costs (Eurostat definition).
2 Primary balance is the public administration balance adjusted for interest paid.
3 Cyclically adjusted primary balance is the primary balance adjusted for cyclical component.
4 Structural balance is the public administration balance adjusted for cyclical component and one-time effects.
5 Net general government debt is the gross general government debt minus liquid financial assets.
Source: MF SR (2015).

Negative consolidation effort indicates that based on structure, there has been first year-on-year (y-o-y) increase in government deficit since 2010 (Table 7.3). The actual achieved structural balance was -1.9 % of GDP in 2014. The gross general government debt decreased in y-o-y mainly due to already mentioned changes in the methodology of basic macroeconomic indicators calculation in ESA 2010. In absolute terms, the gross public debt amounted to 40.4 billion EUR and increased y-o-y by 222 million EUR.

Table 7.3
Consolidation Efforts in 2010 – 2014

	2010	2011	2012	2013	2014
Net lending/net borrowing	-7,5	-4,1	-4,2	-2,6	-2,9
Cyclical component	-0,1	-0,4	-0,8	-1,3	-1,3
One-time effects	-0,6	0,4	0,1	0,0	0,3
Adjusted balance	-6,7	-4,1	-3,5	-1,3	-1,9
Consolidation efforts	0,5	2,7	0,6	2,2	-0,6

Source: MF SR (2015a). Data for 2014 are preliminary.

We may assume that due to political cycle, consolidation efforts will alleviate in 2015, and the objective of achieving a balanced budget on structural base will not be achieved in 2017.

The State Budget Development in 2014

In 2014, the state budget reached a deficit of 2.92 billion EUR and ended up lower by 360 million EUR than planned. The state budget revenues amounted to 12.49 billion EUR and were lower by 1.61 billion EUR than planned. By closer look, we can conclude in terms of tax revenue, a positive development occurred, and in most of revenue kinds the collection of individual taxes was fulfilled or even exceeded planned values (Table 7.4).

The tax revenue reached 9.29 billion EUR and was higher than planned by 602.6 millon EUR. The higher collection of corporate income tax (CIT) amounted to 1.91 billion EUR , which was higher by 482 million

EUR in absolute terms compared to the plan. In case of taxes on goods and services (VAT, excise taxes) as well as non-tax revenue were higher than the 2014 budget expected.

Table 7.4
Central Government Budget Development in 2011 – 2014 (EUR million)

Indicator	2011	2012	2013	Planned 2014	Actual 2014	% of compliance 2014	Year-on-year change, %
Total revenues	12 002	11 830	12 797	14 108	12 496	88.6%	-2.3%
of which:							
1.Tax	8 700	8 463	9 135	8 690	9 293	106.9%	1.7%
of which:							
Tax on personel income	112	234	214	218	239	109.6%	11.9%
Corporate income tax	1 620	1 733	2 003	1 434	1 917	133.7%	-4.3%
Income tax coll. by deduction	143	167	178	154	175	113.6%	-1.6%
VAT	4 753	4307	4 735	4 901	4 919	100.4%	3.9%
Excise taxes	2 002	1979	1 977	1 936	2 009	103.8%	1.6%
2. Non-tax	859	695	1 283	1 397	1 637	117.2%	27.6%
3. Grants and transfers	2 443	2670	2 379	4 020	1 566	39.0%	-34.2%
of which:							
Income from EU budget	2 031	2127	2 175	3 173	1 257	39.6%	-42.2%
Total expenditures	15 278	15 640	14 820	17 391	15 420	88.7%	4.1%
of which:							
Current expend.	12 783	13 657	12 968	14 863	13 441	90.4%	3.6%
Capital expend.	2 495	1 983	1 854	2 528	1 979	78.3%	6.7%
Deficit/Surplus	-3 276	-3810	-2 023	-3 283	-2 923	89.0%	44.5%

Note: Total revenues from tax on personal income is higher, but given the fact it is the revenue for regional government, the values within the state budget are low.

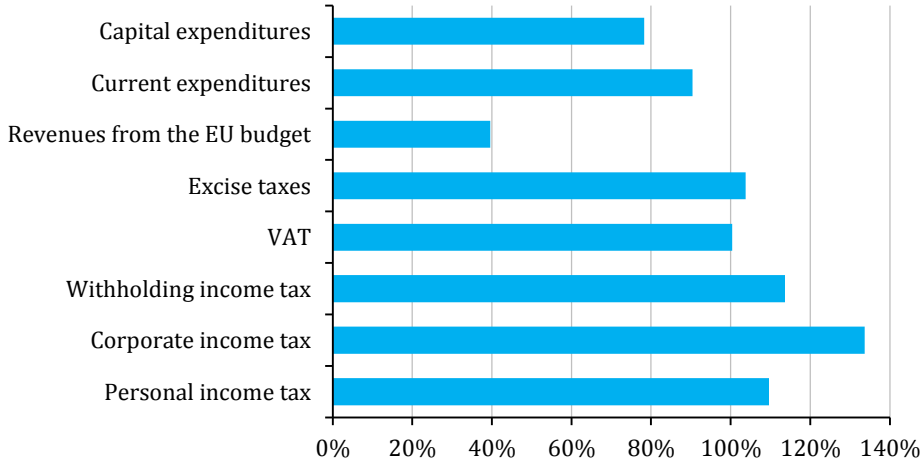
Source: MF SR (2015c); own calculations.

During the annual budgetary assessments, we may conclude that especially in component "Grands and transfers from the EU", there is repeating revenue overestimation every year, while real revenue from the EU budget was substantially lower than planned also in 2014. Total revenues reached the level of 1.25 billion EUR compared to the target one 3.1 billion EUR.

The state budget expenses were lower by 1.97 billion EUR compared to the target, out of which the current expenditures by 1.42 billion EUR

and the capital expenditures by 549.6 million EUR. The highest decrease in expenditures was experienced in expenditures on goods and services by 1.06 billion EUR. Mostly, the contraction in the capital expenditures can be considered negatively.

Figure 7.1
Fulfilment of Selected Revenue and Expenditure of the State Budget in 2014 (%)



Source: MF SR (2015c); own calculations.

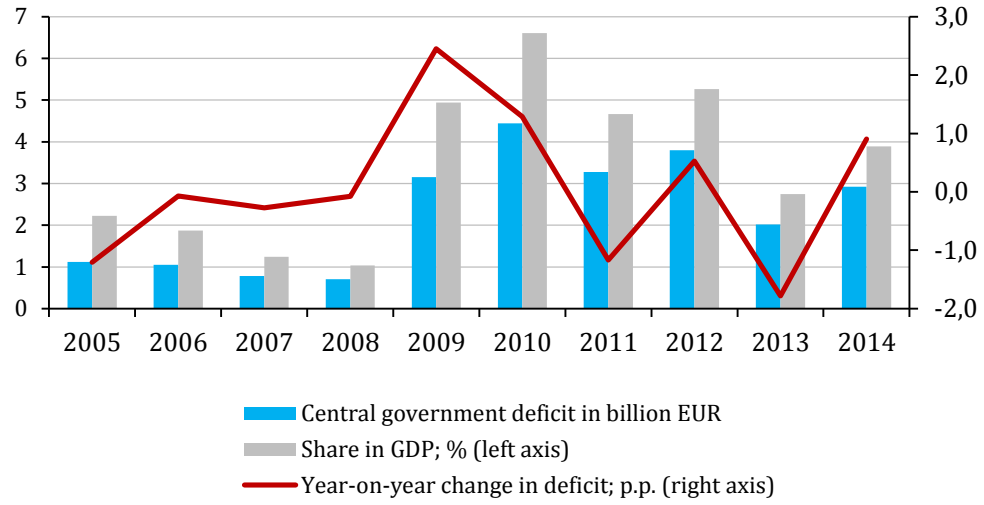
Budget deficit and central government debt

In 2014, the state budget deficit represented 2.02 billion EUR and it was lower by 1 billion EUR compared to planned value. In ratio to GDP, it reached 2.74 % and in y-o-y decreased by 1.8 p. p (Figure 7.2). This was mainly due to already traditional overestimation of expenditures required for operation programs co-financing compared to actual spending.

Gradual fiscal consolidation reflected itself in the growth rate of central government debt and its ratio to GDP. Compared to previous years, the amount of debt has stabilized at level around 40 billion EUR or 52 % of GDP (Figure 7.3). Despite the decrease of consolidation effort in 2014, we can observe a decline in debt-to-GDP ratio of the central government, mainly due to changes recognized in ESA 2010. Given the fact of political cycle ending and upcoming parliamentary elections in 2016, we do not

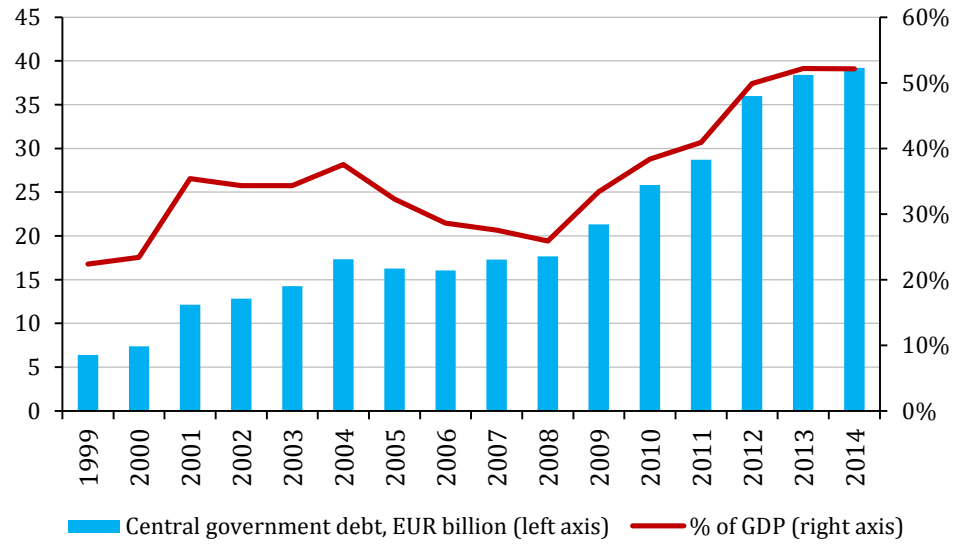
expect any substantial consolidation measures to occur in 2015. The deficit maintaining is more likely at similar levels as of today.

Figure 7.2
The State Budget Deficit in 2005 – 2014



Source: MF SR (2015c); own calculations.

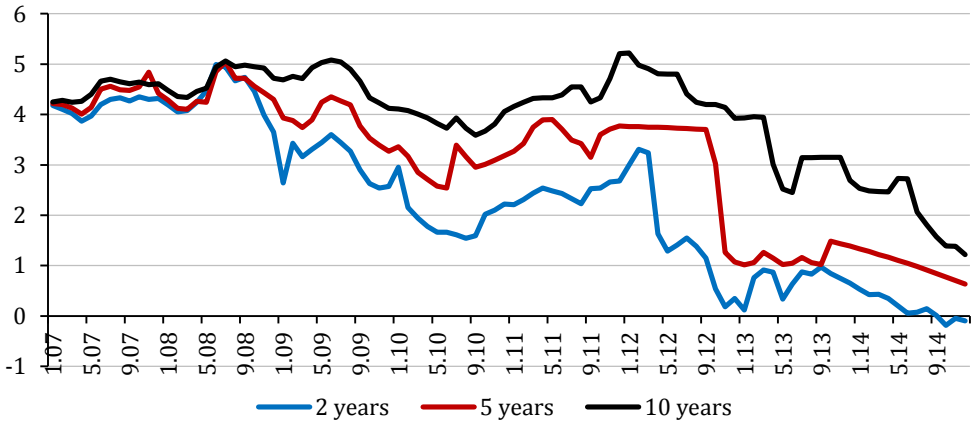
Figure 7.3
Central Government Debt in 1999 – 2014



Source: MF SR (2015b); own calculations.

The ECB policy of quantitative easing coupled with ongoing consolidation of public finances have gradually reflected also in interest yields of Slovak government bonds (Figure 7.4).

Figure 7.4
Interest Rates of Slovak Government Bonds by their Maturity in 2007 – 2014 (%)



Source: NBS.

From the Figure 7.4, it is clear that in 2014, particularly in case of bonds with maturity up to two years, a decline in the remuneration to negative interest rates occurred. Given this fact, Slovakia ranked among those countries of the Euro area, which will pay less for issue of bonds at the time of their maturity than the price they were originally borrowed at. The ECB quantitative easing policy (more in Chapter 4) should continue until September 2016, which may also lead to significant decrease of the remuneration in newly issued bonds with maturity longer than two years. In this situation, it would be appropriate to examine the possibility to refinance part of already existing debt and thereby reduce the interest costs of public debt service.

Financial Position of Slovakia against the European Union Budget

Slovakia's accession to the EU naturally reflected also in the national budget financial relations with the EU. Slovakia's position as converging and less developed country puts Slovakia into the category of net recipient

of funds from the EU budget, mainly through the EU cohesion policy. From 2004 to 2013, the SR gained 8.04 billion EUR from the EU budget.

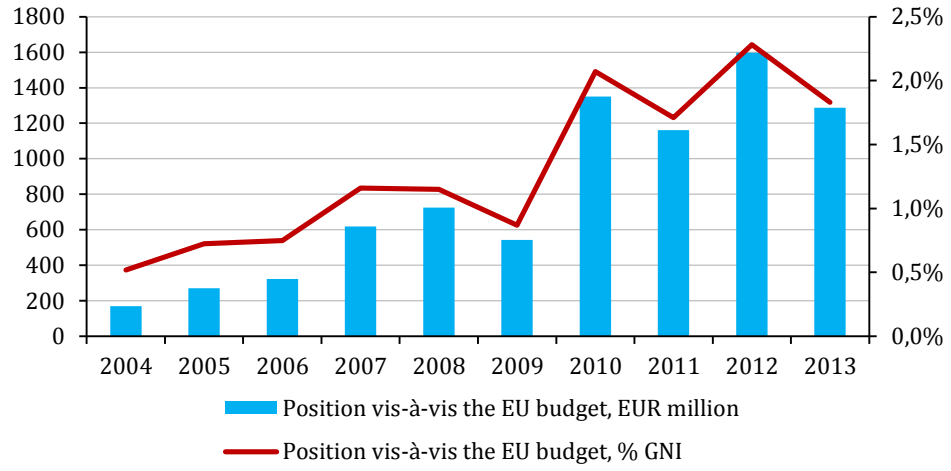
Table 7.5
Expenditures of EU budget in Slovakia in 2007 – 2013 (EUR million)

	2007	2008	2009	2010	2011	2012	2013
1. Sustainable growth	669	852.8	633.5	1208	1096.8	1646	1439.2
1.1 Competitiveness for growth and employment	33.7	43.3	48.7	11.8	40.9	70.4	58.4
1.2 Cohesion for growth and employment	635.2	809.5	548.8	1 096.1	1 056	1 575.7	1 380.8
1.2.1 Structural funds	451.9	510.1	385.9	633.7	917.6	1 212.9	812.1
1.2.2 Cohesion fund	183.3	299.4	198.8	462.4	138.2	362.7	568.7
2. Preservation and management of natural resources	380.5	357	513	676.5	647.9	618	566
3. Citizenship, freedom, security and justice	13.7	11.1	8.5	8.7	29.2	12.6	11
4. EU as a global partner	9.9	11.5	26.6	0.3	0.5	0.5	0
5. Administration	9.6	9.4	10.8	11.5	10.7	9.7	9.9
6. Compensation	0	0	0	0	0	0	0
Total	1 082.7	1 241.8	1 192.4	1 905	1 785.1	2 286.8	2 026.1

Note: 2014 data were not available at the time of chapter publication.

Source: European Commission (2015).

Figure 7.5
Net Financial Position of the SR vis-à-vis the EU Budget, 2004 – 2013



Note: 2014 data were not available at the time of chapter publication.

Source: European Commission (2015).

EU Structural Support Implementation in 2007 – 2013 Programming Period

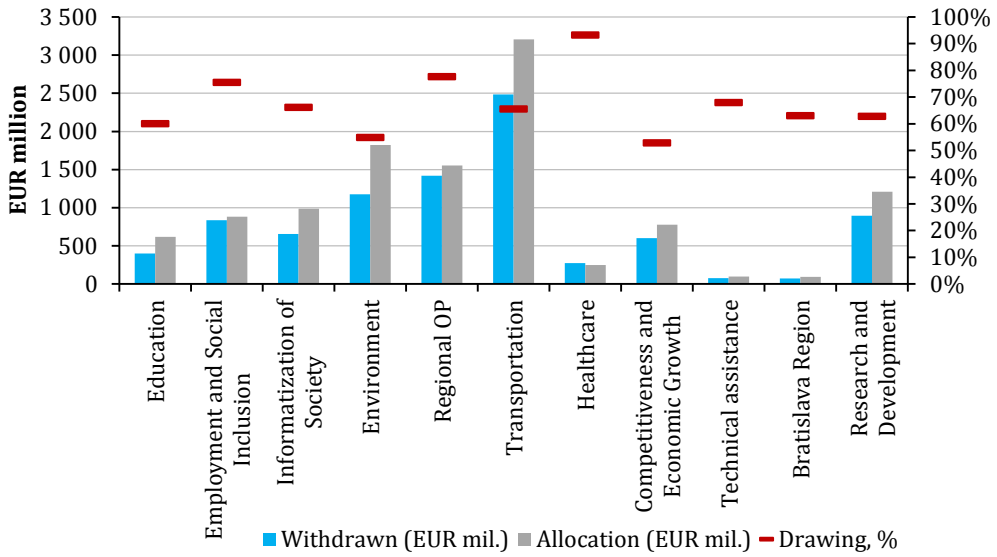
Year 2014 was the penultimate year, in which it was possible to draw financial resources from the programming period 2007 – 2013. Annual draw of funds have increased by 12.79 p.p., which was a slowdown approximately by 1.3 p.p, compared to previous year. Towards the end of 2014, the draw of funds has reached 65.3 % of total. Such low level of implementation confirmed our critical findings published in previous editions of Economic Development of Slovakia, that Slovakia cannot withdraw the overall financial allocation for 2007 – 2013. Despite the measures that have been taken in recent years at all levels of implementation, we estimate that by the end of 2015 maximum of 85 % from total allocation for 2007 – 2013 will be withdrawn. The main factors negatively impacting the utilization of cohesion policy resources include:

- Low absorption capacity on demand and supply side,
- Insufficient stability of administrative capacity at national and regional level,
- Public procurement,
- Applicant's lack of experience with projects creation,
- Lack of domestic financial resources needed for co-financing projects
- Rent-seeking behaviour, lack of transparency,
- Change in competences between authorities responsible for the management and implementations (change of managing bodies, interference of ministries responsible for the implementation and agenda transfer to other managing bodies),
- Administrative complexity of realized projects, often beyond the EC requirements.

The highest increase of resources withdrawal based on year-on-year comparison was recorded in these operation programs (OP): Informatization of Society (19.96 p. p.), Healthcare (8.39 p. p.), Transportation (16.27 p. p.) Education (20.22 p. p.), Research and Development (17.04 p. p.), Regional OP (6.75 p. p.) and Employment and Social Inclusion (13.25 p. p.).

The most successful OPs from withdrawal point of view are: OP Healthcare, Regional OP, OP Employment and Social Inclusion, Bratislava Region OP and OP Transportation.

Figure 7.6
State of Commitment Withdraw in 2007 – 2013 to 31st December 2013 by Operational Programs



Source: <www.nsrr.sk>; own calculations.

In parallel with the end of programming period, the approval of the final form of operational programs for current programming period took place. Table 7.6 briefly presents the basic structure of operational programs of Partnership Agreement, responsible managing bodies and the amount of total allocation (15.3 billion EUR) in years 2014 – 2020.

We can positively evaluate the reduction in number of operational programs and management bodies. This creates appropriate conditions for effective and especially faster programs implementation. It is essential to start with the projects real implementation of current programming period in order to avoid negative phenomena that accompanied previous period. There have not been withdrawn any funds from current programming period in the second half of 2015, so it is necessary to maximize all efforts in order to start real implementation of operational

programs.[20] Programming period 2014 – 2020 represents the last opportunity for SR to draw such strong support from the EU for modernization and structural changes in the Slovak economy. These resources utilization should be a key priority for government majority of any kind.

Table 7.6
Operational Programs and their Allocation within the Program Period 2014 – 2020

Operational Program	Managing body	Allocation (EUR)
Research and Innovation	MŠVVŠ SR	2 266 776 537
Integrated infrastructure	MDVRR SR	3 966 645 373
Human resources	MPSVR SR	2 204 983 517
Quality of Environment	MŽP SR	3 137 900 110
Integrated Regional OP	MPRV SR	1 754 490 415
Effective public administration	MV SR	278 449 284
Technical Assistance	ÚV SR	159 071 912
Rural development program	MPRV SR	1 545 272 844
Fisheries	MPRV SR	15 785 000
Total		15 329 374 992

Source: <www.partnerskadohoda.gov.sk/operacneprogramy>.

* * * *

The slight acceleration of economic growth in 2014 and its expected continuation in 2015 should have a positive impact on the public finance revenues. This is mainly due to the nature of economic growth which is driven by domestic demand. An approaching end of political cycle is expected to have slight negative impact on the consolidation efforts and consolidation pace target will not be met. A significant growth impulse should be the implementation of projects from ending programming period 2007 – 2013 as well as the start of new period. However, no real funds have been withdrawn from new period even until the end of the year.

20 It is appropriate to add that the delay is not caused solely by the SR. Without the EC approval of operational programs, it is impossible to withdraw funds.

8. LABOUR MARKET

Year 2014 was the one of positive news in terms of labour market. Employment grew in line with the recovery of economic activity, in the second half, and especially towards the year end, it grew with an unusual intensity. New employees were arising mainly in industry, trade, information and communication branch and health care. The growth of employees even compensated adverse development in case of sole proprietors. A key moment occurred in the development of long-term unemployment. For the first time in post-crisis period, there is a decrease in the number of unemployed longer than two years, who represent almost half of the total unemployment. A favourable turn could be observed also in development of the youngest unemployment category, which was impacted by crisis the most. The unemployment rate of youth decreased below one-third for the first time since the recession. Finally, the positive development has been reflected also in accelerated growth of average monthly wage. Real wage has grown at the fastest pace since 2007.

Unexpectedly strong employment growth

A gradual recovery of employment after the recession in 2009 started to occur at the end of 2010, when employment grew till the end of first half of 2011. However, it was a very weak growth and on average in 2011 it could be considered rather as a halt of employment decline. Later on, in 2012, there was just weak growth of employment; as a reaction to progressive slowdown of economy in 2012[21], clear decline in employment occurred in mid-2013. Stagnation of employment in 2013 (total annual change in employment[22] in 2013 was zero) was replaced by an unusual increase in employment in 2014 (for development during mentioned period see Figure 8.1).

[21] The growth rate of output declined during all quarters and in last quarter of 2012 the economic growth nearly stopped.

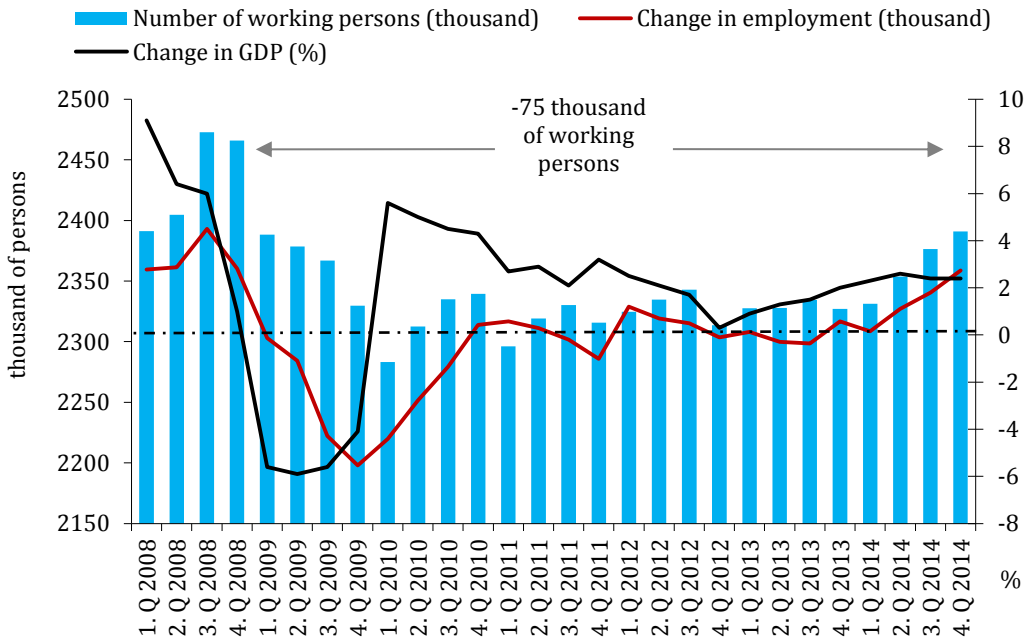
[22] Employment according to the Labour Force Survey (LFS) calculated from the total number of employed persosns, thus including those working under agreements, seasonal workers, persons on maternity leave, working abroad for less than a year and persons in activation work.

The employment growth rate gradually accelerated during 2014 from 0.2 % in the first quarter to 2.7 in the fourth one. That is an increase of 2.1 p. p. compared to growth rate in last quarter in 2013. Therefore, in fourth quarter of 2014, there were roughly 64,000 more employed people in the economy than a year ago. Compared to previous quarter (third one), the seasonally adjusted employment increased by 1 % (equivalent to 24 thousand of people). Over the full year, number of employed persons climbed with year-on-year growth 1.4 % to 2.363 thousand people. *The average year-round value is already higher than the average employment in the economy in pre-crisis year 2007* and only slightly lower than in 2009, when employment began to gradually decline due to the crisis. The only year when employment in Slovakia (calculated from number of persons employed using LFS method) exceeded 2.4 million people threshold was the year 2008. The decline in employment after 2008 was significant and its gradual and discontinuous recovery resulted in fact that even at the end of 2013, three years after recession, there was 139 thousand less people working in the economy than in same period of 2008. Gradually increasing growth of working people in 2014 lowered this employment gap by almost a half: in the fourth quarter of 2014, there were 75 thousand working people less than at the time when the economic crisis occurred (Figure 8.1). The fact, that this persisting gap in employment is a consequence of the economic development (and its impact on the labour market) and not a consequence of the demographic factors is proved by increase in number of economically active persons which increased in mentioned period by 35.000.

The development of GDP (or output, value added) and employment in long-term has shown that employment reacts to changes in the development of product with approximate delay of three or four quarters. This indicates that after the recovery of production, there comes a recovery in employment with certain delay and vice versa, after the economy decline, there comes also the employment decline, but with a time-shifted bottom drop. Same logic could be found behind our expectations (introduced in last issue of this publication) that mild improvement in economic performance during 2013 will bring a gradual recovery in

employment in the upcoming period (see Morvay, 2014). However, besides a time shift mentioned above, there was always certain level of economic growth required in order to induce additional employment growth (employment growth threshold). However, the employment growth at the end of 2014 (and in fact already in the second half of the year) was unusually strong; growth rate of output was below a pace usually required to induce employment growth in past, in last quarter the employment grew faster than output in any of previous quarters.

Figure 8.1
Quarterly development of employment and GDP, 2008 – 2014



Note: GDP based on quarterly national accounts at constant prices, reference year 2010 (constant prices calculated by chain-linked volumes with reference year 2010, ESA 2010 methodology), employment based on LFSS, 2011 data are revised on Population and Housing Census 2011. Number of working persons in thousands, columns – left axis; year-on-year changes in %, lines – right axis

Source: Based on SO SR database (SO SR, 2015a).

Figure 8.1 depicts non-seasonally adjusted data about employment and if there is none additional correction of the statistical data, with certain probability, there were some additional factors present acting in

favour of employment growth in this particular period. It is necessary to bear in mind that there cannot be applied standard development trends on period of recession as well as the recovery period. There are different adaptation processes taking place at/or after major fluctuation in economic performance. In such cases, it is useful to supplement the view of development dynamics with indicators in absolute values. Regarding to this, it is necessary to note than GDP (measured in billion EUR), as well as GDP per capita (measured in both, current and constant prices – based on ESA 2010) have exceeded pre-crisis level already in 2011. We can assume that companies have already exploited standard crisis measures like usage of their inventories and demand for higher productivity growth (e. g. a slowdown in fast growth rate of labour productivity in the largest sector, industry, to almost complete stop in productivity takes place since 2013). All this aligned with positive sentiment in Europe has led to a greater determination to restore part of the original employment. After the period when waiting tactic prevailed as a response to previous two waves of crisis and option of maximized utilization of each rational measure was dominant, the economic sentiment indicator climbed over 100 for the first time since 2007 (it is above long-term average since May 2014, NBS, 2015). The positive expectations of employers have been accompanied with other secondary factors. According to Central Office of Labour, Social Affairs and Family (COLSAF) and Social Insurance Agency (SIA), there has been 2,500 new job positions created with government funding in this period (NBS, 2015). However, this represents only a very small contribution to mentioned employment growth rate.[23] The NBS claimed that mild weather conditions in December could have supported annual increase in construction activity (NBS, 2015a).

[23] According to the European Commission, (EC, 2015) a package of legislative changes with an impact on the labour market since 2015 will keep on in contributing to positive employment development (e. g.., The introduction of tax deduction for health insurance of low-income groups, which reduces some employees and employers health insurance contributions).
In addition to changes in health insurance, from 1.1.2015, there are some changes in social insurance as well (e. g., The students working on agreement with income lower than 200 EUR will be not included in social contributions obligation and the employer wil pay for them only accident and guarantee insurance contributions.) Also changes in Labor Code take place (in the fight against illegal work, the Code adjusts the definition of depending work – there will be no more the condition of perfoming a work for wage or remuneration; and the amendment also amends several provisions of agency work.)

The base for such claim is uncharacteristically low inflow of unemployed from construction branch by COLSAF. However, the data of Statistical Office rather did not confirm such hypothesis. On the contrary, number of employed (sum of employees and entrepreneurs) in constructions in the fourth quarter declined in year-on-year comparison and quarter-on-quarter comparison as well. Rather, the assumption of relative strong impact of robust revenues in trade on employment has been justified in this sector (the driver of employment growth was mostly wholesale, which increased revenues from own performances and goods by 7 % and employment increased by the same value). Another NBS statement (Karšay, 2014) assigns the contribution to stronger employment growth in LFS methodology to a stronger inclusion of unemployed to activation works (already in the third quarter).[24] But even according to quarterly reports, employment soared in the third and the fourth quarter by dynamics not standard to development of long-term threshold of employment growth.

From sectoral point of view, the employment growth (not only) in the last quarter of 2014 was most dominant in industry , which was confirmed by both methodologies. Number of working people in industry by LFS grew in the last quarter by 51.1 thousand persons (in manufacturing by 43.8 thousand), number of persons employed (according to quarterly statistical reports) compared to the same period of previous year increased by 7.8 thousand (the highest increase in all sectors). The industry employs about a quarter of all workers in the SR, so the growth of employment in industrial sectors was the key factor of turnover in growth. Even in previous year 2013, we had to conclude that the decrease of employment in industry along with decrease in construction were the main contributors to employment stagnation. According to quarterly statistical reports, main contributors to the total surplus in employment in the last quarter of 2014 (already mentioned 45.3 thousand people) were industry and trade – it means (and is crucially important) two largest sectors (as regards employment) along with sectors

[24] LFS methodology compared to quarterly statistical reports really involves e. g. persons paid for activation works, but also those on maternity or parental leave or workers working on agreement.

of information and communication, health, accomodation and food services provided around three quarters of annual increase. On the contrary, adverse effect on employment growth had construction sector due to decrease in output for foreign countries and domestic market in terms of new constructions and reconstructions (the only not decreasing construction activity was section of repairs and maintenance).

Obviously, year-on-year expression is also a reflection of the state in the same period of previous year. By look at quarter-on-quarter changes, the strongest recovery in terms of total employment of SR was recorded in second and third quarters. The overview of whole year confirms general trend of improvement in employment (noticeable already since the second quarter). For example, the index of industrial production grew quickest in first months and up to first half of year, revenues in industry have already grown at the turn of 2013/14 – the development in industry is usually a good indicator for expectations of future employment changes. Unusual year-on-year employment increase in the fourth quarter was rather a reflection of longer development in mentioned sectors than one timer fluctuation.[25]

In 2014, number of private enterprises in Slovakia steadily increased in all quarters but this increase was comparable to the development in previous years. Therefore, stronger employment growth in the second half of the year can not be attributed solely to creation of new business entities, but rather to recruitment efforts of already existing enterprises in selected sectors. The fact that improvement in employment can be attributed to employees is verified by development of business entrepreneurs statistics. The number of entrepreneurs-natural persons declined all over the year, with an exception of January 2014. The decrease can be attributed to category of sole proprietors (particularly in trade

[25] According to recent data for the first two months of 2015, industrial production index continues to grow (but at lower pace than at the beggining of 2014), as well as revenues in some key sectors. Even a year-on-year recovery of construction sector takes place (but no positive effect on employment yet). The expectation of positive employment development thus transferred into the beggining of next year. The employment growth was pulled in first months of 2015 mainly by selected market services and information and communications. Employment growth terminated in the sector of wholesale. In terms of sector size, positive contribution is expected from transportation and industry, however, it cannot be assumed that unusually positive growth from last quarter of 2014 will be repeated also in the first quarter of 2015.

and industry). The number of those was diminishing (y-o-y) mainly in the second half of the year (however, more detailed monthly view adjusted from comparative base of previous year reveals that number of sole proprietors notably decreased mainly in first seven months). Anyway, at the end of 2014, Slovakia had about 12.7 thousand entrepreneurs-natural persons[26] less than year before; (SO SR, 2015c). Thus, it is appropriate to considerate whether some proportion of sole proprietors did not change the character of their employment to regular employees (therefore positive development of employment would not be just a result of new employees recruitment, but also change in the employing form of already working persons). This change of employment type could be caused due to wane of motives from employers side as it used to be preferred form of employment during crisis (we have already analyzed this phenomenon in previous publications) or even as a result of negative legislative changes (e. g. it might be the effect of amendments adopted in January 2013, including the tightening of dependent work definition, the increase of tax base or the introduction of minimal social contributions for sole proprietors; see Morvay, 2014). Since the introduction of these legislative changes (January 2013), number of sole proprietors in the SR decreased by approximately 22,400 with quicker decrease just in year 2014.[27]

Unlike the previous year, when two-thirds of total annual loss of employees was due to the employment reduction in small and medium-sized enterprises, in 2014, there has been an increase of employees in all three category sizes of SM Es. In every category; micro, small and medium-sized enterprises; the average growth of employment was 3 %. Small

[26] Sole proprietors represent 91 % of enterpreneurs – thus we focus mainly on this category.

[27] Regards to impacts of legislative changes on the employment forms, a special attention was paid to employment on non-full time agreement basis. Those were impacted the most by recent legislative changes. Since January 2013, this form of employment is subject to full social contributions, which resulted in a dramatic decline of agreements. In January itself, the number dropped by more than half and despite their partial stabilization in following months the total number shrunk between December 2012 (old legislative) and December 2013 by 200,000. At the end of 2013, the Social Insurance Agency recorded 440.3 thousand agreements. Even in 2014, the number of people working on agreement did not restore back to original values, the highest number of agreements in 2014 was recorded in November – 466,700 and by the end of year Social Insurance Agency registered 455,200 agreements (all types). That is still almost 190,000 less than in the same period prior the adoption of legislative changes (December 2012).

and medium enterprises (250 employees) create more than 40 % of total Slovak employment (their share in employment has increased compared to previous year).

The improvement of labour market developments on the supply side is also reflected in vacancies increase . In 2014, there was around 1000 more reported vacancies than year before.

Even long-term unemployment and youth unemployment is decreasing

We have witnessed positive turnaround in unemployment even before the end of 2013, when in the last quarter, the growth of unemployment not only stop, but even a slight decline occurred. Even through it was slight one percentage y-o-y decline in number of unemployed persons (LFS), the decrease in unemployment rate occurred for the first time after two years of continuous growth. Throughout the year 2014, the process of further unemployment decrease progressed, unemployment was decreasing more and more significantly and in the second half of the year, number of unemployed was diminishing at 10 % pace. The result of five quarters lasting drop in unemployment was reduction of unemployed persons by 42 thousand. This looks even more positively in longer term view of last four years. While in the first quarter of 2010, when the post-crisis surge in unemployment reached the peak, there were more than 400 thousand of unemployed (407,000), in the last quarter of 2014, Slovakia had around 345 thousand people unemployed (LFS). Thus, four years after the unemployment peak as a consequence of economic crisis of 2009, there is about 62,000 unemployed less in SR. Most of this decline in unemployment was realized in 2014.

In 2014, number of unemployed shrunk on average (y-o-y) by about 27,000 unemployed, which compared to 2013 represents a decrease of 7.1 %. The resulting annual average of unemployed is 358.7 thousand persons, which is the lowest value for last five years. Unemployment in SR has returned to the level of 2006 after a significant increase caused by crisis. However, there are still about 100 thousand persons unemployed

more as was in pre-crisis 2008 (see Figure 8.2). The unemployment showed similarly positive trend in the middle of 2011, when the number of unemployed persons (as well as in 2014) approached to 350 thousand. However, the second wave of economic problems prevented the recovery process of labour market and in the first quarter of 2013, number of unemployed climbed again almost up to 400 thousand. Therefore, the positive turnaround of unemployment in 2014 needs to be evaluated with caution.

In 2014, the fastest decrease was recorded in category of persons unemployed from 3 to 6 months, as well as 6 months up to one year. In the category of unemployed up to 3 months (the shortest unemployment) was the inflow and outflow almost even during the year. The highest contribution to unemployment decrease in 2014 can be attributed to category of long-term unemployed (and within it, the category of unemployed for period longer than 2 years). As it is the largest group of unemployed in terms of unemployment duration, from total value of 27,000 unemployed less, this group of being unemployed for longer than 2 years contributed to this fall by almost a half. *The key moment in unemployment development in 2014 is a drop in the number of persons unemployed for more than two years.* In all other categories of unemployed according to duration of unemployment the decline was recorded already in 2013 – however, even a reduction of absolute numbers in all groups of unemployed for less than 2 years failed to offset 10 percent increase in long-term unemployed then. Therefore, the resulting increase of unemployment was caused solely by this category in 2013. Not only in 2013, but also in 2011, after a temporary prospects improvement of the economy, number of unemployed up to 2 years decreased (in all categories). In 2012, the direct response to the deterioration of economic development was a slight increase in short-term unemployment. However, it has been reflected in long-term unemployment (more than 2 years) only in quarterly results. The only group of unemployed, which tended to continuously grow since the 2009 recession was a group of persons unemployed for more than 2 years. The turning point occurred in the second quarter

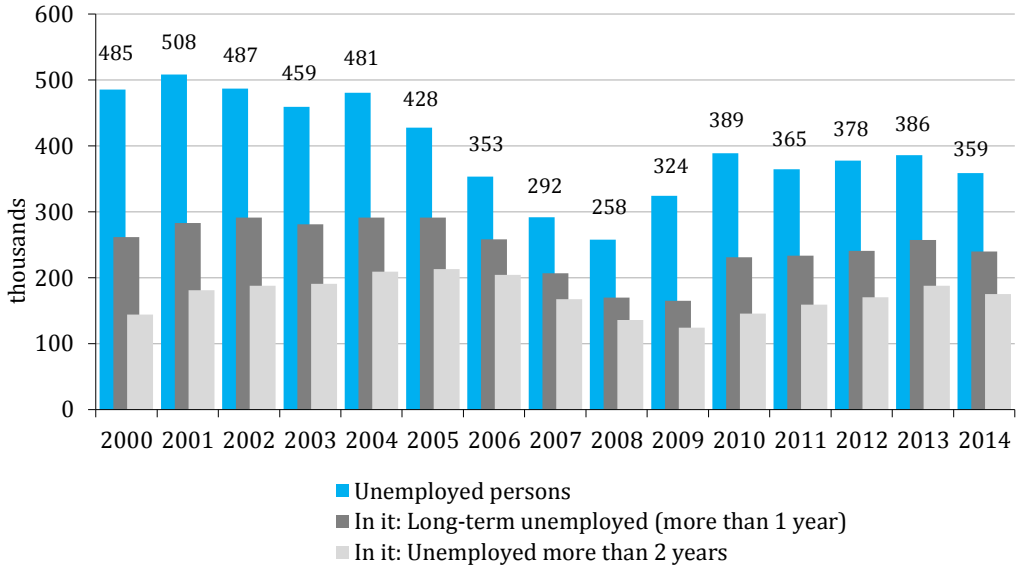
of 2014 and y-o-y decline in the number of longest unemployed people kept to exacerbate during the rest of the year.

The category of persons unemployed for more than 2 years has a crucial impact on the development of total unemployment. This category currently includes around half of all unemployed in the SR (48.9 % in 2014; a gradual increase in the share of this group on total unemployment after 2009 can be read from the Figure 8.2) and prolongation of jobless period reduces the chance of such persons to integrate into the workforce. *In total, long-term unemployment* (defined as unemployment lasting more than one year) *represents* (as well as in 2013) *about 67 % of total unemployment*, which stands for two-thirds of total unemployment. As short-term unemployment (up to 1 year) kept decreasing after 2009 in every year (with an exception of 2012), in case of more numerous long-term unemployment we have been waiting for positive turnover for 5 years. A certain slowdown occurs at the end of 2014, when number of persons in the category of shortest unemployed (which directly reflects or indicates the arrival of the changes) increased. In case of unemployed up to 1 month – its size doubled, and size of unemployed up to 3 months increased by a quarter.

The fact that unemployment in 2014 dropped the fastest in category of persons unemployed for less than 6 months (LFS) has been partially acknowledged by decline in financial demands on Social Insurance Agency in terms of unemployment insurance. Even though the average unemployment benefit grew by 11 EUR compared to 2013, total insurance benefits amount paid to unemployed decreased by 18.8 million EUR compared to year before. In fact, the average monthly number of benefits recipients declined by 12.6 % compared to previous year (data of the Social Insurance Agency <www.socpoist.sk>). The average number of disposable job applicants decreased in 2014 compared to previous year from 380.7 thousand to 345.2 thousand people according to the Social Insurance Agency. That means the drop in registered unemployment rate from 14.1 % (the highest measured value since 2004) to 12.8 %, representing even more significant decline compared to the one according to the LFS methodology. By LFS methodology, unemployment de-

creased by 1 p. p., from 14.2 to 13.2 %. Another positive signal where we can see similar trend in both methodologies is a halt of growth in average duration of job-applicants registration as unemployed in the Labour Office. The duration of job-applicant registration in the Labour Office after crisis rose gradually from 12 months up to 17.4 months in 2013. Based on preliminary data of COLSAF, the average period of registration in 2014 remained unchanged (or even slightly shortened). This relates to stop in long-term unemployment growth (i.e. stop of continuous increase in the number of persons unemployed for more than 2 years) which we mentioned in text above.

Figure 8.2
Development of Total Unemployment and Long-term Unemployment as its component (2000 – 2014, thousand persons)



Note: Based on LFSS methodology, data for 2011 are revised on Population and Households Census 2011.

Source: Based on SO SR database (SO SR, 2015a).

In addition to a one p.p. drop in the unemployment rate (LFS), it is worth to elaborate a deeper insight into its development by age cohorts. As the development in Europe showed, the most vulnerable group in times of economic recession was group of young people. The unemployment rate

of youth (up to 25 years) climbed as a consequence of the crisis to 33 % immediately after the recession and maintained at this level for 4 years. Its decline to level just below 30 % is then long-desired positive turn in 2014. In years 2009 – 2011, Slovakia recorded the fourth highest youth unemployment rate in the EU; In 2014, Slovakia ranked on 7th positon among the EU members with youth unemployment rate of 29.7 %.

The unemployment rate of young people aged between 25 – 29 declined as well (to 16.1 %, which is also the lowest value in this category since 2009). This category was initially the largest group of unemployed broken down by age. And these persons aged 20-24 and 25-29 accounted for (even in 2013) two largest groups of unemployed. In 2014, their number dropped in total of nearly 20,000. This is remarkable fact, as the total loss of unemployed in SR was 27,300.[28] The group of persons aged up to 30 years was in a long run the only category with unemployment rate higher than the rate of total unemployment (with exception of last year 2014, when above-average value of unemployment was experienced also in group 30 – 34 years). Not surprisingly, several labour policy measures were targeted especially at these age categories. Slovakia has implemented its own version of the European program "Youth Guarantees", within which the labour offices provided targeted information and counseling services, assisted students in career choices, prepared exchanges of information, several project activities were implemented including nationwide projects enabling employers – entrepreneurs, but even local governments, to receive a contribution for creation of job position for job-applicant aged up to 29 years.[29] As an example of the real outcomes of the program, the Ministry of Labour presented these

[28] In both age groups occured a decline in a general active population. The fact that demographic factor is not responsible for unemployment decline is proven by improved performance of both groups in terms of unemployment.

[29] The governemnt also ratified legislative changes, the amendment to Act on Employment Services in force in the Slovak Republic since January 2015 introduces a new form of support for young in their first regular paid job – a contribution to employers who employ those young people (up to 25 or 29 years) registered as unemployed and did not have prior permanently paid job (lasting at least 6 months). This measure is targeted on two groups of unemployed: the youngest groups, but also on persons without any previous work experience. Unemployed with no previous job experience create significant part of total unemployment – up to 24 % of all unemployed (almost a quarter) falls into this category (which represented 86,000 unemployed in 2014). Some of them are young people, graduates, this new measure is targeted on them.

projects, undertaken by the ESF, aimed at creation of jobs for job-applicants up to 29 years. According to Ministry, there were supported nearly 13,000 job positions with the help of these projects for youth unemployed. Out of them, 7,000 of young people have been placed and even after the support of job position was completed in August 2014, thus the obligatory employment as well, 80 % of them continue to remain in employment (MoLSAF, 2015). However, there are still more than 117,000 young people out of work aged under 29 in Slovakia (LFS). Back in June 2014, the EC (on the occasion of release of specific recommendations to member states) listed Slovakia in the group of eight countries where youth unemployment is particularly high and where the EC registers serious shortcomings in the implementation of the "Youth Guarantees". The Commision recommends that these countries should use structural measures such as enlargement of the Labour Offices capacities, building partnerships in order to reach out to inactive young population which is missing in the evidence or improve the system of apprenticeship. In 2014, number of youth unemployed under 29 years decreased from 9.3 million to 8.6 million in the EU, however, the high rate of youth unemployment is still considered to be serious and persistent problem.

Another area highlighted in the Commision´s recommendations is the need to decrease long-term unemployment. As we have noted above, in Slovakia long-term unemployment represents two-thirds of total unemployment, out of which only unemployed for more than two years corresponds to half of total unemployment (while the EU average is less than 30 %). Therefore, there is no wonder that the Commision includes Slovakia even in this area among the countries where the sustainability of these people employability requires improvement in active labour market policies and improvement of public employment services performance.

The continuation of favorable development in employment and unemployment is expected also in near future. This indicates also SO SR data for the first months of 2015, the expectations of employers, forecast of NBS or comments of Instute of Financial Policy (IFP) in MF SR. The NBS even slightly corrected its initial estimate for first quarter of 2015 in

its April bulletin due to unexpectedly strong acceleration of employment growth in February (after January slowdown). Another factor for correction was the decline in March number of registered unemployed with pace higher than the average decline for past six months (declining trend of outflow was attributed to the lower phase out of applicants from register for administrative reasons rather than weaker job placement). Last factor invoking correction was growing number of reported vacancies. By the end of March, there was the highest number of vacancies available during whole post-crisis period (NBS, 2015b). The IFP comment (Habrman, 2015) even comes with the hypothesis that developments in post-crisis period suggests change in the relationship between economic growth and employment. While before crisis, there was necessary economic growth of 3 % in order to move with employment (we deal with this topic at the beginning of chapter), after the crisis only 1.5 % economic growth is required in order to change employment. The hypothesis is based on observation that the response of employment to GDP fluctuations is prolonged (reacts to GDP changes not only for the current and previous three quarters, but for current one and previous five quarters) and is twice that strong than before crisis. It means that employers are more cautious in recruitment efforts and respond to long-term development, for short-term changes in performance they use rather change in number of hours worked.

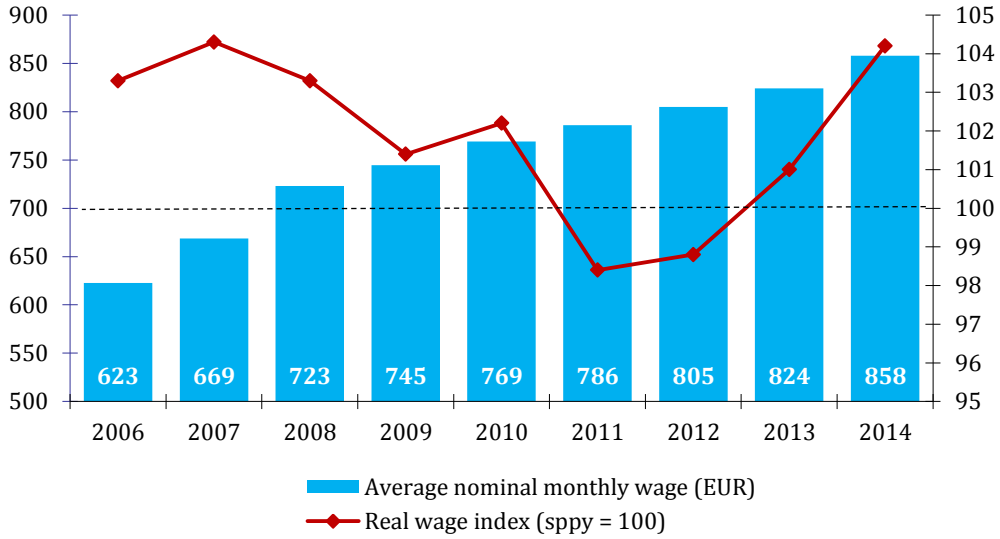
The favorable development of employment and unemployment transformed also into faster wage growth in 2014. The average nominal wage increased by 4.1 % in comparison with 2013 and reached level of 858 EUR. This growth rate was higher by 1.7 p. p. compared to the previous year. Due to the stagnation of price level (for more information see Chapter 5), the growth of real wages was 4.2 % (the highest one since 2007; see Figure 8.3) with positive impact on houselds disposable income (it has been also reflected in a higher share of compensation of employees in growth of household income; see Chapter 1) and thus on domestic consumption.

The fastest growth in the average monthly wage was recorded in Financial and Insurance Activities sector where employees gained in y-o-y comparison 126 EUR and in Administrative Services sector, where the

monthly wage increased by 63 EUR. The growth of wages occurred in almost all sectors of the economy in 2014 with exception of Accommodation and Food Services and Construction, thus two sectors of the economy with the lowest average wage. The average monthly wage of employees in Accomodation and Food Services was 511 EUR which is 3.3 times lower than the average one in top-earning sector – Information and Communication.

Figure 8.3

Nominal and Real Monthly Wages in 2006 – 2014



Source: Based on SO SR database.

* * * *

In 2014, we have seen a change in the relationship between economic growth and employment growth. Naturally, during the period after a significant fluctuation in economic performance, adaptation processes usually occur with distortion of the long-term development trends. However, it would be very beneficial for the Slovak economy if the coming years confirm that the previously tepid relationship between output growth and employment growth (compensated by high productivity gains) will be gradually replaced by closer interdependence based on strengthening position of domestic demand and expansion of labour intensive sectors.

9. OVERVIEW OF SELECTED LEGISLATIVE AND ECONOMIC POLICY MEASURES

In 2014, as key short-term national economic strategy, we can consider the document *National Reform Programme of Slovak Republic 2014*. The document "describes structural measures to achieve sustainable economic growth, creation of new job positions and improvement of life quality". Proclaimed core topic of adopted measures should be employment in 2014. The priority areas of interest remain (as in previous years) the consolidation of public finances, the fight against fiscal evasion (improvement in VAT collection, strengthening of the tax administration capacity and linkage of real estate taxation with its market value), the energy market and increase of public administration efficiency (continued reforms of ERO). Labour market policies are aimed at employment services and long-term unemployment, youth unemployment and education linkage with practice.

Complex character has adopted medium-term economic policy *Strategy of the Slovak Republic – Slovakia 2020+.* Its aim is "the synergic implementation of policies for promotion and exploitation of potential strong areas and competitive advantages of Slovakia and correlation of policies affecting economy and rural development, research and development, human resources, transportation and environment."

The government adopted *the Concept of capital market development*. Its main strategic goal is to restore basic functionality of Slovak capital market (to link supply of available medium and long-term capital to demand) and increase financing of the real economy by long-term household savings. The suggested measures concern mainly on the recodification of the Act on Bonds, the rules of the Act on venture capital funds, preparation and administration of mechanisms for retail government bonds issue, amendments to the Collective Investment Act, amendments to the Securities Act (investment certificates issuance), development of supplementary pension savings (personal pension schemes), changes in the Health Insurance Act and the Income Tax Act (tax and social contributions burden of financial market trading). The planned measures include

also reduction of administrative complexity, regulation and market infrastructure.

Based on this concept, the amendment to *the Act on Bonds*, (No. 206/2015 Coll.) was adopted and brings deregulation in terms of bonds traded in Slovak capital market. Its aim is to support creation and development of new innovative firms through the corporate bonds issuance (alternative source of financing for small businesses). It simplifies the issue conditions, e.g. it cancels the NBS supervision over new bonds issues. The amendment strengthened the rights of bondholders by introduction of institutes – a joint meeting of owners and bondholders representative.

The financial market operation was adjusted by the amendment to *the Bank Act* (No. 213/2014 Coll). It enabled introduction of new international Basel III standards or changes related to housing loans. The amendment is aimed at banks functioning, investment firms and security dealers improvement, but also to ensure better financial stability. It introduces more strict requirements on the regulation and changes competences of the NBS in terms of supervision.

The business activities of consumer loans providers was changed by the amendment to *the Act on Consumer Loans and Other Loans and Credits for Customers.* The licenses for providers of consumer loans, which are not banks, were introduced. There has been introduced also an obligation to provide information on consumers loans into registry. This is related with a new creditor obligation to consult loans provision with at least one register in order to evaluate consumer's ability to repay the loan. The amendment also introduced a new authorization procedure by the NBS (restricted and unrestricted permission dependent on volume of provided loans). The tightening of consumer loans provision was aimed at consumers protection increase on consumer loans market.

The regulation of business environment was adjusted by adoption of some new legislative standards in 2014. Changes in the protection of economic competition have been brought by amendment to *the Act on the Protection of Economic Competition* (No. 151/2014 Coll.) The amendment introduces a possibility of financial reward to citizens for

submission of evidence proving cartel. The amendment prohibits agreements restricting economic competition consisting of coordination of entrepreneurs in public procurements or public business competitions. An introduced institute allows the settlement on fine reduction in case, that participant pleads guilty or takes responsibility.

The amendment to the *Commercial Code* allows to establish two types of limited liability companies – with registered capital of less than 25,000 EUR (i. e. One-Euro Enterprises) and companies with registered capital above it. A new type of "One-Euro Enterprises" should facilitate the establishment of start-ups. Its operation has tightened conditions: the number of partners is fixed at maximum of five, the obligation to indicate amount of registered capital and the scope of its repayment on commercial documents, the obligation to form higher reserves; some restrictions are also established in disbursement of profits. The amendment introduces a non-public register of disqualifications (list of individuals – company statutory with final judgment of prohibiting the operation). It also introduces a new provision – enterprise crisis (essential for assessment is ratio of equity and liabilities of the company[30]). The enterprise in crisis can apply "realization replacing own resources", i. e. additional external sources funding of critical enterprise state. The aim is to protect creditors.

The aim of new *the Act on Ownership Acquisition of Agricultural Land* (No. 140/2014 Coll.) was to regulate acquisitions of agricultural land and avoid (or at least make it difficult) speculative purchases of agricultural land. After EU accession, there was a moratorium on sale of agricultural land to foreigners in Slovakia. The Slovak government tightened the regulation of sales by this Act due to expiration of moratorium. The preferential rights on cultivated land should belong to persons already engaged in agricultural activities in municipality, in which the land is situated or in adjacent municipality. Only after that, an authorized person for purchase could be someone who carries out agricultural activities elsewhere.

[30] The company is in crisis or threatened by crisis if ratio of equity and liabilities is less than 4 to 100 in 2015, less than 6 to 100 in 2016 or less than 8 to 100 from 2017 on.

In terms of taxation, there was a number of amendments adopted in 2014. *The amendment to Act on Income Tax* (No. 333/2004 Coll.) introduces several significant changes. In particular, it changes the approach of assets depreciation: number of depreciation categories expands from four to six; special procedure for depreciation of leased tangible assets was abolished, the conditions were changed for accelerated depreciation as well as cars depreciation. The increase of R&D support was implemented through this amendment by additional deduction of 25% of R&D expenditures (i. e. super deduction of R&D expenditures). The amendment changes method of employees benefits taxation, introduces a withhold tax on pharmaceutical companies from cash benefits provided to doctors and self-taxation of doctors from donations and other non-financial benefits from pharmaceutical companies. The amendment extends an obligation to use cash registers and reduce an option of taxes assignation on corporate income tax in favour of non-profit organizations (it should decrease to 0.5 % by 2019).

The amendment to the Value Added Tax Act (No. 222/2014 Coll.) introduces several changes. (i) For taxpayers providing electronic services, telecommunication services and radio and television broadcasting system, the amendment establishes so-called Mini One Stop Shop. This is simplified reporting regime of applied foreign VAT in single contact point of country in which the company is established. (ii) It changes the deadline for the tax office to register company as a VAT payer. (iii) It clarifies travel agencies taxation. (iv) It changes submission period of recapitulative report, (v) refund of excess VAT, (vi) and removal from the blacklist. The area of local taxes was adjusted by amendment to the *Act on Local Taxes* (No. 268/2014 Coll.). The changes occurred in definition of tax subject and institute of tax determination was extended.

The amendment to the Act on Pension Savings (No. 183/2014 Coll.) changed conditions for pension payments; recast the area of pension claims administration or area of proposals to pension management companies or insurance companies for pension payment submission.

The amendment to *the Assistance in Material Distress Act* (No. 308/2014 Coll.) was adopted with the aim of motivation increase among

long-term unemployed or inactive persons in working age for better employability on labour market. It defines new conditions to eligibility for special allowance enabling concurrence of special allowance provision along with assistance in material distress. Basic state benefits 61.6 EUR will obtain only person in material distress who works 32 hours per month in minor municipal services or volunteering activities. The amendment tightens also eligibility to the activation contribution, which will be available only for persons who works within municipal services at least 64 up to 80 hours per month.

In the area of energy efficiency, the new *Act on Energy Efficiency* was adopted. Its aim is to increase efficiency of energy use, especially in final consumption areas with great potential of savings (buildings and industry). The Act amends the system of mandatory energy audit (energy audit execution is required only from large enterprises). The Act also establishes new obligations on building owners and managers with area above thousand square meters. The new Act is the transposition of European legislation, which is part of the EU strategy for energy consumption reduction by 20 % in 2020.

Relatively large proportion of public policies is funded by the EU funds. The status and competences of public authorities in usage contribution from EU funds is regulated by new *Contribution from the European Structural Funds and Investment Act* (No. 292/2014 Coll.). The new Act regulates legal relations, procedure and conditions for grant provision as well as the rights and obligations of persons regarding grant provision, competence of government administration and local authorities in grant provision and responsibility for grant terms breach.

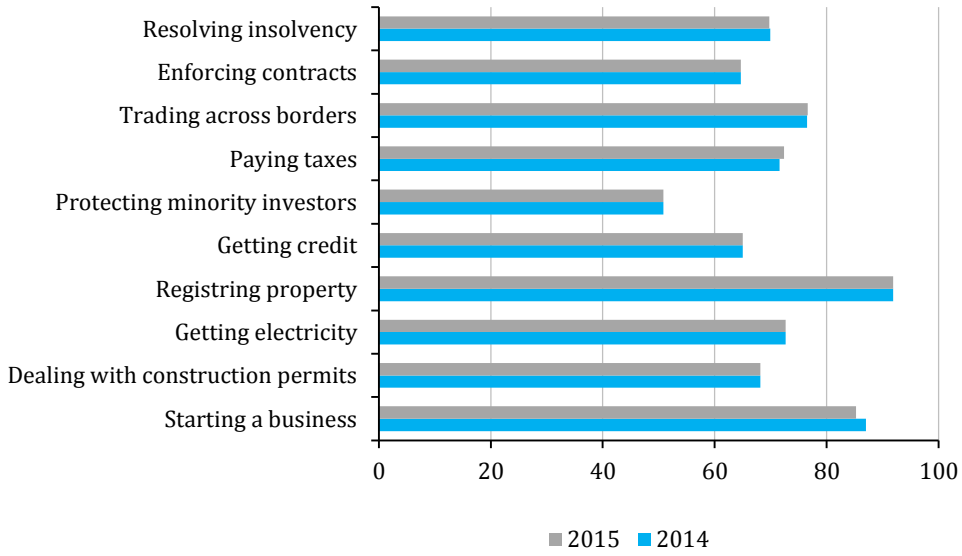
* * * *

The measures adopted in 2014 were based primarily on the National Reform Programme and Action Plan of the National Reform Programme. Priority areas, which were the subject of new legislation, could be considered a fiscal consolidation, solving problems of labour market and social sector. On the other hand, adopted measures are negatively perceived in terms of their impact on quality and competitiveness of business environment

(e. g. an extensive amendment to the Income Tax Act or amendment to the Protection, Support and Development of Public Health Act). The effectiveness of innovative tools aimed at business environment improvement and establishment of new enterprises (e. g. An amendment to the Commercial Code, the Act on the Bonds or Super deduction of R&D expenditures) will be possible to evaluate after a certain time.

Most of new measures is the transposition of European legislation and follows the implementation of EU economic policy. For example, already mentioned amendment to the Bank Act is a response to financial crisis or amendment to the Energy Efficiency Act is a measure of European environmental policy. However, domestic law-creative initiative motivated by phase of electoral cycle also found its space (e.g. free train travel for selected population groups, raise of minimum wage, the wage limit for agreements on temporary work or a new the Water Act).

Figure 9.1
***Doing Business* Indicators – Distance of Slovakia from the Best** (%)



Source: World Bank (2015).

The influence of policy measures and regulation on the economy and business environment is annually measured and evaluated through the World Bank Doing Business Index. In 2014, the Slovak economy ranked 37th (in 2013 ranked 35th) regarding the regulations impact on business environment. Slovakia has relatively good position (measured by distance from the value of best countries in indicators – Figure 9.1) in property registration legislation and new enterprise establishment legislation. On the contrary, Slovakia lags behind in minority shareholders protection.

10. OUTLOOK FOR 2015 AND 2016

The outlook is formed at a time when after several years of pessimism in the euro area, there is more favourable development expected (e.g. European Commission forecast from May, see EC2015). After two recessions (within the same crisis) in 2009 and 2012-2013, after waves of mistrust and insecurity, we have seen that since the second half of 2013, a situation calms down after long time and we witness forecasted macroeconomic parameters of the euro area being corrected towards more positive values.

There were several arguments in previous chapters that have occurred and are appropriate to recall in the process of outlook formation:

1. The Slovak economy belongs among those EU countries, which have already overcame so-called second bottom of recession (many countries still have not overcame it yet). However, the economy dynamics is still below values, which were used to be in place prior to the first bottom (i.e. before 2009). The parameters of such growth, however, belong to unique, already outperformed phase of economic development and their repetition can be hardly expected. Slight strengthening of economic growth has been associated with improvements in several parameters of macroeconomic stability (balance). In general , enhanced macro-stability could be considered as a sign of improved economic growth quality.
2. Even relatively weak (given the Slovak economy circumstances) economy growth was associated with improvement in labour market development. Probably, the model of Slovak economy growth in which the economy can expand under one-time productivity gains and with little involvement of additional work force is retreating. This is very important for the outlook formation: we can probably assume the growth of employment will occur even with lower economic growth rate (even in those cases, which we previously considered to be “below threshold values”).
3. The monetary policy in the euro area can boost economic growth in Slovakia, although this policy might not fulfil expectations associated

with it. The quantitative easing policy, further characterized (including the potential benefits and risks) in Chapter 4 should fight against deflation, boost consumption and investment and thus the real economy including creation of new job positions. However, this policy is realized at late stage and such policy of cheap money softens environment and might weaken the reform efforts of member state governments causing postpone of the euro area recovery. Nevertheless, given the outlined period of this publication, we can expect a positive impact of monetary policy on current economic growth.

4. The depreciation of EUR against USD could boost exports from Slovakia to certain countries outside the euro area. It is another positive factor influencing economic growth.
5. The European economy should be supported by investment package worth 315 billion EUR approved by the European Council with aim to mobilize investment (the full effect is beyond of our outlook horizon).
6. The government has managed to reduce public finance deficits to tolerable limits, however, a motivation for further consolidation has weakened (see explanation of negative value in the indicator "consolidation efforts" in the Chapter 7). Given the political cycle, we can assume, the consolidation efforts will mitigate and the target of achieving balanced budget on a structural basis in 2017 (the horizon is beyond the outlook) is likely to be unfulfilled.

These background information will be incorporated into consideration of development trends – see below. Also a confrontation of last year's outlook 2014 with real development in 2014 (Morvay et al., 2014) will serve as background information for outlook formation.

Comparison of Previous Forecast with Real Development

By critical evaluation of past outlooks, a better formation can be expected for them in the future. Our last year's outlook for 2014 expected recovery of economic growth, employment growth, decrease in unemployment rate and decline in inflation. With such a gross perspective, we can conclude that the trends were estimated correctly (that is already a success). However, with a more detailed evaluation, it becomes obvious

that last year's outlook was very cautious; it correctly identified the nature of changes, however, the quantification of their impacts was too cautious.

For example, the outlook expected a slower growth of price level, but it did not include total absence of inflation (or even a sign of deflation). In addition, the outlook correctly anticipated recovery of employment growth (after previous stagnation), but not to such extent as it actually happened. Moreover, of course, underestimation of employment growth is connected with predicted insufficient decrease of unemployment rate. These "inaccuracies" have a common feature: they are associated with such phenomena that almost never occurred in past development of the Slovak economy (deflation and strong employment growth in times of low GDP growth), so they have been considered as unlikely even in case of outlook for upcoming years.

A special attention deserves the problem of strong underestimation of employment growth (it is a problem of all available forecasts from that period). We did not expect that with still relatively weak (although stronger in y-o-y comparison) economic growth, there could be achieved such a high growth in number of workers (Table 10.1). This is related to the fact that a significant growth in employment was present in past only if there was very strong economic growth in place as well. It was obvious that the model in which economic growth is achieved by sharp productivity gains and little need of additional workers will reach its limits. However, it was very difficult to predict when these limits become apparent. As already indicated in Chapter 1, the economic growth driven by massive labour productivity gains (overcoming of productivity gap between more developed countries and those that are catching up) could re-appear in the next wave of FDI inflows and the rise of their activity (as in periods 2003 – 2007). However, we do not expect such scenario to take place. Economic growth in upcoming years will not be driven by wave of FDI inflows (however, we do not rule out their possible inflow!) and significant moves in the level of technology or productivity. It is necessary to take into account in the process of outlook formation that employment growth may be stronger than we would expect in past given the rate of economic growth.

At first glance, it might seem that the forecast of economic growth rate was very successful and copied real development. However, also here, we must take into account the methodological changes mentioned in Chapter 1 (adoption of ESA 2010 methodology system of national accounts). Data on changes in real GDP (first row in Table 10.1) cannot be directly compared. In time of last year's outlook, we relied on data measured by ESA 95 methodology. Forecasted y-o-y change in GDP (current prices) proved to be exaggerated – however, this relates to the fact that we did not expect price levels decline (as a result, GDP was in our outlook necessarily higher in current prices than its real growth in constant prices).

Table 10.1
Comparison of Forecast with Real Development

Parameter		2012 (r)	2013 (r)	2014 (f)	2014(r)
Year-on-year change in real GDP	%	1.6	1.4	2.2 to 2.7	2.4
Year-on-year change in GDP, current prices	%	2.9	2.0	2.7 to 3.8	2.2
Year-on-year change of workers, LFSS (%)	%	0.6	0.0	0.3 to 0.8	1.4
Unemployment rate, LFSS	%	14.0	14.2	13.3 to 13.9	13.2
Average annual change of inflation measured by consumers price index	%	3.6	1.4	0.2 to 0.8	-0.1

Source: Real data (r) for 2012 - 2014 based on SO SR, forecast (f) based on Morvay et. al (2014).

Effects of External and Domestic Economic Environment

Due to extremely high sensitivity of the Slovak economy to external influences, the assessment of external conditions is necessary for our outlook formation. We still need to elaborate a high degree of sensitivity

to external influences despite the fact that a key factor in the economic growth was domestic demand in 2014.

After several years of negative impact of external environment, we can conclude that external environment is currently not "the barrier" of the Slovak economy growth. In forecasts of selected institutions, there are consistently emerging expectations of economic growth acceleration in the euro area in 2015 and 2016 (Table 10.2). The same applies to the German economy (the most important trading partner of SR).

The European Commision (EC 2015) states that in spring months of 2015, there are several short-term factors giving additional boost to otherwise mild recovery of the EU. These are relatively low oil prices, stable global economic growth, euro depreciation against other currencies and growth oriented economies in the EU (i.e. already mentioned quantitative easing). Despite of quantitative easing policies being perceived as controversial, in our mostly short-term outlook, we can consider them as growth stimulating factors.

T a b l e 10.2
Expected Real GDP Change in the Euro Area and Germany

	2014		2015 forecast	2016 forecast
Euro area				
Real GDP, year-on-year change, %	0.9	IFW	1.4	1.8
		EC	1.3	1.9
		MMF	1.2	1.5
Germany				
Real GDP, year-on-year change, %	1.6	IFW	1.8	2.0
		EC	1.5	2.0
		MMF	1.5	1.7

Source: IfW (2015a; 2015b), March 2015; EC (2015), May 2015; IMF (2015), April 2015.

In addition to relatively favourable expected development (compared with previous years) in the euro area, we can also talk about the support of economic growth by domestic factors. Domestic economic policy (i.e. fiscal) has changed its character. Due to considerable reduction of public finance deficit, the government could alleviate restrictions upon entry into the final stage of political cycle. The relatively strong y-o-y growth of

government final consumption in 2014 and adoption of the so-called "Social Packages" are clear manifestation of altered approach to public finance policy. Such policy supports the economic growth in short-term.

While in 2012 – 2013 there was simultaneously dominating unfavourable impact of external factors and domestic environment (and mutually supported each other in their restrictive effects), in 2014, this configuration changed and in 2015 -2016, the economic growth will be in short-term supported by external monetary policy and domestic fiscal policy.

Expected Development of Basic Macroeconomic Parameters

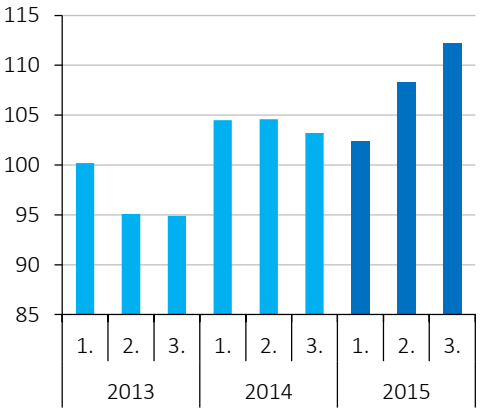
Data which are already available about the Slovak economy for the first months of 2015 creates relatively complex image about sectors dynamics. The recovery is not straightforward or flat across economy. Since at the time of this text preparation some data on GDP in the sectors[31] were not available, we will work with revenues indicators (although they have different explanations). From the data shown in Figure 10.1 is obvious that we cannot talk about a clear acceleration of revenue growth across all sectors in the first months of 2015 (we need to select individual sectors: e. g. in construction, a clear improvement is visible there, on the other hand, we may notice a deterioration in trade sector). However, it is not possible to draw a far-reaching conclusions based on just several data available from beginning of the year. Anyway, a weaker dynamics of revenues in some important sectors forces us to remain cautious and conservative even in time when overall optimism is prevailing.

Although the dynamics of exports and imports in the first quarter of 2015 was very low, it is worth to note an increase in accumulated trade balance (Figure 10.2). It is possible, that net exports will again contribute to GDP growth and economic growth will be jointly driven by domestic demand and net exports (with a dominance of domestic demand contribution).

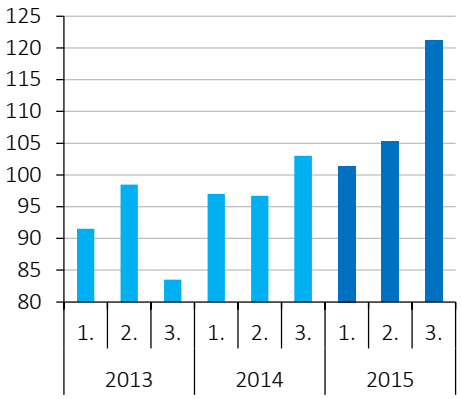
[31] There is already a value of y-o-y change in first quarter in 2015 available. It reached 3.1 % (which represents an acceleration of growth).

Figure 10.1
Dynamics indicators of selected branches (year-on-year indexes, same period of previous year = 100)

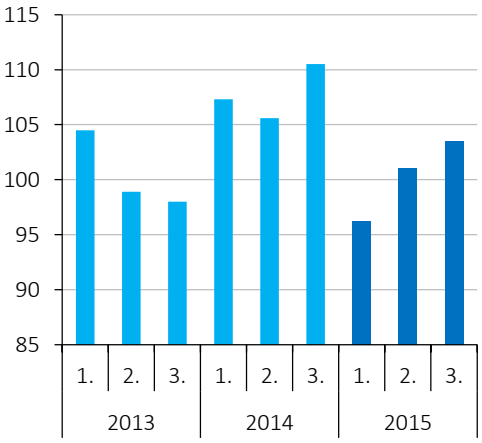
A. Manufacturing sales



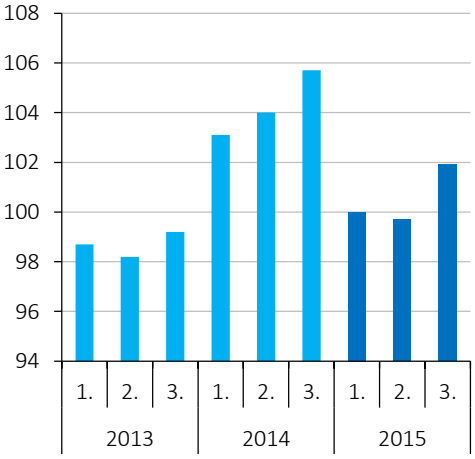
B. Construction sales



C. Wholesale sales

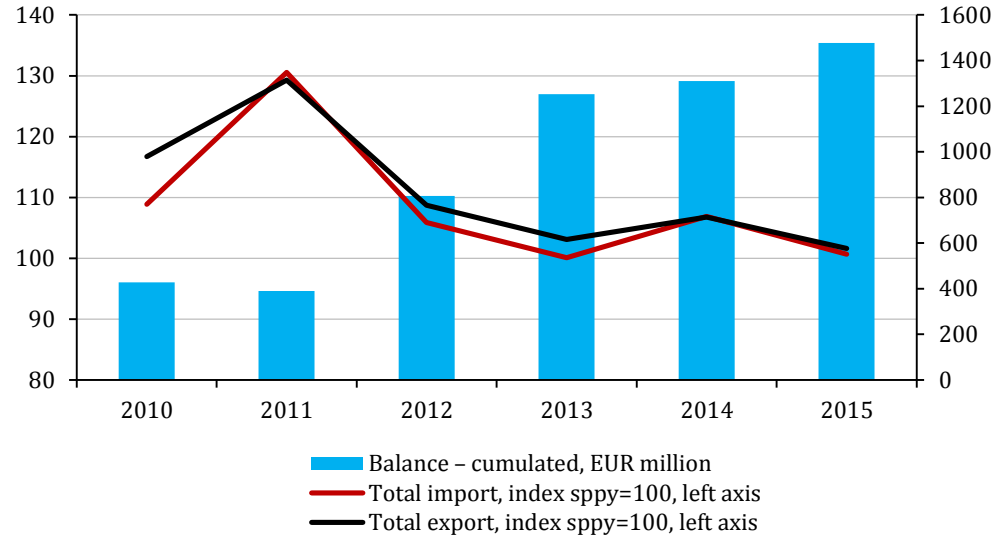


D. Retail sales



Explanation: Figure A is the index of revenues for own performances and goods in industry (sppy = 10, in constant prices); Figure B is the index of revenues for own performances and goods in construction (sppy = 100, in constant prices); Figures C and D are a year-on-year index of revenue from own performances and goods in wholesale and retail trade, excluding motor vehicle sales (sppy = 100), wholesale in current prices, retail in constant prices. *Source:* SO SR.

Figure 10.2
Exports & Imports Dynamics and Cumulated Balance of Foreign Trade
(in first three months of year)

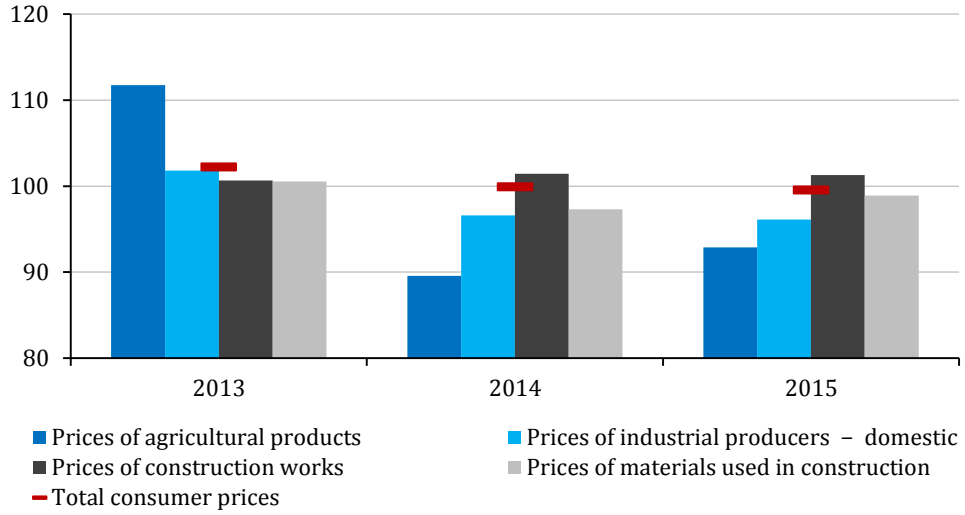


Source: SO SR.

It is very important to deal with expected prices development when considering development trends in the upcoming period. The question is whether the unique development of price level in 2014 (i.e. a slight decrease in price level) will repeat. Existing evidence suggests that inflation in 2015 will be very similar to year before. Low fuel prices encourage deflationary trend, on the other hand, growing demand makes it weaken. The development of various parameters of price level in the first quarter of 2015 is similar to previous year (Figure 10.3). If the inflation ratio (HICP) actually keeps around zero level, that means repeated strong growth of real wages with likely positive effect on households final consumption.

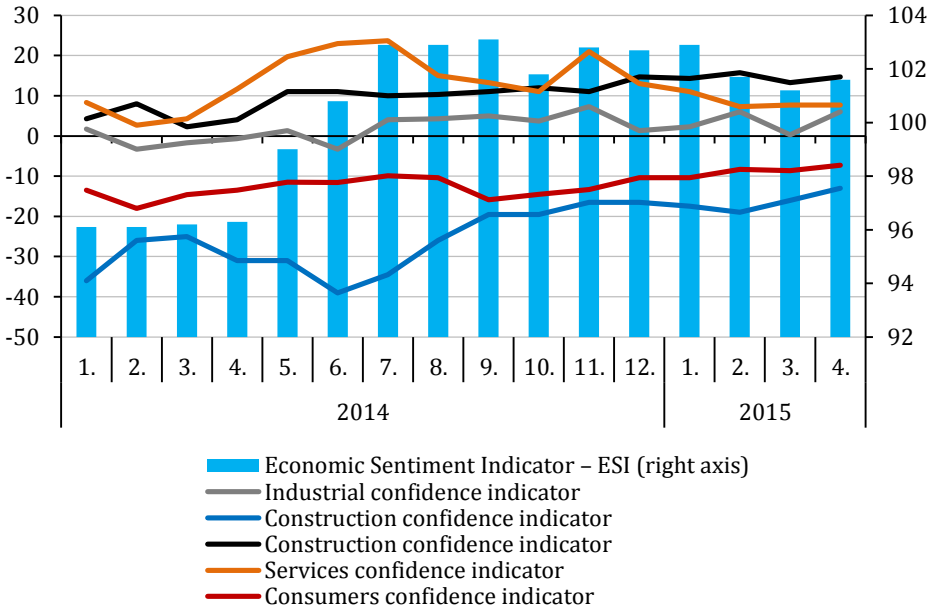
To reflect a climate and expectations in economy, we utilize the economic sentiment indicator (SO SR, Figure 10.4). In the first part of 2015, most of components in the summary indicator developed more favourably than in the same period of previous year. It means greater confidence in economy (particularly significant is the difference in construction or in consumer confidence). This means expectation of favourable development in short-term horizon.

Figure 10.3
Price Level Development Indicators
(Average value for the first three months of the year)



Explanations: Growth of consumer prices HICP. In all cases, there is a year-on-year index (sppy = 100).
Source: SO SR.

Figure 10.4
Expectations in the Slovak Economy: Economic Sentiment Indicator (ESI) **and its components** (2010 level = 100)



Source: SO SR.

The quantification of selected macroeconomic parameters is shown in Table 10.3:

- In 2015 and 2016, real GDP growth is likely to slightly accelerate. Especially in 2015, it will be driven by domestic demand along with possible small contribution of net exports. Real GDP growth in 2015 is likely to be the strongest one since 2010.
- We expect the inflation rate will remain at level close to zero in 2015, but it will not reach the value of what the ECB considers as preferred (just under 2%) even in 2016. At the time of this outlook formation, it was impossible to identify significant inflation impulses (as less significant we consider a policy of QE or growing demand).
- Labour market indicators are highly likely to evolve favourably, since (as we have already mentioned) employment begins to be more responsive to the economy dynamics. The pace of employment growth in 2015 and 2016 may be similar to 2014 or slightly lower. Accordingly, the unemployment rate could drop by almost one p. p. in each year.

Table 10.3
Forecast of Selected Macroeconomic Parameters Development

Parameter		2013 (r)	2014 (r)	2015 (f)	2016(f)
Year-on-year change in real GDP	%	1.4	2.4	2.8 to 3.3	2.9 to 3.7
Year-on-year change in GDP, current prices	%	2.0	2.2	2.7 to 3.3	3.3 to 4.1
Number of employed (year-on-year change in %, LFS)	%	0.0	1.4	1.1 to 1.7	0.8 to 1.5
Unemployment rate, LFS	%	14.2	13.2	12.1 to 12.6	11.3 to 11.9
Average annual change of inflation measured by consumers price index	%	1.4	-0.1	-0.1 to 0.3	0.8 to 1.3

Source: Real data (r) for 2013 - 2014 based on SO SR, forecast (f) based on authors.

If we compare our outlook with forecasts of other institutions (Table 10.4a – 10.4c), we can conclude consensus in expectation of acceleration in economic growth. However, we chose the interval for expected real GDP growth in such way that even a scenario with a very slight acceleration of growth would fit in. We take into account that growth of consumption and investment, which drove the economic growth in 2014, was supported by the compensation effect: the growth was strong due to couple years lasting postpone of consumption and investment (the incentive of prudence in unfavourable expectations). In 2015 and 2016, such effect should have diminishing importance which may result in lower than expected dynamics of domestic demand. Furthermore, the part of household demand increase was covered by loans growth (Chapter 6) which may also reach its limits. These factors are considered as one of the outlook risks.

Table 10.4a
Expected Changes of Real GDP in SR by forecasts of various institutions

	2014		2015 forecast	2016 forecast
Year-on-year change in real GDP (%)	2.4	External institutions		
		EC	3.0	3.4
		IMF	2.9	3.3
		IfW	3.3	4.0
		Domestic institutions		
		IFP	2.9	3.6
		NBS	3.2	3.8
		Selected banks	2.6	3.1

Table 10.4b
Expected Rate of Inflation in SR by forecasts of various institutions

	2014		2015 forecast	2016 forecast
Average annual change of inflation measured by HICP (%)	-0.1	External institutions		
		EC	-0.2	1.4
		IMF	0.0	1.4
		IfW	0.1	1.4
		Domestic institutions		
		IFP	0.0	1.6
		NBS	-0.3	1.7
		Selected banks	0.6	1.7

Table 10.4c

Expected Unemployment Rate in SR by forecasts of various institutions

	2014		2015 forecast	2016 forecast
Unemployment rate measured by LFS (%)	13,2	External institutions		
		EC	12,1	10,8
		IMF	12,4	11,7
		IfW	11,8	10,9
		Domestic institutions		
		IFP	12,9	12,2
		NBS	12,0	11,0
		Selected banks	.	.

Note: The forecasts were not created at the same time. This should be taken into account in their comparison. For example, at the time of IFP forecast publication, some final data were not available for 2014, which could affect the forecast.

Source: EC (2015), May 2015; IMF (2015), April 2015; IfW (2015b), March 2015; IFP (2015); forecast of the Committee for the Macroeconomic Forecasts, February 2015; NBS (2015b), mid-term forecast P1Q 2015; Macroeconomic forecasts of selected banks (NBS, 2015a), Banks average, April 2015.

* * * *

Both, internal and external factors are in favour of continued strengthening growth of the Slovak economy, which has begun in 2014. It is important that favourable socio-economic development appears (income, employment) even at relatively milder GDP growth rates, which was not usual in past. However, it is obvious that the euro area helps itself with tools that may cover its chronic problems. No QE and cheapening of money will provide long-lasting and sustainable growth. If such policies will cover the need for further consolidation and reforms in the euro area, the current upward trend could be very short one.

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