Economic Development of Slovakia in 2011 and Outlook Up to 2013[1]

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Abstract

After the start of recovery (in 2010) from previous recession, the development of the Slovak economy in 2011 became more volatile. In the first half of 2011 the positive tendencies continued and the economic development was more favorable than expected, in the second half of 2011 renewed concerns about a new recession emerged. In 2011, some significant changes in development tendencies occurred: the price level growth revived, the public finance balance improved and the employment growth was observed after a longer period. The impacts of debt crisis and the pessimism connected with it were at the time not as negative as expected earlier. Therefore, we are not seeing the recession as the most likely development scenario up to 2013. We are expecting that the economic development in the upcoming years will be accompanied by relatively weak economic growth, with some signs of instability. For the policy makers it will be important, in addition to the stabilization and public finance consolidation, to restore the confidence of economic agents in the economy.

Keywords: *economic growth, economic policy, post recession development, country study – Slovakia, forecast, production, balance of payments, external trade, labour market, public finance, monetary policy*

JEL Classification: D11, E23, E37, E52, E62, F14, F32, J20, L60, O10, O52

Introduction

It is a natural ambition of any institution whose activity is oriented towards economic research to review the development of the domestic economy and to forecast its future development. For the past nineteen years, the Institute of

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Economic Research SAS has been publishing an annual study on the economic development of Slovakia in the previous year, including an outlook for the next period.

With regard to changes in the macroeconomic environment in the recent years, the task of the authors is certainly not routine. Only in the past five years, the Slovak economy experienced a period of strong expansion (2007 – 2008), uncommonly deep recession (2009) and unusual wavering between a recovery and a threat of returning recession (2010 – 2011). These "particularities" contribute to the appeal of the topic. Therefore, the review of the development is necessarily connected with the research of the economy in a new (and also fundamentally different!) situation. However, the publication on the economic development of Slovakia is not only a statement of what has just happened in the economy. We try to take into account the longer time frame, and place the recent development into within this frame. Traditionally, we review the economic growth and the stability of the economy, the development of production, external economic relations, labour market parameters, prices and selected economic policy measures. The part on monetary flows is a novelty in the publication.

In 2011, the phase of positive expectations (in the first half of the year) was replaced by the spectre of returning recession (in the second half of the year). Thus, the authors of this publication were interested, whether there really were conditions leading to the return of the recession. That is also one of the topics covered in this year's publication.

1. Overall Economic Development

At the beginning of 2011, a concentrated realization of the programme compiled by the government elected in May 2010 was expected. Economic policy resulting from this programme should have strengthened the recovery of the Slovak economy, which had begun in 2010. The achievement of this was supported by legislative initiatives aimed at improving the business environment, especially constraining clientelism and corruption, the functioning of the labour market, and the strengthening of social control of the judicial system. A further strengthening of macroeconomic stability based on tightened fiscal policy should have had the same effect. However, the realization of the above mentioned measures was threatened early on and soon blocked by external and also internal factors related to the intra-political situation in Slovakia. Its development resulted in March 2012 premature elections, which brought the victory of a left-wing opposition.

1.1. In Connection and Comparison with Economic Development Abroad

The position of Slovakia in international economic relations is demonstrated in Table 1.

T a b l e 1

Selected Characteristics of Slovak Economic Relations with Abroad[1]

		2007	2008	2009	2010	2011
Ratio of exports of goods and services to GDP, current prices, %		86.9	83.5	70.9	81.2	89.1
Share of FCE[4], %	In employment in industry[2]	51.6	54.3	56.0	59.1	.
	In industrial production	72.3	68.8	68.3	72.2	.
Ratio to GDP, %	Repatriation of profits	5.4	4.6	3.1	3.6[3]	4.2[3]
	Net inflows of direct investment	3.5	4.2	1.0	0.2[3]	1.7[3]

[1] Based on: NBS (2012a); ŠÚ SR (2011); ŠÚ SR (2009).
[2] In average registration number of employees in main activity.
[3] Preliminary data.
[4] FCE – foreign-controlled enterprises.

Intensive multilateral links which connected the Slovak economy with abroad at the time of the economic boom (2007) were more or less weakened in some areas, but were not severed completely. Since 2010, they have been strengthening again as part of the economic recovery process, gradually returning to pre-crisis levels. This includes the high extent of Slovakia's participation in the international division of labour: the ratio of exports to GDP in 2011 surpassed the 2007 level; as well as the share of foreign-controlled enterprises in industrial production and employment.[2]

Table 1 illustrates significant changes which occurred in the crisis and still affect the participation of Slovakia in international capital flows. This relates mainly to the net inflows of foreign investment, which almost ceased in 2010, and only reached one third of the 2008 level in 2011. Table 2 presents an international comparison of the development of FDI inflows.

All groups of countries mentioned in Table 2 recorded a decline in the inflows of foreign direct investment (FDI) already in 2008 (in BRIC countries and Slovakia in 2009). In the following years, the inflows of FDI remained deep below the pre-crisis levels (again with the exception of the BRIC countries). This shows that the 2010 economic recovery, displayed in certain, albeit

[2] The share of foreign-controlled enterprises in employment in the industry increased in the crisis period presumably because the foreign-controlled enterprises tried to retain their regular employees by preferring shortening of working time to dismissals.

mostly timid GDP growth (see Graph 1), was only partial, local, and without sufficient support of global capital flows. Therefore, as proved by the European economies' development in 2011, the recovery was very sensitive to risks and uncertainties.

T a b l e 2

Indices of Foreign Direct Investment Inflows (2007 = 100)[1]

	Ø 2004 – 2006	2007	2008	2009	2010	2011
Large developed economies[2]	56	100	77	46	53	.
Small developed economies[3]	36	100	81	47	27	.
EU countries with debt crisis[4]	33	100	46	45	47	36[o]
New EU member states[5]	80	100	70	43	45	34[o]
BRIC[6]	53	100	123	77	109	.
EU-27 total	51	100	63	44	35	.
OECD total	52	100	78	49	48	.
Slovakia	95	100	131	−1	15	43[7]

[1] Calculated from FDI inflow totals in the listed groups of countries based on OECD (2011).
[2] Australia, Canada, France, Germany, Japan, United Kingdom, USA.
[3] Austria, Belgium, Denmark, Finland, Netherlands, Norway, Sweden, Switzerland.
[4] Greece, Ireland, Italy, Portugal, Spain.
[5] Czech Republic, Estonia, Hungary, Poland, Slovenia (data are available only for OECD member countries).
[6] Brazil, Russia, India, China.
[7] Based on NBS (2012a).
[o] Estimate.

In 2009, the inflows of FDI to Slovakia stopped abruptly and fully. In this aspect, the development of the Slovak economy was affected by the recession more than averagely, but not extraordinarily. It has to be taken into account that the attractiveness of Slovakia for FDI has its limits and that it has declined well below the level of the other new EU member states in the recent years.[3] One of the causes is probably that Slovakia still has not reached a satisfactory level of competitive capacity.[4]

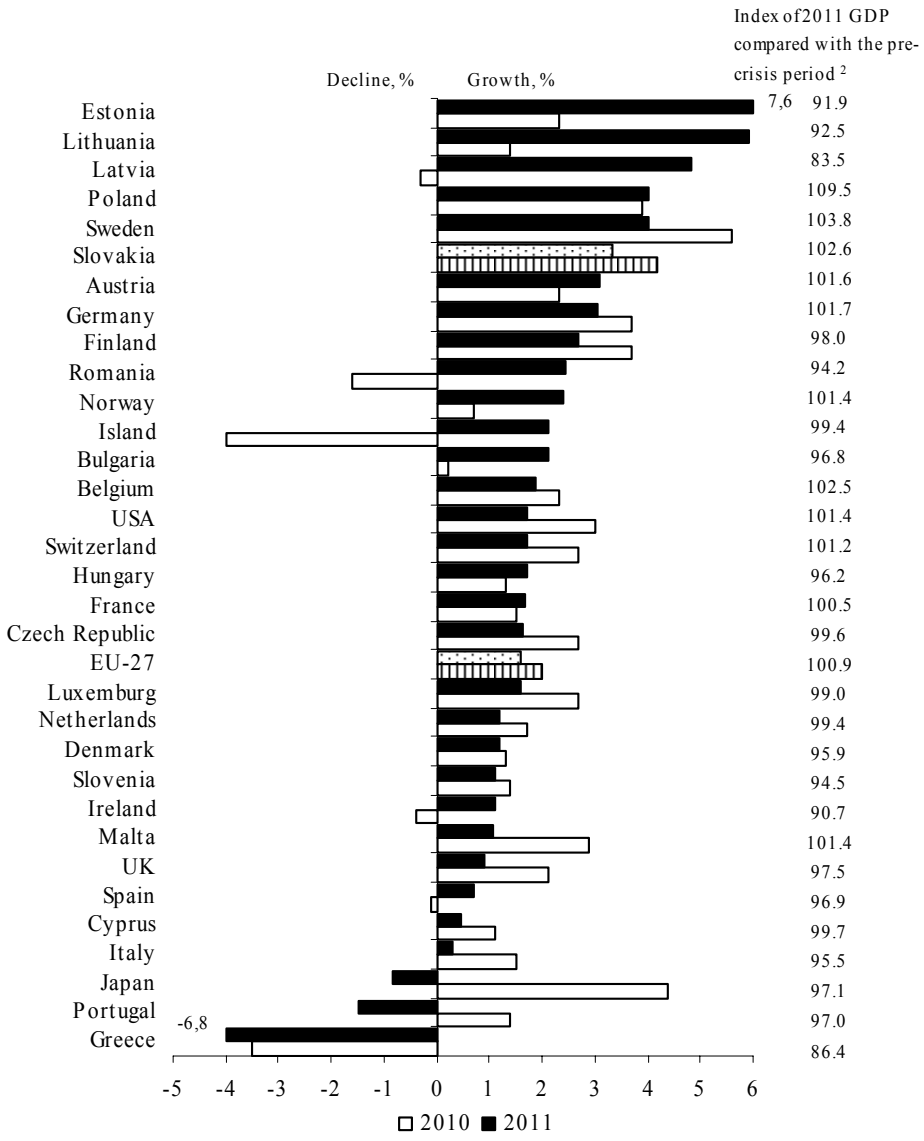
The high extent of Slovakia's participation in the European and thus the world economy presents a requirement to compare its economic development with other economies. The fist step in this direction is the analysis of the performance data of the European economies and their most important partners during the recession and at the beginning of the recovery. These data are presented in Graph 1.

[3] In 2010, the inflows of FDI to Slovakia equalled USD 526 million, to Czech Republic USD 6 788 million, to Hungary USD 1 811 million and to Poland USD 8 861 million (OECD, 2011).

[4] According to the World Competitiveness Yearbook 2011, Slovakia ranked 48th out of 59 reviewed countries in 2011 (behind Czech Republic, Poland and Hungary). In terms of "soft" criteria, it lagged behind mainly in Act enforcement (quality of judicial system) and fight against corruption and clientelism. Slovakia achieved a similar result in the World Bank ranking, where it fell from the 43rd place (in 2010) to 48th place (in 2011). However, the remaining V4 countries received an even worse review: Hungary ranked 51st, Poland 62nd and Czech Republic 64th.

Graph 1

Annual Change in GDP in 2010 and 2011 Compared with the Pre-crisis Levels[1]



[1]Based on Eurostat data.
[2] 2011 compared with 2007 in Denmark, Estonia, Ireland, Italy, Latvia, Sweden, UK and Japan, in other countries compared with 2008.

From the 32 countries included in the graph, the GDP growth rate accelerated in 13 and slackened in 19. The slowdown in the GDP growth rate was recorded in the largest European economies – in Germany, France, Italy and the United

Kingdom, and therefore in the EU-27 as a whole. Large non-European economies – the USA and Japan – did not avoid it either and sunk into recession again. Because of such economic development outside Slovakia, a certain dampening of the economic growth is not surprising, but its relatively small extent (from 4.2% in 2010 to 3.3% in 2011) is.

In most European countries, the prevailing decline in the GDP growth in 2011 is the result of the economic recovery, which was very promising in 2010, hitting a snag of high indebtedness in 2011. In the case of some countries, this resulted in a state of expected insolvency. The solution to this problem, which has caused uncertainty, pessimistic expectations, and in several European countries also political crises, has been the focus of not only European political and economic institutions, but also the International Monetary Fund.

The higher economic growth rate in Slovakia compared with the EU-27 average enabled Slovakia to make a small step in real convergence. Based on the revised Eurostat data, the Slovak ratio of GDP per capita to the EU-27 level increased (in PPP) from 74% in 2010 to 75% in 2011.

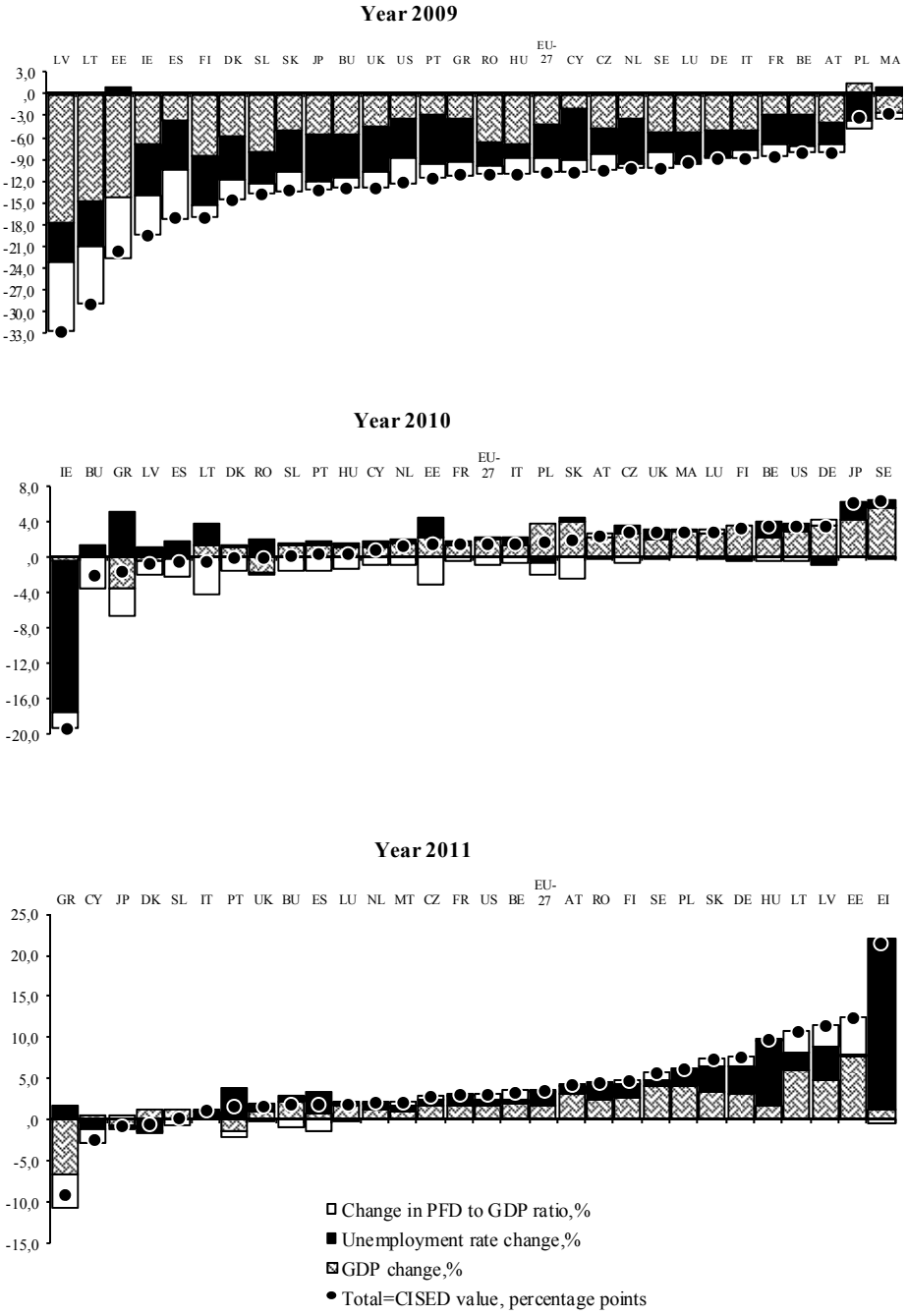
Gross domestic product is undoubtedly an important indicator of the macroeconomic development, but – as commonly accepted – offers only a one-sided, certainly not complete view of the changes occurring in the economy. The limited informative value of GDP regarding the changes in the Slovak economy is enhanced in international comparison by a composite index of socio-economic development (CISED) based on the combination (sum of values) of three criteria: GDP change, unemployment rate change, and the change in the public finance deficit to GDP ratio. A relatively simple composite index offers a large amount of information because GDP indicates not only performance, but also production of resources for all areas in the society's life. The unemployment rate is a sensitive part of social development, which affects the living standard of the unemployed segment of the economically active population, and also – through its influence on the overall wage development – the income situation of the population.

Finally, the development trend of the public finance deficit characterizes the result of the central element of the economic policy and also financial relations of the state to the public. Therefore, the composite index of socio-economic development as a whole provides considerable insight into the living standard of the citizens and their relations with the state.

Graph 2 illustrates substantial differences in the socio-economic development in these countries in the period marked by the beginning of the economic recession in the world economy. Information included in Table 3 complement the characteristics of these differences.

Graph 2

International Comparison of the Composite Index of Socio-economic Development Values[1]



[1] Based on Eurostat data.

T a b l e 3

A. Number of Countries Included in Graph 2 in Intervals of CISED Value Change[1]

Year	Intervals of CISED value change, percentage points (p. p.)			
	> 5,0	4,9 to 0,0	–0,1 to –5,0	–5,1 >
2009	.	.	2	27
2010	2	21	5	1
2011	8	17	3	1

B. Ø Change in CISED and its Components in the EU-27 Countries (p. p.)

Year	GDP change	Unemployment rate change	Change in PFD to GDP ratio	CISED value change
2009	–4.3	–1.9	–4.5	–10.7
2010	2.0	–0.7	0.4	1.7
2011	1.6	0.1	1.8	3.5

[1] Based on Eurostat data.

In 2009, the CISED reached negative values in all of the selected countries and almost in all three criteria (with insubstantial exceptions in the GDP development of Poland and the unemployment development of Estonia and Malta).

In the economic recovery of 2010, most of the selected countries achieved positive CISED values, mainly because of the GDP growth. GDP grew in 24 out of 29 selected countries. In the EU-27, GDP grew by 2%, which is the same as the 2001 – 2008 average rate achieved in the EU-27 (Eurostat, Structural indicators). The positive development of performance (measured by GDP) affected the unemployment development only to a certain extent: unemployment growth slackened in most countries (20 out of 29), and halted in two. The unemployment rate fell in three countries and increased in four. In 2010, relative PFD (expressed as a ratio to GDP) reacted to the economic growth recovery on a small scale. In the EU-27, it fell from –6.9% in 2009 to –6.5% in 2010. In 2010, it was less then –10% in five countries and in the interval of –5% to –10% in twelve countries.

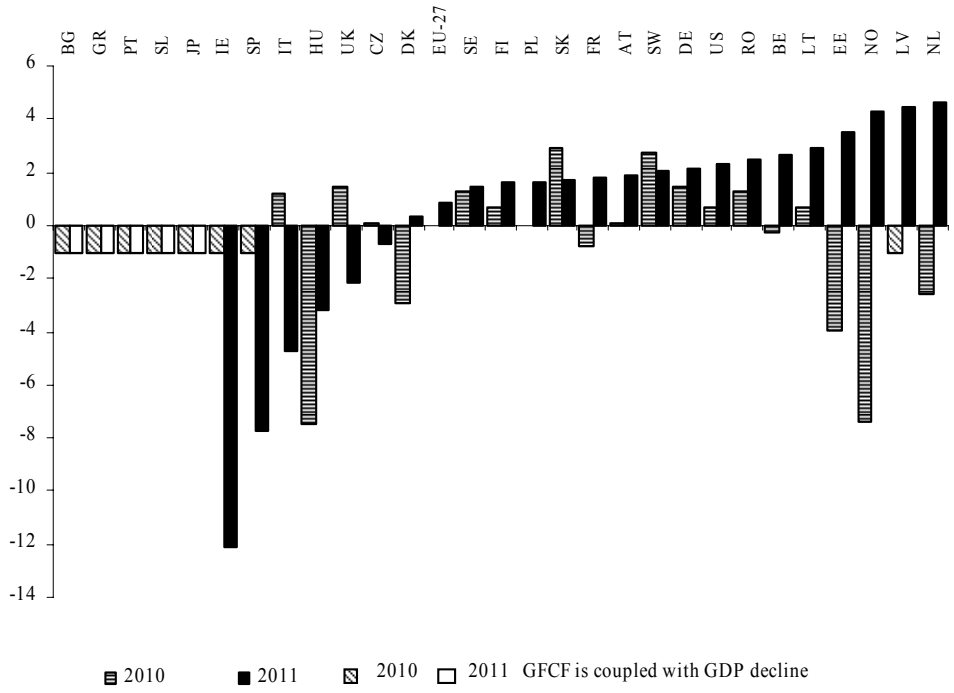
It is impossible to assess the changes in the socio-economic development of the compared countries in 2011 easily and clearly. The positive CISED development, which improved significantly in 2010, continued more moderately in 2011, when – as visible in Table 3B. – its positive value reached double the value of the previous year. However, GDP growth rate slackened in 2011. The unemployment rate in EU-27 stagnated: it fell from 9.7% in 2010 to 9.6% in 2011. The development of the ratio of PFD to GDP was more positive: in EU-27 it fell by 1.8 p. p. from -6.5% to –4.7%. The decline in the ratio of PFD to GDP

in 2011 was achieved by public finance consolidation occurring under pressure from the EU bodies and the European Central Bank (ECB), which strived to overcome the payment crisis in the Euro area by a simultaneous consolidation of public finances in the EU member states. However, restrictive fiscal policy, which was the main pillar of the public finance consolidation, also had its share in the deterioration of the GDP and employment development in the selected countries in 2011.

With regard to the CISED value change, it can be concluded that not only in 2010, but also in 2011, the EU-27 took first steps towards overcoming the recession. The validity of this cautiously uttered conclusion can be verified (but also refuted) by the investment accelerator development illustrated in Graph 3.

Graph 3

International Comparison of Investment Accelerator Values in 2010 and 2011[1]



[1] Ratio of annual change of gross fixed capital creation (GFCF) to annual GDP change (in constant prices). Based on Eurostat data.

From the 28 countries compared in Graph 3, GDP decline was coupled with decapitalisation (determined as a drop in gross fixed capital formation) in eight countries in 2010, but only in five countries in 2011. The number of countries

with growing GDP coupled with a more rapid increase in gross fixed capital formation (and therefore a positive investment accelerator) increased from 13 in 2010 to 18 in 2011. In 2011, negative GFCF development was recorded in Japan and the United Kingdom, in countries hit by the debt crisis, and also in Slovenia, Hungary and (after an indication of improvement) in the Czech Republic.

To summarize, based on the improved GDP development, the year 2010 appeared to be a period of recovery for both the European and the world economy, but from the point of view of investment as a precondition for future economic growth, most of the selected economies were still in the grips of recession. The year 2011 brought a slight improvement in the development of the investment accelerator of the selected countries, which verifies the conclusion drawn from the development of the composite index of socio-economic development. The 2010 recovery signs in the EU economies and the economies of their most important partners were one-sided – only visible through GDP. In 2011, the positive signs had a broader base, encompassing not only economic growth, but also the development in the labour market, public finance and investment activities. However, they will become relevant only after they have been verified by the future development.

1.2. Main Trends in the Slovak Economy

When assessing the development of the Slovak economy in 2011, it is helpful not only to compare it with changes abroad (see above), but also to put it in a more long-term development framework (see Table 4).

A year ago, the analysis of the economic development of Slovakia in 2010 (Morvay et al., 2011) stated that the overcoming of the recession is "unbalanced, even fragmentary". The economic development of 2011 confirms and at the same time broadens this observation. The laborious recovery is very complicated not only because of its unevenness, but also because of the contradictions in its partial results. One of the signs of this controversy is the above mentioned negative impact of the necessary fiscal tightening on the economic growth and the unemployment development. Another example of interconnected contradictory trends in 2011 was the deteriorating development of labour productivity on the verge of stagnation, and simultaneous slight increase in employment. A similarly connected, but inversely proportional pair of macroeconomic trends was the accelerating inflation and more manageable servicing of the government debt. Both processes affect the macroeconomic stability in countering ways. The increase in inflation weakens it, more convenient conditions of servicing of the government debt strengthen it.

T a b l e 4

Socio-economic Development of the Slovak Republic, 1998 – 2011

	1998	1999	2000	2002	2004	2006	2007	2008	2009	2010	2011
	A. Development of economic performance										
GDP index, previous year = 100[1]	104.4	100.0	101.4	104.6	105.1	108.3	110.5	105.8	95.1	104.2	103.3
Labour productivity index; previous year = 100[2, 5]	104.9	102.6	103.4	104.4	104.8	104.3	107.9	107.5	97.8	106.3	101.4
Unit labour costs, PPP, Austria = 100[7]	.	32.3	34.8	33.4	31.3	31.0[8]	37.3	38.6	39.8	38.7	38.6
Cost profitability in non-financial corporations, %	0.4	1.4	2.7	4.5	7.0	7.7	7.6	6.2	5.1	6.2	6.3
	B. Stability indices										
Inflation rate, %[3]	6.7	10.4	12.2	3.5	7.5	4.3	1.9	3.9	0.9	0.7	4.1
φ interest rate on household loans, %[4]	10.35	8.86	8.53	10.20	10.98	11.72	11.82	10.60	7.69	7.05	6.82
Public finance balance/GDP, %	–3.7	–7.0	–12.3	–5.7	–3.3	–3.4	–1.9	–2.2	–6.8	–7.9[p]	–4.6
Share of general government consumption in GDP, %	22.3	20.2	20.2	20.5	19.3	19.2	17.3	17.6	19.6	19.3	18.1
Annual Δ in productivity[2] – annual Δ in real wages in the national economy, percentage points	2.2	5.7	8.3	–1.1	2.9	2.8	3.8	0.2	–3.3	5.8	2.4
Net exports of goods and services/GDP, %[1]	–9.7	–2.8	–2.5	–6.5	–1.5	–1.3	3.1	3.1	3.8	–1.0	8.0
	C. Social development										
Year-on-year employment index, LFSS[5]	99.7	97.0	98.6	100.2	100.3	103.8	102.4	103.2	97.2	98.0	101.9
ϕ unemployment rate, %[5]	12.5	16.2	18.6	18.5	18.1	13.3	11.0	9.6	12.1	14.4	13.5
Annual change in real wages, %	2.7	–3.1	–4.9	5.8	2.5	3.3	4.3	3.3	1.4	2.2	–1.6
Index of real wages in the national economy, 1989 = 100	93.6	91.0	86.9	92.8	93.6	102.8	107.2	110.7	112.2	114.7	112.9
Index of real household consumption per capita, 1989 = 100	99.5	102.1	101.1	112.3	115.4	129.8	138.8	147.3	146.0	145.6	144.7
Share of social benefits in household consumption, %	22.2	23.0	21.9	22.4	21.3	21.3	20.7	20.1	22.3	20.4	22.3
Share of social protection expenditure in GDP, %[6]	14.5	14.9	14.5	14.9	12.1	12.3	10.6	10.1	12.2	.	.

[1] At constant prices (year 2000). [2] Based on GDP at constant prices per 1 worker. [3] Based on Harmonized Index of Consumer Prices (HICP). [4] From loans taken from commercial banks, average per annum. [5] Based on Labour Force Sample Survey methodology (LFSS). [6] Public finance expenditures, based on Eurostat. [7] WIIW(2011). [8] 2005.

Source: ŠÚ SR; NBS; MF SR.

However, the unevenness of the recovery of individual components of the economy only seems controversial at first glance, in a short-term perspective. In fact, it is only a different phasing of partial processes shifted in time, with an internal logic of complexly entwined causes and consequences. This is clearly visible e.g. in the ties between the indices of macroeconomic stability and economic performance. The improvement of macroeconomic stability, i.e. the values of its indices in Table 4B., temporarily negatively affects economic growth and related social situation of the population (see Table 4A. and C.). These ties, also accepted by the economic policy of the EU and the ECB, create preconditions for future economic growth.

The relatively positive development of the Slovak economic performance after 2009, which was determined in the international comparison in Graph 1 based on annual data, is confirmed by the standard definition of a recession: a contraction of GDP in two consecutive quarters compared with the same period of the previous year.[5] From the start of the recovery in the first quarter of 2010 to the fourth quarter of 2011 including, the value of this indicator in Slovakia ranged from 3.2% to 4.9%. From the countries compared in Graph 1, only Poland, Sweden and Germany recorded a similar GDP change in a similar time period.

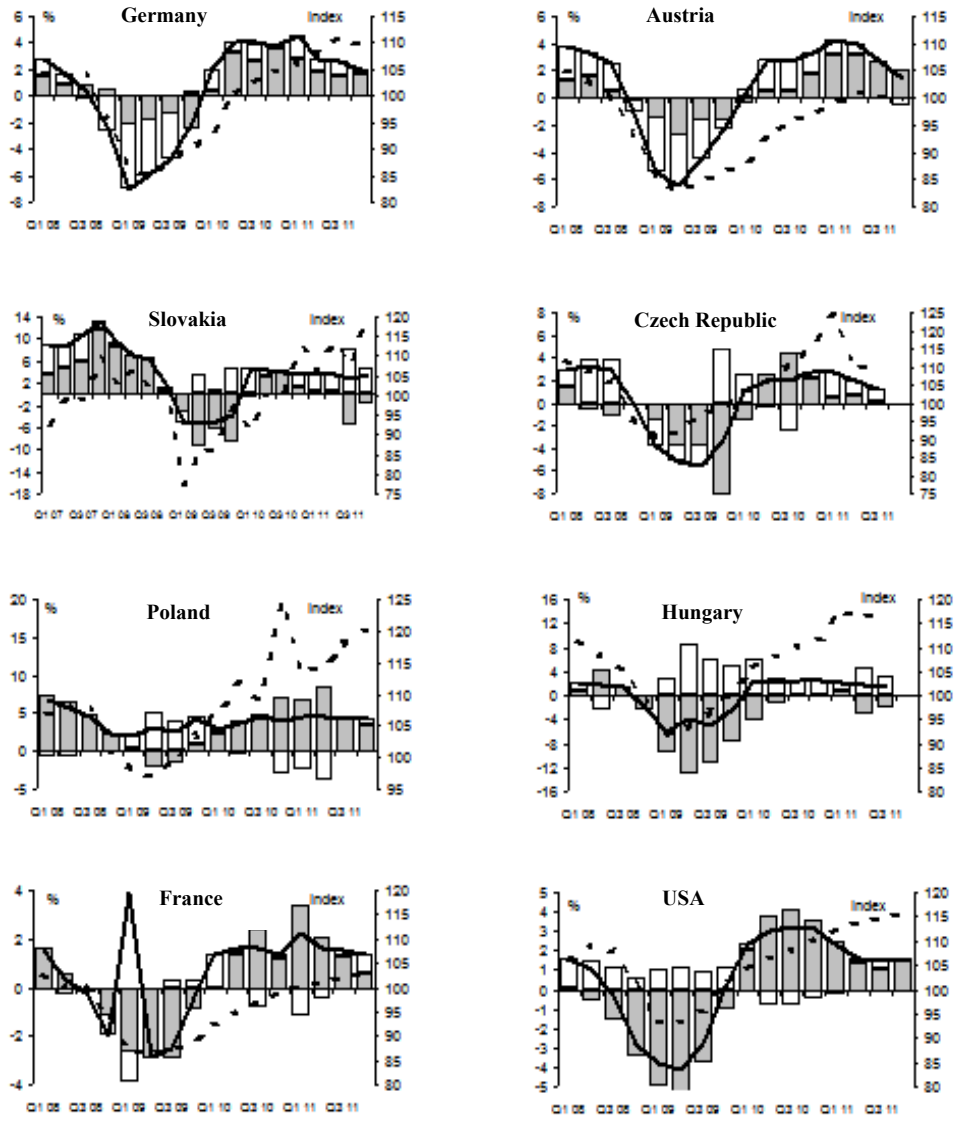
It is helpful to determine the influence of domestic and foreign demand in the Slovak economy and other selected countries in order to detect the causalities. Below, the main development tendencies of demand structure of selected economies are mirrored to and compared with their production-supply structure (see Graphs 4 and 5).

In Graph 4, the development of demand structure in the Slovak economy is compared with different-sized economies (larger, even much larger) with differing production structures. The impact of the size of the economy on the total demand structure is undisputable, yet should be subject to a more detailed analysis. From the production-sector structure point of view, Graph 5 illustrates two types of economies. The first, larger group encompasses economies with significant, 30% or higher share of industry (including construction). Slovakia approaches the upper margin, Germany and Austria with a smaller, but still significant share approach the lower margin. The group also includes the Czech Republic, Poland and Hungary. The second group encompasses France and the USA with a lower (19% and 20%) – and therefore much different – share of industry in the GDP formation than Slovakia.

[5] According to the above mentioned strict definition, a second wave of recession unfolded (with the exception of Greece, where the recession has continued uninterrupted since 2008) in Portugal, Slovenia, and Cyprus, and in Q4 2011 it also knocked on the door in Italy and the Netherlands.

Graph 4

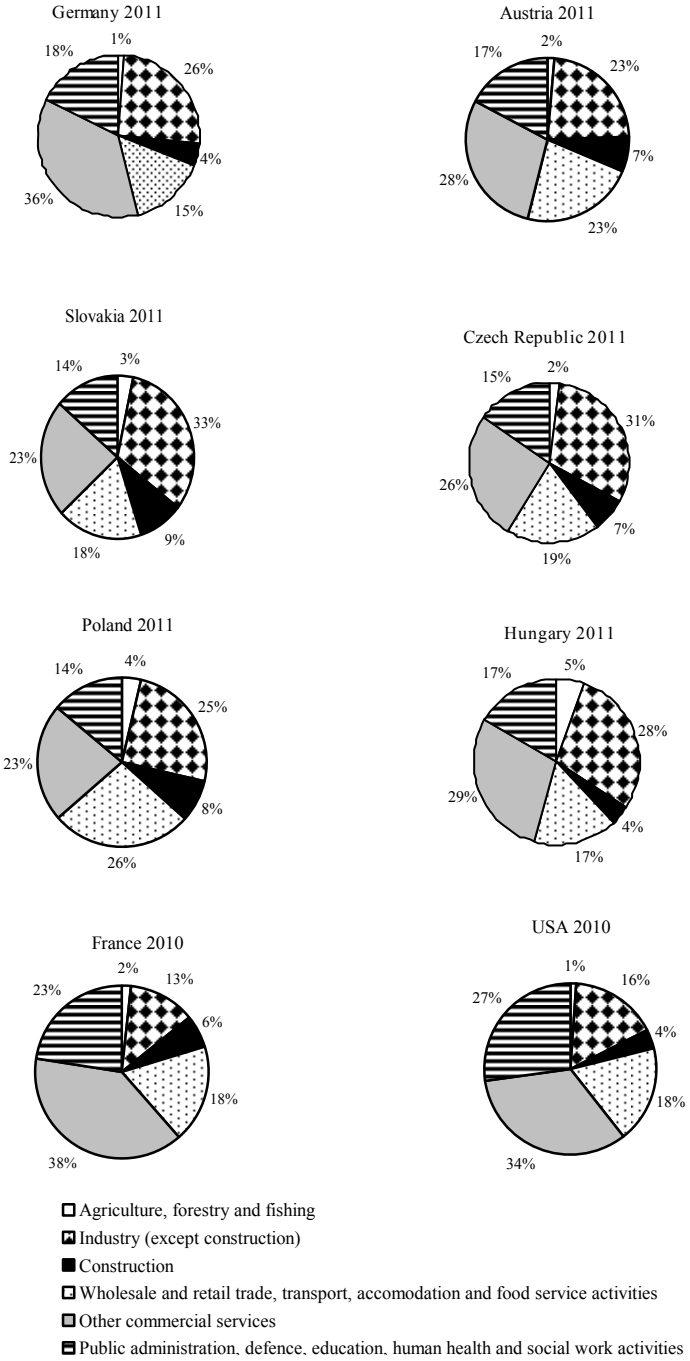
Development of GDP, Exports and Share of Domestic and Foreign Demand in GDP



Source: Based on Eurostat data.

G r a p h 5

Share of Branches in the Creation of Gross Value Added, %[1]



[1] Based on Eurostat and (USA) OECD data.

The impact of domestic and foreign demand on the economic growth recovery was different in countries with significant share of industry in the production structure. In Germany, GDP growth in 2010 and 2011 was connected largely with the increase in domestic demand, and in Poland only with the increase in domestic demand. In Austria, GDP growth was connected mostly with foreign demand in 2010 and domestic demand in 2011. On the contrary, in the Czech Republic and Slovakia, domestic demand dominated already in the first stage of the recovery (in 2010). In the second, weaker stage (in 2011), foreign demand in the Czech Republic took a leading position, and in Slovakia it even had to surmount the decline in domestic demand. The Hungarian economy is a special case: the change in domestic demand has been affecting its performance development negatively since the beginning of the recession.

The report on the economic development of Slovakia in 2010 (Morvay et al., 2011) states that the increase in exports beginning in the second half of 2009 induced the increase in domestic demand in the second and the fourth quarter of 2010. A breach of this trend in 2011 was caused by declining consumption (demand) of the public administration due to the restrictive fiscal policy (from 19.3% GDP in 2010 to 18.1% in 2011), and also due to the development of real wages (which increased year-on-year by 2.2% in 2010, but fell by 1.6% in 2011), and the development of real household consumption, which continually declined after the year 2008.

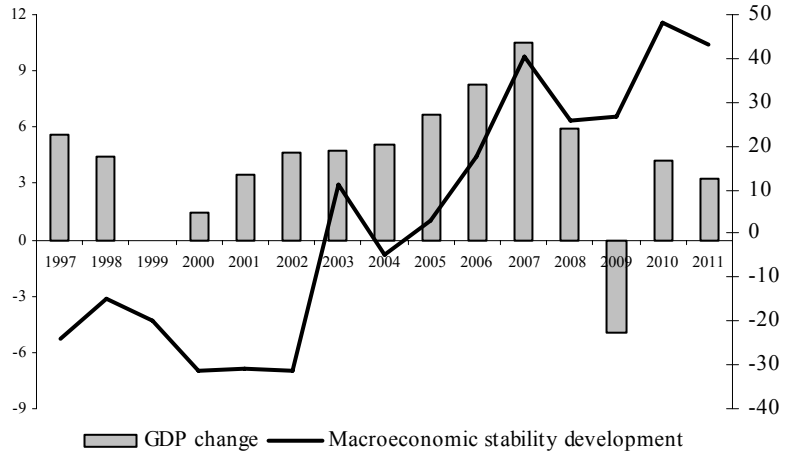
The decline in GDP induced by the economic crisis and the recession disrupted the overall macroeconomic stability and its components. Therefore, the economic recession should be overcome through the economic performance recovery, as well as the recovery and the subsequent preservation of the necessary macroeconomic stability. However, since the recession caused no small changes in the supply-production structures and the domestic and foreign demand structures, the economic growth and macroeconomic stability recovery cannot constitute a simple return to the initial pre-recession state. The production structure changes induced by the recession and the subsequent recovery are described in the next part of this study. Table 4B. offers information on the development of the macroeconomic stability criteria.

The combined result of the selected partial criteria of macroeconomic stability is encompassed in the composite index of overall macroeconomic stability (CIOMS). Its long-term development is illustrated in Graph 6.

The highest CIOMS value in the selected period was achieved in 2010, i.e. simultaneously with the start of the vigorous recovery trend. This was due to the lowest, 1% inflation rate, the significant reduction of loan interest rates, the balance of trade surplus, and the considerable excess of labour productivity growth

over real wage growth rate. The positive impact of the above mentioned criteria on the CIOMS was much stronger than the negative impact of the high public finance deficit and the increasing government debt.

Graph 6
Development of Performance of the Slovak Economy and its Macroeconomic Stability Represented by CIOMS[1]



[1] Based on ŠÚ SR data. CIOMS values calculated by merging values of the six partial stability criteria introduced in Table 4B. Partial criteria values used to calculate CIOMS are determined as a ratio of partial criteria values in individual years to average values for the entire selected period.

A slight decline in the CIOMS value in 2011, however to a level exceeding the value achieved in the pre-crisis year 2008 (!), was coupled with a slight decline in the GDP growth rate. The relatively high CIOMS value was positively affected by the record-low interest rate, historically the best result of the balance of trade, but also by the gradual lowering of the public finance deficit and the not-so-bad ratio of labour productivity growth to real wage growth. The decline in the CIOMS value compared with the previous year should be attributed to the increase in inflation rate and the historically highest recorded government debt.

In 2010, the positive development of macroeconomic stability supported the recovery of the Slovak economy. In 2011, the same development was a barrier to a more significant slackening of its economic growth rate. The elimination of partial imbalances, confirmed by the development of partial criteria of macroeconomic stability, was achieved thanks to the undisturbed functioning of the market system, the support of the government economic policy as well as (especially concerning price and interest rate development) the ECB monetary policy and the overall EU stabilization policy.

2. Production Development

In 2011, the continued economic growth was coupled with a faster increase in production (5.1%) and intermediate consumption (6.4%) than value added (3%). However, the production and intermediate consumption growth dynamics declined year-on-year in the third and the fourth quarter of 2011; the value added growth rate declined in the fourth quarter. The relatively stable GDP growth in the fourth quarter of 2011 was supported by the large increase in net taxes on products (which increased the GDP growth by 1 p. p. compared with the value added growth). For more details see Table 5.

T a b l e 5

Development of GDP Formation by Components, 2008 − 2011

					2011			
	2008	**2009**	**2010**	**2011**	Q1	Q2	Q3	Q4
	Year-on-year change, % (based on 2005 prices)							
GDP	5.8	–4.9	4.2	3.3	3.4	3.5	3.0	3.4
Production	6.5	–10.5	8.7	5.1	7.5	8.3	3.2	1.8
Intermediate consumption	6.5	–14.1	11.8	6.4	9.9	11.8	3.3	1.4
Value added	6.4	–4.7	4.2	3.0	3.7	2.9	3.2	2.4
Net taxes on products	–0.4	–6.8	4.0	6.4	0.5	10.7	1.3	12.9

Source: ŠÚ SR, Slovstat database.

In international comparison with the EU-27 member states, in 2011, Slovakia belonged among the six most rapidly growing economies (a higher growth was recorded in the Baltic states, Poland and Sweden). Slovakia's growth was approximately 2 percentage points (p. p.) higher than the EU-27 average. At the same time, it recovered from the crisis slump, achieving a 2.4% higher GDP than in 2008, ranking third among the EU-27 member states. Only Poland and Sweden achieved a better result (110.2% and 104.8% of the 2008 level respectively). From the 27 EU member states, five more countries exceeded the 2008 level; the remaining 19 have not achieved it yet.

Based on the preliminary quarterly national accounts data, it can be stated that the development of the Slovak economy was positively affected mainly by the increase in value added in industry (12.8%; 15% in manufacturing) and to a lesser extent also in construction (2.1%). The value added in services stagnated and in agriculture decreased considerably. For more details see Table 6. [6]

[6] We call attention to the fact that based on the current preliminary quarterly national accounts, the development tendencies in individual branches in the previous years changed considerably compared with data published in 2011. We also add that at the time of writing, we had at our disposal only the data for the ten branches included in Table 6.

T a b l e 6

Development of GDP Formation by Branches, 2008 − 2011

	2008	2009	2010	2011	2011 Q1	2011 Q2	2011 Q3	2011 Q4
	Year-on-year change, % (based on 2005 prices)							
Agriculture[1]	11.6	–27.6	5.0	–20.2	–36.5	–29.2	–9.6	–5.6
Industry total	4.4	–11.2	30.8	12.8	24.2	21.4	2.8	6.1
Manufacturing	7.7	–16.8	39.7	15.0	34.7	22.4	2.3	6.8
Construction	20.3	–7.0	5.6	2.1	–0.2	–6.3	6.5	5.1
Trade, transportation, accommodation[2]	11.5	–14.1	–13.0	–3.7	–8.9	–11.9	2.9	6.3
Information and communication	–0.9	3.7	2.1	6.4	5.2	5.8	7.3	7.1
Financial and insurance activities	–4.2	13.9	–7.9	–6.0	–9.4	–4.1	0.0	–10.0
Real estate activities	4.5	15.8	–3.8	4.0	–5.3	1.7	12.6	7.1
Professional services[3]	10.9	5.3	–20.5	3.5	3.5	–1.0	16.5	–4.5
Public services[4]	1.5	6.2	3.5	–0.7	–5.5	7.4	0.2	–4.8
Other services[5]	–21.7	38.2	6.4	–5.5	10.6	–19.5	–11.6	–0.1

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

Source: ŠÚ SR, Slovstat database.

The slowdown in the economic growth, clearly evident in the development of the total value added, was expressed also in the year-on-year growth rate of value added in industry (and manufacturing). It is questionable whether this signalizes the return of the recession, or is only a reaction to the significant increase in value added in the third and the fourth quarter of 2010. If we look at the value added development in the main branches of the economy in absolute terms (in 2005 prices), its tendency to decrease is clear only in the "trade-related" branches. We can assume that this aggregate of the traditional service branches, where the value added (in 2005 prices) significantly lagged behind the 2008 level also in 2011 (it achieved only 72%), has been undergoing structural changes, which have been changing its overall position in the economic structure.[7] The remaining branches have already apparently switched to the "normal" development with the usual lower performance at the end of the year. It should also be taken into consideration that the value added in industry, as well as manufacturing, exceeded the 2008 level in 2011 by 31% and 34% respectively. In construction, it reached the 2008 level and in services less "trade-related" branches it exceeded the 2008 level by 6%. Achieving higher growth rates especially in manufacturing will require a lot more effort (new investment, products and markets) compared with the period when the recession-induced problems were being overcome.

[7] As verified by the revenue and employment analysis in the individual branches of market services, the expected changes are related mainly to wholesale.

The differences in the performance of individual branches are further described based on more detailed economic indices usually found in business statistics.

In 2011, the development in *agriculture, forestry and fishing* improved slightly compared with the previous year, as documented by the data in Table 7.

T a b l e 7

Selected Indicators of the Agricultural Sector Development, 2008 – 2011

	Absolute values[1]				Year-on-year change, %			
	2008	2009	2010	2011	2008	2009	2010	2011
	Agriculture, forestry and fishing							
Gross production, current prices[2]	4 957	3 791	4 217	4 500	8.6	–23.5	11.2	6.7
Value added, current prices[2]	2 505	1 781	1 877	1 988	12.1	–28.9	5.4	5.9
Value added, constant prices[2]	2 186	1 583	1 662	1 326	11.6	–27.6	5.0	–20.2
Employment[2]	82	76	69	71	–1.1	–7.1	–9.1	3.4
Profit/loss, current prices[3]	156	–104	–42	60.7	.	.	.	.
	Agriculture[4]							
Revenues for own products, current prices	1 452	1 141	1 215	1 452	–2.0	–21.4	6.5	19.5
Revenues for own products, constant prices	1 308	1 513	1 231	1251	–5.8	15.7	–18.6	1.6

[1] In EUR million, employment in 1000 persons. [2] Based on ESA 95 methodology. [3] Based on business statistics.
[4] For agricultural enterprises entered in the business register and for farmers with an information duty.

Source: Own compilation based on ŠÚ SR data.

The decline in employment halted in the sector. After two loss-making years it achieved a positive profit/loss and the nominal growth of gross production and value added continued. The real decrease in value added suggests that the development was significantly affected by the 16.7% year-on-year price growth of agricultural products.

The development in agriculture was positively influenced by the abundant harvest of most statistically significant crops, not only compared with the previous year, but also with the average for years 2008, 2009 and 2010. E.g. the growing of cereals increased by 46% compared with the previous year, and by 11% compared with the three-year average. On the contrary, in animal production, the number of newborn calves and especially pigs declined (by 6%; by 60% compared with 2003). A slight increase was recorded in cow milk production. In the current conditions, producers are not able for various reasons to sell the increased production, so they have been adjusting their production capacity.

Total revenues for own goods increased nominally by almost a fifth, however, in real terms (in 2005 prices) only by 1.6%. The growth was positively affected mainly by the sales of crop production, whereas the revenue for animal production declined.

In 2011, the increase in both production and revenues for own performances and goods in *industry* continued at an average rate of 7% and 10.2% respectively.

The year-on-year growth rate slackened, but remained at the average growth rate level for the last ten years. Industrial production in manufacturing increased by 8.9% and revenues for own performances and goods by 10.8%. The real productivity growth (based on revenues for own performances and goods) reached 5.7% and 5.6% respectively. For more details see Table 8.

T a b l e 8

Selected Indicators of the Development of Industry in the SR

	2008	2009	2010	2011	2011			
					Q1	Q2	Q3	Q4
	Year-on-year change in industry, %							
Revenues for own performances and goods[1]	3.8	–18.0	19.2	10.2	16.5	12.3	8.0	5.1
Industrial production index[2]	3.2	–13.8	18.9	7.0	11.9	7.9	5.6	3.1
Employment[3]	0.6	–15.0	–3.8	4.3	5.3	4.8	3.9	3.3
Labour productivity in revenues[1]	3.2	–3.4	23.9	5.7	10.6	7.1	4.0	1.7
	Year-on-year change in manufacturing, %							
Revenues for own performances and goods[1]	2.9	–19.9	20.9	10.8	18.4	12.6	7.8	5.6
Industrial production index[2]	2.5	–15.5	20.1	8.9	13.3	11.3	7.7	4.1
Employment[3]	1.3	–16.0	–3.8	5.0	5.9	5.5	4.5	4.0
Labour productivity in revenues[1]	1.5	–4.6	25.7	5.6	11.8	6.7	3.2	1.5
	Nominal values – industry							
Revenues (EUR billion, current prices)	72.8	57.4	67.5	76.6	18.8	19.3	18.4	20.1
Employment (1000 persons)	586	498	479	500	498	500	500	502
	Nominal values – manufacturing							
Revenues (EUR billion, constant prices)	60.1	45.3	54.7	62.5	14.9	16.1	15.3	16.2
Employment (1000 persons)	533	448	431	452	450	451	452	455

[1] Based on constant prices. [2] Working-day adjusted data. [3] Average number of employed persons.

Source: ŠÚ SR, Slovstat database.

In 2011, total revenue in industry (in current prices) exceeded the 2008 level by 5.2% and in manufacturing by 4.3%. The positive development of revenues was contributed to mainly by the sales in foreign markets, which increased by 15.7% compared with 2008, and in manufacturing by 11.2%. A significant increase in revenues was recorded especially in the non-euro-area market. The revenues in the domestic market have not yet recovered from the crisis and remain below the 2008 level by 5.4% and 6.1% respectively. For more details see Table 9.

The process of recovering from the crisis was very different in individual branches. Manufacturing was the most affected by the development of revenue in the manufacture of motor vehicles, which exceeded the 2008 level by 21.7% in 2011, and increased its share in the manufacturing revenue from 23% in 2008 to 27% in 2011. The 2008 level was also considerably exceeded in the manufacture of coke and refined petroleum products (by 19%), the manufacture of

chemicals and chemical products (by 23%), and the manufacture of pharmaceuticals (by 16%). Especially the manufacture of wood and paper products, and printing (–15%) and the manufacture of metals and metal structures (–8%) have not been able to recover from the consequences of the crisis. Graph 7 offers an overall view of the differences among individual branches.

T a b l e 9

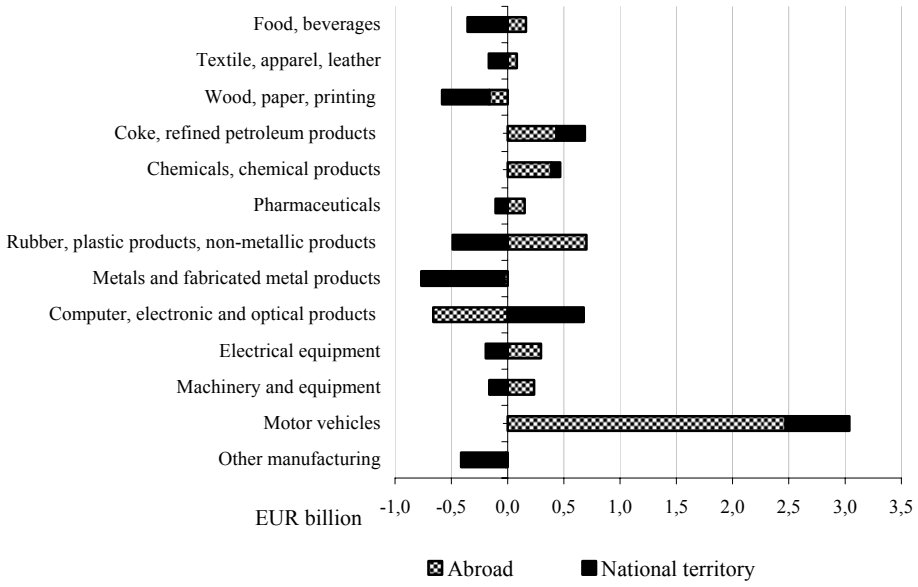
Development of Revenue in Industry Sales by Individual Markets

	2008	2009	2010	2011	2011/2010	2011/2008
	EUR billion (current prices)				%	
Industry total						
Markets total	72.8	57.4	67.5	76.6	13.6	5.2
Domestic market	36.0	28.1	30.7	34.1	11.0	-5.4
Foreign market	36.8	29.3	36.8	42.5	15.7	15.7
Euro area market	24.8	19.3	23.5	26.3	12.1	6.1
Non-euro-area market	12.0	10.0	13.3	16.2	22.1	35.5
Manufacturing						
Markets total	60.1	45.3	54.7	62.7	14.5	4.3
Domestic market	23.9	16.9	19.5	22.5	15.1	-6.1
Foreign market	36.1	28.4	35.2	40.2	14.2	11.2
Euro area market	24.5	19.0	22.9	25.2	10.3	2.9
Non-euro-area market	11.6	9.4	12.3	15.0	21.4	28.8

Source: Own calculations based on ŠÚ SR, Slovstat database.

G r a p h 7

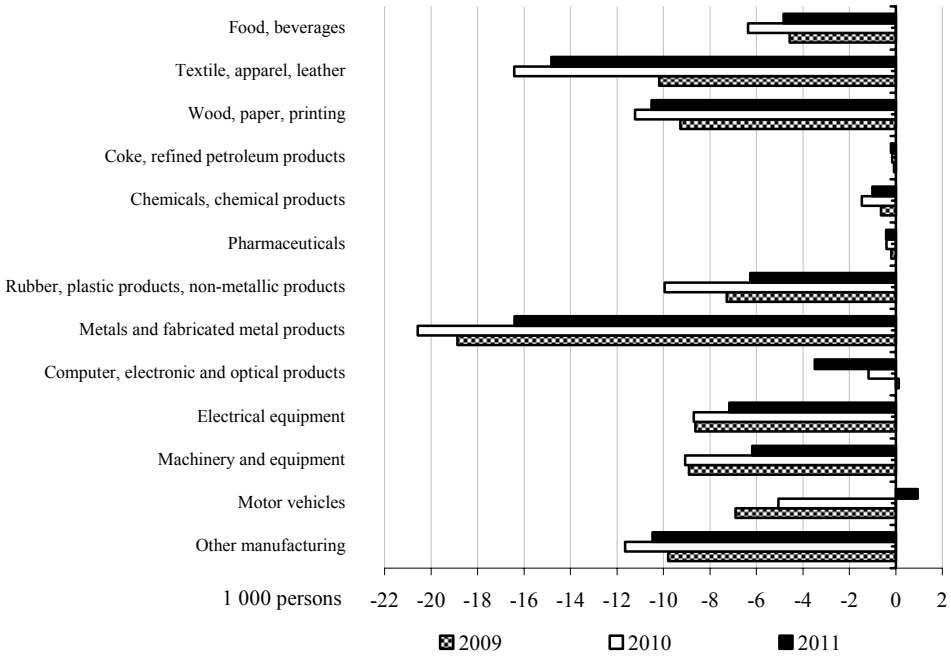
Differences between Domestic and Foreign Revenues in 2011 Compared with 2008 by Individual Manufacturing Branches (EUR billion, current prices)



Source: Own calculations based on ŠÚ SR, Slovstat database.

In 2011, a gradual increase in employment, which started in the fourth quarter of 2010, continued in industry. Employment increased year-on-year by 4.3% in industry and by 5% in manufacturing. Employment increased during all four quarters of the year. However, if we look at the overall employment development since 2008, we have to point out that the job losses caused by the recession have not yet been replaced. In 2011, there were still 86 thousand fewer (14.7% less) employees working in industry, and 81 thousand fewer (15.2% less) employees in manufacturing. (Based on ESA 95 methodology, there were 67 thousand fewer employees.) In some branches, e.g. in the manufacture of textiles, apparel, leather and related products, employment declined by as much as 29% compared with 2008; in others approximately by 20% (the manufacture of wood and paper products, and printing; the manufacture of electrical equipment, etc.). Only in the manufacture of motor vehicles did the employment reach and exceed the 2008 level. Graph 8 offers a more detailed view of the situation in individual branches.

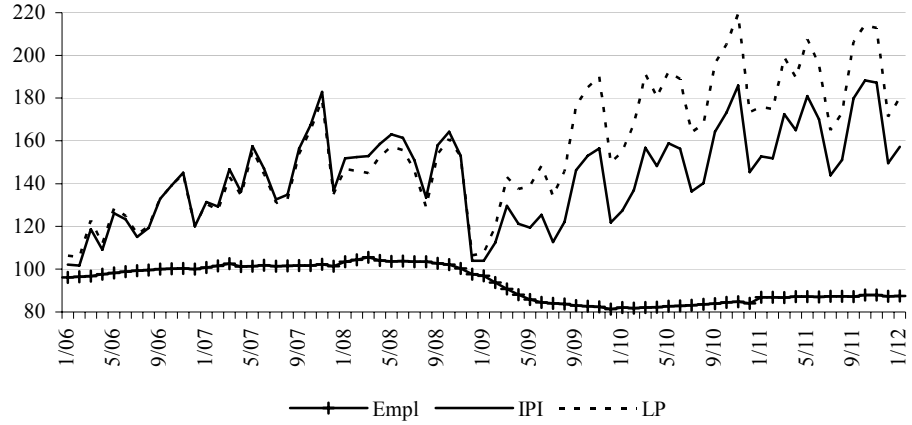
G r a p h 8
Differences in Average Number of Employed Persons in Manufacturing Branches in 2009, 2010 and 2011 Compared with 2008



Source: Own calculations based on ŠÚ SR, Slovstat database.

As illustrated in Graph 9, the recovery of manufacturing is based far more on the labour productivity growth than in the pre-crisis period. According to us, this tendency suggests that a more considerable increase in employment apparently cannot be expected without an increase in its production capacity. In accordance with the tendencies in the developed economies, it can be expected that the share of manufacturing in employment will further decline.[8] Manufacturing should "create" jobs in the market services through demand for intelligent services. However, this requires qualitative changes in the economic structure with the help of government policy.

G r a p h 9
Development of Employment, Production and Labour Productivity in Manufacturing in 2006 – 2012 (average month of 2005 = 100)



Note: IPI – industrial production index; Empl – employment; LP – labour productivity.
Source: Own calculations based on ŠÚ SR, Slovstat database.

The development of industry in 2012 is quite uncertain:

• Although lower growth rates in industry in the second half of 2011 (see Table 8) signalize a certain slowdown, the nominal development of revenues and employment indicates a stable growth trend. The January 2012 data so far confirm this assumption – the industrial production index increased year-on-year by 7% in industry (due to the exceptional growth in the manufacture of electricity and gas by 27.4%), and by 3.1% in manufacturing. Revenues for own performances and goods increased by 7.9% and 8.6% respectively, employment increased slightly (by 0.2% and 0.7% respectively).

[8] In this area, Slovakia has been significantly exceeding the EU-27 average – in 2011 by 7.1 p. p. (21.5% compared with 14.4%). Slovakia's share is the second highest in the EU-27 after the Czech Republic.

• Based on the January 2012 data, new orders increased by 11% compared with the previous year and by 4% compared with December 2011 (but only by 1.1% compared with the average nominal monthly value of orders in 2011).

• SO SR business surveys in industry show significant uncertainty with regard to the industrial production development. The expectations were optimistic in January, considerably more pessimistic in February (a decline by 20 points), and returned to the January level in March (an increase by 20 points). The industrial confidence indicator changed proportionally, and based on the last survey reached the long-term average level.

Overall, it is clear that because of the high dependency of the Slovak industry on foreign demand, the development in foreign markets will be crucial. In our view, it is unwise to expect significant domestic demand impulses. The increase in effective household demand as well as public expenditures, e.g. on infrastructure or housing, will be relatively restrained because of the inevitable stabilization of the public finance. The recovery of demand in the domestic market with positive impacts on the production growth could be significantly supported by the preference of products of domestic origin instead of imported products by the final consumers as well as businesses.

In 2011, the negative development continued in *construction*. Construction production declined year-on-year by 1.8%, employment by 3.6%, revenues for own performances and goods increased by 3.2% after two years of decline. For more detailed information see Table 10.

T a b l e 10

Selected Indicators of the Development in Construction in the SR

	2008	2009	2010	2011	2011			
					Q1	Q2	Q3	Q4
	Year-on-year change, %[1]							
Construction production	12.0	–11.3	–4.6	–1.8	0.5	–1.2	–1.7	0.8
Revenues for own performances and goods	16.4	–13.9	–6.1	3.2	4.5	–0.5	5.8	3.3
Employment	9.1	2.0	–2.6	–3.6	–3.1	–3.9	–3.8	–3.6
Labour productivity[3]	2.6	–13.0	–2.1	2.0	0.7	–0.1	2.3	4.5
	Nominal values[2]							
Construction production	6.3	5.7	5.5	5.5	0.9	1.4	1.6	1.6
Revenues for own performances and goods	10.3	9.1	8.6	9.0	1.4	2.3	2.6	2.7
Employment	181	184	180	173	173	173	174	173
Labour productivity[3]	34.7	31.0	30.6	31.6	5.2	8.2	9.1	9.1

[1] Based on constant prices, in the case of employment based on average number of employed persons. [2] Construction production and revenues for own performances and goods in EUR billion, employment in thousand persons. [3] From construction production of construction businesses, in constant prices, nominal values in EUR thousand.

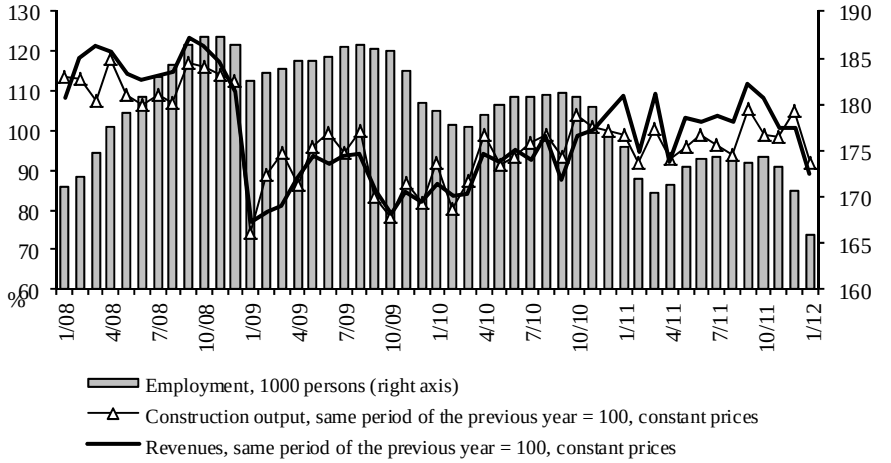
Source: Based on ŠÚ SR data.

In 2011, construction production and revenues for own performances and goods in construction reached approximately 87% of the 2008 level, and employment reached 96% of the 2008 level (approximately 8 thousand fewer employees than in 2008). However, if we take into account that the recession in construction became more evident only at the end of 2008, we can see that in the fourth quarter of 2011 there were approximately 14 thousand fewer employees in construction than in the fourth quarter of 2008. The overall development of employment, production and revenues since 2008 by months is illustrated in Graph 10.

As seen in Graph 10, the beginning of the year 2012 brought a decline in all major construction indicators, and the further development of this branch is questionable. Based on the SO SR March business survey in construction, although the decline in the confidence indicator halted, its level remains 22.5 points below the long-term average. Based on this survey, 40% of businesses expect an increase in construction activity, 50% its stabilization at the current level and 10% its decline.

A more rapid recovery of the Slovak construction could be supported by a more vigorous realization of the planned transport infrastructure, as well as by overcoming the constant decline in home building. Whereas almost 19 thousand homes were finished in 2009, it was less than 15 thousand in 2011. Home building can support not only the growth in construction, but also the growth in other related branches and businesses oriented to the domestic market.

G r a p h 10
Development of Employment, Production and Revenues in Construction by Months of 2008 – January 2012



Source: Based on ŠÚ SR data.

Based on the preliminary quarterly national accounts data, the *service sector* as a whole contributed to the overall value added growth in 2011 significantly less compared with its position in the economy. It contributed only 0.9 p. p. out of the 4.7% value added growth (in current prices), and out of that 0.6 p. p. was contributed by the market services.

The development of performance and employment in *market services* is illustrated by the data in Table 11.

T a b l e 11
Development of Revenues for own Performances and Goods and Employment by Market Services

	2008	2009	2010	2011	2008	2009	2010	2011
	Revenues, EUR billion, current prices				Year-on-year change, %[1]			
Trade and repair of motor vehicles	5.1	3.9	3.8	3.8	7.0	–17.9	–1.5	11.8
Wholesale	31.0	22.7	23.3	23.1	13.7	–26.8	2.6	–0.8
Retail trade	19.8	17.4	17.3	17.5	9.1	–10.3	–2.2	–2.8
Accommodation	0.4	0.3	0.3	0.3	–2.9	–23.6	–4.8	–1.9
Restaurants and food service activities	1.1	0.9	0.8	0.8	2.4	–27.7	–9.1	–1.2
Transportation and storage, postal activities	6.3	5.4	5.8	6.3	.	–13.6	7.1	9.4
Information and communication[2]	4.7	4.9	4.5	4.9	.	3.3	–8.7	9.7
Selected market services[3]	8.3	8.0	8.6	10.1	.	–4.7	5.7	14.3
Total	76.7	63.5	64.3	66.8		–17.2	1.2	3.9
	Employment, thousand persons				Year-on-year change, %			
Trade and repair of motor vehicles	25.3	22.8	21.1	21.0	1.0	–9.9	–7.4	–0.5
Wholesale	134.8	107.2	95.2	94.7	2.5	–20.5	–11.2	–0.6
Retail trade	160.5	155.7	152.3	153.6	1.3	–3.0	–2.1	0.8
Accommodation	10.9	10.2	9.5	9.4	–12.3	–6.8	–6.8	–1.0
Restaurants and food service activities	39.1	31.0	28.7	28.7	1.8	–20.7	–7.5	–0.1
Transportation and storage, postal activities	110.9	111.8	110.6	112.2	.	0.9	–1.1	1.4
Information and communication[2]	35.8	37.6	33.2	37.8	.	5.0	–11.6	13.8
Selected market services[3]	131.5	123.7	120.6	127.3	4.2	–6.0	–2.5	5.6
Total	648.8	599.9	571.3	584.6	.	–7.5	–4.8	2.3

[1] Based on constant prices, year-on-year change in wholesale; transportation and storage; information and communication, as well as market services total, based on current prices.
[2] Including: publishing activities, motion picture, video and television programme production, sound recording and music publishing activities, programming and broadcasting activities, telecommunications, computer programming and information service activities.
[3] Including: real estate activities, professional and technical activities, administrative and support service activities, other education and education activities, arts, entertainment and recreation, computer repair activities, repair of other equipment and personal service activities.

Source: Compiled based on ŠÚ SR data.

Based on the information in Table 11, as well as other information not included in this text, the development of market services in 2011 put into the previous years' context could be summarized as follows:

- In 2011, market services as a whole achieved a nominal increase in revenues for own performances and goods of 3.9% and an increase in employment of 2.3%. So far, only some segments of this group of services managed to achieve the 2008 level. The overall lag in services is 13% in revenues and 10% in employment (64 thousand fewer employed persons).
- It is positive that the most successful development was recorded in the knowledge based service segments, especially in information and communication and selected market services. In the information and communication segment, there was a high year-on-year increase in revenues (9.7% in current prices) and employment (13.8%) which enabled it to exceed the 2008 level (in revenues by 3% and in employment by 5.6%).[9] In selected market services, revenues increased nominally by 17.1% (by 14.3% in real terms), and employment increased by 5.6%. However, compared with 2008, this segment exceeded the 2008 level in revenues (nominally by 22%), but not in employment (where it reached only 97%, which is more 4 thousand fewer employees than in 2008). Both segments recorded a more or less stable growth in all four quarters of 2011.
- The development in 2011 was also positive in the service segment of transportation and storage, and postal activities. This segment also recorded a relatively high year-on-year increase in revenues (nominally 9.4%) and a slight increase in employment (1.4%). Both indicators reached and slightly exceeded (by 1%) the 2008 level.
- In 2011, worse results were achieved in traditional services, more broadly understood as "trade-related"[10], where total revenues increased nominally only by 1.2% and employment increased by 0.2%. The lag behind the 2008 level is 21% in revenues and 17% in employment (63 thousand fewer employees, out of which 40 thousand fewer in wholesale). After the significant decline in 2009, performance and employment in these segments changed minimally in 2010 and 2011. A significant pressure on prices and costs, including labour costs, has presumably led to an overall change in the position of these segments, which were considerably excessive compared with the EU. Any future growth in these segments will probably be slow and dependent on the development in the domestic and foreign markets. Supporting tourism might increase the demand for accommodation and food service activities.

[9] The successful development of this service segment is also documented by the 6.4% year-on--year real value added growth, which is the second highest after industry (based on the current preliminary quarterly national accounts data).

[10] Trade and repair of motor vehicles, wholesale, retail trade, accommodation, restaurants and food service activities.

In 2011, the *financial and non-financial corporations' profit/loss* increased by EUR 1 620 million, out of which the financial corporations' profit/loss increased by EUR 571 million. The increase in profit/loss in non-financial corporations was only EUR 1 048 million, which is approximately half of the 2010 result.

The extremely low increase in industry (by EUR 88 million) and the decline in manufacturing are the most surprising. A significantly better result than in 2010 was achieved in agriculture (a shift from loss to profit). Relatively positive results were achieved in construction and services. Table 12 offers an overall view of the profit/loss development in the recent years.

T a b l e 12

Development of Corporate Financial Position, 2007 − 2011

	2007	2008	2009	2010	2011
	Profit/loss, EUR million				
Non-financial and financial corporations, total	10 887	8 905	7 353	9 144	10 764
Financial corporations	643	−579	767	554	1 125
Non-financial corporations	10 244	9 485	6 586	8 590	9 638
of which:					
Agriculture, forestry and fishing	39	156	−104	−42	61
of which: Agriculture	10	130	−104	−42	32
Industry	5 054	3 998	2 819	3 965	4 053
of which: Manufacturing	3 171	2 355	1 026	2 153	1 983
Construction	513	678	558	584	779
Services total	4 638	4 652	3 315	4 083	4 745
	Cost profitability, %				
Non-financial corporations	7.6	6.2	5.2	6.2	6.3
of which:					
Agriculture, forestry and fishing	1.4	5.1	−4.6	−1.9	2.4
of which: Agriculture	0.4	5.2	−5.5	−2.3	1.5
Industry	7.3	5.2	4.8	5.9	5.4
of which: Manufacturing	5.4	3.6	2.2	3.9	3.2
Construction	8.8	8.9	7.8	9.5	12.1
Services total	8.0	7.0	5.5	6.4	6.8

Source: Compiled based on ŠÚ SR data.

In 2011, the non-financial corporations' cost profitability increased only marginally (by 0.1 p. p.), and declined in industry and manufacturing. An extremely high cost profitability was achieved in mining (32.3%), in supply of electricity, gas, steam and air conditioning (16%), in construction (12.1%), in information and communication (15.7%) and in real estate, professional, scientific and technical activities, administrative and support service activities (12.7%).

Finally, it can be concluded that the position of individual branches in the economic structure did not stabilize after the recession – it has been changing over the years. So far, it seems clear (based on the preliminary national accounts data) that the position of agriculture weakened from the point of view of value added creation as well as employment. The share of industry in the value added

increased, but declined in employment. The opposite development was recorded in services – their share in the value added declined, but increased in employment. Based on the 2010 national accounts data for individual branches, it appears that the technologically more demanding segments of manufacturing have been strengthening after the recession to the detriment of the less demanding segments, and in the service sector the more knowledge based segments are strengthening.

3. Qualitative Factors of Economic Development

The gradual exhaustion of price and cost factors of Slovakia's competitive capacity leads to focusing on the review of qualitative factors of the economic development. Effective domestic research and development (R&D), innovation capacity of the economy, educated labour force and the use of information and communication technology (ICT) constitute the prerequisites for higher national labour capitalization, higher economic growth and job creation.

The development of some input (R&D expenditure and employees in R&D) and output (patents and academic papers) indicators of the innovation system in the years 2004 – 2010 is presented in Table 13.[11]

The share of R&D expenditure in GDP exceeded 0.6% GDP after a longer period of stagnation. An increase was recorded in all the selected sectors: government, business and also university college sector. The increase in R&D expenditure in 2010 is attributable to the disbursement of the EU Structural Funds and the Cohesion Fund resources. On the other hand, the R&D expenditure structure remains inadequate. Almost two thirds of the R&D expenditure is directed to the public sector (government sector and university colleges), which coupled with insufficient institutional support of transfer of the public sector research results to the commercial sector deteriorates the innovation activity in the economy. In the long run, the innovation performance of the economy is limited by the weak absorption capacity of the R&D expenditure of the business sector (0.27% GDP in 2010).

In terms of the R&D expenditure resources, public and state resources (49.6%) dominated in 2010, although their share declined in the last monitored year as well as in the previous period. Business resources have been achieving a share of 35% on a long-term basis. Foreign resources increased in 2010, reaching 14.6%. The low share of university college resources (only 0.4% of the gross R&D development in 2010) is related to their position and means of financing.

[11] R&D and education indicators included in this part are published with a two-year lag.

T a b l e 13

Selected Indicators of Research and Development, 2004 – 2010

	2004	2005	2006	2007	2008	2009	2010
R&D expenditure (% GDP)	0.51	0.51	0.49	0.46	0.47	0.48	0.63
of which (% GDP):							
Government sector	0.16	0.15	0.16	0.16	0.15	0.16	0.19
Businesses	0.25	0.25	0.21	0.18	0.20	0.20	0.27
University colleges	0.10	0.10	0.12	0.11	0.11	0.12	0.17
R&D gross expenditure resources (%)							
State and public resources	57.1	5.70	55.6	53.9	52.3	50.6	49.6
University college resources	0.3	0.3	0.3	0.2	0.3	0.6	0.4
Business resources	38.3	33.6	35.0	35.6	34.7	35.1	35.1
Foreign resources	4.3	6.0	9.1	10.2	12.3	12.8	14.6
R&D employees[1]	22 217	22 294	23 120	23 437	23 641	25 388	28 128
year-on-year change (%)	6.2	0.3	3.7	1.4	0.9	7.4	10.8
Domestic patent applications[2]	215	155	193	240	167	176	235
Number of patent applications[2] per 1 000 R&D employees	9.7	7.0	8.3	10.2	7.1	6.9	8.3
Academic papers[3]	2 160	2 010	2 238	2 274	2 392	2 390	2 509
Number of academic papers per 1 000 R&D employees	97.22	90.16	96.80	97.03	101.18	94.14	89.2

[1] By 31. 12.
[2] Domestic patent applications filed at the Industrial Property Office of the Slovak Republic.
[3] Academic articles listed in Current Content Connect® (by 4. 4. 2012).

Source: ÚPV SR (2011); ISI Web of Knowledge^{SM} (2012); ŠÚ SR (2012d).

Graph 11 illustrates the R&D expenditure (% GDP) and its structure in the SR compared with the V4 countries and the EU-27 average. The R&D financing in Slovakia lags not only behind the EU-27 average, but also behind the V4 countries.

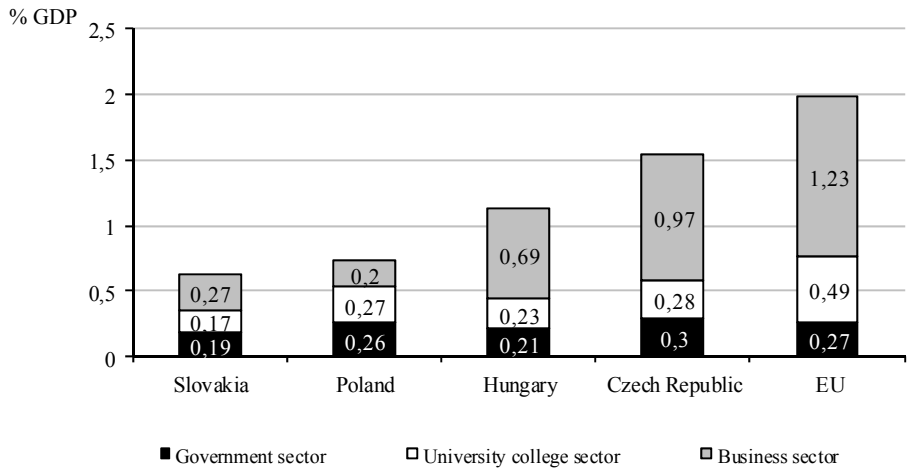
In 2010, the number of R&D employees increased year-on-year by 10.8%, which represented the highest increase in the 2003 – 2010 period. Patent activity measured by the number of domestic patent applications increased slightly after two years of stagnation and reached a level of 235 domestic patent applications. Patent productivity increased from 6.9 to 8.3 domestic patent applications per 1 000 R&D employees. Academic productivity (measured by the number of academic papers per 1 000 R&D employees) declined from 94 to 89 articles, which represents the lowest level in the past seven years. This decline was caused by an increase in the number of R&D employees.

Education is one of the key competitiveness factors of the economy. Especially university college education constitutes a necessary prerequisite for high-quality human capital. There is a positive trend of increasing public expenditure on education in the last two years. In 2010, public expenditure on education represented 4.5% GDP, which is still less than the EU-27 average of 5.5%. A negative trend is visible in the public expenditure on university college education (in % GDP) as well as in the participation in lifelong learning. While 9.1%

of the age group 25 to 64 years participated in further education in the EU-27 in 2010, it was only 2.8% in Slovakia. A relatively positive development is visible in the number of graduates in mathematics, science and technical science. 17.5 graduates per 1 000 graduates in the age group 20 to 29 years exceeded the EU-27 average (14.3 graduates).

Graph 11

Structure of R&D Expenditure in 2010 in the V4 Countries and the EU-27



Source: Own compilation based on Eurostat data (2012).

Table 14

Selected Indicators of Education

	2004	2005	2006	2007	2008	2009	2010
Total public expenditure on education (% GDP)	4.2	3.85	3.8	3.62	3.5	4.3	4.5
Public expenditure on university college education (% GDP)	0.98	0.81	0.90	0.79	0.77	.	.
Participation in lifelong learning (% of the age group 25 to 64 years)	4.3	4.6	4.1	3.9	3.3	2.8	2.8
Number of graduates in mathematics, science and technical science (per 1 000 persons in the age group 20 – 29 years)	9.2	10.2	10.3	11.9	15.0	17.5	.

Source: Eurostat; ŠÚ SR, Slovstat database.

The development of knowledge society is to a large extend preconditioned and dynamised by the use of ICT across the society. Table 15 introduces some indicators of ICT penetration in the society (households, businesses and public

administration). In Slovakia, the number of households with Internet access increases every year. Digital literacy, expressed as a share of citizens who regularly use the Internet to the citizens with medium level of PC knowledge, stagnated in 2011.

T a b l e 15

Selected Indicators of ICT Penetration in the Society

	2004	2005	2006	2007	2008	2009	2010	2011
Share of households with the Internet access	23	23	27	46	58	62	67	71
Share of citizens[1] who regularly use the Internet	40	43	43	51	62	66	73	72
Share of citizens[1] who use the Internet banking	10	10	13	15	24	26	33	34
Share of citizens[1] with medium level of PC knowledge	.	35	30	33	.	33	.	33
Share of business revenues from e-commerce in total revenues	.	0	0	3	8	12	8	16
Share of businesses which send or receive e-invoices	.	.	.	14	23	30	34	.
Share of citizens[1] who use the Internet to interact with public administration	25	27	32	24	30	31	35	.
Share of businesses which use the Internet to interact with public administration	47	57	77	85	88	91	88	.
Share of broadband Internet connections	0.4	1.5	4	6.9	9.6	14.3	15.5	.

[1] Age group 16 to 74 years.

Source: Eurostat (2012).

In the business sector, ICT use also developed rather dynamically. The share of business revenues from trading via electronic networks (e-commerce) recorded a relatively high year-on-year increase, as did the number of companies sending or receiving electronic invoices (e-invoicing). ICT are also used in the area of electronisation of public administration services. The demand for public administration online services is represented by the share of citizens and businesses that use the Internet to interact with public administration institutions. Businesses recorded a more dynamic year-on-year increase and also a much larger share in the last monitored year compared with citizens who used the Internet to interact with public administration. This can be explained by the fact that the supply side of the public administration online services concentrates mainly on the business sector (e.g. prioritizing online tax collection).

The development of R&D, innovations, education and ICT penetration in the society, which shows the potential of qualitative factors in the economic development of Slovakia, can be reviewed as negative. The increase in total R&D expenditure in the last monitored year 2010 can be considered positive, but the

level of financing still lags behind the EU-27 average and the V4 countries. From the point of view of innovation development, the structure of R&D expenditure is inadequate because of the low participation of the private sector. From the point of view of R&D financing sources in Slovakia, there is a sustained increase in the foreign resources, which is attributable to the disbursement of the EU Structural Funds (Operational Programme Research and Development, Operational Programme Competitiveness and Economic Growth, and Operational Programme Bratislava Region).

4. Labour Market

The recovery of the labour market, which started to show already in the course of 2010, continued in 2011. With the exception of real wage, which fell because of the stronger consumer price increase; and of long-term unemployment, which increased slightly thanks to of the time elapsed since the beginning of the recession, all remaining parameters of the labour market achieved better year-on-year results. In the first half of the year, employment increased more perceivably, the number of unemployed as well as the unemployment rate fell, the nominal wage increased. In the second half of the year and especially at the end of the year, the more optimistic development waned again.

4.1. Employment and Unemployment Development

The 1.5% increase in employment coupled with only slightly higher than 3% GDP growth constituted a noteworthy phenomenon of the year 2011. Especially in the first two quarters of 2011 it is impossible to overlook the uncommon approximation of the increase in employment level to the GDP growth level.

4.1.1. *Employment Development Lagging behind GDP Development*

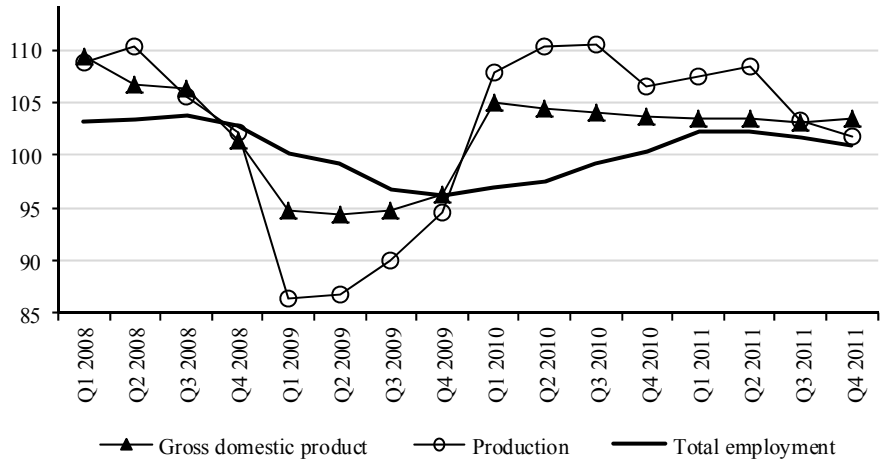
To induce initial employment growth, GDP growth of at least 4% was needed in the past. The average difference between GDP growth (expressed in constant prices) and the increase or decline in employment for the period of ten years before the 2009 recession is 4.09 percentage points. This relation was eroded in 2009, when GDP fell by almost 5% but employment only by less than 3%. In 2011, a similar disproportion, though in the opposite direction, was observed – GDP grew by 3.3% while total employment increased by 1.5%.

A more detailed look at the development of GDP and employment in individual quarters of the critical period affected by the crisis could explain this phenomenon. Graph 12 illustrates the time lag and the differing dynamics of the

GDP and employment development (production development, an important part of GDP creation with ties to total employment, is also included in the graph).

G r a p h 12

Development of GDP, Production and Total Employment, 2008 – 2011



Note: Based on quarterly national accounts, ESA 5 methodology, indices same period of the previous year = 100; GDP and production in constant prices, reference year 2005.

Source: Based on ŠÚ SR data.

The economy reacted to significant decline in GDP and production in the first and the second quarter of 2009 by a gradual decline in employment. However, the employment bottom was wider and shallower than the GDP or production bottoms. A certain time lag is also visible: the lowest employment level lags two quarters behind the lowest GDP level (and three quarters behind the lowest production level). Because of the lower labour market flexibility compared with production (the above mentioned wider bottom), the employment recovery lags even longer – four quarters – behind the GDP recovery (the difference between the peaks).

The reaction of employment to the overcoming of the economic recession was less flexible than the reaction of production because of several reasons (besides the barriers resulting from the labour legislation). At first, companies reacted to the recovery of production growth by putting pressure on the productivity growth. The acceptance of new employees is sensitive to expectations, which were cautious after the overcoming of the recession. In the recession, companies retained part of their workforce which was not necessary to cover the lowered production, even if it was not fully used. The resulting decline in productivity was replaced by an unusually strong productivity growth when production

recovered. However, with continuing production growth it became unsustainable, which resulted in an increase in employment (for a more detailed analysis see Morvay, 2011).

The more optimistic development of total employment at the beginning of 2011 (year-to-year growth of 2.3% based on ESA 95, 2.1% based on LFSS) was – not taking into account the effect of the low comparative base of the same period of the previous year – probably a delayed reaction to the GDP growth by approximately 5% in the first quarter of 2010 (and an even more pronounced production growth, some kind of a "recovery boom" which reflects not only the real recovery, but also the low comparative base) (Graph 12). This resulted in the uncommon approximation of the GDP growth and employment growth levels in the first two quarters of 2011 (the difference in the increase of both levels fell to 1.1 – 1.2 p. p., which is very close compared with the average difference of 4 p. p. recorded in the decade before 2009). This resulted in an increase in employment accompanied by GDP growth below the 4% limit necessary in the past.

A similar pattern of development was observed for the last time in 1999 – 2000 when, similarly to 2009, GDP fell roughly by 5% (although only in two quarters). Employment declined more mildly but for a longer period of time, and the recovery lagged three quarters behind the more vigorous GDP recovery in the fourth quarter of 2000. This resulted in a similarly remarkable approximation of the GDP growth and employment growth levels at the beginning of 2001.

4.1.2. *Employment Development in 2011*

Whereas GDP fell for four quarters (first to fourth quarter of 2009), employment declined for seven quarters because of the lagged recovery (the above mentioned wider bottom). The employment growth was restored in the last quarter of 2010 and employment continued to increase during 2011, however the pace of growth slowed down in the course of the year. The dynamics of the year-to-year employment growth was the highest in the first quarter, that was, as stated above, not only due to the effect of the low comparative base, but probably also due to the lagged reaction of the labour market to the GDP growth in the first half of 2010.

In absolute terms, employment remained slightly above the 2010 level during 2011 (with the standard fluctuation in the first quarter). As a result, the number of employees increased by 33.9 thousand persons, which is equivalent to the annual employment growth of 1.5% (based on LFSS). The increase in employment by approximately 34 thousand persons constitutes a significant positive impulse. However, it bears little significance from the point of view of recovering total employment in comparison with the previous two years: in 2009, the

number of employees fell by 68 thousand persons, in 2010 by further 48 thousand; despite the positive turn in 2011, the number of employees still falls short of the 2008 level by more than 80 thousand persons.

In 2011, the increase in number of employees in industrial production, which – in terms of employment – is the branch most severely affected by the recession, contributed most to the employment growth. On the other hand, the declining number of employees in construction – which is one of the three branches with the largest fall in employment after 2008 (together with industrial production and agriculture; for more details see Part 2) – counteracted the growth of total employment. The only two sectors of the economy in which the number of employees increased in 2009 – 2011 are public administration and information and communication.

4.1.3. *Development of Unemployment in 2011 and a More Long-term View of the Impact of the Crisis*

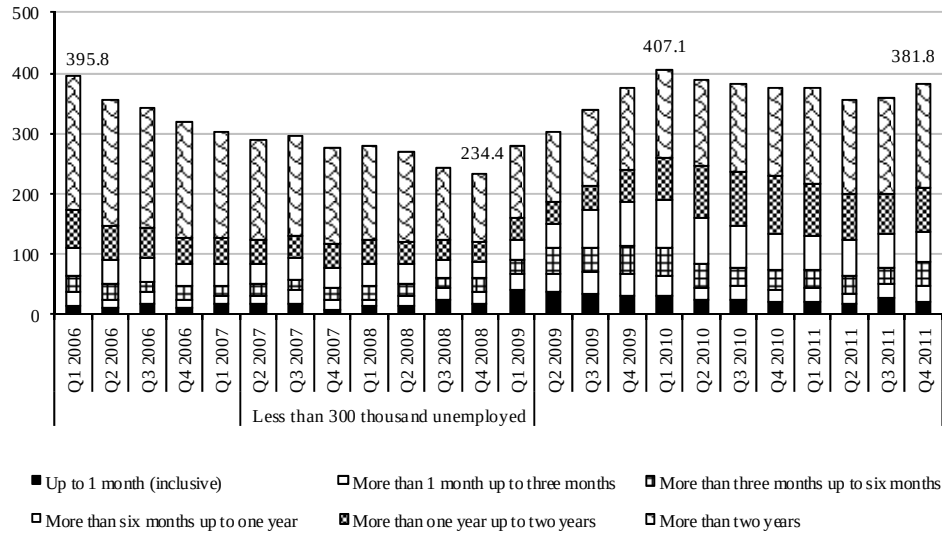
The indications of labour market recovery have translated into the unemployment development already in 2010. Even though unemployment increased year-on-year, its growth rate gradually slackened in the individual quarters. The beginning of 2011 brought a distinct decline in unemployment and the almost 10% decline continued in the second and the third quarter. At the end of the year, the year-on-year decline in unemployment halted and the number of unemployed increased again. In 2011, the total number of unemployed persons declined compared with the previous year by 21.1 thousand to 368 thousand unemployed persons. The unemployment rate fell by almost 1 p. p., from 14.4% in the previous year to 13.5% in 2011 (LFSS), mostly in mid-year.

The number of unemployed in Slovakia has stayed above 400 thousand persons since 1999 (in 2001, even more than half a million people were unemployed). Thanks to the positive macroeconomic development, unemployment declined under 400 thousand unemployed persons at the beginning of 2006 for the first time since 1999. The decline in unemployment continued and already in the two-year period of 2007 – 2008, unemployment was constantly below 300 thousand persons (see Graph 13). In the second half of 2008, there were less than 250 thousand unemployed for the first time in history. Graph 13 illustrates the positive trend of declining unemployment after the year 2006, as well as the fact that the 2009 recession, which came directly after historically the most positive unemployment development, successfully eliminated positive development achieved after 2006. At the beginning of 2010, the number of unemployed exceeded the level of 400 thousand persons again after four years. The more optimistic development during the past two years was translated into five quarters

lasting unemployment decline; however, at the end of 2011, the number of unemployed increased again and reached a level similar to that from the beginning of 2006.

G r a p h 13

Development of Number of Unemployed Persons by Unemployment Duration, 2006 – 2011 (in thousands)



Note: LFSS methodology. The group of long-term unemployed consists of two categories: more than one year up to two years, and more than two years.

Source: Based on ŠÚ SR data.

Graph 13 also illustrates the extent of the Slovak long-term unemployment, which is the largest part of total unemployment, and the impact induced by the economic crisis. The group of long-term unemployed consists of persons out of work for more than a year, i.e. the last two (most numerous) categories of unemployed in Graph 13. Long-term unemployment, which represented almost 70% of total unemployment at the beginning of the examined period, declined gradually, and represented only half of total unemployment in 2009. In the years 2010 – 2011, it increased more distinctly again, and at the end of 2011 represented 63.5% of total unemployment. Whereas during 2009, the number of unemployed increased in all subcategories up to one year, in 2010, the subcategory of more than one year up to two years was mostly responsible for the increase in total unemployment (the number of unemployed in this subcategory increased six times as much in 2010 as in 2009), and at the end of 2011, the group of unemployed for more than two years grew significantly (as a result, this most

numerous subcategory increased its share in the total employment in 2011 for the first time after several years of decline). This represents a transfer of unemployed in between the categories of unemployment duration.

The importance of the consequences of the 2009 recession is best documented by an all-European comparison. Slovakia has been holding an unflattering primacy in the level of long-term unemployment rate (of all the EU-27 countries) since 1999 (with the exception of the year 2001). Although the long--term unemployment rate in the SR was slowly approaching the European average before 2010 (declining from triple the average in 2002), its lowest value in 2009 (6.5% of total active population) was still more than double of the EU-27 average (3%). From the point of view of the future development, Spain poses the highest risk because of a rapid increase in long-term unemployment (before the crisis, in 2008, its rate was 2% of the active population, which is below the average; in 2011, it was 9% compared with 9.2% in the SR and the EU average of 4.1%).

4.2. Selected Characteristics of some Labour Force Segments

In the following part we discuss two phenomena which have quite significantly affected the structure of employment and unemployment in the recent years. It is the disadvantaged position of the youngest segment of the labour force in a negative economic circumstances; and the change in the form of employment represented by the growing share of self-employed persons (especially entrepreneurs). In both cases, the consequences of the recent changes continue to this day.

4.2.1. *The Disadvantaged Position of the Youngest Labour Force Segment*

The youngest segment of the labour force reacts extremely sensitively to the negative changes in the labour market. This was confirmed in the 2009 recession, but negative consequences in the employment of this age group continue to this day. As illustrated in Graph 14, the unemployment rate in the age group 15 to 24 years old was above the average already in the pre-crisis period. However, before the crisis, the unemployment rate of the youngest age group was only approximately 10 p. p. higher than the total unemployment rate. During the 2009 recession, the difference between the two unemployment rates increased to 18.2 p. p. (at the end of 2009), and even more (to 20.4 p. p.) at the end of 2011. Graph 14 clearly shows that the unemployment rate in the remaining age groups more or less traced the development of total unemployment, whereas the unemployment rate of the youngest age group "broke away" from the total unemployment rate during 2009 and has remained at the highest values.

Graph 14

Unemployment Rate by Age Groups, 2008 – 2011

Note: LFSS methodology. The graph includes figures for total unemployment and unemployment in the age group 15 to 24 years.

Source: Based on ŠÚ SR data.

The deterioration of the relative position of younger persons in the labour market as a result of the economic crisis seems even more serious in the light of some other facts:

- The unemployment rate of young persons stays high at a time when the share of young labour force in the Slovak labour market is declining in favour of older labour force, and young people are becoming a "scarce resource"; only in 2011, 23.6 thousand persons aged 50 to 64 entered the labour market, while the number of economically active persons aged 15 to 24 declined by 16 thousand.
- The rising unemployment rate of young persons has been reflected in the increase in unemployed persons who have never been employed, have no work experience and work habits, that is being their competitive disadvantage when they try to find employment.
- Before the crisis, the unemployment rate of young persons was high; almost one fifth of the economically active population aged 15 to 24 was unemployed. At present, however, it is more than one third. This development cannot be contributed to the increased number of students (the lengthening education period) because this category is not part of the economically active population.
- The negative situation from the point of view of unemployment of young persons remains the same despite the fact that they constitute relatively cheap

labour force (the average gross monthly wage of an employee aged 19 and less is only a little more than a half of the total average wage; in the case of an employee aged 20 to 25 it is around two thirds of the average wage in the SR).

We consider employment support for young people and an effort to conquer long-term unemployment the most critical tasks in the formulation of the labour market policy in the SR.

Slovakia has not been the only case in this area. In 2009, youth unemployment increased rapidly also in Ireland, Lithuania, Greece and Spain. In the last two mentioned, it continues to increase dynamically (in Greece and Spain, almost half of the young people were unemployed in 2011; in these countries, the increase in unemployment of young persons outstripped total unemployment most significantly in the EU).

4.3. Change in the Employment Structure through the Form of Employment

The year 2011 brought not only the recovery of employment growth, but also a change in the structure of its increase – for the first time since 2006, the increase in the number of employees was higher than the increase in self-employed persons. The high (more than 10%) increase in self-employed persons in 2008 – 2009 was caused by the increase in the number of entrepreneurs, particularly those without employees. At the same time, in 2009, this increase was coupled with a decline in the number of employees – what constitutes a structural change in employment: replacing of dependent work by self-employment. The shift towards higher self-employment was present also in the past, but the crisis strengthened some motives to do so. The motives, such as lowering the risk for the employer, the risk of losing the job (or real loss of the job), and reducing the labour costs in a difficult economic situation, were reinforced by the factor of more preferable conditions in terms of the social insurance contributions.

In 2011, the employment growth was ensured mostly thanks to the increase in the number of employees (this category is of course also more numerous than the self-employed). This can be explained by the fact that most of the crisis--induced or crisis-reinforced reasons to shift to self-employment have diminished. However, this does not fully explain why the self-employment boom halted (since the shift to self-employment occurred also in the pre-crisis period). The self-employment growth trend halted already in 2010 and since then, its share in total employment has remained 15.9%.

In this case, the share in total employment could be the decisive factor: thanks to two strong waves of self-employment growth in the SR (2003 – 2004 and 2008 – 2009) the share of self-employed persons in total employment in the

SR increased from 6.9% in 1994 to the above mentioned 15.9% in 2011. Thus, the share of this form of employment approached the EU average. The primary motives to shift to this form of employment in the pre-crisis period included also the low level of self-employment, which existed in the SR after the transfer from centrally planned to market-oriented economy (this is confirmed by similar development in some other EU-10 countries). Therefore, the economic crisis probably just accelerated the convergence towards the EU average in this form of employment (however, the differences among the EU countries suggest that the current slowdown does not have to be final).

The recession also played an important role with regard to a structural change in the type of working time arrangement. In 2009 – 2010, there was a year-on--year decline in the number of full-time employees coupled with an increase in the number of part-time employees. Already between the second quarter of 2008 and the second quarter of 2009, the number of part-time employees almost doubled. In 2011, the increased number of part-time employees not only remained at the higher level, but increased even more. The share of part-time employees in total employment, which was around 2 – 3% in 2009, increased to 4.7% in 2011. However, it still remains deep below the EU average. The position of part-time employment remains stronger even after the recovery from the recession. The amendment of the labour legislation in order to encourage employment flexibility also in this area (the Labour Code amendment valid from September 2011) creates potential for further preservation of this share (for more details see Part 11).

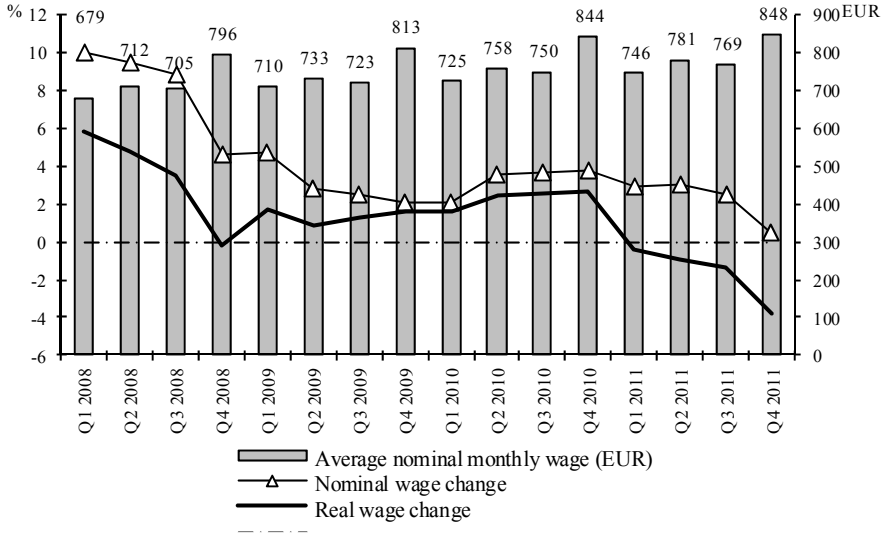
4.4. Development of Average Monthly Wage and Labour Productivity

In 2011, the nominal monthly wage of an employee in the SR reached an average of EUR 786, increasing by 2.2% compared with 2010. However, this increase was 1 p. p. lower than in the previous period. Because of the higher consumer price increase compared with the nominal wage increase, the real wage declined by 1.6%. The decline accelerated especially at the end of the year, this time also thanks to the weaker year-on-year increase in the nominal wage (Graph 15).

Although the year-on-year growth rate of the nominal wage slackened, it has to be taken into consideration that in 2010, it was overvalued because of the low comparative base of the year 2009. But more complex long-term view of the nominal monthly wage development brings a clear conclusion in terms of its development dynamics: the 2.2% increase is the lowest average wage growth rate in the history of the SR.

Graph 15

Average Monthly Wage, EUR, and Year-on-year Change in Nominal and Real Wage, %, 2008 – 2011



Source: Based on ŠÚ SR data.

It is also important to mention that the monthly wage growth almost stopped at the end of 2011. It could be asserted that the wage convergence of the SR with the EU average has stalled in the past two years despite the fact that the wage level in the SR is below average. It is worth mentioning that the real wage declined for the first time since 2003; real wages did not decline even during the recession in 2009 thanks to low inflation. Thus, the consumer price increase affected significantly this part of the population's real income represented by the wage.

In 2011, the average monthly wage increased in all sectors of the economy with the exception of three branches (public administration and defence; professional, scientific and technical activities; administrative services). The highest average nominal monthly wage was in information and communication (EUR 1 576), the lowest in accommodation and food service activities (EUR 508). Thus, the best earning employees earn thrice as much as the worst earning ones. The three best earning branches (information and communication; financial and insurance activities; supply of electricity, gas and steam) also ranged among the four branches in which the nominal wage increased most rapidly in 2011 – at a rate of more than 8% (with regard to the wage growth rate, the trio of the most "lucrative" branches is accompanied by mining and quarrying). As a result, sectoral wage differences have further increased.

Wage inequality does not occur only between economic activities. Average wage differences also exist between men and women. Whereas the largest share of women (if we divide the gross monthly wage into intervals of EUR 50) work for an average monthly wage of EUR 350 to 400, most men earn a gross monthly wage of EUR 650 to 700. More than a half of women (51.5%) but only a little more than one third of men (36.2%) earn less than EUR 600.

As mentioned above, in the 2009 recession the economy reacted to the declining production by a weaker and lagged decline in employment, which has translated into the 3% decline in labour productivity. On the other hand, in the initial stage of the recovery, the less flexible reaction of employment was compensated for by the rapid labour productivity growth, especially in the first half of 2010. Because of the employment growth apparent since the turn of the years 2010 – 2011, the productivity growth rate gradually slackened. The resulting annual growth rate value of 1.5% in 2011 is considerably lower than the 5.8% in 2010 (constant prices; NBS, 2011). However, the productivity growth still outstripped the change in the real wage significantly, which – as stated above – fell because of the higher consumer price increase. Since compensation per employee increased more slowly than real productivity, there was also a slight decline in unit labour costs, which declined for the second year in a row.

4.5. Development of Unemployment and Average Wage in the Regions of the Slovak Republic

In 2011, the average monthly wage increased in all regions of the SR. The most substantial increase was recorded in the Trenčín, Trnava and Nitra Regions; the Trnava Region ranked second in terms of the average wage in 2011 (in the previous years, the second highest average wage was recorded in the Košice Region). The highest average nominal monthly wage (EUR 1 001) is traditionally recorded in the Bratislava Region, which is the only region with an average wage higher than the national average, but at the same time, the average wage in Bratislava Region increased the least in 2011 (it was the only region where the average nominal wage fell in the fourth quarter of 2011). At first glance, this could be considered wage convergence among the regions in the SR. However, it is only a short-term change; there is a long-term trend of increasing wage differences. This is confirmed e.g. by the development of some descriptive statistical data, such as the median wage for individual regions. However, the growth rate of the wage divergence is moderate, although it can appear more acute in absolute terms. In 2002, the difference between the region with the highest (Bratislava Region) and the lowest (Prešov Region) average wage was EUR 240 in absolute terms. In 2010, it was EUR 444.

T a b l e 16

Summary Overview of the Unemployment and Average Wage Development in the Regions of the SR

Region	Number of unemployed		Unemployment rate		Average nominal monthly wage	
	2011 (thousand persons)	change compared with 2010, %	2011 (%)	change compared with 2010, p. p.	2011 (EUR)	change compared with 2010, %
SR total	367.9	−5.4	13.5	−0.9	786	2.2
Bratislava	20.4	−2.4	5.8	−0.3	1 001	1.0
Trnava	31.7	−13.4	10.6	−1.4	735	4.3
Trenčín	25.9	−15.6	8.7	−1.5	687	4.6
Nitra	43.9	−18.9	12.5	−2.9	662	4.1
Žilina	48.6	−0.2	14.3	−0.2	707	3.1
Banská Bystrica	58.0	−3.8	17.5	−1.1	652	2.7
Prešov	68.0	−5.6	17.8	−0.8	608	2.4
Košice	71.6	8.8	19.6	1.3	726	1.4

Note: Unemployment based on LFSS, monthly wage less business revenues.

Source: ŠÚ SR (2012b).

Whereas regional disparities in the average wage development somewhat increased, the unemployment rate development in the regions of the SR converged from a long-term point of view. The unemployment rate fell most rapidly in the most problematic regions. The unemployment rate in the Banská Bystrica Region, the region with originally the highest unemployment rate in the SR, has been developing positively since 2004. In 2011, the decline in the unemployment rate in this region even accelerated. The situation also improved considerably in two out of three regions in which unemployment increased the most in the previous year, i.e. in the Trnava and Trenčín Regions. The unemployment rate fell the most in the Nitra Region. On the contrary, the Košice Region was the only region in which the unemployment rate increased in 2011. Therefore, this region became the "leader" in unemployment; it became not only the region with the highest unemployment rate (19.6%), but also the region with the highest number of unemployed persons (71.6 thousand persons). The development in the Košice Region slightly disrupted the overall reduction of regional disparities in the unemployment development.

5. External Economic Relations

5.1. Balance of Payments

The year 2011 brought significant shifts in the development of the Slovak economic relations with abroad. First of all, is has to be pointed out that the long-term current account deficit changed to a slight surplus amounting to EUR 38 million, which is 0.1% GDP in current prices (Table 17). This was mainly

due to the increase in the balance of trade surplus, which resulted from the increase in foreign demand for the Slovak goods, and also from the decline in the imports for domestic consumption and domestic business sector.

With the outbreak of the economic crisis in 2009, a surplus of EUR 946 million was recorded after a long period of trade balance deficits caused by the high import intensity of the Slovak production, as well as the considerable imports of investment goods. In 2010, the surplus was a little lower, and in 2011, the balance of trade surplus was at its historically highest level of EUR 2 442 million. The financial account surplus was also high, mainly because of the foreign direct investment development. At the same time, there was a slight year-on-year decline in the capital account surplus.

The balance of services recorded a lower deficit compared with the previous years. This was partly due to the development of transport services and mainly thanks to the improved development in the "other services", in which the increased income for computer service activities was coupled with the decrease in expenditure on these services.

T a b l e 17

Development of Main Balance of Payments Components in the Slovak Republic, 2007 – 2011

	2007	2008	2009	2010	2011
Balance of trade (EUR million)	−725	−758	946	779	2442
Balance of services (EUR million)	435	−487	−1 026	−744	−371
Balance of income (EUR million)	−2 634	−2 295	−870	−1 249	−1680
Current transfers (EUR million)	−368	−893	−676	−422	−354
Current account (EUR million)	−3 292	−4 433	−1 627	−1 637	38
Capital account (EUR million)	377	806	464	1 018	865
Financial account (EUR million)	5 788	5 063	2 060	−503	2866
Current account/GDP (%)	−5.4	−6.6	−2.6	−2.5	0.1
Rate of current account deficit offset by capital and financial account surplus	1.87	1.32	1.55	0.31	x

Source: NBS (2012c); ŠÚ SR (2012); own calculations.

The current transfer deficit also declined slightly because of the positive development of the balance of other transfers, concretely the impact of higher income for donations, bails and executions. In terms of the government transfers, the contributions to the European budget exceeded the increase in income from abroad. Only the balance of income deteriorated compared with 2010, recording a deficit of EUR 1 680 million, caused mainly by the increased investment income deficit.

5.2. Foreign Trade

In 2011, the balance of trade, an important component of the current account, reached a record surplus of 3.5% GDP, which represents a year-to-year improvement of 2.3 p. p. (Table 18). The balance of trade surplus increased most

rapidly in the second half of the year, when the year-to-year export dynamics significantly exceeded the import dynamics (Graph 16). A balance of trade surplus was recorded even in December, when the foreign trade usually records a deficit (as was the case in the previous years). The weaker increase in imports in the second half of the year was connected with the decline in household demand and import intensity, and the more pronounced utilization of inventories caused by the companies' uncertainty regarding the development of foreign demand in the near future.

T a b l e 18

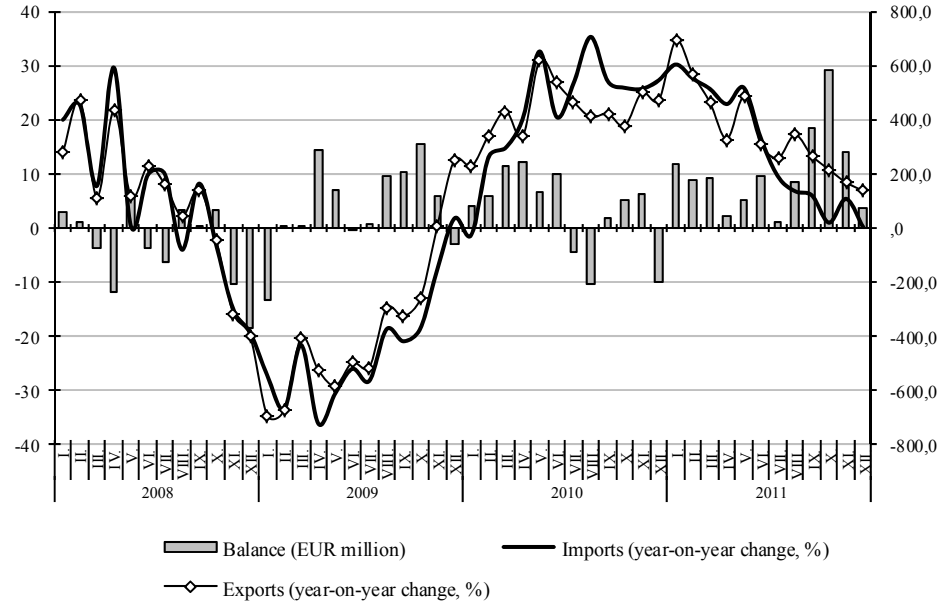
Development of the SR Foreign Trade in Goods, 2007 – 2011

	2007	2008	2009	2010	2011
Exports (EUR million, current prices)	47 351.0	49 522.3	39 721.2	48 272.1	56 407.9
Annual change (%, current prices)	15.8	4.6	−19.8	21.5	16.9
Imports (EUR million, current prices)	48 075.9	50 280.1	38 775.1	47 493.6	53 966.1
Annual change (%, current prices)	10.6	4.6	−22.9	22.5	13.6
Balance (EUR million)	−725.0	−757.8	946.1	778.5	2 441.9
Balance/GDP (%)	−1.2	−1.1	1.5	1.2	3.5
Export performance (% GDP)	77.1	74.0	63.3	73.4	81.7
Import intensity (% GDP)	78.2	75.1	61.7	72.2	78.1

Source: ŠÚ SR (2012); own calculations.

G r a p h 16

Year-on-year Change in Exports and Imports (%) **and Balance of Foreign Trade** (EUR million) **by Individual Months of 2008 – 2011**



Source: Based on ŠÚ SR data (2012).

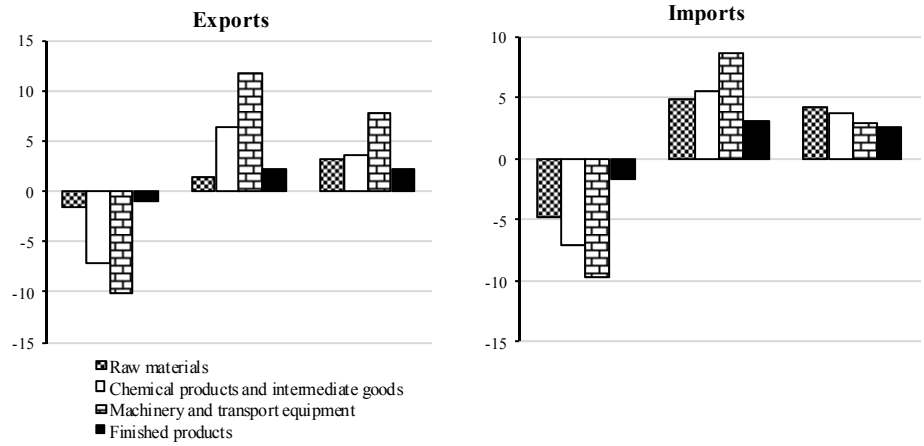
During the year, exports has rose year-on-year by 16.9% and imports by 13.6%, i.e. more slowly than in 2010. However, we should stress the importance of the comparative base effect at that time. As a result of the economic crisis, there was a slump in foreign trade in 2009 (Graph 16). However, the year-on-year dynamics of exports and imports declined at the end of 2011 because of the weakening foreign demand connected with fears of a European recession.

The considerable year-on-year increase in exports led to an increase in export performance of the Slovak economy to more than 80% GDP (Table 18), which thus surpassed the pre-crisis levels. The import intensity of the economy of 78% GDP reached the pre-crisis levels. Thus openness of the economy measured as a share of foreign trade in GDP increased to almost 160%.

In 2011, as well as in 2010, machinery (especially winches, engines and bearings) and transport equipment (especially passenger cars and other motor vehicles used for passenger transport) was mostly responsible for the year-on-year increase in exports (Graph 17). The second largest contribution to year-on-year increase in exports was recorded in chemical products and intermediate goods. The increased exports of chemical products were probably connected with the higher prices of petroleum products.Price development also affected the exports of raw materials, especially the increase in exports of refined petroleum products and natural gas. Finished products achieved the slowest year-on-year increase in exports, and the exports of footwear increased the most within this category.

G r a p h 17

Structure of Contribution to Year-on-year Change in Exports and Imports by Commodity Groups in 2009 – 2011 (p. p.)



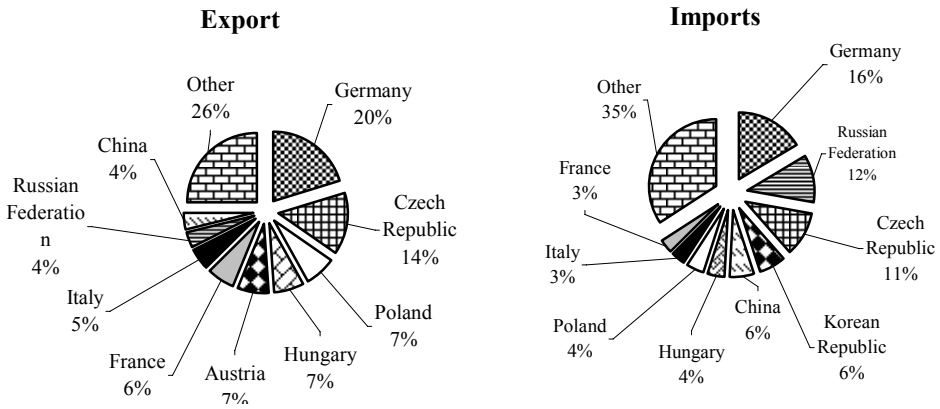
Source: Based on the NBS Monthly Bulletin (March 2012).

In 2011, the share of the various categories of goods in the year-on-year change in imports was relatively balanced (Graph 18). Because of the oil price development in the world market, there was an increase in the imports of petroleum and natural gas, which translated into the highest share of raw materials in the year-on-year increase in imports. In the chemical products group, natural rubber and plastics together with iron, steel and other products thereof contributed most to the increase in imports. The higher imports of machinery and transport equipment were generated mostly by the increase in imports of components for motor vehicles, induced by the stronger foreign demand. In 2011, as well as in 2010, finished products contributed the least to the year-on-year change in imports, mainly because of the decline in imports of passenger cars.

In 2011, as well as in the previous years, Slovakia exported mainly to Germany (20.4% of total exports) and the Czech Republic (14.2%) (Graph 18). Other key importers of Slovak goods were the neighbouring countries – Poland, Hungary and Austria –, but also France and Italy. In 2011, as well as in 2010, exports to China increased by more than 50%, mainly because of the higher exports of vehicles. Almost 15% of all passenger cars manufactured in Slovakia were exported to China. This represented a higher share in the total exports in this category than the share of the hitherto leading Germany. However, the 2011 data confirm the sustained high dependence of the Slovak economy on the German demand, and thus the economic development of Germany. It should be added that the relation of the Slovak economy to the largest EU economy is also determined by the large share of Slovak exports to countries which have foreign trade relations with Germany.

G r a p h 18

Territorial Structure of the SR Exports and Imports in 2011



Source: Based on ŠÚ SR data (2012).

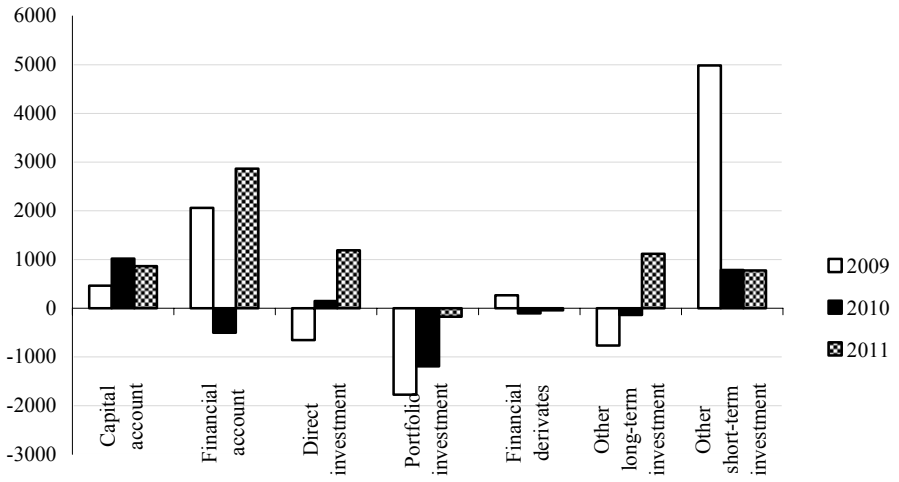
In 2011, the imports from the Russian Federation increased significantly, by one third compared with the previous year, because of the oil price increase in the world market. The share of the Russian Federation in total imports reached 11.5% (Graph 18. In 2011, the highest foreign trade deficit of EUR 4 113 million was recorded between Slovakia and the Russian Federation. From the point of view of import volume, Germany remained in the leading position with a 16.4% share. After several years, the Czech Republic (10.6%) was surpassed by Russia and fell to the third place. The share of the EU member states in the imports of the SR and the EU share in the exports from the SR remained stable: 65% and 85% respectively.

5.3. Foreign Capital

In 2011, the capital account of the balance of payments recorded a slightly lower surplus compared with the previous year due to the lower income from the EU funds (Graph 19). A more considerable change was recorded in the financial account, which achieved a surplus again after the 2010 deficit, mainly because of the development of the FDI inflows and other long-term investment.

G r a p h 19

Capital and Financial Accounts in 2009 – 2011 (EUR million)



Source: Based on NBS data (2012c).

With regard to the FDI, considerably higher inflows were recorded mainly thanks to the foreign investors' interest to invest in Slovakia in the form of equity capital. At the same time, the residents' interest to invest abroad declined. The

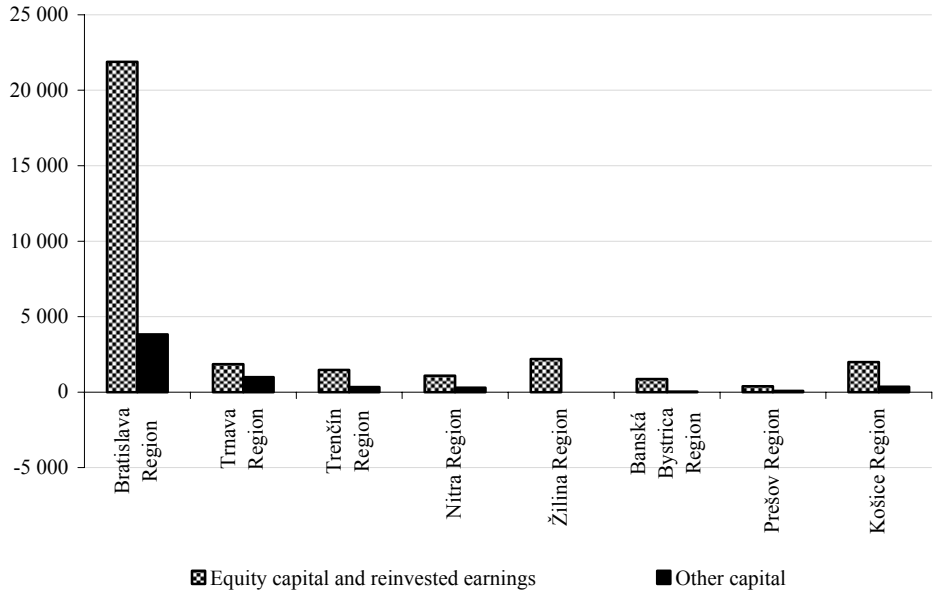
Slovak Investment and Trade Development Agency (SARIO) cumulative analysis 2002 – 2011 shows that the number of finished investment projects is relatively balanced in all the Slovak regions. It also shows an increase in foreign investors' interest in the central and eastern regions. However, the FDI stock values confirm significant regional disparities (Graph 20).

In 2010, the Bratislava Region was the most dominant in terms of the FDI stock. The sum of equity capital, reinvested earnings and other capital in the Bratislava Region was fifteen times higher than the average FDI stock in the other Slovak regions. The situation was the least positive in the Banská Bystrica and Prešov Regions, where the FDI stock did not exceed EUR 1 billion.

In terms of the jobs created by investment projects in 2002 – 2011, the western regions are still the most dominant. According to the SARIO, the largest investor countries in that period were Germany (17%) and the Korean Republic (12%), which invested mainly in the automotive industry. If we look at the finished investment projects by sectors, the most important are the manufacture of motor vehicles (14%), the manufacture of metal structures except machinery and equipment (14%), the manufacture of rubber and plastic products (14%), and the manufacture of electrical equipment (11%).

G r a p h 20

FDI Stock in the SR by Regions (EUR billion, 2010)



Source: Based on NBS data (2012c).

Portfolio investment, which is also part of the financial account, recorded a net outflow of almost EUR 200 million in 2011, after net outflows of more than EUR 1 billion in the last two years (Graph 19). Non-residents, whose interest in government bonds increased, as well as domestic banks and businesses, which expressed less interest in foreign bonds and shares, contributed to this development.

Whereas the surplus in the category of other short-term investment remained almost unchanged compared with 2010, the last year's deficit in other long-term investment changed to a surplus. Here, the NBS played a major role especially in the last quarter, when the inflow of deposits in the national bank accounts significantly exceeded the outflow of money because of the debt payments. Similarly to the NBS, the business sector contributed to the surplus of other investment, especially by depositing less into foreign bank accounts. On the contrary, the bank sector recorded not only a higher outflow of money due to debt payments, but also a year-on-year decrease in deposits in the Slovak bank accounts, which generated a negative contribution to the other investment total.

6. Price Development

The price development belongs to those areas in which the development tendency changed dramatically in 2011. After an unusually weak increase in price level in 2009 – 2010, there was a significant increase in the price dynamics in 2011. To a certain extent, the acceleration of price growth is a normal phenomenon connected with an economic growth recovery after a recession. On the other hand, there were other factors which promoted price growth.

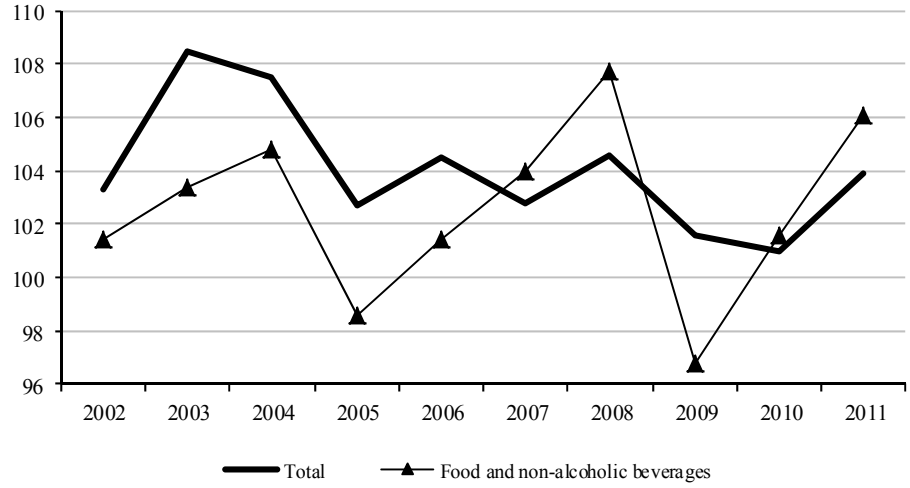
In 2009 – 2010, the inflation rate decreased to unusually low levels. This was a reaction to the global recession (a slowdown in the price growth is common during economic contractions). The increase in price level in 2011 appears to be considerable, which leads to worried commentaries. However, the 2011 inflation rate (3.9% based on CPI, and 4.1% based on HICP) was only high in comparison with the previous two years (Graph 21), mostly because in 2009 and 2010 it was pulled down by the weak demand.

The 2011 inflation rate is not high when compared with the pre-2009 rates. Actually, it is below the average rate of the last ten years. The average inflation rate in 2001 – 2011 was 4.3%; therefore the 2011 rate of 3.9% is not extraordinary.

The 2011 inflation rate was viewed negatively probably also because of the food price growth. This situation was similar to 2008: the increase in the price of food and non-alcoholic beverages was more pronounced than the increase in total consumer price level.

Graph 21

Average Year-on-year Change in Consumer Price Level (CPI)
(index, same period of the previous year = 100)



Source: ŠÚ SR, Slovstat database.

The accelerated consumer price growth can be explained at least by the following four factors:

1. The recovered economic growth offers a wider base for price growth. The year 2011 was the second year of economic growth after a deep recession (2009). This probably eliminated the disinflation pressures in the EU economies.

2. Food prices rose significantly because of the extra-economic factors (low harvest in the previous year). This factor was important in the first half of 2011. In the second half of the year, under the influence of the relatively abundant harvest, the price dynamics of the basic food commodities gradually slowed down.[12]

3. The government increased indirect tax rates with the aim of public finance consolidation. Indirect taxes belong among the components of the final price. The government's consolidation measures (the increase in VAT from 19% to 20%, the increase in the excise tax on tobacco etc.) contributed to the increase in inflation rate by approximately 1 p. p. (based on the NBS).

4. Energy and fuel prices developed negatively. The price of energy resources, especially oil, directly affected the fuel prices and indirectly the regulated prices of gas, heat and electric energy. The increase in energy prices was related not

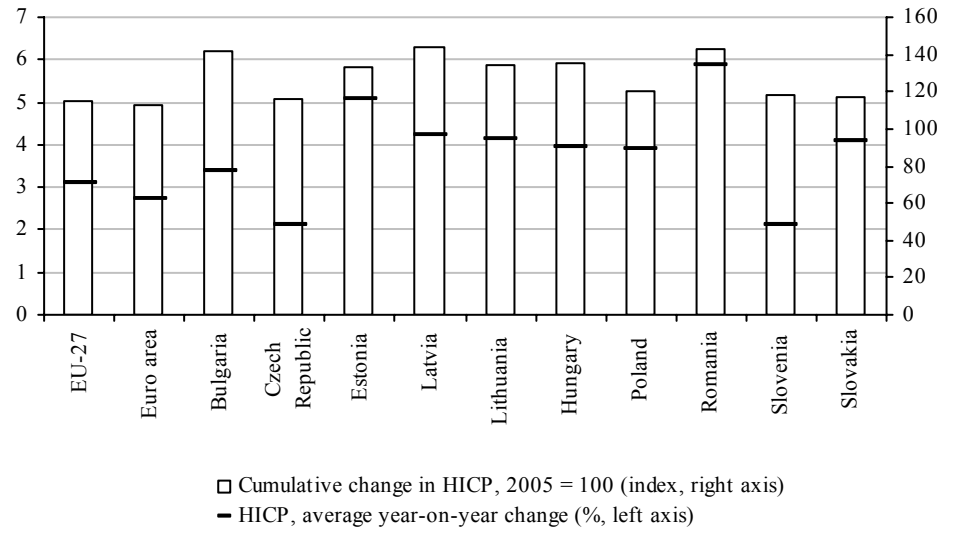
[12] In the second half of 2011, worries about the intestinal infection caused by the E. coli bacteria constituted an unusual anti-inflationary factor in the agro-food sector. These worries caused a drop in the vegetable prices in June to September.

only to the price development of energy resources, but also internal influences, such as the more significant expansion of (costly) alternative resources, the introduction of the National Nuclear Fund fee and the State Material Reserves fee, and the increase in LPG taxation (for more details see e.g. NBS, 2012d).

The accelerated increase in the consumer price level in Slovakia was in accordance with the EU and the Euro area trend, but the acceleration was more pronounced compared with the EU average. In an international comparison, only Romania and Latvia recorded a higher inflation rate than the SR based on the harmonized index of consumer prices (HICP) (Graph 22). In 2011, Slovakia recorded a significantly higher inflation rate compared with the EU average, but in the medium-term view, the inflation rate in the SR was not very different from the EU average. If we compare the medium-term cumulative price level growth rates, the Slovak rate development seems much more positive than in the 2011 comparison (Graph 22).

Graph 22

Comparison of the Price Level Dynamics (HICP)



Source: Eurostat.

Therefore, the following question could be raised: why was the 2011 inflation development in Slovakia more negative than in the external environment? There appear to be two explanatory factors:

1. The share of those commodities whose prices rose at the European level is higher in the Slovak consumer basket. This fact is documented by the data in Table 19. E.g. if the share of energy carriers (electricity, gas and other fuels) in

the Slovak consumer basket is double the share in the EU-27 consumer basket, it is clear that the increase in fuel prices will translate into a much higher price level growth in the SR than in the EU-27.

2. As mentioned above, several specific domestic factors were at work, forming the inflation rate (indirect taxes, fees). These also account for the higher inflation rate in the SR compared with the European average.

T a b l e 19

Share of Selected Commodity Groups (COICOP) in the Consumer Basket (per mil.)

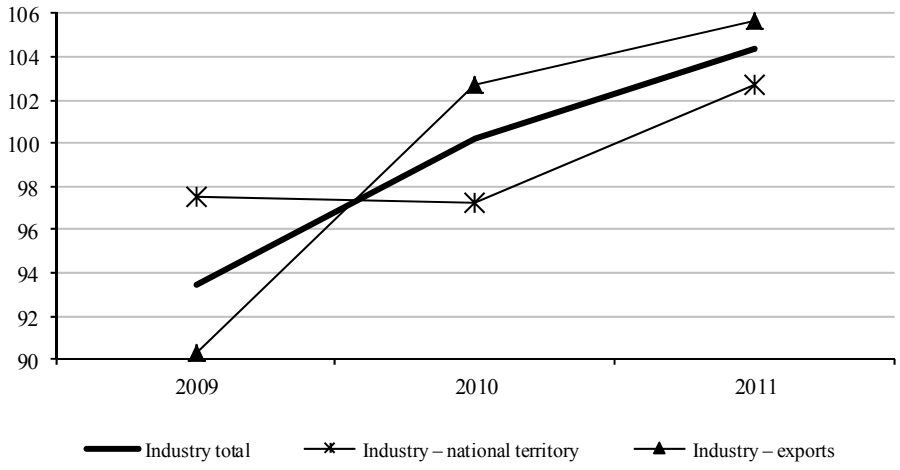
	Food	Electricity, gas and other fuels
EU-27	141.8	59.7
Euro area	140.4	56.8
Slovakia	167.4	126.7

Source: Eurostat.

The industrial producer prices development is similar to the consumer price change. In 2009, these prices even fell. Extremely large fluctuations were recorded in the prices of export products: from a decline of 9.7% in 2009 to an increase of 5.7% in 2011. In 2011, the increase in export product prices was significantly higher than the increase in the prices of products intended for the domestic market. However, this could only reflect the previous dramatic decline in the export product prices (Graph 23). This means that while the price development during the recession harmed especially exporters, the 2011 development "compensated" them.

G r a p h 23

Average Year-on-year Change in Industrial Producer Price Level
(index, same period of the previous year = 100)



Source: ŠÚ SR, Slovstat database.

The accelerated growth of industrial producer prices was not reflected in the improved results of the financial management (the decline in the net income of industrial production was mentioned in the part devoted to production). A potentially positive impact of the increase in industrial producer prices on the financial indicators of industrial production was eliminated by the large increase in costs. At the same time, it is possible that if the industrial producer price growth had not accelerated, the deterioration of the economic development and the cost profitability in industrial production would have been much more pronounced.

The other producer price indices developed differently. The increase in the price of construction works was very weak in 2011 (1.2%), which is probably related to the continuing recession in this branch. On the contrary, there was a very large increase in the agricultural product prices (16.7%), caused also by the low harvest in the previous year, which translated into the consumer price index. However, there was a certain compensation factor at play: after a dramatic drop in the recession, the agricultural product prices returned rapidly to the 2008 level.

The price development of the gross domestic product (GDP deflator, Graph 24) did not manage to approach the dynamics of the consumer prices. The GDP deflator has a broader base than the consumer price index. From the components of domestic demand, final household consumption was the most dynamic (3.8% based on the final household consumption deflator). However, the increase in the price of the commodities related to the gross fixed capital formation was only 0.2%. It is evident that the investment commodity price growth slackened more significantly than the consumer commodity price growth because of the 2009 – 2010 macroeconomic tremors. The exceptionally small increase in investment commodity prices was responsible for the low level (1.6%) of total GDP deflator.

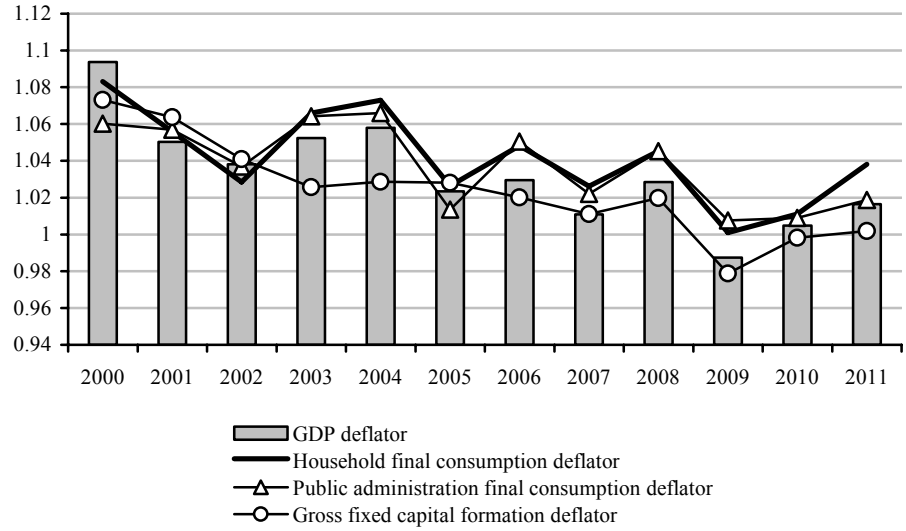
It is interesting to follow the price development of export and import commodities. In the period after 2002, there have never been such considerable movements of the export and import commodity prices. It is true that the economic policy has only a minimum impact on these prices; they are determined mainly by external factors. The impact of these prices on the Slovak economy is rather negative: import prices increased more significantly than export prices in 2011 as well as in 2002 – 2011 on average. This suggests a negative terms of trade development and weakening effects from the participation in the foreign trade exchange.

The accelerating price level growth affected also other areas of the macroeconomic development. There is a significant connection between wage and income parameters. Thanks to the exceptionally low inflation rate, the increase in real wages continued in 2009 and 2010 despite the substantial decline in the

average nominal wage growth rate. Although the wage growth slackened considerably, the price level growth was even slower. However, in 2011, the extremely low increase in the average nominal wage was coupled with increasing inflation dynamics, which resulted in a decline in the real wage – for the first time since 2003. A similar conclusion can be drawn for the total current household income: its slackened growth (from 3.6% in 2010 to 3% in 2011) coupled with accelerated price growth resulted in a decline in the real current income in 2011 compared with its increase in the previous year.

G r a p h 24

Price Dynamics of the Components of Domestic Demand
(year-on-year change index)



Source: Own calculations based on ŠÚ SR data.

In 2011, the Slovak price level did not significantly advance in approaching the Euro area average. The price level[13] in the SR equalled less than 65% of the Euro area price level both in 2011 and 2010 (and 67% and 68% of the OECD countries' price level respectively). It is remarkable that the approach to the OECD price level halted for a longer period of time (Table 20). This helped Slovakia to remain among the countries with a relatively low price level in the complicated economic situation in 2008 – 2011. In Slovakia, as well as in other V4 countries, the 2011 comparative price level was lower compared with 2008

[13] We work with comparative price levels as used by the OECD. Comparative price levels are defined as a ratio of purchasing power parity to exchange rate. They offer a measure of price level difference among individual countries. For more details see OECD: <http://stats.oecd.org/Index.aspx>.

(at the beginning of the crisis and in the following recession). That means that the "price lag" behind the advanced economies' level increased in this period. If we look at the V4 countries, it is clear that the price level lag increased the least in Slovakia. This could be explained by the loss of some price factors of the competitive capacity of the Slovak economy to the benefit of other V4 countries.

T a b l e 20

Comparative Price Levels (OECD level = 100)

	2008	2009	2010	2011
OECD total	100	100	100	100
Euro area	112	109	104	105
Czech Republic	79	72	72	74
Poland	73	59	60	60
Hungary	71	62	61	61
Slovakia	71	70	67	68

Source: OECD.

The increase in the dynamics of all inflation components (including core and net inflation), and the recovery of the industrial producer price dynamics and the deflators of the GDP components create expectations of strengthening adaptation processes in the economy. They are commonly coupled with (and induced by) the price movement. A mild recovery of the price movement is actually desirable for the adaptation processes in the economy, and is a better sign than the price rigidity in the previous years. However, it is clear from the inflation factors that not all price level movements were of this nature.

7. Monetary Flows in the Real Economy[14]

The financial and economic crisis significantly affected the credit flow in the real economy. The credit flow is an important part of the market economy, ensuring the accumulation of savings and their subsequent allocation through the financial and capital market in the real economy in the form of consumption and investment. We assume that the financial and economic crisis distinctly affected this allocation mechanism, especially in the non-financial and household sectors.

In this part we closely analyse the impact of the financial and economic crisis on:

[14] With regard to the structure of the banking sector dominated by foreign owners, as well as the relatively trouble-free state of the this sector, which was not so severely hit by the financial and economic crisis compared with the banks in other European countries, we do not pay attention to the development and the state of the banking sector in this part.

• the change in the interest rate on household loans compared with the Euro area average,

• the change in the volume and structure of household and non-financial corporate loans,

• the change in the volume and structure of natural persons' and non-financial corporate deposits,

• the concrete economic subjects through an analysis of the volume of non-performing loans in 2008 – 2011, its year-on-year dynamics and change in its structure.

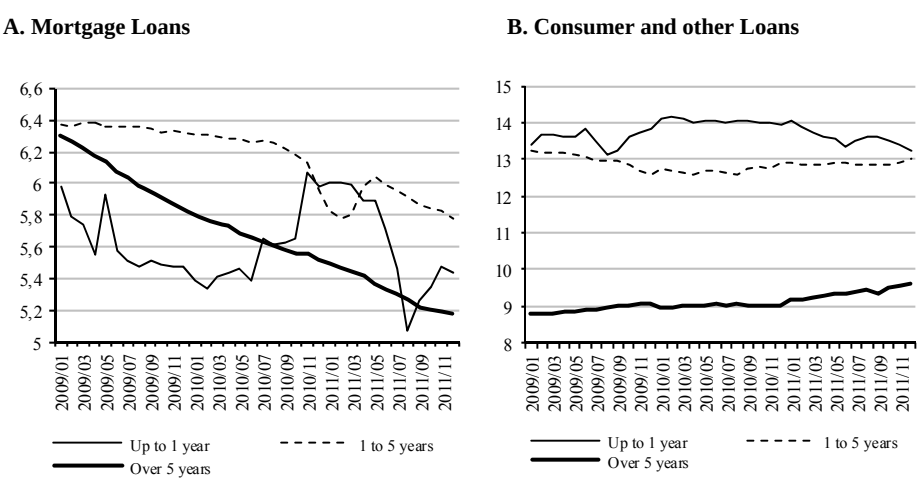
7.1. Development of Loan Interest Rates in the Slovak Republic and the Euro Area

Graph 25 illustrates the development of the interest rates on consumer loans and mortgage loans in the Slovak Republic and the Euro area. The recent development of interest rates confirms the highest average interest rates on both types of loans compared with the Euro area average.

Especially the difference between the interest rates on consumer loans is not explicable by the specific characteristics of the domestic market. The difference between the deposit interest rate and the loan interest rate suggests a higher interest income of domestic banks compared with the Euro area average (Graph 27). This indicates an insufficient competition in this type of loan products despite the relatively large number of financial institutions operating in the market.

G r a p h 25

Loan Interest rates, % p. a. – Slovak Republic

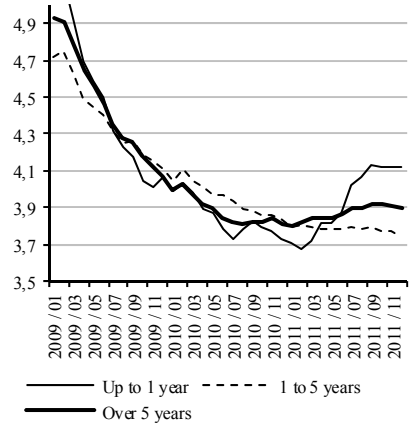


Source: NBS (2012e).

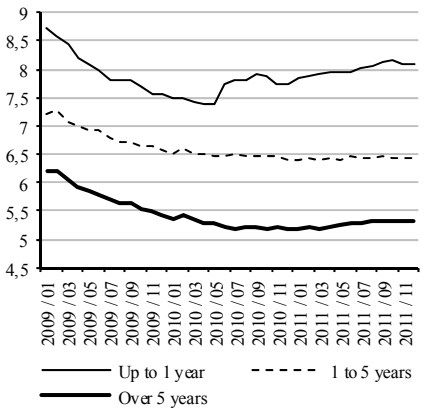
Graph 26

Loan Interest Rates, % p. a. – Euro Area Average

A. Mortgage Loans



B. Consumer and other Loans

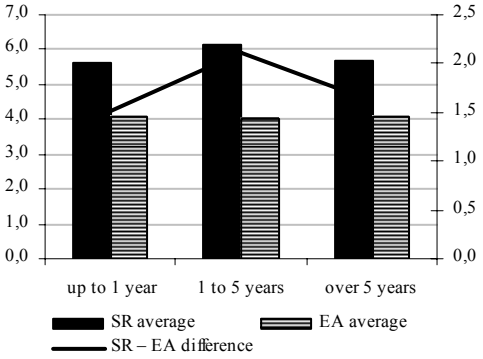


Source: NBS (2012e).

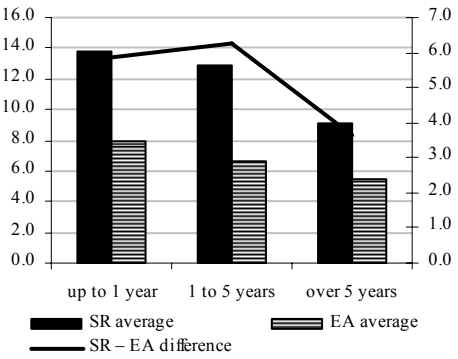
Graph 27

Comparison of Average Interest Rates in the SR and the Euro Area

A. Mortgage Loans



B. Consumer and other Loans



Note: EA – Euro area.

Source: NBS (2012e); own calculations.

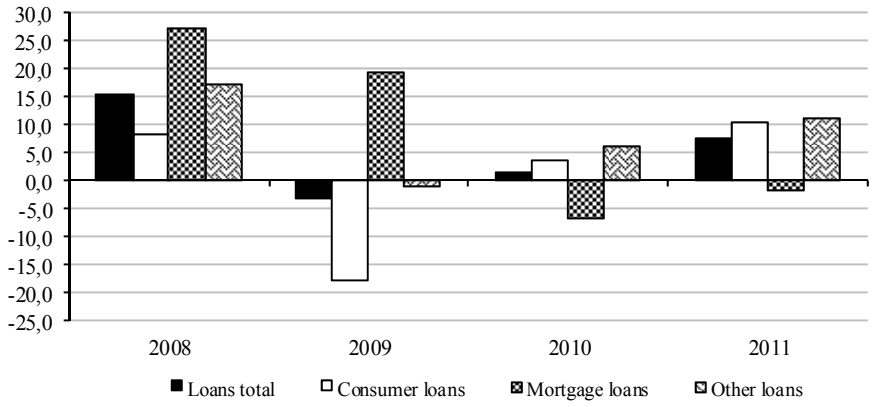
In the case of mortgage loans, we can observe a declining trend in the interest rates, especially in 5-year and more fixed rate mortgages, from 6.3% in 2009 to 5.3% in 2011. In the consumer loan segment, the interest rates remained relatively stable. A slight increase is visible in the interest rates on consumer loans with agreed maturity over 5 years.

7.2. Development of Deposits and Loans in 2008 – 2011

The financial and economic crisis significantly affected the loan activity in the economy, visibly showing in the volume and year-on-year growth rate of the non--financial sector loans. The growth rate of household loans did not slacken even in the crisis year 2009, when there was the largest decline in the non-financial corporate loans, of which the largest decline (by 17.9%) was recorded in consumer loans. On the other hand, mortgage loans increased significantly (by 19.4%), which compensated for the possible substantial decline in this period. Total year-on-year decline in the non-financial corporate loan volume was 3.3%, i.e. EUR 537 million.

In 2009, we observed a mild recovery of the loan activity in the non-financial sector. The loan volume increased year-on-year by 1.6%, especially in consumer and other loans. The year-on-year growth was negatively affected mainly by mortgage loans, and this trend continued also in 2011. The volume of mortgage loans declined by EUR 362 million since the beginning of 2009, when the growth was the strongest (Graph 28).

G r a p h 28
Year-on-year Increase in Non-financial Corporate Loans, 2008 – 2011



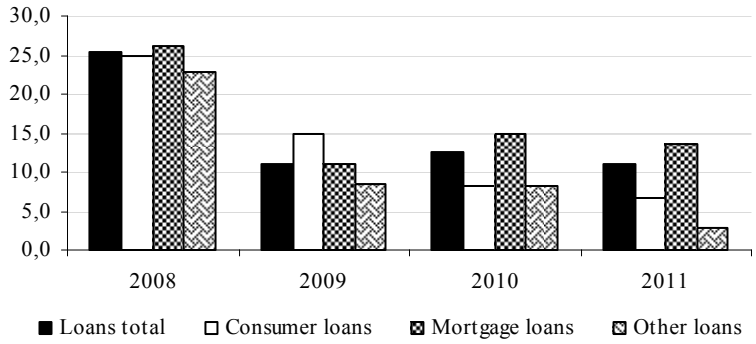
Source: NBS (2011a); own calculations.

The above mentioned growth in household loans did not slacken during the whole period. However, there was a significant year-on-year decline in the growth dynamics. Whereas in the pre-crisis year 2008 the year-on-year growth rate was 25.3%, it stabilized around 11% in the following years.

Despite the decline in household loans, their growth rate indicates a continuing increase in indebtedness, especially with regard to the mortgage loans. The consumer loan growth rate slackened considerably compared with 2008, when it reached a year-on-year increase of 24.8%. In 2011, it was only 6.6%, which was the lowest result in the selected period.

G r a p h 29

Year-on-year Increase in Household Loans, 2008 – 2011



Source: NBS (2011a); own calculations.

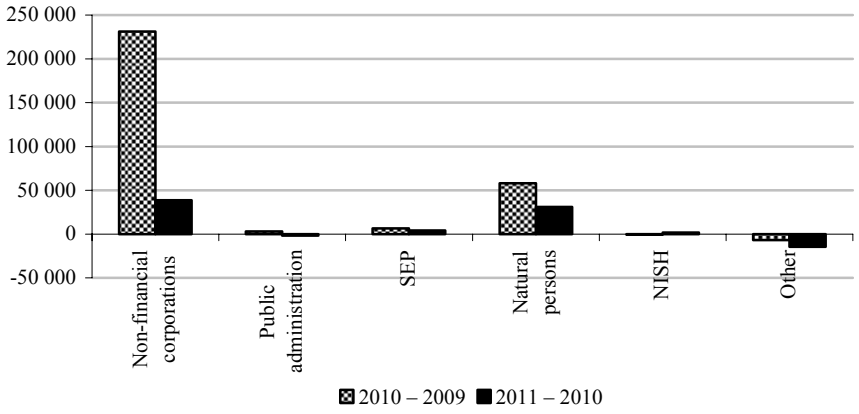
7.3. Development, State and Structure of Non-performing Loans

The consequences of the financial and economic crisis and their impact on the individual market subjects naturally resulted in an increase in the volume of non-performing loans. In the period 2009 – 2011, the volume of non-performing loans increased to approximately EUR 2 billion.

The largest year-on-year growth was recorded in 2010, when the total volume of non-performing loans increased by EUR 291 million, of which the largest share was attributed to the non-financial corporations (58.8%); to natural persons (35.9%); and to self-employed persons (3.7%).

G r a p h 30

Year-on-year Change in Non-performing loans by Creditor Types (EUR thousands)



Note: NISH – non-profit institutions serving households; SEP – self-employed persons.

Source: NBS (2011a); own calculations.

The increase in non-performing loans continued in 2011, although more slowly. The volume of non-performing loans increased by EUR 58.6 million, which is mainly attributable to the non-financial corporations (EUR 38.6 million), households (EUR 30.9 million), and self-employed persons (EUR 4 million). The negative trend which started in 2009 continued and indicated more problems of these subjects with paying off their loans because of impact of the financial and economic crisis.

This is confirmed by the development and the volume of non-performing debt by individual types. In the non-financial sector, there was a significant change in the structure of non-performing loans in 2010. Whereas in 2009, the largest share of non-performing loans was in overdraft and revolving loans (27.5%) and the second largest share was in investment loans (21.9%), in 2010, a large increase (by 15.7 p. p.) was recorded in investment loans, which reached a share of 37.6% in the total volume of non-performing loans in the non-financial sector.

Based on this development, we can conclude that:

- the investment loans granted in the previous years were invested in areas which did not bring the expected economic returns,
- because of the financial and economic crisis and a decline in business performance (revenues, turnover, profit), companies were not able to sufficiently cover the costs of paying off their loans.

Compared with 2009, the household sector recorded an increase in non-performing loans in the category of other real estate loans by 4 p. p. in 2011, whose share in the total volume of bad household debt increased from 18.2% to 22%. The largest decline in non-performing loans was recorded in consumer loans by 5 p. p., and in overdraft and revolving loans by 1.8 p. p. The total volume of non-performing household loans reached EUR 775.9 million in 2011, and its share in the total amount of non-performing loans in the financial sector reached 36.4%. Compared with 2009, its share declined by 2.1 p. p. On the contrary, non-financial corporations recorded an increase (the share of non-performing loans has increased continually since 2009), which indicates that the negative development continues in the case of businesses and the share of non-performing household loans declines.

In the case of self-employed persons, there was an increase in non-performing loans in 2011 compared with 2009, especially in mortgage loans by 4.9 p. p., and in consumer loans by 8.7 p. p. There was a significant decline by 18.1 p. p. in overdrafts and revolving loans. This development indicates that the consequences of the financial and economic crisis affected the self-employed persons especially in the area of own consumption and real estate financing (used as business premises or a personal living space).

7.4. Household Deposits

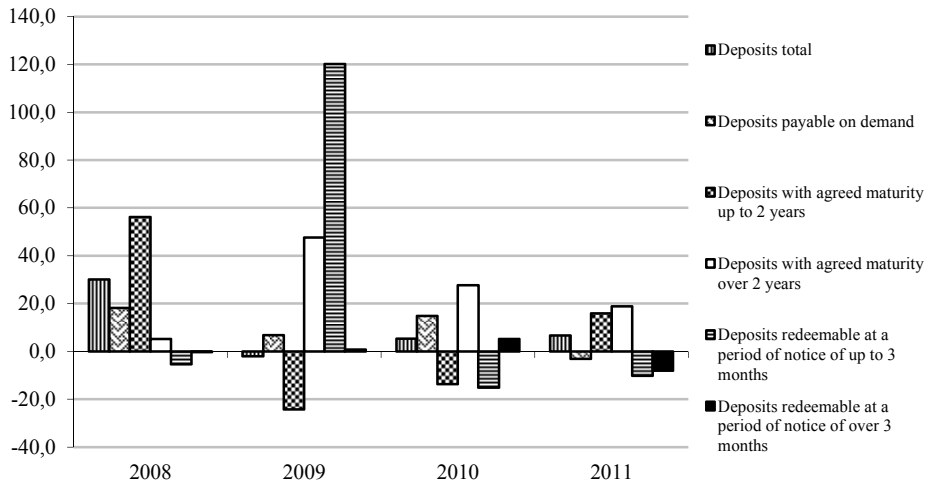
The development of household deposits was characterized by a significant year-on-year increase of 30.1% especially in 2008 due to the introduction of the single European currency on January 1st, 2009.

The highest year-on-year increase of 56.2% was recorded in deposits with agreed maturity up to two years, followed by deposits payable on demand with a year-on-year increase of 18.3%.

However, already in 2009, when the consequences of the financial and economic crisis were clearly visible in the Slovak economy, translating into unemployment growth, GDP decline and overall uncertainty about the future development, there was a year-on-year decline in deposits by 2%. The deposit structure evidently changed: the volume of deposits with agreed maturity up to two years declined considerably – by 24.2% – and the volume of deposits with agreed maturity up to three months increased by 120.1%. This shift implies a certain caution of households due to negative expectations connected with the development of their social and economic situation (Graph 31).

Graph 31

Year-on-year Change in the Household Deposit Volumes, 2008 – 2011

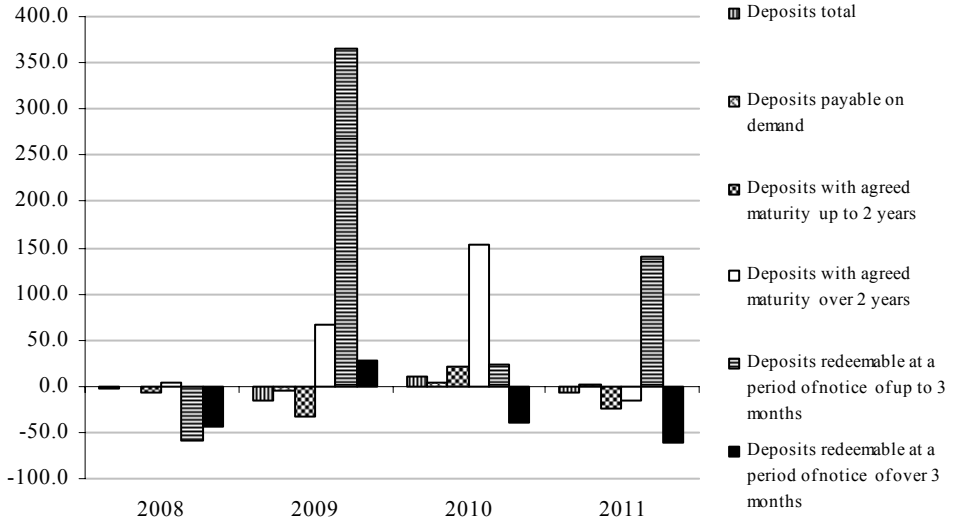


Source: NBS (2011b); own calculations.

The share of household debt to household deposits has increased continually since 2008. Whereas in 2008, this share was 55.1%, in 2011 it reached 68.1%. Despite the increasing volume of deposits, there has been a tendency of continuous growth of the household debt burden coupled with an increasing volume of non-performing loans.

Graph 32

Year-on-year Change in the Non-financial Corporate Deposit Volume, 2008 – 2011



Source: NBS (2011b), own calculations.

The development of non-financial corporate deposits was quite volatile in 2008 – 2011. Whereas the volume of deposits payable on demand remained relatively constant, the volume of deposits with agreed maturity up to two years declined significantly. During 2008 – 2011, their volume declined by EUR 1.4 billion.

Based on the above mentioned analyses we can conclude that in the past four years, the following tendencies in the monetary flows of the real economy have been verified:

- There has been a continuous increase in household deposits coupled with a change in their structure towards deposits with shorter agreed maturity, and at the same time an increase in household debt and the volume of non-performing loans.
- The non-financial corporate deposits have been volatile in the selected period, and their volume has declined since 2008.
- The volume of non-financial corporate loans increased by EU 717 million. However, the volume of non-performing loans increased as well, especially in the category of investment loans. This signalizes high vulnerability and insufficient immunity of the domestic business sector to the external influences of the financial crisis.
- The average domestic consumer loan interest rates are significantly higher compared with the Euro area average. Similarly, the domestic mortgage loan interest rates are also higher compared with the Euro area average.

8. European Central Bank Monetary Policy and the Euro Area Functioning

The Euro area and its member states have experienced two turbulent years. In reaction to the debt crisis, measures are being accepted at the European and national levels, which were, until recently, only discussed theoretically. Besides, the effectiveness of the adopted measures is controversial. The changes in the Euro area functioning, whether related to the new budgetary and economic governance framework, or the aid mechanism for the countries facing problems with government debt, directly affect Slovakia as one of the youngest Euro area member states.

The disadvantage represented by the loss of autonomous monetary policy after the euro adoption was joined by further drawbacks including the costs of assistance to the peripheral countries, and the limits to fiscal competences. While the costs related to membership in the monetary union increase, the benefits remain relatively minor, since the optimistic expectations from the period prior to the euro adoption (regarding its positive effects on economic growth, foreign trade, foreign direct investment and employment) have not yet come true.

In this part, we cover selected topics related to the functioning of the Euro area in 2011 and in the first quarter of 2012, including the implemented monetary policy and the new EU economic governance, which should reinforce confidence in the European economy. Finally, we pay attention to the results of the research focused on the confidence of Slovak citizens in the EU and the Euro area.

8.1. European Central Bank Monetary Policy

Although the European Central Bank started and finished the year 2011 with a record low interest rate of 1%, during the year there were two increases (to 1.25% in April, and to 1.5% in July) and two decreases (back to 1.25% in November, and to the initial 1% in December). The July interest rate peak was induced by worries about the increase in inflation, which were overridden by worries about the return of the recession. The basic interest rate remained at its historical minimum also during the first quarter of 2012.

The ECB has become more and more concerned with the solution to the debt crisis. In 2011, it continued to implement unconventional measures, which have to be temporary. Since August 2011, it has been buying government bonds of the most vulnerable indebted Euro area member states in the secondary market with the aim to decrease their yields to a sustainable level. The government-bond purchasing program, initiated in May 2010 to help Greece and stop the spreading

of debt crisis to other countries was later stopped.[15] However, the bank reacted to the increasing interest rates on Italian and Spanish bonds by restarting the program. The agreement on the second bailout for Greece as well as the provision of extra liquidity to commercial banks at the end of 2011 and at the beginning of 2012 (more below), alleviated pressures in the financial market. The ECB subsequently reduced the bond purchases and even stopped buying them entirely in March 2012. However, the program might continue after the soothing effects fade away.

One of the unconventional measures was the above mentioned supply of cheap credit to commercial banks, realized in December 2011 through emission of three-year bonds (which is an unusually long period, hence the name *Long--Term Refinancing Operation* – LTRO) with a low interest rate,[16] with the aim to reduce tension in the European interbank market. This offer was taken up by more than 520 banks, which together borrowed EUR 489 billion. Their great interest was also connected with the lowering of the collateral requirements for the ECB loans. At the end of February 2012, the ECB offered more extra liquidity for three years in the amount of EUR 530 billion, which was taken up by around 800 commercial banks. The above mentioned resources were used mainly to pay due bills, or deposited in the ECB. The banks did not start offering loans to businesses and households in order to bolster economic growth, as the ECB had expected. The expectation that banks would buy government bonds of the most problematic Euro area countries fulfilled only partially. The markets calmed down, which offers certain (albeit probably short) time to adopt necessary structural reforms and consolidate public finance in the euro zone countries to ensure a more sustainable confidence recovery.

According to the ECB, the measures to supply liquidity are not a threat to inflation because the real economy absorbed just part of the supplied resources. However, many experts maintain a different opinion, considering the purchases of government bonds of the most vulnerable member states in the secondary markets to be extremely risky. At the same time, inflation in the Euro area reached a significantly higher level in 2011 compared with 2009 and 2010. It was 2.7%, which is higher than the maximum rate in the price stability definition. At the beginning of 2012, inflation remained the same also because of the higher energy prices.

[15] From the Euro area member states, Germany raised the strongest criticisms of the government-debt purchase program. According to Germany, the ECB thus interferes in the fiscal policy. Germany encourages the Euro area member states to maintain more fiscal discipline as a means of fighting the debt crisis.

[16] The interest rate at which the ECB lent resources to commercial banks equals to the three--year average of the bank's key interest rate, which is 1% at the moment.

8.2. Changes in the Functioning of the Euro Area

For the past two years, the European Union and especially the Euro area have been fighting the government debt crisis, which threatens not only its functioning but also its existence. The critical condition of public finance has raised a need and necessity to manage public finance and the economy more effectively not only at the European level but also in the individual member states. After long negotiations with the European Commission (EC) and the European Parliament, the heads of states and governments adopted the so-called *six-pack* of economic governance legislation which should strengthen the coordination and surveillance of the macroeconomic and fiscal policies at the European level. However, if critically assessed, these regulations still do not appear to be strict and clear enough in terms of the rules enforcement, because they leave large room for individual assessment of the countries by the EC and the European Council. The above mentioned legislative package entered into force in January 2012 and is executed as part of the European semester, an annual cycle related to all aspects of surveillance, including fiscal, macroeconomic and structural policies.

In terms of strengthening the Stability and Growth Pact (SGP), i.e. the fiscal surveillance, at the end of October 2011, the highest representatives of the Euro area member states agreed to: adopt balanced budget rules in national legislation, ensure that state budgets will be based on independent growth forecasts, introduce independent fiscal councils, and consult important fiscal and economic policy reforms with potential spillover effects with the EC before their adoption.

During the European Council summit at the beginning of March 2012, the heads of states and governments of the EU member states except the United Kingdom and the Czech Republic signed a new fiscal treaty (a so-called Fiscal Compact, officially the *Treaty on Stability, Coordination and Governance in the Economic and Monetary Union*). It aims to eliminate some of the shortcomings of the SGP and to strengthen the fiscal governance framework in the Euro area. In other words, it is a step towards further centralization and integration. The treaty is not considered an EU treaty but an intergovernmental agreement due to the refusal of the United Kingdom and later also the Czech Republic to join it.

An important part of the fiscal treaty is the balanced or surplus budget rule in the structural expression (the so-called debt brake[17]), which should be introduced into the constitutions or similar laws of the contracting parties at the latest one year after the agreement enters into force. This will be supervised by the Court of Justice of the EU.[18] A structural deficit of 0.5% GDP at market prices is allowed, and 1% GDP at market prices for those countries whose government

[17] The introduction of the *debt brake* was advocated especially by Germany, which exerts the biggest pressures to improve fiscal discipline of the Euro area member states since its creation.

debt is significantly lower than 60% GDP and long-term public finance sustainability risks are low. The fiscal treaty also contains some more automatic sanctions if the public finance deficit exceeds 3% GDP, and a reference value for the reduction of the government debt at an average rate of one twentieth of the difference between the debt-to-GDP ratio and 60% GDP per year in the case of those countries whose debt-to-GDP ratio exceeds 60%.

The new treaty should be ratified by the national parliaments of those countries whose heads of states and governments signed it.[19] Ireland will hold a referendum on the ratification of the treaty. Potential complications in the ratification process in some member states should not be a significant obstacle because the treaty should enter into force on January 1st, 2013, if it is ratified by at least 12 out of 17 Euro area members.

Only those countries which ratified the treaty and introduced the new fiscal rule into their constitutional legislation will be allowed to access the European Stability Mechanism (see below) finances. The non-members of the Euro area will be fully bound by the fiscal treaty only after the adoption of the single European currency.

The aim of the new macroeconomic surveillance framework adopted after intense discussions at the end of 2011 is to identify and cope with the macroeconomic imbalances in the EU member states at an early stage. The new framework consists of the preventive and the corrective arm and includes an early warning mechanism; in-depth reviews of the economic development in the member states with major macroeconomic imbalances (or their risk); recommendations of corrective (and preventive) action for the member states; a procedure in the case of an excessive macroeconomic imbalance (*Macroeconomic Imbalance Procedure* – MIP): issuing of more rigorous recommendations for the problematic country, financial sanctions in the form of interest bearing deposits decided by the reverse qualified majority, and their possible conversion into a fine.

The European Commission will regularly publish an *Alert Mechanism Report* concerned with the macroeconomic imbalances in the member states, together with a list of countries which should undergo a more in-depth analysis. The review of the individual member states with regard to their specifics and the current economic development is based on the MIP scoreboard, which consists of ten relevant and relatively simple indicators based largely on the Eurostat data.[20]

[18] The Court of Justice of the EU can impose a penalty payment amounting to 0.1% GDP on a country which does not introduce the new rule into its constitution or similar laws. The amounts imposed on a Euro area member state shall be payable to the European Stability Mechanism. In the case of a Euro area non-member, the payments shall be made to the general budget of the EU.

[19] Slovakia should adopt the fiscal treaty in the second half of 2012.

[20] The *scoreboard* was proposed by the EC after consultations with the European Parliament, The Council of Ministers and the European Systemic Risk Board.

Two of them monitor external balance, three are related to competitive position and five review internal balance.

The review results should not be interpreted mechanically; they should be assessed qualitatively with regard to the number of breaches of thresholds, the severity of individual breaches, and also the combination of breaches. Table 21 presents a list of all indicators, their threshold values and also their (non-)fulfilment in Slovakia in 2010. Taking into account that the review results in the selected period do not signify an imbalance risk in the Slovak economy, Slovakia was not included among the countries requiring a more in-depth analysis.

T a b l e 21

EC Scoreboard Indicators and their (Non-)fulfilment in Slovakia in 2010

Indicator	Thresholds		Slovakia
	Euro area members	Euro area non-members	
Current account balance (% GDP)[1]	−4% to 6%		−4.1%
Net international investment position at the end of the year (% GDP)	−35%		−66.2%
Real effective exchange rate[2]	−/+5%	−/+11%	12.1%
Export market shares[3]	−6%		32.6%
Nominal unit labour cost[4]	9%	12%	10.1%
Year-on-year change in house prices[5]	6%		−4.9%
Private sector credit flow (% GDP)	15%		3.3%
Private sector debt (% GDP)	160%		69.0%
General government sector debt (% GDP)	60%		41.0%
Unemployment rate (%)[1]	10%		12.0%

[1] 3-year backward average.
[2] Based on HICP/CPI deflators, relative to 35 other industrial countries – 3-year percentage change.
[3] 5-year percentage change, current prices.
[4] 3-year percentage change.
[5] Deflated by the final household consumption deflator.

Source: EC and Eurostat (2012); EC (2012b).

In the more in-depth analysis, a broader set of indicators would be reviewed, which can lead to three different conclusions: either there are no macroeconomic imbalances in the country, or there are some imbalances, or there are major imbalances, in which case the MIP comes into play. As for the scoreboard, in the future, the EC can adjust the indicators, their threshold values and the calculation methodology in order to improve the detection of potential macroeconomic imbalances.

The impact of the introduction of the new fiscal and economic governance framework can be weakened by its shortcomings criticized also by the ECB. Among the most important limits of the new framework are: the vast number of exceptions and factors which should be taken into account when assessing the public finance deficit and government debt; the insufficient automaticity of the sanctions; the complexness of the framework, which reduces its transparency; the insufficient strengthening of the national fiscal frameworks.

In addition to the strengthening of fiscal surveillance and the creation of macroeconomic surveillance, the heads of states and governments of the Euro area countries, joined by Bulgaria, Denmark, Latvia, Lithuania, Poland and Romania, endorsed a so-called *Euro Plus Pact*. The pact should strengthen the economic pillar of the Euro area and improve the coordination of economic policies with the aim to promote competitiveness and convergence. It also aims to support employment, public finance sustainability and financial stability. Attention should also be paid to tax policy coordination. At present, there is an ongoing discussion about the EC proposal for a common consolidated corporate tax base and a financial transaction tax. The obligations of the Euro Plus Pact countries should be more ambitious, and should be included in the stability and convergence programmes and the national reform programmes.

8.3. Financial Assistance to the Peripheral Countries

The creation of the temporary *European Financial Stability Facility* (EFSF) in 2010 with the aim to assist the most indebted countries, which was not in accord with the then recently ratified Lisbon Treaty, alleviated tensions in the government bond markets just for a short period of time, and then the 10-year government bond yields of the peripheral countries started to increase again. After bilateral loans granted to Greece in May 2010, Ireland and Portugal were also forced to ask for support (in November 2010 and April 2011 respectively) and they were granted assistance from the EFSF. In July 2011, the European Council agreed to a second bailout deal for Greece, this time from the EFSF and even with the participation of the private sector in the form of voluntary write-downs of the bond value.

Whereas Ireland has been implementing its reform plan relatively successfully, in the case of Portugal with its increasing indebtedness, low competitiveness and weak economic performance, a Greece-like scenario and a bailout are being mentioned. However, the procedure used in the second Greek bailout should be an isolated example. A third bailout for Greece, which apparently is not able to break the vicious circle of indebtedness, is already being discussed publicly. Moreover, if the problems of Portugal increase, the situation in Spain could deteriorate further because Spanish banks own a large amount of Portuguese bonds.

The EFSF turned out to be an insufficient (and principally not entirely correct) solution to the debt crisis. The EU reacted by proposing a new permanent crisis management mechanism (the *European Stability Mechanism* – ESM) with effective lending capacity of EUR 500 billion. The accession of Slovakia to the ESM should be ratified by the Parliament in June 2012. The Slovak contribution

to the ESM is not negligible: EUR 5.83 billion. A larger part is in the form of callable capital and guarantees. Paid-in capital amounts to EUR 659 million and is divided into five instalments payable in three years (2012 – 2014).

In July 2011, in an effort to stop the rapid spreading of the debt crisis, the leading EU representatives agreed to increase the flexibility of the ESM and the EFSF. The increase in flexibility means relaxing the mechanisms' rules, and thus a higher moral hazard, concretely by introducing the possibility of preventive loans, the purchases of vulnerable government bonds in the secondary markets, and bank recapitalization financing also in countries not included in the program.

With regard to the EFSF, it could only lend out around EUR 250 billion in order to maintain the highest rating. Therefore, the leading EU representatives agreed to increase its lending capacity to the originally planned EUR 440 billion.[21] In order to achieve this and at the same time maintain the highest rating, the guarantees had to increase to almost EUR 780 billion. For Slovakia, this meant a guarantee increase from EUR 4.37 billion to EUR 7.72 billion.

The measures adopted so far are apparently insufficient to restore confidence in the Euro area ability to solve the debt crisis. Severe risks are present and worries appear related to the critical situation in other countries, especially in Spain and Italy, whose bailout would require hundreds of billions of euros because of the size of their economies. In order to protect the euro and the monetary union, the European Council agreed to speed up the launch of the ESM to July 2012 instead of the originally planned July 2013. This means that both the EFSF and the ESM will exist simultaneously, being able to lend a maximum of EUR 700 billion. However, this will change in the second half of 2013 when the EFSF terminates. Afterwards, the maximum effective lending capacity of the ESM will be EUR 500 billion.

8.4. Slovak Citizens' Confidence in the EU and the Euro Area

Although the situation in the EU and the Euro area in the past two years cannot be considered positive, most Slovak citizens still have confidence in both. The February 2012 survey, conducted by TNS Slovakia on a representative sample of 977 respondents older than 15 years, shows that most Slovaks have confidence in the euro and the European Union. More than 70% of Slovak citizens have confidence in the euro, and one tenth stated that they have complete trust in the single European currency. The remaining percentage does not trust the euro. Two thirds of respondents have trust in the EU, one third does not. Most respondents also stated that the introduction of the euro brought more benefits than costs.

[21] The government of the prime minister Iveta Radičová fell in October 2011, trying to ratify the increase in the lending capacity of the EFSF.

A complex and objective expert review of the costs and benefits of the Euro area membership will require a longer time frame. However, the adoption of the euro can bring more benefits than costs to Slovakia only if the Euro area functioning is based on clear, strictly implemented and enforced rules. It is also important to eliminate the reasons for the current crisis in the monetary union as quickly as possible, and not only to solve the most acute problems on a short-term basis, which just leads to shifting and further accumulation of debt.

9. Public Finance

The year 2011 was a period of fiscal consolidation, important legislative changes, and many planned changes in the taxes and social insurance contributions, which, however, were not realized because of the fall of the government and the subsequent early parliamentary elections. An important factor from the external environment was the continuing debt crisis in several EU countries. In order to prevent the further spreading of the debt crisis to other Euro area countries, as well as to support public finance consolidation in the countries so far unaffected by the consequences of high indebtedness, the EU adopted a series of fiscal measures (the United Kingdom and the Czech Republic opted out of the agreement).[22]

9.1. Important Changes in the Management and Functioning of the General Government Budget

The approval of the Constitutional Fiscal Responsibility Act was a significant step towards functioning and management of the public finance.

The Act establishes a long-term fiscal stability indicator elaborated by the Fiscal Board and published on the Fiscal Board's website. In accordance with the Act, the indicator must take into account:

- the value of the primary structural balance,
- the demographic development projection,
- the macroeconomic forecasts of the Macroeconomic Forecasting Committee and the European Commission,
- the long-term projected impact of ageing elaborated by the EC,
- the long-term projected capital revenues calculated by the EC,
- the implicit and conditional obligations,
- other indicators determining long-term sustainability.

The Act represents an important change in the fiscal policy. The constitutional Act limits the amount of general government debt, introduces automatic

[22] For more details on changes approved at the EU level see Part 8.

measures to inhibit the increase in debt to an unsustainable level, and generally significantly limits the government's manoeuvring area to implement expansive fiscal policy in the following years.

The premature parliamentary elections constitute quite a challenge for the approved pace of public finance consolidation, especially in 2012. The pace of consolidation will depend mainly on the expectations, particularly of the economic growth in the following years. The domestic political instability in 2011, the situation in the world and especially the European economy affected by the volatile and largely negative expectations, introduces an element of uncertainty, mainly with regard to the economic growth and its impact on the public finance revenues and expenditures.

In the following years, the fiscal consolidation, also with regard to the obligations resulting from the fiscal pact agreed at the EU level, will require a complex attitude and implementation of both revenue and the expenditure measures. Simple and flat reductions in individual budgetary chapters are not a systemic measure and are not desirable from a long-term perspective because they can result (and they do result) in under-financing of public goods, creating and increasing implicit debts, which can negatively affect the sustainability of public finance in a medium--term and especially long-term perspective. Ill-considered measures connected with the consolidation could also induce undesirable effects and create preconditions for future problems, whose solution might require a lot of effort. In the following years, it is necessary to lead an open and expert discussion on the form and character of the state, the extent of services provided by the state in the form of public goods, and the elimination of risks stemming from the implicit debt. Moreover the reform of the revenue and expenditure sides of the budget should be approached sensitively and expertly. However, the reform should not be limited to parametric changes in rates, but extend to a thorough institutional reform of the collection and management of taxes, customs duties and insurance contributions. One of the main aims is to improve the quality of service for taxpayers filling in the tax return, and to eliminate the low effectiveness of tax collection, particularly of the value added tax (VAT), whose share in the total amount of public revenues is dominant.[23]

9.2. Public Finance Management in 2011

Based on the preliminary data, the public finance deficit in Slovakia reached 4.6% GDP in 2011, compared with 8.1% GDP in 2010. Compared with the originally planned result it was 0.3 p. p. less. In monetary terms, the deficit reached EUR 3.18 billion compared with the originally planned EUR 3.44 billion.

[23] The Institute for Financial Policy estimated the tax gap due to the low effectiveness of the collection to be 1.6% GDP, which represented EUR 1.1 billion in 2010.

Based on the Ministry of Finance of the SR preliminary data, the more positive development was mainly attributable to:

- the lower expenditure related to the co-financing of the cohesion policy projects by EUR 227 million,[24]
- the lower expenditure on servicing the government debt of EUR 157 million,
- the higher non-tax revenue of EUR 168 million
- the higher dividend revenue of businesses with state equity capital of EUR 85 million,
- the lower than planned transfer to the Social Insurance Agency due to the achieved savings related to the functioning of the agency.

Among the budget items which developed negatively compared with the 2011 plan were:

- the lower tax revenue of EUR 86 million,
- the transfer to railway companies of EUR 136 million, aimed at their revitalization,
- the unrealized plan to sell emission quotas for EUR 100 million,
- the increase in health care institutions' indebtedness of EUR 120 million,
- the covering of the railway companies' loss of EUR 105 million, based on the contract with the state.

9.3. State Budget Development in 2011

Compared with the previous year, the state budget was built on realistic presumptions and it was not necessary to revise it during the year. This is confirmed by the fulfilment of the individual revenue and expenditure items whose real development was less volatile compared with the 2010 state budget. Nevertheless, the collected revenues were EUR 1.1 billion lower than originally planned.

This was caused mainly by the lower corporate income tax revenue by EUR 49.1 million, excise taxes by EUR 81.5 million, and traditionally revenues from the EU budget by EUR 1.2 billion. The revenues were positively affected by the higher collection of the value added tax (VAT) by EUR 100 million, non-tax revenue by EUR 155.7 million, and a slight increase in the personal income tax collection of EUR 1.6 million.

The revenue from personal income tax before the transfer to local self-governments reached only 98.9% of the originally planned amount (EUR 1.6 billion in absolute terms). A significant decline was recorded in the corporate income tax and taxes payed by self-employment , which achieved only 61.9% of

[24] This effect appears regularly in the public finance management and indicates the inability to disburse the cohesion policy resources at a satisfactory level since the beginning of the 2007 – 2013 programming period.

the originally planned amount, i.e. it was EUR 40.5 million lower than planned. The decline can indicate problems with the effectiveness of tax collection in this group of tax payers (who have greater possibilities to evade taxes).

With regard to the consolidation efforts, the nominal value of total expenditure items declined year-on-year by 9.9%, which is EUR 1.67 billion. The highest decline compared with the originally planned expenditure was recorded in capital expenditure, which reached only 86.3% of the originally planned amount.

9.4. Government Budget Deficit and Central Government Debt

Because of the implemented consolidation measures, the government budget deficit amounted to EUR 3.3 billion in 2011, which was 1.1 p. p. less than in the previous year. Its share in the GDP declined from a record high of 6.7% to 4.7%.

T a b l e 22

State Budget Development, 2008 – 2011 (EUR million)

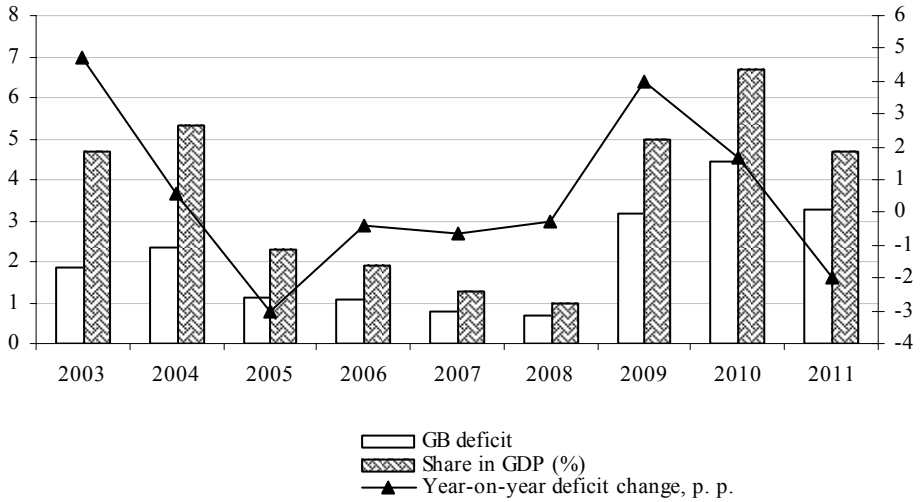
Indicator	2008	2009	2010	Proposal 2011	Reality 2011	% fulfilment 2011	Year-on-year change, %
Revenues total	11 352	10 541	10 901	13 148	12 002	91.3	10.1
of which:							
1. Tax revenue	9 023	8 025	7 962	8 787	8 700	99.0	9.3
of which:							
Personal income tax[1]	118	29	139	111	112	101.5	−19.4
Corporate income tax	2 122	2 130	1 258	1 670	1 620	97.1	28.8
Withholding income tax	206	156	152	146	143	98.1	−5.8
VAT	4 632	3 846	4 432	4 652	4 753	102.2	7.2
Excise taxes	1 906	1 835	1 945	2 083.3	2 001.7	96.1	2.9
2. Non-tax revenue	874	828	681	703	859	122.1	26.1
3. Grants and transfers	1 456	1 688	2 257	3 657.9	2 443.2	66.8	8.2
of which:							
EU budget revenue	837	1 081	1 427	3 343.9	2 031.1	60.8	42.4
Expenditures total	12 057	13 332	15 337	16 958	15 278	90.1	−0.4
Current expenditures	10 449	11 173	12 969	14 066	12 783	90.9	−1.4
Capital expenditures	1 607	2 159	2 368	2 891	2 495	86.3	5.4
Surplus/Deficit	−704	−2 791	−4 436	−3 809	− 3 276	85.9	−26.2

Note: Total personal income tax revenue is higher, but is remitted to the local and regional self-governments, and thus not all of it is accounted in the state budget.

Source: MF SR (2012); own calculations.

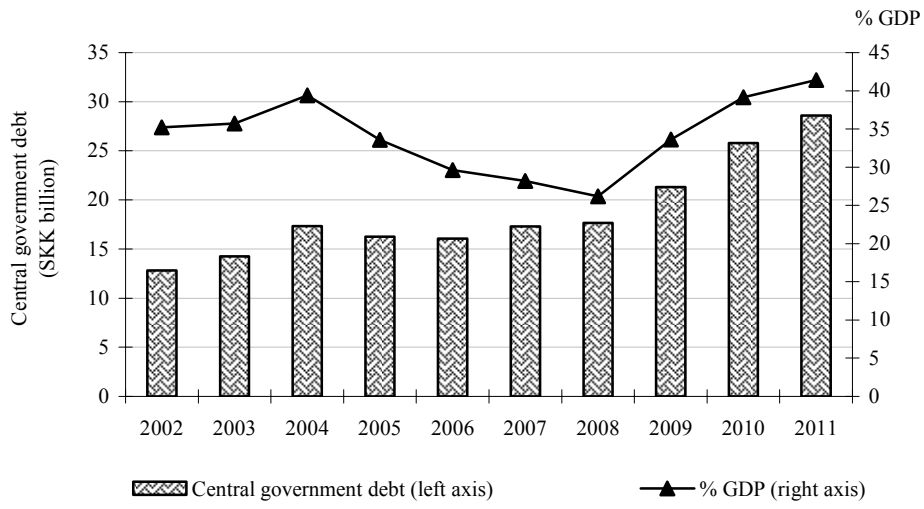
The year-on-year decline by 2 p. p. is the largest since 2005 when the deficit declined by 3 p. p. (Graph 33). In 2009 and 2010, the central government debt growth dynamics increased rapidly; in two years, debt increased nominally by EUR 8.1 billion. In 2011, debt increased by EUR 2.8 billion.

G r a p h 33
Government Budget Deficit, 2003 – 2011



Source: MF SR (2012); own calculations.

G r a p h 34
Central Government Debt, 2002 – 2011



Source: MF SR (2012); own calculations.

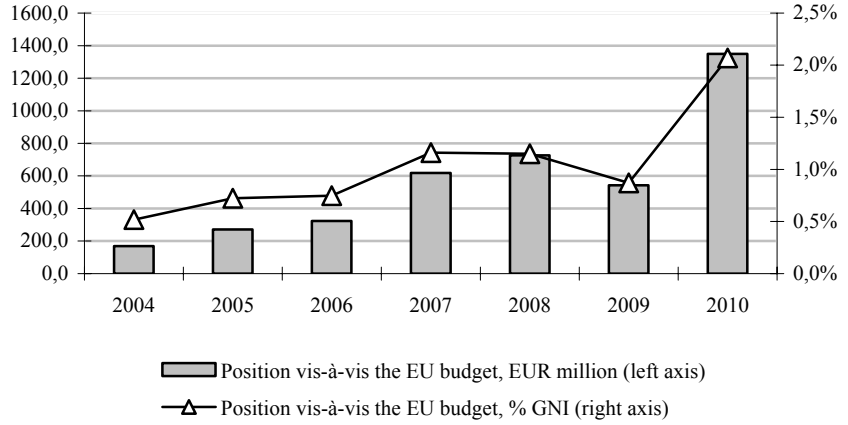
The year-on-year increase of debt-to-GDP ratio was 2.26 p. p., from 39.2% to 41.4% GDP (Graph 34). Since the beginning of the financial and economic crisis, whose first consequences were felt in the Slovak economy especially in 2009, the debt-to-GDP ratio increased by 15.2 p. p. (EUR 11 billion).

9.5. Financial Position of Slovakia vis-à-vis the EU Budget

Slovakia's membership in the European Union included the financial relations with the EU budget to general government budget. Since the accession to the EU, the Slovak Republic has been a net recipient from the EU budget (Graph 35).

Graph 35

Development of the SR Net Position vis-à-vis the EU Budget, 2004 – 2010



Source: European Commission DG ECFIN (2012); own calculations.

The net position of Slovakia vis-à-vis the EU budget has been continually increasing because of the financial implementation of Cohesion policy projects agricultural subsidies, and a subsidy for decommissioning the nuclear power plant in Jaslovské Bohunice. We expect a significant increase especially at the end of the current budget period and in 2014 and 2015 (with regard to the "n + 2" rule and the necessity to disburse the financial allocation for current programming period).

Table 23

EU Budget Expenditures in the SR, 2007 – 2010 (EUR million)

	2007	**2008**	**2009**	**2010**
1. *Sustainable growth*	*669*	*852.8*	*633.5*	*1208*
1.1 Competitiveness for growth and employment	33.7	43.3	48.7	11.8
1.2 Cohesion for growth and employment	635.2	809.5	548.8	1 096.1
1.2.1 Structural funds	451.9	510.1	385.9	633.7
1.2.2 Cohesion fund	183.3	299.4	198.8	462.4
2. *Preservation and management of natural resources*	*380.5*	*357*	*513*	*676.5*
3. *Citizenship, freedom, security and justice*	*13.7*	*11.1*	*8.5*	*8.7*
4. *EU as global partner*	*9.9*	*11.5*	*26.6*	*0.3*
5. *Administration*	*9.6*	*9.4*	*10.8*	*11.5*
6. *Compensations*	*0*	*0*	*0*	*0*
Total	*1 082.7*	*1 241.8*	*1 192.4*	*1 905*

Note: 2011 data are published with a time lag and were not available at the time of writing this chapter.

Source: European Commission DG ECFIN (2012).

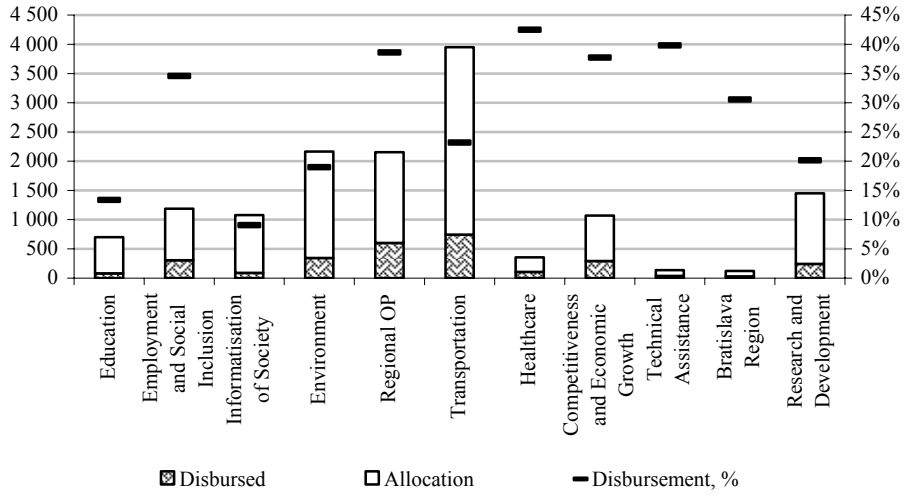
It is clear from the individual budget chapters that the highest revenue was in the Sustainable growth chapter, where the financial resources almost doubled in 2010 compared with 2009. This was mainly contributed by the Structural Funds and the Cohesion Fund revenue (Table 23).

9.6. EU Structural Support Implementation in the 2007 – 2013 Programming Period

In 2011, the pace of the financial implementation of the operational programmes accelerated by 11.6 p. p. compared with the same period of the previous year, and reached 25.02%. Compared with 2010, there was a slight year-on-year increase in financial implementation, but it cannot be considered satisfactory. The reasons given in this chapter in recent years still represent important factors which negatively affect the financial implementation of the Cohesion policy programmes.

The levels of financial implementation and their dynamics are different between the individual operational programmes. The largest year-on-year increase was recorded in the operational programmes Healthcare (23.2 p. p.), Competitiveness and Economic Growth (20 p. p.), Regional OP (19.1 p. p.), Bratislava Region OP (16.8 p. p.), and Employment and Social Inclusion (16.2 p. p.). The most problematic operational programmes include: Informatisation of Society with 9.04% financial implementation, and Education with 13.4% financial implementation from the total commitment for the 2007 – 2013 programming period.

G r a p h 36
Financial Implementation of Operational Programmes in the 2007 – 2013 Period as of December 31st, 2011, by Operational Programmes



Source: MF SR (2011); own calculations.

With regard to the new political cycle, the attitude of the new government to this agenda will be crucial. Vast institutional and personal changes similar to those realized in 2010 could have a destabilizing impact on the functioning of the managing authorities. It is therefore important to approach these changes sensitively and avoid non-conceptual shifts of competences and replacement of executive and administrative employees in this area.

10. Outlook for 2012 and 2013

This outlook was written in a period characterized by an unusual relationship between the development of expectations and the real economy. For a longer period of time – at least since August 2011 – there was a general expectation of a recurring economic slump. However, the development of the real economy at the time of compilation of this outlook was not negative enough to correspond with the prevailing expectations (for more details see below). At this moment, it is hard to say whether the wave of negative expectations was unjustified, or the new crisis and recession have been approaching more slowly.

10.1. Comparison of the Previous Projection with the Real Development

Last year, we formulated our outlook in two phases for the first time: we supplemented the projection from the first half of the year (hereinafter referred to as "original projection" or "spring projection"[25]) with an autumn update (hereinafter referred to as "updated projection" or "autumn projection"[26]), which proved to be extremely important. During 2011, negative impacts strengthened considerably, which could not be well projected in advance. Although we warned about the risks stemming from the debt crisis also in the original projection, we could hardly gauge the dramatic tremors in the financial sector in August 2011. In the outlook update we could take the new factors into account. Although the updated projection for 2011 is only slightly different from the original, the updated projection for 2012 is significantly different from the original.

In Table 24, we confront the outlook for 2011 with the real development. The updated outlook for 2011 took into account the possible slowdown in the economic growth in the second half of the year, but also the unexpectedly strong employment growth. It is unusual (and it belongs to the specifics of the 2011

[25] It was part of the publication Economic Development of Slovakia in 2010 and Outlook to 2012. See Morvay et al. (2011a).

[26] Outlook of the Development of the Slovak Economy to 2012: Update. See Morvay et al. (2011b).

development) that although the economic growth slackened, we had to revise the employment parameters upwards (for more details see the part Labour Market or the updated outlook).

T a b l e 24

Comparison of the Macroeconomic Projections with the Real Development

Parameter	2009 (r)	2010 (r)	2011 (p)		2011 (r)
			spring projection (April 2011)	updated projection (October 2011)	
Real GDP, year-on-year change, %	−4.9	4.2	3.3 to 3.8	2.8 to 3.2	3.3
GDP, year-on-year change, %, current prices	−6.1	4.7	−	5.2 to 6.1	5.0
Number of employees, year-on-year change based on LFSS, %	−2.8	−2.0	0.4 to 0.9	1.4 to 1.8	1.5
Unemployment rate based on LFSS, %	12.1	14.4	13.8 to 14.3	13.1 to 13.6	13.5
Average annual inflation rate (CPI), %	1.6	1.0	3.4 to 3.9	3.6 to 4.0	3.9

Source: Real data (r) for 2009 to 2011 based on ŠÚ SR; projections (p) by the authors.

The updated projection is in line with reality with regard to the development of employment, unemployment and inflation. The real GDP growth rate is close above the projected interval (because of the slightly unexpected acceleration of the economic growth in the last quarter). The variation was greater in the case of GDP growth in current prices. It is evident that we overestimated the GDP deflator in our projection (because of the increase in inflation). The GDP deflator as a measure of price development significantly lagged behind other inflation measures (the reason is presented in the part Price Development). Thus, we slightly *under*estimated the real GDP growth and at the same time *over*estimated the nominal GDP growth.

Already in the original projection, we correctly determined the direction of the change in the economic development in 2011, but it was necessary to specify its dynamics in the updated projection:

- The original projection estimated a slowdown in the economic growth. Even the growth dynamics was projected correctly and the correction in the update turned out to be too cautious.
- The original projection worked with the possibility of employment growth recovery. However, the employment development turned out to be more positive than expected, considering the slowdown in the economic growth. Therefore, the updated projection shows increased employment growth rates. This was proved correct.

• It was not necessary to considerably revise the inflation estimate in the updated projection. Already the original projection estimated the consumer price dynamics relatively well.

It can be concluded that the original projection estimated the real GDP development and the inflation development relatively well. However, we did not anticipate that the slowdown in the economic growth could be coupled with a short-term, yet relatively strong employment growth (connected with the rationalization of the labour force utilization in the previous years, as well as the stronger economic growth in 2010).

10.2. Determinants from the External Economic Environment

The Slovak economy is exceptionally vulnerable to external determinants (because of the high share of both exports and imports in the GDP). Therefore, we begin the macroeconomic development reflection by reviewing external determinants, followed by internal determinants and finally the outlook parameters.

When reviewing the external determinants, we deal mainly with the Euro area and Germany (because of the country's ties with the Slovak economy). We base our projections on the forecasts of specialized institutions (with regard to the need to be acquainted with the projected development in Germany, we prefer German institutions). The up-to-date projections (see data in Table 25) naturally consider the debt crisis to be the central factor of the 2012 development. Uncertainty coupled with postponement of investment and partly also consumption should result in economic stagnation in the Euro area and a significant slowdown in the economic growth of Germany. At the same time, the authors of these forecasts call attention to the fact that in the case of Germany, more serious problems related to the economic growth should be limited to the first and at most the second quarter of 2012, and followed by more positive development. In 2013, the economic growth of Germany should be much higher. The April DIW forecast (2012, p. 3) states that "the German economy approaching strong recovery" and that the crisis in the Euro area at the turn of the years 2011 – 2012 caused only a temporary weakening of the economy. The Euroframe (2012) states that the impact of the debt crisis on the Euro area economy is already waning (March 2012) and the recession in the Euro area as a whole is not the most probable outcome anymore. The Euro Growth Indicator[27] published by the Euroframe suggests a weak real GDP growth close to stagnation but not a decline in the first half of 2012.

[27] Indicator estimating the real GDP growth in the Euro area approximately six months in advance. Methodology and concrete values at: <http://www.euroframe.org/index.php?id=9>.

T a b l e 25

Expected Real GDP Change in the Euro Area and Germany

	2011		2012 projection	2013 projection
Euro area				
Real GDP, year-on-year change, %	1.4	IfW Kiel DIW Berlin Euroframe	−0.2 −0.4 0.0	1.1 0.9 1.4
Germany				
Real GDP, year-on-year change, %	3.0	IfW Kiel DIW Berlin Euroframe	0.7 1.0 0.5	1.9 2.4 2.0

Source: IfW (2012)[28] (March 2012); DIW (2012)[29] (April 2012); Euroframe (2012)[30] (January 2012).

To summarise, pessimistic forecasts from the second half (and especially the end) of 2011 have slowly been replaced by cautiously optimistic forecasts.

The *Composite Leading Indicator* (CLI) constructed by the OECD helps to identify future reversal points, in which the development probably deviates from the trend. This tool can signalize the breaking points, but cannot exactly quantify the development parameters. Its value in the second half of 2011 significantly declined in most economies, which signalized approaching economic growth problems. Since the CLI development abruptly turned negative in the second half of 2011, a downward trend could have been anticipated at the turn of the years 2011 – 2012. However, the next CLI reversal point at the end of 2011 indicates a possible recovery phase starting in the second half of 2012.

The *Business Climate Index*[31] (Geschäftsklimaindex) is a useful indicator of the economic climate, demonstrating the expectations in Germany. The stabilization and slight increase in this indicator at the end of 2011 was very surprising, given its decline six months previously.[32] Still, its values indicate a significant slowdown in the economic growth.

To summarize, the December 2011 and January 2012 forecasts of the selected institutions and the economic climate indicators suggest upcoming economic

[28] Konjunktur im Euroraum im Frühjahr 2012. <http://www.ifw-kiel.de/wirtschaftspolitik/konjunkturprognosen/konjunkt/2012/konjunkturprognosen_euroraum_3-12.pdf>.

[29] Frühjahrsgrundlinien 2012. DIW Wochenbericht 14 + 15/2012 <http://www.diw.de/documents/publikationen/73/diw_01.c.396337.de/12-14.pdf>.

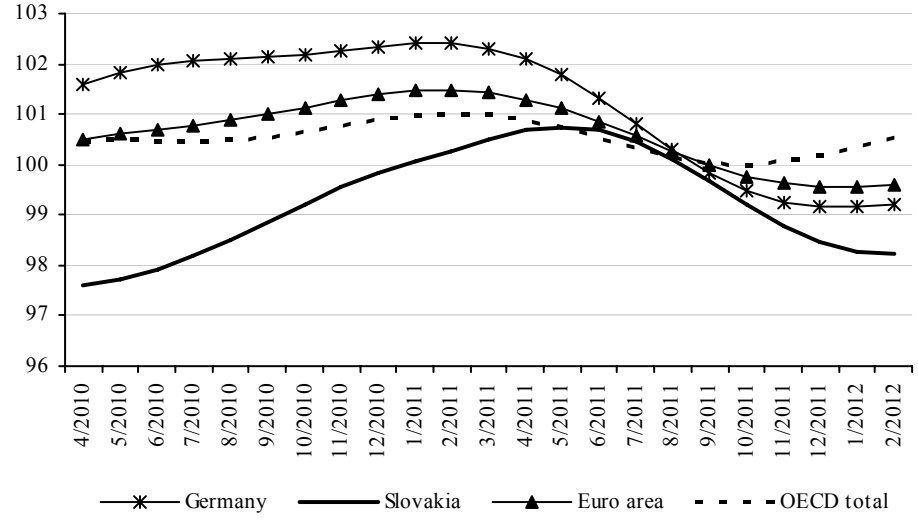
[30] Economic Assessment of the Euro Area. January 2012. <http://www.euroframe.org/fileadmin/user_upload/euroframe/docs/2011/winter2011/EFN_Winter1112.pdf>.

[31] This index is also a composite of both the current situation in business and the expectations in a six-month horizon. For more details see IFO (2012). <http://www.cesifo-group.de/portal/page/portal/ifoHome/a-winfo/d1index/10indexgsk>.

[32] German mass media presented this fact as surprising, see e.g. Stimmungswandel in der deutschen Wirtschaft. <http://www.sueddeutsche.de/wirtschaft/ifo-geschaeftsklimaindex-steigtuberraschender-stimmungswandel-in-der-deutschen-wirtschaft-1.1217369>.

stagnation or a slight decline in the real GDP in the Euro area, and a very weak economic growth (around 0.5%) in Germany. Economic instability and uncertainty translates into political instability. These are – regardless of the internal determinants – very serious barriers to economic growth in Slovakia.

G r a p h 37
OECD CLI Development (long-term average = 100)



Source: OECD. [33]

In addition, it is important to count with potential external inflationary pressures:

- In the first half of 2012, fuel prices have been developing negatively, which will probably result in a more long-term inflationary impulse in the economies.
- It is possible that inflation will be used to partially solve the debt crisis. Intentional support of higher price level dynamics for the sake of alleviating the debt burden could also result in a more long-term inflationary pressure.

10.3. Determinants from the Internal Economic Environment

Even if there was an ideal domestic economic policy, it probably would not outbalance the negative external determinants of the Slovak economy. Domestic economic policy in a strongly export-oriented country cannot withstand considerable negative external determinants; it can only partially outbalance their consequences.

Among the "clearly internal" factors, there is uncertainty connected with the formulation of the economic policy of the new government. However, this is just

[33] <http://stats.oecd.org/Index.aspx?datasetcode=MEI_CLI&lang=e>.

a short-term phenomenon. At the time of writing this part, it is too soon to work with the measures of the new government, which are being prepared.

In the near future, there will be no room for fiscal growth incentives (in the form of expansionary policy). The need for further public finance consolidation will significantly restrict the government's possibilities in this area. In 2011, the share of public finance deficit in the GDP was decreased considerably, but further decreasing (albeit less sizeable) could be proved even more challenging. We expect the next significant consolidation phase in 2013 (and consider 2012 a year of preparations for this phase).

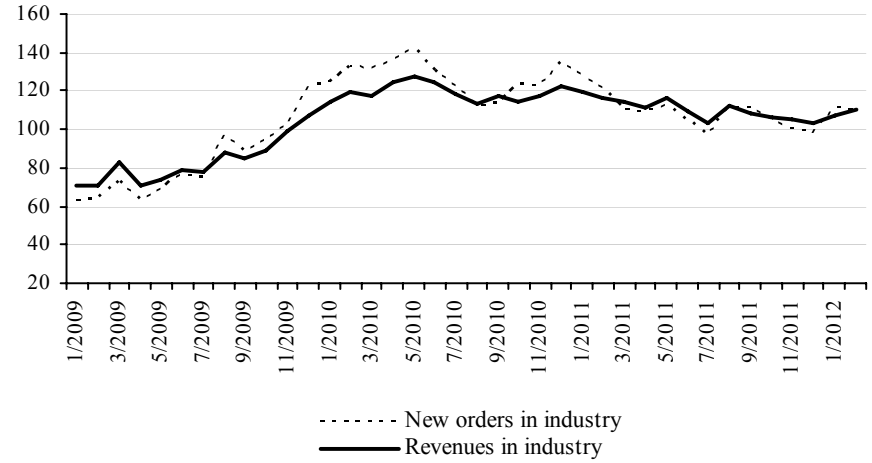
The Economic Sentiment Indicator (ESI) reflects the climate in the Slovak economy. Its development in 2011 was similar to the above mentioned Business Climate Index in Germany: a substantial decline beginning in the second half of the year was replaced by stabilization at the end of the year and a slight improvement in the first months of 2012. At present, it is impossible to gauge whether it is just a short-term improvement which will be replaced by a further decline, or a reversal point followed by a further increase. It is important to add that this indicator forecasts the future development, but its relationship with the actual real development can be very loose. The fluctuations in the ESI or its component, the Industrial Confidence Indicator, can forecast future changes in the dynamics of the economy, but should be reviewed cautiously.

The volume of new orders in industry is a typical indicator forecasting the future development. Its dynamics (in contrast to the climate indicators) projects the probable future production, without being biased by the subjective thoughts of people involved. The link between the volume of new orders and the revenues is tight, there is only a slight lag of the revenues behind the new orders. Therefore, the development of new orders forecasts the near future (in a short-term horizon, see Graph 38).

At the end of 2011, the value of this index declined. However, this is partly attributable to the extremely high values in the previous year, when the industry was recovering from the first phase of the recession. In any case, the development of this index suggests a slowdown in the production growth, but not a decline. On the contrary, at the beginning of the year it signalized production growth in the near future.

Naturally, the Economic Sentiment Indicator and the volume of new orders do not reflect only the internal determinants of the development. Both indicators reflect the expectations in the economy, which result from both internal and external determinants. Barriers to economic growth in the near future stem from both sets of determinants. However, based on the structure of the economy, external determinants are more important.

G r a p h 38
New Orders in Industry and Revenues in Industry
(index, same period of the previous year = 100)



Note: Revenues for own performances and goods.
Source: ŠÚ SR.

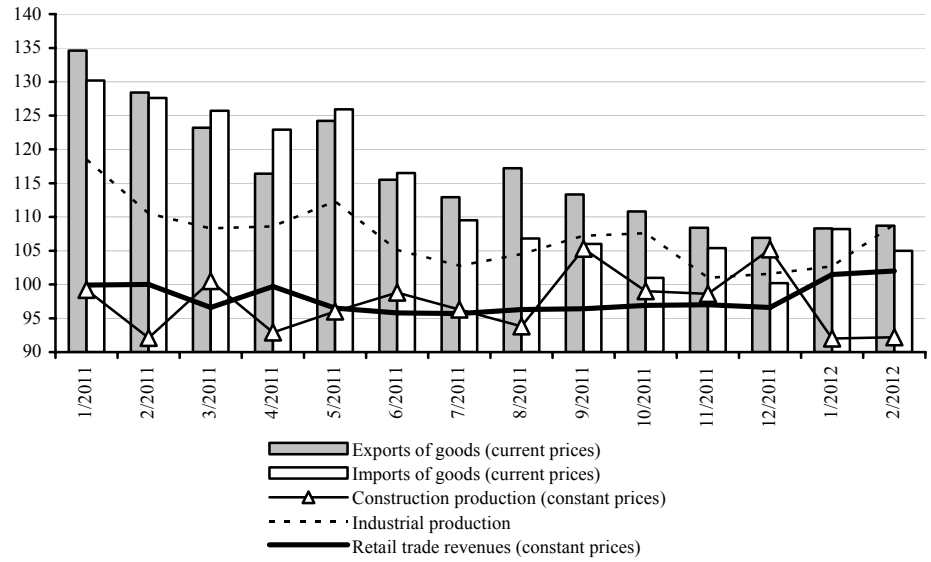
10.4. Expected Development of Basic Macroeconomic Parameters

During August – December 2011, there was an apparent decline in production, although still not remotely close to a "recession" (i.e. the real GDP contraction in at least two consecutive quarters). The real GDP growth of 3.4% in the last quarter of 2011 is fairly weak compared with the long-term development in the SR, but does not fall under the definition of recession. However, it is common that every fluctuation or slowdown in the economic growth is deemed a recession in communication with the public. This helps to create negative expectations, and negative expectations and low confidence are problematic in the current economic development. We do not dispute the rational basis for negative expectations due to the debt crisis or other global socio-economic issues. These create a more long-term barrier to higher economic performance. However, negative expectations are fed also by other factors. Given that (not only) economists underestimated the upcoming recession in 2008 – 2009, there has been a tendency to regard any new recession with utmost seriousness. This has lead to a situation in which the most negative forecasts are regarded as trustworthy and attractive. This has contributed to the spreading of pessimism. And, naturally, the terms "crisis" and "recession" are also alluring for the mass media and in terms of political marketing.[34] The new government and the wider political elites stand before an important task: to restore confidence in the economy and reduce negative expectations.

Although there is an undisputable tendency of slackening growth rate of most production parameters in 2011 (Graph 39), it is important to be aware of the fact that some year-on-year indices were unnaturally high even at the beginning of the year (there is a compensation effect: after a dramatic drop in 2009, some rates were unusually high during the 2010 recovery and even at the beginning of 2011). Their decline is in a sense a return from unsustainable levels.

G r a p h 39

Development of Year-on-year Indices of Selected Production and Trade Indicators
(index, same period of the previous year = 100)



Source: ŠÚ SR.

The latest available data – for the first two months of 2012 – indicate a positive turn. Some indices characterizing production improved significantly, especially the industry and retail trade indicators. However, this does not mean that danger is at bay. The Slovak economy is extremely open and can not only recover but also deteriorate very fast, depending on the external determinants. Moreover, the recovery signs were not present in some branches. Decline in production continues e.g. in construction.

Since the autumn projection partially took into account the complications in the external economic environment, and there are reasons not to consider the

[34] It can be convenient for political elites to remind the public of the crisis or the recession. A crisis can become a universal argument for or against adoption of certain measures. A crisis can "justify" almost any failure. A crisis and related worries can become a communication tool increasing the threshold of social resistance or the acceptability of the measures.

return of the recession in the Euro area and the SR to be the most probable scenario, it is not necessary to fundamentally correct the parameters of the outlook for 2012. Therefore, the parameter values in the actual projection for 2012 are similar to autumn 2011 projections (Table 26). There are only slight corrections in the projected values.

T a b l e 26

Projections for Selected Macroeconomic Parameters

Parameter	2010 (r)	2011 (r)	2012 (p)		2013 (p)
			autumn projection (October 2011)	current projection	current projection
Real GDP, year-on-year change, %	4.2	3.3	2.7 to 3.1	2.6 to 3.2	3.2 to 4.0
GDP, year-on-year change, %, current prices	4.7	5.0	4.8 to 6.0	4.9 to 6.3	5.3 to 6.5
Number of employees, year-on-year change based on LFSS, %	−2.0	1.5	0.5 to 1.0	0.1 to 0.8	0.5 to 1.1
Unemployment rate based on LFSS, %	14.4	13.5	12.8 to 13.6	13.1 to 13.8	13.0 to 13.7
Average annual inflation rate (CPI)	1.0	3.9	3.0 to 3.6	2.8 to 3.4	2.4 to 3.0

Source: Real data (r) in 2010 a 2011 based on ŠÚ SR, projections (p) by the authors.

We expect the real GDP growth rate to slacken from 3.3% in 2011 to a slightly lower rate. We do not expect the real GDP to decline in any of the four quarters, and thus do not anticipate a recession. The real GDP development should be much more positive than the expected GDP development in the Euro area. In 2013, we expect a higher economic growth rate (Table 26) in accordance with the expected recovery in the external environment. However, the expected next phase of the public finance consolidation and the resulting restrictive policy will probably dampen the growth.

The indicated weaker economic growth (in terms of Slovak economy) hardly can be coupled with further significant employment growth. In 2011, it was very positive that despite the weakening economic growth and worsening economic climate, there was an increase in employment. However, there is not a great chance that this unusual increase in employment will continue for a longer period of time, especially coupled with slackening GDP growth rate. Therefore, we estimate a significant slowdown in the increase in the number of employees. In 2012, we estimate stagnation or a slight increase in the number of employees at a maximum of 0.8%. The unemployment rate (LFSS) will not change considerably compared with 2011. Stronger economic growth will probably be coupled with a more positive employment development in 2013.

Weak dynamics in the economy and tensions in the labour market will probably result in stagnation of the average nominal wage growth rate at a low level of 3 – 3.5%. However, with regard to the projected lower inflation rate, this could mean a return to real wage growth, albeit very slight (up to 0.5%). In any case, this is more positive than the decline in the real wage in 2011. A decline in inflation rate coupled with a slight improvement of the situation in the labour market could lead to a more considerable real wage growth in 2013 (around 1.5%).

Although the above mentioned external inflationary factors (fuel prices or the "inflationary solution" to the debt crisis) will have a negative impact, we expect a decline in inflation. In 2012, the absence of indirect tax adjustment or the stagnation of energy prices could even result in disinflation. Weak economic growth can also have an anti-inflationary impact. The inflation rate can further decline in 2013 provided the government does not achieve public finance consolidation by increasing the indirect tax rates, and there are no more rapid increases in the strategic fuel prices.

The above mentioned expected development can be considered the most probable scenario. There could be a *positive variation* from this scenario if the following factors gained in importance:

- The economic subjects are much more cautious in the current "second wave" of the crisis compared with the "first wave" in 2008 – 2009. They have taken greater care to create reserves and savings, and bear in mind the overall financial health.
- Despite the very dramatic development in the financial markets (approximately since the beginning of August 2011), the indicators of the real economy deteriorated only slightly.
- The climate indicators show a reversal towards a more positive trend.
- The 2009 drop was especially large also because it was preceded by a very positive development. The weak economic growth in 2011 did not constitute such high comparative base for the next year as the exceptional economic expansion before the "first wave" of the crisis.
- It is evident that in the second half of 2011, the economic subjects preferred liquidity (precautionary motive). If the uncertainty and the negative expectations diminished, a part of these liquid resources would probably translate into higher expenditures, thus supporting aggregate demand.
- The decision-making structures could bolster confidence and improve expectations in the economy.

If the above mentioned factors grow stronger, it is possible that the Slovak economic growth rate will not be that weak. It is possible that the macroeconomic parameters, such as the real GDP growth or the employment growth, could exceed the levels indicated in Table 26. We do not consider such positive variations only theoretical.

However, we cannot disregard possible *negative variations*. A very dramatic negative variation could be connected with the single European currency. However, despite the debt crisis, we do not consider this development probable. Moreover, we believe it impossible to quantify the economic parameters in the case of such scenario. A more probable negative variation is connected with a possible prevailing uneasiness in the financial markets during 2012 coupled with a possible escalation in the debt crisis, which could result in a decline in real GDP and employment. However, we do not expect such dramatic drops as in 2009, when the external shock caught the economic subjects unawares.

When confronting our outlook with other available projections, our outlook seems less pessimistic (we deliberately avoid the term "more optimistic"). At the time of writing, the Ministry of Finance of the SR operated with a macroeconomic forecast[35] projecting the 2012 real GDP growth rate at 1.1% (this projection was formulated in February 2012). In April 2012, the *Macroeconomic Predictions of Selected Banks*[36] projected the 2012 GDP growth rate at 0.5% to 2.4%. Compared with these levels, the expected real GDP growth rate in our outlook seems really high. We review the ability of the Slovak economy to resist the debt crisis much more positively (although we recognise possible serious complications). At the time of finalization of our outlook, several other outlooks were published, which placed the growth prospects of the economy within a similar range (IMF World Economic Outlook, April 2012[37] or OECD Economic Outlook, May 2012[38]).

For some time now, there have been worries about a double-dip recession. The breakout of the debt crisis gave these worries a more solid base. Our outlook does not wish to question the legitimacy of the negative sentiments or the possibility of a second recession. However, we would like to point out that the weakening of the economic growth is much less pronounced than the recession in 2008 – 2009. The Slovak economy has (so far) resisted the consequences of the debt crisis better than expected in the second half of 2011. The debt crisis represents a relatively long-term barrier for solid economic growth in Europe, which has to affect the Slovak economy as well. However, according to us, the most probable development is a long period of weaker economic growth, and not a steep decline similar to 2009.

[35] Available at: <http://www.finance.gov.sk/Components/CategoryDocuments/s_LoadDocument.aspx?categoryId=8162&documentId=7065>.

[36] See *Macroeconomic Predictions of Selected Banks* published by the NBS. Available at: <http://www.nbs.sk/_img/Documents/_Statistika/VybrMakroUkaz/MakroPredVybrBank/MPVB_t-2012.pdf>.

[37] IMF World Economic Outlook Database, April 2012, projects the real GDP growth rate in the SR at 2.4% in 2012.

[38] OECD Economic Outlook, May 2012 projects the real GDP growth rate in the SR at 2.6% in 2012.

It is an important challenge for the domestic economic science as well as the creators of the practical economic policy to achieve a relatively low economic growth rate coupled with a satisfactory public finance and labour market balance. It will be necessary to surpass the current economic model, in which an exceptionally strong economic growth was necessary in order to achieve acceptable public finance and labour market development.

11. Overview of Selected Legislative and Economic Policy Measures

The adoption of economic-policy measures in Slovakia was affected by the fall of the government in October 2011 and the subsequent premature elections in March 2012. In April 2011, the Government of the Slovak Republic compiled a *Stability Programme of the Slovak Republic for 2011 – 2014*, which defines medium-term economic-policy priorities. The Government committed itself to carrying out the following measures in the next 12 months: the pension reform, the adoption of the Fiscal Responsibility Act, the tax and contribution reform, the Labour Code reform, the reduction of administrative burden in the business sector, the fight against corruption, the improvement of transparency in public finance and judiciary. However, because of the premature fall of the government, these political priorities were realized only partially.

One of the most important approved legislative norms was the Labour Code amendment (No. 512/2011 Coll.). The amendment brought changes into practically every area of the labour relations and introduced new elements, which aimed to impose greater flexibility in the labour market. The Labour Code amendment introduces a differentiation of the notice period by the number of years worked; there is also a change in the severance allowance (by the number of years worked); the process of collective redundancies becomes simpler; the parallel payment of the severance allowance and the lapse of the notice period is cancelled; the obligation to negotiate a dismissal with the employees' representatives is also cancelled.

The probationary period can be prolonged to six months. A fixed term employment relationship may be agreed not for at most two years, but three years. Also, there is now greater possibility to renew fixed term contracts.[39]

The amendment introduced the *working time account*, which ceased to be effective in 2010. New elements to the Labour Code also include the *non-compete clause* and the institute of *job sharing*.

[39] A fixed term employment contract may be agreed at most three years and may be extended or renewed at most three times in three years. After three renewals, employer must agree to a contract for an indefinite period. However, in some occupations, fixed term contract can be renewed "indefinitely" (e.g. university college employees, science, research and development employees).

Last year, the labour market was also affected by the amendment of the Employment Services Act (No. 120/2011 Coll.), which introduced a new form of activation works, the so-called *smaller services*.[40] The labour market was also affected by the amendment to the Illegal Work and Illegal Employment Act (No. 346/2011 Coll.) which specifies the minimum sanctions against employers of third-country nationals illegally staying on the territory of the EU member states.

The Act No. 384/2011 Coll. on a Special Levy on Selected Financial Institutions was approved in reaction to the global financial crisis. The aim of the Act is to introduce a mechanism making selected financial institutions participate in the costs of future financial crises in the banking sector and in protecting the stability of the banking sector in Slovakia. The obligation to pay the special levy is imposed on banks and branches of foreign banks operating in Slovakia. The rate of the special levy will be 0.4% for the calendar year, and it will be applied on a specifically-determined basis depending on the type of financial institution.

The financial sector was affected also by the following legislative changes. The amendment to the Banking Act (No. 46/2011 Coll.) introduced the National Bank of Slovakia's responsibility to take into account the possible impact of its decisions on the stability of the financial system in the EU member countries, especially in crisis situations. The amendment also introduced some changes in mortgage banking. The new Act on Collective Investment (No. 203/2011 Coll.) tightened up the requirements on organization and operation of management companies. The changes include e.g. the requirement to contribute to the Investment Guarantee Fund, the internal control mechanisms of management companies (internal audit), or the creation of sub-funds.

The amendment to the Act on Securities (No. 130/2011 Coll.) modified the provision of information on securities and their issuers, thus increasing the investors' protection; and simplified the procedure of public offers of securities. The amendment also modified the details of linking and functioning of payment and settlement securities' systems and their use. The aim of this novel was to increase transparency in the securities' markets.

The new Act on Drugs and Medical Devices (No. 362/2011 Coll.) deals mainly with the drug policy. The changes relate above all to the obligatory prescription of some drugs and their active substance (so-called generic prescription). The Act introduces the obligation to prescribe prescriptive drugs by their active substance. Some changes also relate to the provision of healthcare and the liberalization of entrepreneurship in this area.

[40] These are activation works for the long-term unemployed, who help to create and maintain the environment protection and offer help in exceptional situations. The new form of activation works should help to eliminate the consequences and risks of floods.

In the area of public finance, an important legislative measure – the Constitutional Fiscal Responsibility Act (No. 493/2011 Coll.) – was approved. The Act aims to ensure the long-term sustainability of public finance. The Act introduces a new institutional element into the management of public finance – the *Fiscal Responsibility Council*, and redefines the hitherto applied fiscal responsibility and transparency rules.

The Fiscal Responsibility Council will be comprised of three members elected for a period of seven years with no possibility of re-election.

In accordance with this Act, the Council should focus mainly on the following activities: to produce and publish a report on long-term sustainability; to submit to the National Council of the SR a report on fiscal responsibility and implementation of rules for transparency in the previous fiscal year; to produce and publish a statement on legislative drafts affecting public finance. In the area of fiscal responsibility, the Act defines the upper and lower thresholds for the government debt measured as a ratio to the gross domestic product. If the upper thresholds of the total government debt are reached, certain procedures are implemented automatically in accordance with the Act, which should prevent the excessive accumulation of debt. Sanctions based on concrete thresholds of the government debt level defined in the law include: a necessity for the Government to propose a package of measures to reduce the debt; a decrease in the Government's members' salaries to the previous year's level; a tying of 3% of the total state budget expenditures with the exception of certain expenditure items; a freeze on the prime minister's reserve; a limit on the budget proposal with a year-on-year nominal increase in the public administration consolidated expenditures compared with the previous fiscal year; a restriction on a deficit budget.

The Act represents an important step which will significantly impact the future management of public finance. Its approval is the result of overall social and political consensus which creates preconditions for its effective future implementation.

The aim of the approved amendment to the Act on Public Procurement (No. 58/2011 Coll.) is to foster transparency and control, and also limit opacity in the area of public procurement. The amendment extends the range of the obligatory published documentation; limits the increase in the price of the winning bid; introduces the obligation to publish contract appendices and determine the thresholds; and also eliminates the exclusion of an offer based on an "extraordinary low bid".

The amendment to the Act on Investment Aid (No. 231/2011 Coll.) simplifies the granting of investment aid to a broader range of subjects by lengthening the period of entitlement to tax relief and decreasing the level of obligatory investment.

The amendment to the Act on Tax Administration (No. 133/2011 Coll.), which brought some significant changes, was also part of the broader public finance

reform. With its entry into force, the Tax Administration and the Customs Administration of the Slovak Republic both ceased to exist, and were replaced by the Financial Administration of the Slovak Republic, the new administrative body of the merged tax and customs administration.

With the aim to foster competitiveness of the Slovak economy, the Government of the Slovak Republic approved the *Government of the SR Policy Proposal to Improve the Business Environment in the SR*. This so-called Project Singapore consists of five short-term and 64 long-tem recommendations aimed at decreasing the administrative burden in the business environment. The measures are related mainly to the informatisation of public administration (especially tax administration), the improvement of business awareness, the shortening of administrative procedures, and the simplification and elimination of administrative obligations and their duplicity.

The strategy *Minerva 2.0 – Slovakia into the First League* adopted in 2011 belongs among medium-term economic-policy documents. Its ambition is to cover the medium-term economic policy measures in Slovakia. The proposed solutions are related mainly to the reform of education system; the connection among the most important elements of education, science, research and entrepreneurship; the grant financing of science and research; and the support of innovative entrepreneurship and commercialization of the national research results. In relation to this, it is important to mention the strategic document *Updated Long-Term Plan of State Policy for Science and Technology until 2011* (Phoenix Strategy). The document specifies and updates the main aims of the state science policy and introduces measures to realise them.

During the second year of the centre-right coalition of I. Radičová in the office, the government recorded only a partial success in the implementation of the reform measures set in the *Manifesto of the Government of the Slovak Republic* or in the *Stability Programme of the Slovak Republic for 2011 – 2014.* The most important legislative change in the area of economic policy was probably the amendment to the Labour Code, which should increase flexibility in the labour relations and in the labour market. The Slovak Republic became the first EU member state which approved a law on fiscal responsibility. The amendment to the Act on Public Procurement, which implemented the aim to foster transparency in public finance, can also be reviewed positively. On the other hand, expectations were not fulfilled regarding the tax and contributions reform and the pension reform, as well as the realisation of concrete measures proposed in the strategy to reduce the administrative burden of the business sector. The approved financial sector legislative measures transpose the European legislation into Slovak law with the aim to limit negative impacts of future financial crises on the

financial sector. The new government led by Robert Fico, constituted in the spring of 2012, will probably bring a change in the economic policy, as well as in the opinion on the role of state in the economy. Because of the need to stabilize public finance, we can assume a further implementation of measures aimed at public finance consolidation.

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