

*INSTITUTE OF ECONOMIC RESEARCH  
OF SLOVAK ACADEMY OF SCIENCES*

*Economic Development  
of Slovakia in 2007*

**(A study prepared on behalf of the United Nations  
Economic Commission for Europe)**

*Ivan Okáli et al.*

*Bratislava 2008*

***Team of authors:***

Ing. Karol Frank (6th chapter)  
Ing. Herta Gabrielová, CSc. (2nd chapter)  
Ing. Tomáš Jeck (8th chapter)  
Ing. Karol Morvay, PhD. (5th and 7th chapters)  
Ing. Ivan Okáli, DrSc. (1st chapter)  
Ing. Daniela Rumpelová (4th chapter)  
Ing. Ivana Šikulová, PhD. (3rd chapter)

***Reviewers:*** Ing. Elena Fifeková, PhD.  
visiting doc. Ing. Štefan Zajac, CSc.

The analysis based on information provided by  
the Statistical Office of the Slovak Republic,  
the National Bank of Slovakia,  
the Ministry of Finance of the Slovak Republic,  
and the Collection of Laws of the Slovak Republic.

***Translation:*** Mgr. Valéria Cepková  
***Technical editor:*** Iveta Balážová, Oľga Blechová

© Institute of Economic Research of Slovak Academy of Sciences,  
Bratislava 2008  
1st edition

***Print:*** REPRO-PRINT Bratislava  
***ISBN 978-80-7144-164-9***

## CONTENTS

1. AN ONVERALL ECONOMIC DEVELOPMENT .....	5
2. PRODUCTION DEVELOPMENT .....	21
Development in the field of creating conditions for innovations and their use .....	34
3. EXTERNAL ECONOMIC RELATIONS .....	39
Balance of payments .....	39
Openness of economy .....	40
Foreign trade .....	42
Foreign capital .....	45
4. LABOUR MARKET DEVELOPMENT .....	47
5. MONETARY POLICY AND PRICE LEVEL DEVELOPMENT .....	55
6. PUBLIC FINANCE .....	61
State budget .....	62
The state and public debt .....	65
7. SHORT-TERM OUTLOOK OF ECONOMIC DEVELOPMENT .....	67
Development of external environment .....	67
Assessment of development in economy performance .....	69
Assessment of development in some indicators of balance and quality of economy growth .....	71
8. AN OVERVIEW OF SELECTED LEGISLATIVE AND ECONOMIC-POLITICAL MEASURES .....	74



## 1. AN ONVERALL ECONOMIC DEVELOPMENT

The balanced positive development characteristic for the Slovak economy in 2006 continued even in 2007. Owing to this Slovakia was ranked in 2007 among the most successfully developing economies of the EU and OECD. The World Bank launched talks with the Government of the SR on transferring Slovakia among the advanced countries, which do not receive any credit or consultation assistance from the Bank.

Even in 2007 the economy of the SR performed within the economic-political and institutional settings formed by reforms of the former governments (initiated by their ministers of finance – first by the left-oriented B. Schmögnerová and afterwards by the right-wing I. Mikloš). The present government headed by the representative of the Social Democratic party Smer Prime Minister R. Fico introduced some slight corrections into the economy, namely by strenghtening the social orientation in the use of economic results. In some fields (for example in the health care) the government interventions aim at substituting the market regulators effect. The attitude towards some privatization plans suggests that Smer is still on its way towards the position of a modern European left-oriented party, which does not consider private ownership as such being risky, but only its misuse or (common in Slovakia) irrespecting the principle „the ownership is binding“.

The trends of real economy in economic growth, in macro-economic stability and in social situation of the population (mentioned in table 1) confirm that the corrections of the reforms realized by the present government have only a partial character and in 2007 they did not have any impact on the work of the Slovak economy.

Performance of the Slovak economy was tied up even in 2007 on the several years lasting trend of accelerating the pace of economic growth so that the increase in the real GDP achieved a two digit value.<sup>1</sup>

---

<sup>1</sup> From the recorded 10.4 % growth in GDP one percentage point falls on the revenue from the consumption tax on tobacco products, purchased on stock in advance because of concern over the expected increase in the tax tariff on their sale in 2008.

Table 1  
Socio-economic development of the SR over 1998 – 2007

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
	<b>A. Development in performance of economy</b>									
GDP Index <sup>1</sup> Previous year = 100 <sup>1</sup>	104.4	100.0	101.4	103.4	104.8	104.8	105.2	106.6	108.5	110.4
Labour productivity Index Previous year = 100 <sup>2</sup>	104.9	102.6	103.4	102.8	104.7	103.7	105.4	105.1	106.1	108.1
Industrial output index Previous year = 100	.	97.9	108.5	106.9	106.3	104.9	104.0	103.3	110.1	112.8
Cost profitability in non-fin. org. in %	0.4	1.4	2.7	4.5	4.5	6.0	7.0	7.1	7.7	7.6
	<b>B. Indicators of stability</b>									
Inflation rate in % <sup>3</sup>	6.7	10.6	12.0	7.1	3.3	8.5	7.5	2.7	4.5	2.8
Of which: Core inflation rate in %	6.1	6.0	5.7	4.3	2.1	2.6	2.6	1.1	2.5	2.9
φ Interest rate on credits in % <sup>4</sup>	19.4	16.9	11.8	9.3	9.1	7.6	7.9	6.0	7.4	7.5
Balance of public finance/GDP in %	-3.7	-7.0	-12.3	-6.0	-5.7	-3.7	-3.3	-2.95	-3.4	-2.2
Annual Δ in productivity <sup>2</sup> – annual Δ in real wages in NE, in points	2.2	5.7	8.3	1.8	-1.1	5.7	2.9	-1.2	2.8	3.8
Net export of goods and services/GDP in % <sup>1</sup>	-9.7	-2.8	-2.5	-7.3	-6.5	-0.8	-1.5	-3.4	-1.0	4.0
	<b>C. Social development</b>									
Year-on-year employment, VZPS <sup>5</sup>	99.7	97.0	98.6	101.1	100.2	101.8	100.3	102.1	103.8	102.4
Year-on-year employment, ESA 95	99.5	97.5	98.0	100.6	100.1	101.1	99.8	101.4	102.3	102.1
φ unemployment rate in % <sup>5</sup>	12.5	16.2	18.6	19.2	18.5	17.4	18.1	16.2	13.3	11.0
Annual change in real wages in %	2.7	-3.1	-4.9	1.0	5.8	-2.0	2.5	6.3	3.3	4.3
Index of real wages in NE 1989 = 100	93.6	91.0	86.9	87.8	92.8	91.3	93.6	99.5	102.8	107.2
Index of real household consumption/cap. 1989 = 100	99.5	102.1	101.1	106.4	112.3	111.4	115.4	122.1	129.8	138.8
Share of social benefits in household consumption in %	22.8	23.3	22.5	21.3	21.2	21.6	20.2	19.6	19.4	22.2

<sup>1</sup> At constant prices in 2000. <sup>2</sup> According to GDP at constant prices per 1 worker. <sup>3</sup> According to consumer prices, in average per year. <sup>4</sup> From credits drawn from commercial banks, in average per year. <sup>5</sup> According to Labour Force Survey (VZPS).

The gross domestic product produced in 2007 exceeded the 1989 level by 60 %. According to preliminary estimates (as per data on the longterm property) about one third of the GDP growth in 2007 accounts for increase in the volume of resources used (approximately the same share falls on the employment growth and the longterm property volume growth) and two thirds account for the growth in the integral productivity factors. The positive impact of all the mentioned factors on the GDP growth was mainly due to the inflow of foreign direct investment (FDI).

On one side the foreign investment are pulling the accelerating economic growth after 2000, but at the same time they imply that owing to the repatriation of profits over the last years (see table 2) net transfers of incomes to foreign countries bring negative values. This is the reason why in 2007 as well the growth in GNP in the SR (i. e. national product used in Slovakia) was lower than the growth in GDP.

Table 2  
Gross domestic product (GDP) and gross national product (GND) in the SR;  
their links and growth rates<sup>1</sup>

		1998	2001	2002	2003	2004	2005	2006	2007
GDP = 100 <sup>2</sup>		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Of which: A <sup>4</sup>		3.2	3.4	3.2	3.4	3.9	5.3	5.2	4.5
B <sup>5</sup>		3.1	3.4	3.5	8.4	7.9	8.0	7.7	7.9
C <sup>6</sup>		0.1	-0.0	-0.4	-5.0	-4.0	-2.7	-2.5	-3.4
GND v %		100.1	100.0	99.6	95.0	96.0	97.3	97.5	96.6
Indexes, previous y = 100 <sup>3</sup>	GDP <sup>3</sup>	104.4	103.4	104.8	104.8	105.2	106.6	108.5	110.4
	GNP <sup>3</sup>	101.8	104.0	104.2	99.7	106.5	111.0	106.1	107.4

<sup>1</sup> By Eurostat (16. 4. 2008).

<sup>2</sup> At current prices.

<sup>3</sup> At constant prices.

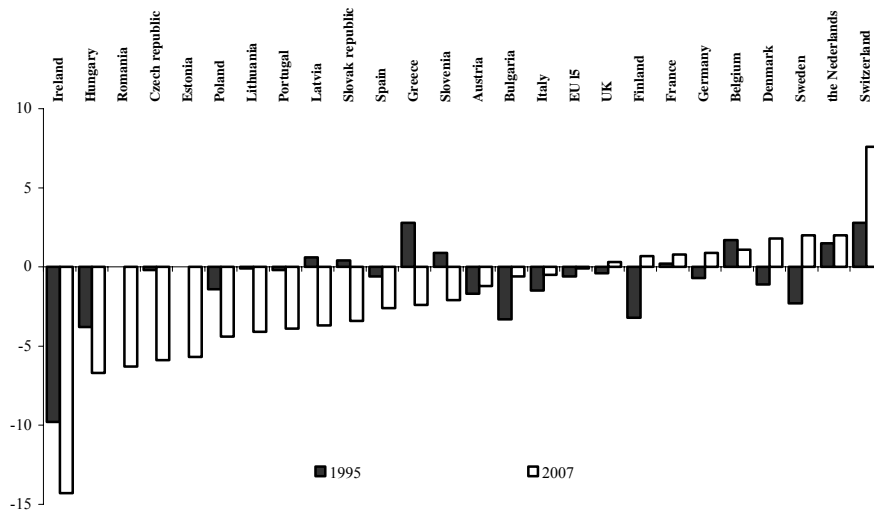
<sup>4</sup> A –Primary incomes received from abroad.

<sup>5</sup> B –Primary incomes payed to abroad.

<sup>6</sup> C –Net transfers of incomes with abroad.

Data contained in table 2 are shown within an international comparison in graph 1.

Graf 1  
**Shares of net transfers of income with abroad in GDP in %  
 in 1995 and 2007**



Data in table 2 show to the fact that the primary incomes paid to abroad which are largely shared by the repatriation of profits of foreign firms established in Slovakia, represented also in 2007 a remarkable part of its GDP use. However, owing to only a partial, but yet considerable (in 2007 43 %) compensation of payments to abroad by payments from abroad, the net transfer of incomes does not impact the positive trend of economic growth rate, and therefore cannot change the concluding statement on the prevailing positive impacts of foreign investment on economic development of Slovakia.

The international comparison of the state and development (over the years 1995 – 2007) of net transfers of income with abroad gives evidence to the fact that Slovakia does not reach yet the scope of GDP share as recorded in the neighbouring countries (Czech Republic, Poland and mainly Hungary). Still greater difference can be seen between Slovakia and other



countries (like Ireland) which managed to the utmost to use the FDI inflow for their fast economic growth and catching up the advanced countries.

In 2007 as well, the attractiveness of Slovakia as an investment locality was proved by several factors. Apart from acceding the European Union and its geographic position (vicinity and transport accessibility, especially from the central part of the EU to the western part of Slovakia) a significant factor was (and still is) the cheap labour force.

Though Slovakia is gradually losing this advantage of cheap labour force, the foreign investors still appreciate that their labour cost in Slovakia sounds more lucrative than in majority of other new EU member states. In 2007 the unit labour cost in Slovakia measured in purchasing power parity (PPP) reached 38 % of the Austrian level. This indicator showed in 2007 in Lithuania 42 %, in Hungary 43 %, in the Czech Republic 45 %, in Estonia 46 %, in Poland 49 % and in Slovenia 66 %.<sup>2</sup> The foreign investors who export the main part of output produced by their firms in Slovakia (also in other compared countries) consider as relevant the unit labour cost not on the basis of PPP, but according to the conversion rates. In their opinion the advantage of low unit labour costs in the SR is much greater, than say the mentioned data.<sup>3</sup>

The changes in comparative advantage of the unit labour cost cannot be appropriately assessed only by the development of the ULC themselves. Important is also the relation between development of real wages and development of labour productivity, which is illustrated within an international comparison in graph 2.

From the graph 2 it results that within the last decade (over 1998 – 2007) the Slovak economy retained a positive relation between development

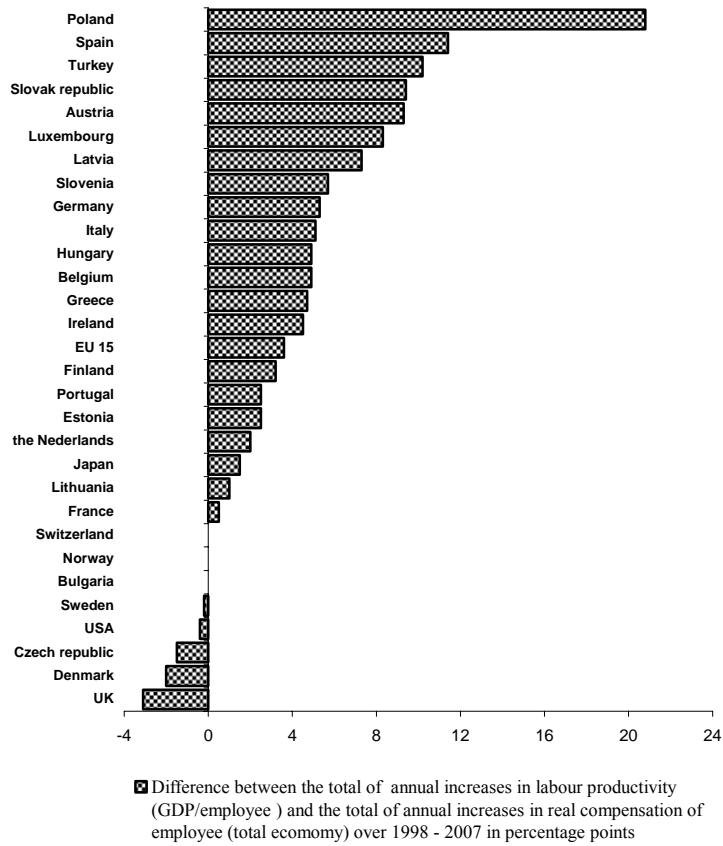
---

<sup>2</sup> Special Issue on Economic Prospects for Central, East and Southeast Europe. WIIW Research Reports/335. HAVLIK, P. – HOLZNER, M. et al.: Weathering the Global Storm, yet Rising Costs and Labour Shortages May Dampen Domestic Growth. Vienna, February, 2008.

<sup>3</sup> According to the conversion rates, the relation in ULC between the SR and Austria was relating only to 23 %.

of labour costs and labour productivity. Even the very best among the EU countries.

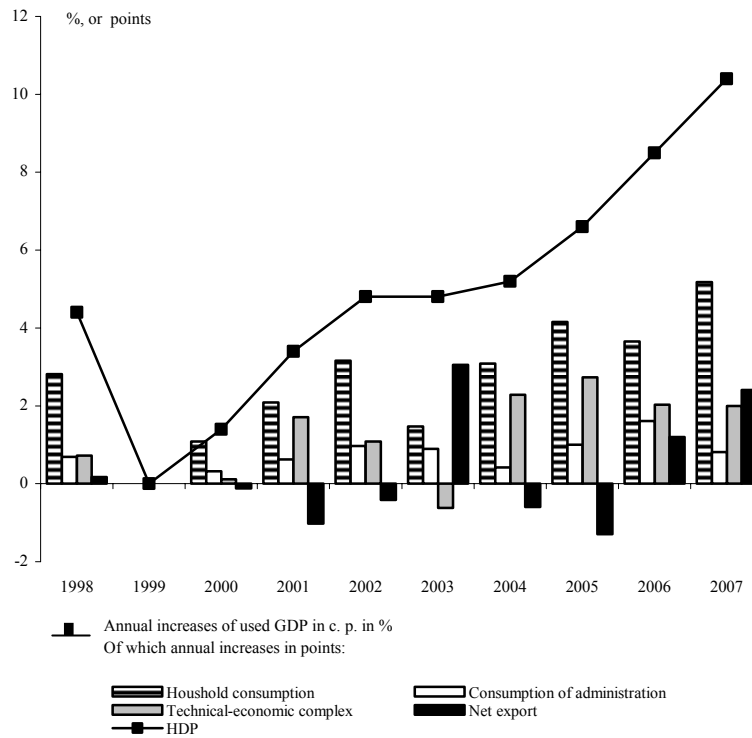
**Graph 2**  
**Comparison of development in labour productivity and real wages**  
**over 1998 – 2007<sup>1</sup>**



<sup>1</sup>By data from Statistical Annex of European Economy, Autumn 2007.

Links between the economic growth rate and development of unit parts of demand are illustrated in graph 3.

**Graph 3**  
**Impact of domestic demand components and net export on GDP changes**  
**(at constant prices)**



In 2007 (likewise as in the two previous years) the GDP growth was positively influenced by all three (in graph 3) illustrated components of domestic demand in sequence (by power of its impact): household (demand) consumption, formation of gross capital (investment demand) and consumption (demand) of administration. Past the period (years 2004 and 2005) of negative impact of net export on GDP development, in 2006 and even more strikingly in 2007 the net export (external demand cleared of import) becomes a factor contributing to economic growth.

In contrast to 2006, when the positive impact of net export on GDP growth was evoked by reducing its negative balance, in 2007 the net export

of goods and services gained positive value. As per our own calculations (Statistical Office of the SR does not publish development of terms of trade) the terms of trade deteriorated in 2007 compared to 2000 by 1.0 and compared to 2006 by 0.4 percentage points (p. p.).

The share of final household consumption in GDP usage moved over the years 1998 – 2007 between 54 – 57 %. Thus the household consumption is the most significant household demand component, but – as shown in graph 3 – its increases exerted through the surveyed period a dominating impact on GDP growth rates.

Data in table 3 contain information on the process (on resources or factors) of formation of household incomes, their transformation into household consumption, as well as on development trend of this process.

The mentioned data in table 3 concern mainly the trends in the division processes, which shared the formation of gross disposable income of households. Their intensity (expressed through changes in relation of incomes and expenditures of households to their final consumption) was weak until 2004, afterwards it restored moderately. At the same time until 2004 relation of taxes to final consumption was declining more expressively than relation of expenditures, however, in the following years (including 2007) it remained on a stable level.

As far as the revenues of employees and gross mixed income are participating in the formation of gross disposable income and final household consumption we can see sizeable year-to-year variations. Comparing average values of impact of employees revenues and gross mixed income on the increases in the household consumption over the years 1989 – 2002 and the years 2003 – 2007 (i. e. in a longer trend) brings strengthening of the impact of gross mixed income, which is pertinent also for 2007.

Table 3<sup>1</sup>**a) Development of structure of formation and usage of household incomes (final consumption of households = 100)<sup>2</sup>**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Incomes total	155.2	152.7	150.8	147.7	148.2	145.4	141.7	142.8	142.2	143.0
Of which: compensation of empl.	80.0	75.4	75.5	72.1	72.4	72.4	69.4	71.4	70.7	70.6
gross mixed income	35.2	36.7	38.1	39.5	40.0	40.7	39.9	40.7	41.4	41.9
social benefits	25.3	25.9	24.7	24.2	24.6	21.9	22.6	23.0	22.2	22.2
Expenditures total	41.3	39.7	37.9	37.8	38.5	38.0	35.6	36.3	37.8	37.6
Of which: current taxes on income	7.8	8.4	6.7	6.8	6.6	6.9	5.5	5.5	5.4	5.5
Gross disposable income <sup>4</sup>	113.8	112.9	112.9	109.9	109.7	107.4	106.1	106.5	104.4	105.4
Gross savings of households <sup>4</sup>	13.8	12.9	12.9	9.9	9.7	7.4	6.1	6.5	4.4	5.4
Final consumption of households	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**b) Impact of final household consumption components on its annual changes in percentage points<sup>3</sup>**

	1998	1999	2000	2001	2002	2003	2004	2005	2006 <sup>p</sup>	2007
Incomes total	8.0	-0.1	3.1	6.9	8.5	1.8	4.7	10.1	8.1	10.7
Of which: compensation of empl.	3.7	0.0	1.8	2.4	4.2	1.2	1.9	6.0	3.8	5.0
gross mixed income	2.1	-0.1	1.2	3.0	2.5	0.8	1.4	3.2	2.8	3.3
social benefits	1.3	0.0	0.3	1.1	1.6	-0.2	1.2	1.8	0.9	1.6
Expenditures total	1.5	0.0	0.5	2.1	2.6	0.5	0.7	2.8	3.0	2.5
Of which: current taxes on income	0.1	0.0	-0.2	0.4	0.2	0.2	-0.3	0.4	0.3	0.4
Gross disposable income <sup>4</sup>	6.5	-0.1	2.6	4.8	5.9	1.3	4.0	7.2	5.0	8.2
Gross savings of households <sup>4</sup>	0.1	0.0	0.3	-0.9	0.4	-0.3	-0.2	0.7	-0.9	1.1
Final consumption of households	6.4	-0.1	2.3	5.7	5.5	1.6	4.2	6.5	5.9	7.1

<sup>1</sup> Own calculations by data of the SO SR.<sup>2</sup> By data in current prices<sup>3</sup> From the annual change in constant prices<sup>4</sup> Gross disposable income and gross savings are adjusted by change in net rental of households, reserves and payments to pension insurance funds. Since 1999 this change distinguishes the gross disposable income from the difference between revenues and expenditure

In 2007 a change occurred at dividing the gross disposable income into gross household savings and their final consumption. While in 2006 the increase in household consumption was shared also by decline in savings, in 2007 (very likely due to a record increase in disposable income) households changed part of their income into savings.

Formation of the gross capital (GCF) and along with this also formation of the gross fixed capital (GFCF) was developing with large instability over the last decade (see graph 3). But the positive impact of the gross capital formation on the GDP development over the whole surveyed period was prevalent – the real gross capital formation in 2007 was by 33 % and gross fixed capital formation by 21 % higher than in 1998 (data at 2000 constant prices).

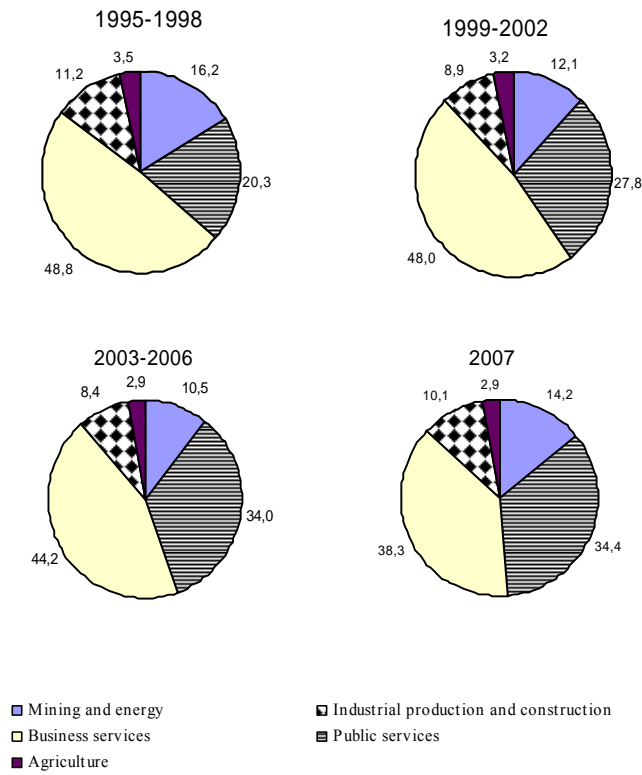
Changes in performance of the Slovak economy do not appear only in the growth of investment activities (in growing gross fixed capital formation) but also in structural changes of gross fixed capital formation, illustrated in graph 4.

The most significant trend in development of the branch structure of gross fixed capital formation is the rising part of industrial output (manufacturing industry), shared mainly since 2002 by the arrival of foreign investors. Fast rising of the gross fixed capital formation in industrial production caused decline of the shares of other sectors (groups of branches) in the gross fixed capital formation over 1999 – 2002, and namely over 2003 – 2006. In 2007 the described trends continued with two modifications. The share of mining and energy (equally as in 2006) increased and similarly started the share of public services its enlargement, especially owing to double investment in the branches of public administration and defence.

Mean time trend of the constant (and in 2007 continuing) growth of industrial production share in total investment, in the back of which stand the foreign investors activities, may evoke concern about the excessive extension and intensifying of the industrial phase of economic development and thereby about reducing the chances of its transition into the post-industrial

phase based on structures linked to knowledge economy. Reasons for this concern can be appraised only at a deeper sight on the very structures of investment into industrial production for which can serve well information given in table 4.

Graph 4  
Branch structure of gross fixed capital formation



**Table 4**  
**Distribution of gross fixed capital formation into groups of industrial production branches by degree of their intensity of technology**

	Shares of groups of branches in total GFCF in %			
	A	B	C	Total
Average over 2002 – 2004	33.5	36.1	30.3	100.0
Average over 2005 – 2007	22.1	23.3	54.6	100.0
2007	21.1	23.9	55.0	100.0

A – Low technologies branches.

B – Medium low technologies branches.

C – High and medium high technologies branches.

Data in the table 4 show that over the last three years (including 2007) a shift of investment into high technology branches or into medium high technologies occurred (chemistry, car industry, machinery and electrical engineering). This is a group of branches developing not only material but also human capital and thereby conditions for knowledge economy formation. The conclusion of a positive investment structure into industrial production in the SR can be confirmed by the fact, that the investment share into industrial production branches with high and medium high technologies over 2003 – 2005 was equal in the EU 27 to 42.1 %, of which for example in Austria it was 36.7 %.

Graph 3 confirms that the public administration demand transformed into its consumption contributed every year (except only in 1999) to GDP growth. Its values moved in rather large span; from 0.3 (in 2000) to 1.6 (in 2006) p. p. according to the place of relevant year in the political cycle. At its end they culminated and in its first two years they were diminishing. A striking decline in the public consumption share in GDP in 2007 corresponds to the mentioned rule.

A component part of the government demand in the total demand is also its investment demand, which is contained within the structure of GDP usage in the structure of gross fixed capital formation (see graph 4, structure of gross fixed capital formation by branches). A complex sight at the mean



time trends of development of public administration share in total demand or in GDP usage produced, can be seen in table 5.

**Table 5**  
**Share of public consumption in the GDP use (in %)**

	Annual average 1995 – 1998	Annual average 1999 – 2002	Annual average 2003 – 2006	2006	2007
Share of public administration in GDP usage in %, <sup>1</sup>	22.2	20.2	19.3	19.3	17.6
caused by: final consumption gross fixed capital formation	3.8	3.0	2.3	2.2	2.0
in total	26.0	23.2	21.6	21.2	19.6
Annual average change in final consumption of % <sup>2</sup>	5.2	1.7	4.0	10.1	0.7

<sup>1</sup> By data at current prices.

<sup>2</sup> By data in constant prices.

Average annual changes in final consumption of public administration over the surveyed four-year period though rather vary, but the share of public administration in GDP usage shows definitely declining tendency. The results from 2007 suggest, that this trend continues.

From the view of size of the share of final consumption of public administration in GDP position of Slovakia over the past decade markedly improved even in international comparison. In 1998 this share in average of EU 15 and EU 27 matched 19.8 % and was lower than in the SR (22.0 %). Only in six countries of EU 27 (Denmark, France, Latvia, Lithuania, the Netherlands and Sweden) it exceeded the Slovak level. The fast pace of economic growth, which was recorded in the Slovak economy past 2002, was used by the fiscal policies of all its governments for the purpose of decreasing the reflected share in such a manner that in 2007 its value (17.6 %) got below the level of EU 15 (20.7 %) and EU 27 (20.5 %). It fell on the sixth lowest

round in total EU 27 (lower round was occupied only by Bulgaria, Romania, Estonia, Lithuania and Greece).

The macroeconomic stability continued in its reinforcing even in 2007, but actually it was still more expressive than in the previous years. The rate of inflation compared to the previous year decreased. Deficit in public finance declined to the ever lowest level despite the fact that from the amount of public finance the deficit of the first pillar of annuity assurance was reimbursed. Growth in real wages recorded rather slow speed than labour productivity growth and net export of goods and services (in constant prices) reached positive value. The mentioned results from 2007 were connected above all with the record pace of economic growth. It must be mentioned that a significant contribution (on side of economic policy creating conditions for positive functioning of the economy) came also as a pressure in evaluating readiness of Slovakia to accede the European economic and monetary union. The values of Maastricht criteria achieved by the Slovak economy in 2007 in international comparison of readiness to accede the monetary union are given in table 6.

The positive evaluation of Slovakia's readiness to entry to the monetary union, as a result of international comparison, need not be overestimated. But on the other hand it is evident that the macroeconomic stability of the Slovak economy in 2007 reached a relatively good position, or at least (except Ireland) was not worse than in other countries comparable with Slovakia, that were preparing for entry to the Eurozone.

However, a question is, what is the short term and medium term sustainability of the stability position achieved in 2007 which undoubtedly was satisfactory, or the level of accomplishing the Maastricht criteria. Obviously the hardest task will be to sustain the inflation rate within the limit of the innovated Pact on stability and growth, which will depend mainly on future speed of economic growth along with a harmonized development in public finance and wages.

**Table 6**  
**Value of Maastricht criteria achieved in cohesion countries**  
**In the second year before their entry to the monetary union<sup>1</sup>**

	Inflation rate <sup>2</sup>		Ratio of result of public finance to GDP		Longterm interest rate		Result In total	
	in %	order	in %	order	In %	order	Points <sup>3</sup>	Order
	Ireland	1.3	1	1.3	1	6.29	3	5
Greece	2.1	5	-3.5	6	6.30	4	15	6
Spain	1.9	2 – 4	-3.3	4	6.40	6	13	4 – 5
Portugal	1.9	2 – 4	-3.4	5	6.36	5	13	4 – 5
Slovenia	2.5	6	-1.4	2	3.81	1	9	3
Slovakia	1.9	2 – 4	-2.2	3	4.49	2	8	2

<sup>1</sup> In EU 15 cohesion countries are those, which were because of relative low level of GDP/capita (less than 75 of EU average) obtaining development aid also from cohesion EU funds. In the 90's those were Ireland, Greece, Spain and Portugal. The second year before entry to the monetary union, when results in table of mentioned countries are compared with results achieved in the SR in 2007, for Ireland, Spain and Portugal was the year 1997, for Greece the year 1999 and for Slovenia the year 2005. Values of the fourth Maastricht criterion (ratio of the state debt to GDP) are the result of impact of factors, which cause problems in international comparison, therefore they are not contained in the table.

<sup>2</sup> By consumer prices

<sup>3</sup> Summary of orders in individual Maastricht parameters.

The employment development assigned by the Lisbon strategy as a dominant factor in social development changes was attached in 2007 to the positive trends of previous three years. In spite of this even in 2007 the employment rate (15 – 64-years old population) stopped on one of the lowest levels in EU 27 (lower than in the SR was the employment rate in Hungary, Romania, Poland and Italy). However, we must also take into consideration that in 2005 worked abroad 6.0 %, in 2006 7.2 % and in 2007 7.6 % of total number of working population.

Even in 2007 a mirror image of employment trend was the unemployment development. The constant decline of its rate did not stop either in the first months of 2008 so that in March (as per the Eurostat methodology) for the first time in a historical view it fell to one-digit number (9.7 %). Next, though a moderate decline of unemployment rate can be expected in the

nearest future depending from inflow of further foreign investment and from upgrading the transport accesability to the regions of Middle and Eastern Slovakia. In the Slovak economy there still remains a hardly resolvable problem of the long term unemployment. The share of 12 months and longer unemployed from the total active population (15 – 64years old) amounted in Slovakia in 2007 to 8.3 % (the Slovak number was approached with large distance of 4.9 % Poland, Germany 4.7 %, Greece 4.1 %, considering the EU 27 average of 3.0 %).

Even in 2007 real wages in the SR were growing with a marked distance from the labour productivity growth and performance of the economy. The wages contingent from GDP in 2007 was equal to 47 % and was the lowest one in the whole EU 27<sup>4</sup>.

While assessing the changes which happened in 2007 in the sphere of social protection of population, provisionally we can get along only from information on the share of social benefits from the household consumption (the last line in table 1). Its growth (recorded after the previous 7-years long constant decline) obviously reflects the accents of government policy, enabled by good results of the economic growth.

It is necessary to see that in the social protection Slovakia ranks constantly among the most lagging behind countries of the European union<sup>5</sup>. The performance growth in the EU is accompanied by faster speed of expenditure growth for social protection. Certain signs of turn towards this trend which appeared in the SR in 2007, need to be appreciated along with the expectation that an onward performing growth would enable their continuing.

---

<sup>4</sup> In 2006 the wages contingent from GDP equalled in EU 27 to 65 % and in EU 15 to 66 %.

<sup>5</sup> The share of expenditure on social protection from GDP in 2005 equalled in EU 27 to 27.2 %, while in Slovakia it reached only 16.9 %. Only in Estonia, Lithuania and Latvia it was a little lower. The Czech Republic achieved 19.1 %, Poland 19.6 %, Hungary 21.9 % and Slovenia 23.4 %. PETRÁŠOVÁ, A.: Social Protection in the European Union. Eurostat, Statistics in focus, 46/2008.

## 2. PRODUCTION DEVELOPMENT

The high real growth of GDP in 2007 (10.4 %) was shared by value added growth with 9.1 p. p. and by 1.3 p. p. of growth in taxes on products (reduced by subsidies). In 2007 we can observe more or less similar growth rate in gross output, intermediate consumption and value added. Thus the share of value added in gross output achieved more than 40 % (in constant prices), equally as in the previous three years.

The GDP growth dynamics in 2007 was mostly influenced by an extra strong real value added growth in industry amounting to almost 20 %, which shared the GDP growth of 10.4 % by 6.6 p. p. The GDP growth was supported also by the services sector and by construction, but in contrast real decline in value added in agriculture by more than 20 % reduced the GDP growth by 1.1 p. p. The overall growth tendencies are given in table 7.

Table 7  
Development of GDP formation over 2004 – 2007<sup>1</sup>

	Year-on-year changes in %				Contribution to GDP growth in p. p.			
	2004	2005	2006	2007	2004	2005	2006	2007
GDP	5.2	6.6	8.5	10.4	.	.	.	.
Of which:								
Agriculture	2.0	11.9	12.6	-20.2	0.1	0.6	0.7	-1.1
Industry	15.3	6.8	10.2	19.7	4.6	2.2	3.4	6.6
Construction	2.2	21.4	15.2	4.0	0.1	1.1	0.9	0.2
Trade, transport <sup>2</sup>	6.6	5.8	12.4	9.4	1.4	1.2	2.7	2.1
Financial services <sup>3</sup>	3.0	1.8	11.6	1.5	0.4	0.2	1.5	0.2
Public services <sup>4</sup>	-13.0	0.6	2.0	15.2	-1.9	0.1	0.2	1.6
Other GDP components <sup>5</sup>	10.6	13.3	-4.6	11.8	1.1	1.5	-0.6	1.3

<sup>1</sup> By revised data by SO SR; from constant prices calculated by chaining volumes using as reference year 2000; at using this method the summary of individual components, and therefrom derived indicators, does not equal exactly to total.

<sup>2</sup> Trade, hotels, restaurants, transport., storage, telecommunications.

<sup>3</sup> Financial intermediation, real estate, renting, business activities.

<sup>4</sup> Public administration, defence, education, health care, social work, personal services, households activities.

<sup>5</sup> Value added tax, excise tax, tax on imports less subsidies.

Development in 2007 led to further strengthening of the position of industry in the value added structure. The Slovak Republic compared with the EU 15 average comes to higher share in value added in industry (by 10.5 p. p.) and noticeably lower in services (by more than 12 p. p.).

Remarkable above all is the weaker position of financial and business services, as well as public services, while on the contrary in trade, transport, posts and telecommunications the share in value added is higher than in EU 15 average. As shown by data in table 8, similar situation is also in the Czech Republic and in less outstanding form also in further new EU <sup>6</sup> member states.

Table 8  
Development of share of branches in value added in current prices<sup>1</sup> (%)

	Slovakia			EÚ 15	CZ	HU	PL	SI
	1995	2006	2007	2007	2006	2007	2007	2007
Agriculture	5.9	3.9	2.9	1.7	2.6	4.2	4.2	2.0
Industry	32.7	28.6	30.3	19.8	31.7	25.3	23.3	27.5
Construction	5.1	6.9	6.7	6.3	6.4	4.2	8.0	7.0
Trade, transport <sup>1</sup>	24.6	26.6	26.6	20.7	25.5	21.1	28.0	22.5
Financial services <sup>1</sup>	17.5	18.7	17.8	28.9	16.8	23.0	18.5	21.6
Public services <sup>1</sup>	14.3	15.2	15.8	22.7	17.0	22.2	18.0	19.4

<sup>1</sup> For more exact branch identification see the notes to Table 7.

A very interesting view at the different development of individual branches compared with the EU 15 average offers information on value added in PPS calculated per 1 capita <sup>7</sup> published by Eurostat within their statistical database. The indicator shows performance of individual branches in comparison with

<sup>6</sup> The high share of industry in value added in current prices (32 – 33 %) was recorded in several countries mainly in the 80's (Germany, United Kingdom, Korea) and recently also in Ireland (over 1995 – 2002 the share of industry represented on average as much as 34 % in value added).

<sup>7</sup> In contrast to the shares of individual branches in the value added, this indicator characterises position of individual branches more precisely – irrespective of the development in other branches.

the EU 15 average and indirectly also the process of their convergence to this average. Basic information are given in table 9.

Table 9  
Value added per cap. in PPP, EU 15 = 100 (%)

	Slovakia				CZ	HU	PL	SI
	1995	2006	2007	change <sup>2</sup>	2006	2007	2007	2007
Branches in total	41	57	61	20	71	55	48	80
Agriculture	100	125	100	0	100	150	125	100
Industry	56	83	94	38	113	71	57	110
Construction	33	64	67	33	79	40	60	93
Trade, transport <sup>1</sup>	47	73	78	32	86	57	65	88
Financial services <sup>1</sup>	30	37	38	8	42	44	31	61
Public services <sup>1</sup>	26	39	43	16	52	54	38	68

<sup>1</sup> For more exact branch identification see the notes to Table 7.

<sup>2</sup> Change between 1995 and 2007 in p. p.

Data in table 9 definitely confirm lagging development in financial and business services as well as public services not only behind the EU 15 average, but also behind the Czech Republic, Hungary and Slovenia. As concerns the industry, its relative performance compared with 1995 markedly approached the EU 15 average (increase by 38 p. p.), but despite this it does not reach the level of the Czech Republic and Slovenia.

In 2007 the output in *industry*<sup>8</sup> increased on year-on-year terms by 12.8 %; of which in manufacturing by 15.3 % (both by 2.7 p. p. more than in 2006).

A positive turnover was reached in mining and quarrying (growth by 25.9 % compared to the decline in the previous four years), but in contrast the output in manufacture of electricity, gas and water supply recorded an onward decline (by 7.5 %).

---

<sup>8</sup> By industrial production index.

Most positive growth was reached in manufacturing industry in manufacture of motor-cars (by 62.7 %) and in manufacture of radio, television and connection equipment (by 45.1 %); the most serious decline was recorded in manufacture of business machines and computers (-26.3 %). Development in individual branches was rather differentiated, as seen in graph 5, while an overall positive trend is in fact the result of an extra strong growth in several branches.

Increase in industrial output in 2007 was reached due to faster growth in labour productivity<sup>9</sup> (by 9.6 %) than in number of employees (by 2.9 %), of which by labour productivity growth in manufacturing by 11.5 % more than by number of employees (by 2.9 %).

In 2007 the industry exceeded moderately the high speed of real growth in *receipts for turnover of enterprises*, achieved in previous year – in industry it was 15.6 % of which in manufacturing 16.6 %. The highest turnover was gained in manufacture of motor-cars (45.6 %) and in manufacture of radio, television and connection equipment (36.9 %) – they covered as much as 64 % of nominal increase in turnover of enterprises in industry.

The increase in manufacturing in 2007 resulted in the *foreign trade* in an expressive increase in surplus (by 43 bil. SK) of its foreign trade balance. An overall survey on foreign trade of manufacturing in 2007 by branches is given in table 10.

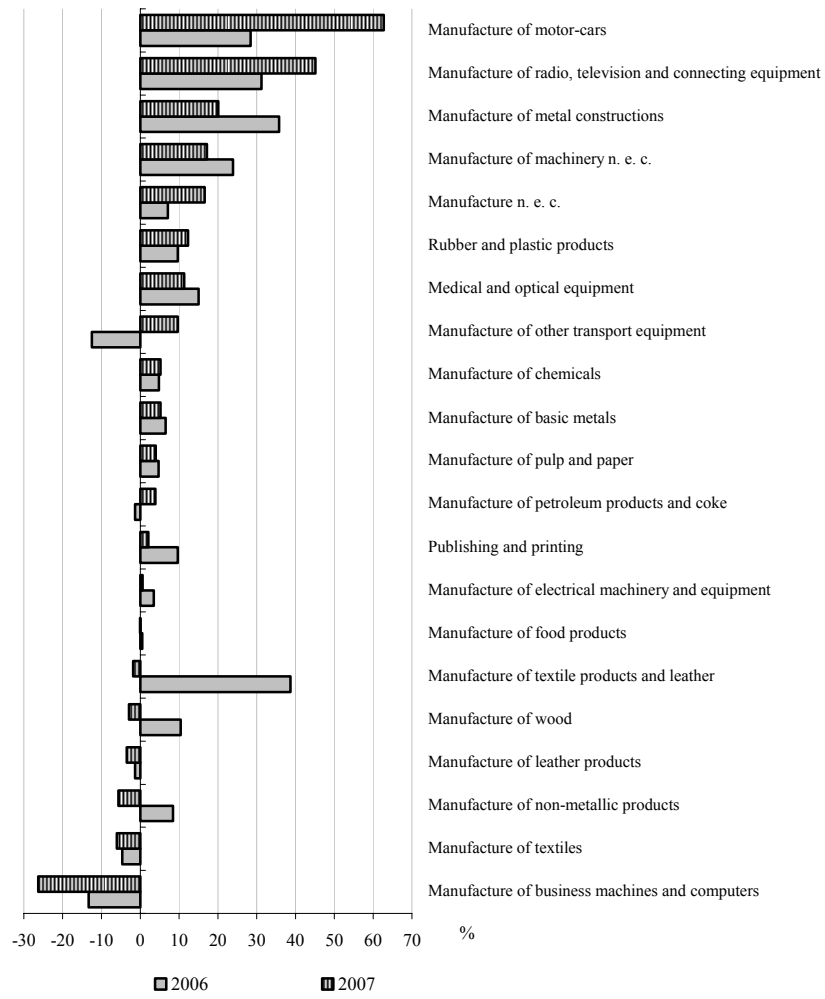
The most successful branches in terms of achieved export value in 2007 were the manufacture of transport equipment, manufacture of electrical equipment and manufacture of metallic products, while the first two branches contributed markedly also to improvement of the balance of trade of manufacturing; in other branches except of manufacture of machinery and equipment n.e.c., manufacture n.e.c. and manufacture of leather, it came to impairment of the balance of trade. As the most significant net exporters can be named manufacture of transport equipment, manufacture of basic metals and metal products and manufacture of coke and petroleum products.

---

<sup>9</sup> According to the industrial production index.



Graph 5  
**Growth in output of manufacturing branches in 2007 compared to 2006 (%)**<sup>1</sup>



<sup>1</sup> By industrial production index.

Table 10

## Development of foreign trade of manufacturing in 2007

	Export (bil.SKK)		Import (bil.SKK)		Balance (bil.SKK)	
	2007	+/- <sup>1</sup>	2007	+/- <sup>1</sup>	2007	+/- <sup>1</sup>
Industrial output in total	1 394.6	193.2	1 269.5	150.4	125.1	42.8
of which:						
Manufacture of food products	41.2	3.6	63.9	8.8	-22.7	-5.2
Manufacture of textile products	36.3	0.6	44.4	0.9	-8.1	-0.2
Manufacture of leather	20.5	1.9	16.2	0.8	4.3	1.1
Manufacture of wood	19.9	0.2	13.1	2.1	6.8	-1.9
Manufacture of pulp and paper	41.0	0.8	28.4	1.5	12.5	-0.7
Manufacture of coke & petr.products	65.2	-0.5	30.4	0.6	34.8	-1.1
Manufacture of chemicals	68.4	-2.1	116.6	7.1	-48.2	-9.2
Rubber and plastic products	53.0	3.7	63.1	4.3	-10.0	-0.6
Manuf. of non-metallic products	23.0	0.1	21.9	3.5	1.1	-3.4
Manufacture of metal products	212.3	15.5	160.7	20.8	51.6	-5.4
Machinery and equipment n. e. c.	115.9	9.7	122.9	7.2	-7.0	2.5
Manufacture of electrical equipment	305.0	58.5	321.7	44.3	-16.8	14.3
Manufacture of transport equipment	360.9	96.5	239.0	46.0	121.8	50.5
Manufacture n. e. c.	32.1	4.7	27.2	2.5	4.9	2.2
<i>To supplement:</i>						
Mining and quarrying	5.9	-1.6	143.8	-19.6	-137.8	18.0
Other items of foreign trade	20.2	-3.7	28.9	3.2	-8.7	-6.9
Foreign trade in total:	1 42.7	187.9	1 442.1	134.0	-21.4	53.9

<sup>1</sup> Change compared to 2006.

The structure of foreign trade of manufacturing from the view of technological intensity is passing in the last few years through significant changes. As can be seen in table 11, the share of technology highly intensive groups of manufacturing in total export of manufacturing industry is steadily rising at the expense of technology low- and medium low intensive goods. In 2007 this export was actually for the first time higher than export of low technology intensive goods. Along with the export of technology high intensive goods naturally increases even their import. In the internationally cooperative manufacture this is more or less natural, especially in the phase of introducing new output. This concerns the

electrical engineering industry, which develops at the present time very sharply. Data in table 10 confirm, that the deficit of its balance of trade decreased strongly.

Table 11  
Share of technological groups in export and import of manufacturing <sup>1</sup>

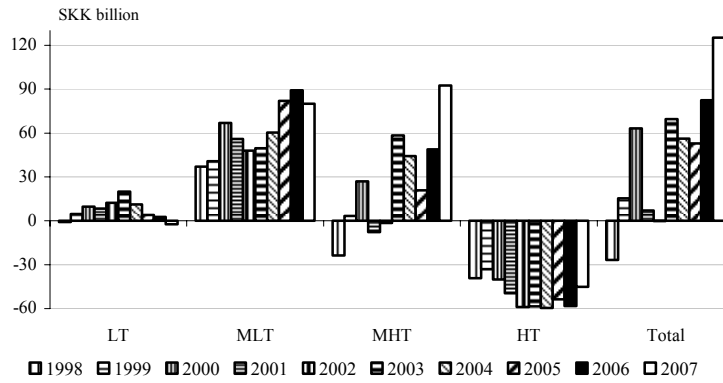
	Export (%)				Import (%)			
	2004	2005	2006	2007	2004	2005	2006	2007
Low technologies	18.2	17.2	14.9	13.7	18.1	17.8	15.8	15.2
Medium low technologies	28.2	29.8	28.0	25.5	22.7	22.6	22.1	21.7
Medium high technologies	45.8	41.6	42.5	44.3	43.5	41.7	41.3	41.3
High technologies	7.8	11.4	14.6	16.5	15.7	17.9	20.9	21.7

<sup>1</sup> Elaborated by groups of production classification in 4-digit code; classification of branches into technology groups by OECD STAV Indicators.

Development of balance of trade of manufacturing by technology groups shows in 2007 several positive changes. Trade with goods classified among high technologies remains though all the time in deficit, which, however, decreased from 58 billion SKK to 45 billion SKK. The group of technology medium high intensive shows high surplus (almost 93 billion SKK), which is for the first time more than in the group of technology medium low intensive, which so far was always achieving high surplus. The group of technology low intensive recorded small deficit. More details see in graph 6.

Growth in construction rather slowed down in 2007 compared to 2006. (to 5.7 % compared to 14.9 % in 2006). Similar slowdown was recorded even in development of turnover of enterprises (to 8.2 % compared to 13.3 % in 2006), in employment development (to 6 % compared to 9.3 %), as well as in productivity development (to 0.6 % compared to 5.2 % in the previous year). A more positive development than in 2006 was achieved only in construction abroad (growth by 14.1 %; in 2006 decrease by 12.1%). The slowdown of growth in construction resulted in all size groups of enterprises; the lowest growth (0.4 %) was recorded in big enterprises, the highest in tradesmen (10.3 %).

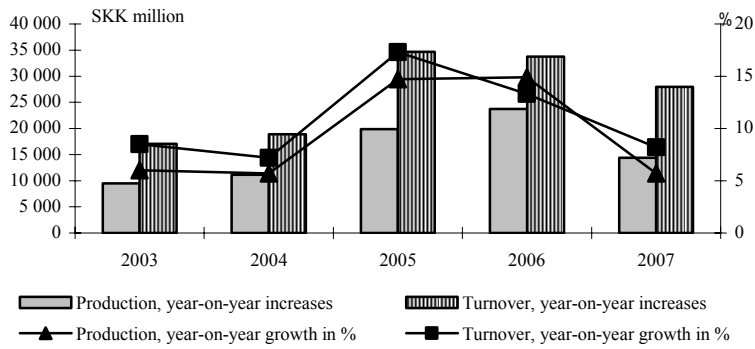
**Graph 6**  
**Development of balance of trade in segments of manufacturing**  
**by technology intensity (in SKK billion)**



*Annotation:* LT – low technologies, MLT – medium low technologies, MHT –medium high technologies, HT – high technologies.

General view on development in construction over several years is given in graph 7.

**Graph 7**  
**Development in construction production and turnover (year-on-year increases**  
**in billion SKK of current prices, year-on-year growth in % from constant prices)**



In *agriculture* the year of 2007 was very severe. (According to current information on GDP by branches (these characterise only total agriculture branch in which the share of farming makes more than 80 %) the gross agriculture production decreased in nominal terms by 17 % and value added by 19 % (in real terms by more than 20 %). A deep slump in production suggest also estimates of agriculture crops, which except for rape were considerably lower than in previous three years (for example cereals by 19 %). But from the view of turnover the development does not appear dramatic as much because thanks to the 24 % rise in prices for crop products the enterprises gained in receipts for crop products by 3.4 billion SKK more than in the previous year (this result was reduced by receipts for livestock products which decreased by 0.1 billion SKK). In total receipts in turnover increased by 2.5 % in real terms.

The macro economic statistics for 2007 deals with the development in the *services sector* only in aggregate form (three groups of branches). More detailed view can be obtained from information on development of turnover in selected services branches, which are mainly of commercial character. The basic information on the recent three years are contained in table 12. As follows from the presented information, in 2007 there was recorded faster growth than in previous year in receipts for sale and maintenance of motor vehicles, in posts and telecommunication activities, in computer and related activities as well as in recreational, culture and sports activities. Other surveyed activities recorded slowdown in growth.

The *profit and loss of corporations* increased in 2007 by 59.6 billion SKK (compared to 18.9 billion SKK in 2006). The development was largely impacted by the sector of financial corporations (increase by 31.3 billion SKK).<sup>10</sup> By contrast, in the sector of non-financial corporations growth in profit slowed down – it increased by 28.3 billion SKK, while in 2006 by almost 60 billion SKK (see table 13).

---

<sup>10</sup> A fundamental impact on development of profit/loss in financial corporations was caused by decrease in the loss of NBS from 45 billion SKK as of the end of 2006 to 19 billion SKK as of the end of 2007.

Table 12  
Development of turnover in selected services branches over 2005 – 2007

Branch, NACE	Turnover in billion SKK current prices			Year-on-year growth		
	2005	2006	2007	2005	2006	2007
Sale and maintenance of motor vehicles	166 783	189 197	222 202	5.9	13.6	24.2
Wholesale (51) *	678 271	776 273	821 910	17.9	14.4	5.9
Retail trade (52)	385 782	425 271	456 475	9.7	8.8	5.5
Hotels and restaurants(55)	35 329	41 544	43 194	0.0	14.5	1.6
Transport, storage (60 – 63) *	114 480	142 862	167 186	13.4	11.6	6.4
Posts and telecommunication(64) *	67 797	72 823	78 698	8.7	7.4	8.1
Real estate, renting and business activities in total (70 – 72,74)	157 498	180 806	197 515	7.8	10.9	8.6
of which:						
<i>Computer and related activities (72)</i>	27 902	32 863	38 638	12.7	13.8	16.8
<i>Other business services (74)</i>	99 356	114 503	124 261	8.3	11.4	7.9
Other personal and social services (90, 92 ,93)	42 118	46 193	54 867	13.5	6.9	20.0
of which:						
<i>recreational, culture and sports activities (93)</i>	29 916	32 882	40 903	20.2	8.6	24.1

<sup>1</sup> Growth rate on basis of constant prices, except for branches marked by \*.

Development of profit/loss in non-financial organizations<sup>11</sup> is characterized in 2007 compared to 2006, but also to previous years, by some negative lines which to certain extent are in contradiction with the very successful economic growth. First of all, there was recorded an extraordinary high growth in loss of unprofitable corporations (from 29 billion SKK in 2006

<sup>11</sup>Explanatory note: The total profit/loss of non-financial corporations represents the difference between positive profit/loss (profits) in profitable corporations and negative profit/loss (losses) in unprofitable corporations. The Statistical Office of the SR informs in their quarterly Reports on basic development tendencies in the economy of the SR on the overall profit/loss (also by branches) about all non-financial corporations, as well as about profits and losses in unprofitable corporations with 20 or more employees. The difference between the total profit/loss of non-financial corporations and difference in profits and losses for corporations with 20 and more employees represents the profit/loss of small organizations with less than 20 employees.

to almost 72 billion SKK in 2007)<sup>12</sup> Loss grew in services by 30 billion SKK, of which in trade almost by 19 billion SKK, in agriculture by 4 billion SKK, in manufacturing by 3 billion SKK and in electricity, gas and water supply almost by 5 billion SKK. The share of unprofitable enterprises in total number of non-financial corporations with 20 and more employees increased from 28 % to 31 %. In contrast to 2006, when not one sector ended as a whole with negative profit/loss, in 2007 the sectors of education and health care and social services joined them.

Table 13

**Development of financial position of corporations over 2003 – 2007**

	2003	2004	2005	2006	2007
	Profit/Los in SKK billion				
Non-financial & financial corporations total	138.0	180.0	249.5	268.4	328.0
Financial corporations	-15.1	-12.3	28.7	-12.0	19.4
Non-financial corporations	153.1	192.3	220.9	280.4	308.6
of which:					
Agriculture	-1.9	1.0	-0.3	1.3	0.3
Manufacturing	53.2	70.0	73.1	91.4	95.5
Construction	8.4	10.2	12.3	14.4	15.4
Services – total	55.4	67.4	86.2	116.1	139.7
Profitable and unprofitable non-financial corporations with 20 or more employees	115.2	149.3	172.9	223.6	233.5
of them: profitable	146.6	173.0	204.1	252.8	305.3
unprofitable	-31.3	-23.7	-31.2	-29.2	-71.8
	Cost profitability in %				
Non-financial corporations	6.0	7.0	7.1	7.7	7.6
Agriculture	-3.1	1.6	-0.5	2.0	0.4
Manufacturing	5.0	6.2	5.7	5.9	5.4
Construction	7.8	8.6	8.3	8.7	8.8
Services – total	5.1	5.6	6.3	7.4	8.0

<sup>12</sup> The Slovak economy recorded a similar volume of loss for the last time in 1998 (80.3 billion SKK) and in 1999 (54.1 billion SKK). In the following years losses moved on essentially lower level (around 30 billion SKK). In contrast to 1998 when on each crown of profit in profitable corporations fell 0.93 SKK of loss in unprofitable corporations, relations between profits and losses in 2007 were essentially more positive (0.24 SKK of loss on one crown of profit), however, in comparison with 2006 essentially worse (0.12 SKK of loss on one crown SKK of profit).

On the other side profit grew in profitable corporations almost by 53 billion SKK (in 2006 by 49 billion SKK) and also a positive profit/loss in organizations with less than 20 employees by 18 billion SKK (in 2006 only by 9 billion SKK). With respect to losses development total increase in profit/loss in non-financial corporations compared to 2006 was less than half.

In 2007 the growth in cost profitability of non-financial organization ceased. In manufacturing the cost profitability even decreased by 0.5 p. p. to 5.4 %. It decreased namely in chemicals, textile and leather manufactures. The highest cost profitability was furthermore maintained by manufacture of metals and metallic products and by manufacture of non-metallic products, as much as 14 %. In branches typical for their dynamic growth (manufacture of transport equipment and manufacture of electrical and optical equipment) the cost profitability in 2007 was essentially lower (3.1 % and 2.8 % respectively).

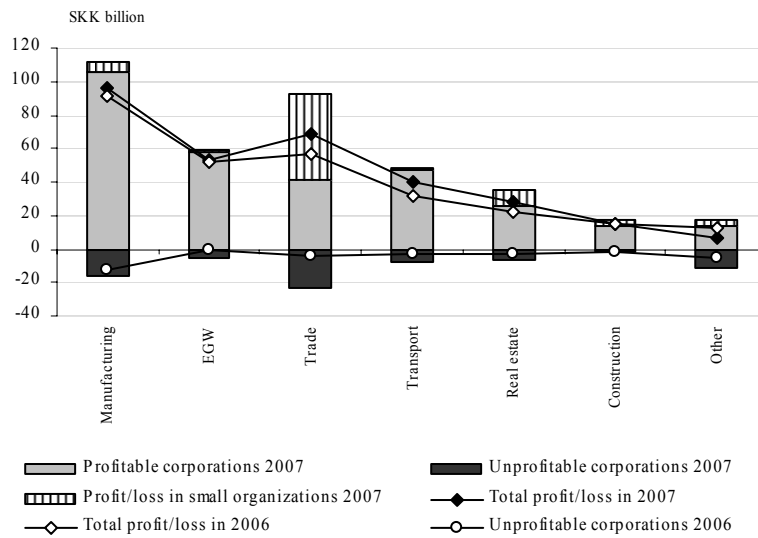
In graph 8 we illustrate development of total profit/loss in non-financial corporations by groups of corporations in the branches of economy and also we show a comparison of total profit/loss and the produced losses in unprofitable corporations in 2007 and 2006.

As can be seen in graph 8, from among the surveyed branches the highest profit (105 billion SKK) in profitable corporations was gained in 2007 in manufacturing, of which 33 billion SKK in manufacture of metals and metallic products, 14 billion SKK in manufacture of transport equipment (4 billion SKK more than in 2006) and 10 billion SKK in manufacture of electrical and optical equipment. Small organizations as well as unprofitable organizations impacted formation of total profit/loss in manufacturing in essentially less extent than in services branches.

As the strong profit branch remains even further electricity, gas and water supply; in this respect profitable corporations are mostly dominant, though in 2007 loss increased in this branch. Cost profitability in this branch is all the time high above average, 18.9 %.



**Graph 8**  
**Profit/loss of non-financial corporations by type of corporations and main branches of economy in 2007 and selected indicators for 2006**



*Explanatory note:*

EGW – electricity, gas and water supply; trade – wholesale, retail trade, repair of motor vehicles, motor cycles and consumer goods, hotels and restaurants; transport – transport, storage, posts and telecommunications; real estate – real estate, renting and business activities; other – agriculture, mining and quarrying, education, health care and social care, other community, social and personal services; p/f – profit/loss.

Most noticeable changes in the formation of profit/loss were doubtless connected with development in services sector, especially in trade. It is noteworthy, that services shared mostly not only the growth of total loss in economy (70 %), but also two thirds share in growth of profit in profitable organizations and in the end they shared total increase in the group of organizations with less than 20 employees. The services sector contributed to increase in total profit/loss in the economy – 84 %, mainly but thanks to the increase of profit/loss in small organizations.

Altogether it can be said that increase in profit/loss in the economy in 2007 was in two thirds the work of organizations with less than 20 employees, in the previous three years their contribution made 17 % at the most.

*Development in the field of creating conditions for innovations and their use*

If Slovakia is to maintain in a long term the relatively fast economic growth, it is inevitable to develop very intensively the capability of enterprising subjects to react flexibly on technological progress and changes in the structure of domestic and external demand through innovation activities. Therefore it is of utmost importance to analyze all the time also the position of Slovakia in creating preconditions for innovation process.

In the given field complex and relevant information on the position of Slovakia can be found in the European Innovation Scoreboard (EIS 2007)<sup>13</sup> comprising 25 indicators on basis of which a Summary innovation index<sup>14</sup> was calculated. Position of Slovakia by this indicator is given in table 14.

Apart from the results of Slovakia the above table shows information on the position of other new EU member countries as well, which underwent transformation in the previous period. It is obvious that Slovakia has a weak position among these countries, and it improves very slowly. According to the analysis to the EIS 2007 Slovakia is counted among the last, least performing group, the group of catching up countries,<sup>15</sup> while Estonia, Czech

---

<sup>13</sup> European Innovation Scoreboard 2007. Comparative Analysis of Innovation Performance and relevant materials can be downloaded on [http://www.proinno-europe.eu/index\\_](http://www.proinno-europe.eu/index_) EIS 2007 was elaborated for 27 EU member countries and further 10 countries. Its data are based on statistical data for 2004, 2005 and 2006, they do not refer to development in 2007, only to the previous years.

<sup>14</sup> SII gives a general view at the innovation performance, but it is necessary to note that the index characterizes a relative, not absolute position of individual countries. The value for every country may move between 0 and 1.

<sup>15</sup> The surveyed countries are characterized by hierarchic cluster technique as 1. leaders, 2.followers, 3.moderate innovators, 4.catching countries. From among the old EU member states the catching countries are only Spain and Portugal.

republic and Slovenia occupied over the recent five periods a stable place among moderate innovators, and in the last period Lithuania joined this group. The perspective of Slovakia in convergence with the EU average are rated rather pessimistic in the given analysis. At a linear development it will necessitate at least 20 years in order to achieve the EU average in innovation performance. A faster progress could be reached only on basis of fundamental changes within the whole innovation system of Slovakia and in improving total socio-economic and regulation environment to make it favourable for innovation activities.

Table 14  
Summary innovation index over 2003 – 2007

	Value					The order within EU27				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
<i>EU 27</i>	0.45	0.45	0.45	0.45	0.45	-	-	-	-	-
Estonia	0.35	0.34	0.35	0.37	0.37	12	13	12	12	12
Czech Republic	0.32	0.33	0.33	0.34	0.36	14	14	14	14	13
Slovenia	0.32	0.34	0.34	0.36	0.35	15	12	13	13	14
Lithuania	0.23	0.24	0.24	0.26	0.27	21	22	21	19	19
Hungary	0.24	0.25	0.25	0.25	0.26	20	20	20	21	20
<i>Slovakia</i>	0.23	0.22	0.23	0.24	0.25	22	23	23	23	23
Poland	0.21	0.21	0.22	0.23	0.24	23	24	24	24	24
Bulgaria	0.20	0.21	0.20	0.22	0.23	25	25	25	25	25
Latvia	0.16	0.16	0.17	0.18	0.19	26	26	26	26	26
Romania	0.16	0.15	0.16	0.17	0.18	27	27	27	27	27

Where is the root of the weak point of Slovakia in innovation performance? A certain answer lies in distinguishing the five dimensions of innovation process and in the connected partial innovation indices. Three of them characterize inputs into the innovation process and two its outputs.<sup>16</sup> A view at the position of Slovakia by partial indices is shown in table 15.

<sup>16</sup> The preconditions for creating innovation potential are characterized by *Beareres of innovation* (the level of attained education of population and young people, participation in life-time

Table 15  
Partial innovation indices over 2003 – 2007

	Indices value					The order within EU27				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
Bearers of innovation	0.30	0.30	0.29	0.31	0.32	20	20	23	21	21
Knowledge formation	0.08	0.07	0.08	0.08	0.07	25	25	25	25	26
Innovation and entrepreneurship	0.19	0.18	0.20	0.19	0.20	25	25	24	27	27
Applications	0.51	0.50	0.51	0.56	0.55	8	7	7	6	8
Intellectual property	0.ñ.01	0.01	0.01	0.02	0.03	21	22	24	23	21

As is evident from table 15 Slovakia's best position is in *Applications*, i. e. in the firms' results in introducing innovations and more intensive technologies into manufacture. For example receipts for new products in overall turnover of firms achieved for new products on the market 174 % of EU average and for new products in the firm 103 %; employment in medium high technology and high technology intensive branches of manufacturing reached 147 % of EU average in overall employment (3rd place among the surveyed countries).

The unfavourable position of Slovakia in other dimensions of innovation performance on one side and relative strong position in real achievements of firms on the other side evokes a conclusion that even small efforts in creating conditions for the innovation process can bring about progress in raising the technological level in economy. But attention is to be drawn to the fact that economy can be successful in technological catching up without creating preconditions for the innovation process only for certain time, what means only until foreign investors are ready to transfer new production on higher technological level into our economy, i. e. at a high dependency on foreign investors.

---

education and connection to internet). *Knowledge formation* measures investment to research and development which is decisive in the knowledge economy success. The index *Innovation and entrepreneurship* characterizes the efforts of firms in innovation process, mainly in small and medium firms. Among the partial innovation indices which characterize the outputs, are reckoned *Applications* (level of employment, exports and business activities in innovative sectors) and *Intellectual property* (mainly patents etc.)

For the sake of a more particular orientation in the state and development of indicators which are the basis for construction of innovation indices, we have chosen those which characterize the level of education, investment in innovation and engagement of the small and medium enterprises in innovation process (see table 16).

Table 16  
Selected indicators from database to EIS 2007

		2002	2003	2004	2005	2006
Graduates from postsecondary natural sciences and technical sciences studies per 1000 inhabitants, aged 20 - 29	Grad..	7.8	8.3	9.2	10.2	.
	% EÚ	69	68	74	79	.
Population with tertiary education (per 100 inhabitants, aged 25 – 64)	Grad.	10.8	11,6	12.8	14.0	14.5
	% EÚ	54	56	59	62	63
Secondary educated youth (in % from population in age of 20 – 24)	Grad.	94.5	94.1	91.7	91.8	91.5
	% EÚ	123	122	119	119	118
Participation in life-long learning (per 100 inhabitants in age of 25 – 64)	Grad.	.	3.7	4.3	4.6	4.3
	% EÚ	.	44	46	47	45
Broadband connection (number of connections /100 inhabitants)	Grad.	.	.	0.4	1.5	4.0
	% EÚ	.	.	5	13	24
Expenditure on research and development from public finance (% of GDP)	Grad.	0.20	0.26	0.26	0.25	.
	% EÚ	30	39	41	38	.
Expenditure on research and development from enterprises (% of GDP)	Grad.	0.37	0.32	0.25	0.25	.
	% EÚ	31	27	21	21	.
% of innovative firms funded from public resources in total number of enterprises	Grad.	.	.	2.8	.	.
	% EÚ	.	.	31	.	.
Investment in risk capital in the starting phase (% of GDP)	Grad.	0.00	0.00	0.00	0.00	.
	% EÚ	3	0	6	1	.
Investment in ICT (% of GDP)	Grad.	.	6.4	6.5	6.7	.
	% EÚ	.	100	102	105	.
% of SME innovating solely in total number of SME	Grad.	.	.	11.6	.	.
	% EÚ	.	.	53	.	.
% of SME innovating in cooperation in total number of SME	Grad.	.	.	6.8	.	.
	% EÚ	.	.	75	.	.
% of SME implementing organizational innovation in total number of SME	Grad.	.	.	13.4	.	.
	% EÚ	.	.	39	.	.

Position of Slovakia in the university education level is gradually improving, does not reach, however, the EU average and is far distant from countries with the highest values.<sup>17</sup> The share of secondary educated young people is above average, but questions arise in the field of their quality level and not enough suitable structure of this education. Slovakia has a very weak position in life-long learning and similarly as in majority of European countries smaller are also the possibilities of informal education by means of internet.

The most weak point of innovation performance is doubtless the level of funding research and development (R & D) from public as well as from business resources and the overall financial support to the innovation process. While on average in the EU the expenditure on R & D from public sources make 0.65 % of GDP (in Sweden and Finland more than 0.9 % of GDP), in Slovakia it is only 0.25 %. Still more explicit differences exist in expenditure on R & D from business sources – Slovakia receives only one fifth of the EU average (0.25 % against 1.17 % GDP); The highest values reaches Sweden (2.92 %) and Finland (2.46 %). Very weak is the public support to innovating firms and development of risk capital.

As to the interest of SME in the innovation activities, it is necessary to say that differences among countries are very large. The share of SME innovating solely in total number of SME moves between 39 % – 9 % (in the SR 11 %) and those, which innovate in cooperation are 21 % – 3 % (in the SR 6.8 %). In majority of countries a large portion of SME strive to increase their performance through organizational innovations (from 58 % till 11 %, while in five countries they are used by less than 20 % of SME, among them the SR with 13.4 %). So the participation of SME in innovation process in Slovakia is in comparison with other countries very low and basically this reflects the overall low support to innovation activities in the economy.

---

<sup>17</sup> The share of graduates from natural sciences and technical sciences in Ireland was almost 25 % in 2005, and the share of population with tertiary education in Finland was 35 % in 2006 (the highest values in the given years).

### 3. EXTERNAL ECONOMIC RELATIONS

#### *Balance of payments*

In 2007 position of Slovakia toward foreign countries improved markedly. After the last year's deficit the balance of payments reached again a surplus of 5.2 % of GDP, which was the best result over the past five years (table 17). This denoted increase in foreign exchange reserves of the NBS by 96 billion SKK as a result of interventions against strengthening Slovak crown. The most significant share in this improvement of balance of payments belongs within the items in capital and financial account to short-term investment growth and within the items of current account to the expressive decline in deficit in balance of trade which was recorded at the strong evaluation of the Slovak crown of that time.

Table 17  
**Development of basic items of the balance of payment  
of the Slovak Republic in 2003 – 2007**

	2003	2004	2005	2006	2007
Trade balance (billion SKK)	-23.4	-49.6	-74.0	-75.3	-21.4
Balance of services (billion SKK)	8.7	8.6	9.9	22.5	13.1
Income balance (billion SKK)	-66.8	-70.9	-62.5	-62.1	-79.4
Current transfers (billion SKK)	9.0	5.5	0.5	-1.6	-11.1
Current account (billion SKK)	-72.5	-106.4	-126.1	-116.5	-98.7
Capital and financial account (billion SKK)	112.1	159.3	186.9	32.4	185.7
Overall balance (billion SKK)	51.9	55.2	71.4	-78.1	96.0
Current account/GDP (%)	-5.9	-7.8	-8.5	-7.0	-5.3
Overall balance/GDP (%)	4.2	4.1	4.8	-4.7	5.2
Degree of coverage deficit of current account by surplus in capital and financial account (%)	1.55	1.50	1.48	0.28	1.88

Source: NBS, 2008; own calculations.

Even the current account recorded the best result since 2003, while its deficit to GDP reached 5.3 %. This indicator improved in spite of the fact that the economic growth is usually accompanied by larger imports growth. With respect to the favourable development of main items in the balance of payments it is possible to assess positively also the degree of coverage deficit in current account by the surplus in capital and financial account, which approached the value 2 in 2007.

The deficit of current account was mostly impacted by the balance of trade, namely the income balance, while worsening in the income balance was caused mainly by higher repatriation of profit of foreign investors and by lower incomes from credits and portfolio investment. The year 2007 brought also decline in surplus of balance of services shared mainly by transport services (lower income from gas transit) and tourism services (growth in expenditure of Slovak residents for tourism services exceeding growth in receipts for services in this category). Because of methodological change also deficit of current transfers worsened largely. A part of incomes so far included in the balance of current transfers was in 2007 recorded already in the balance of capital transfers. While using the original methodology this item of current account would have recorded improvement in comparison with the previous year, especially through the growth in incomes from the EU funds.

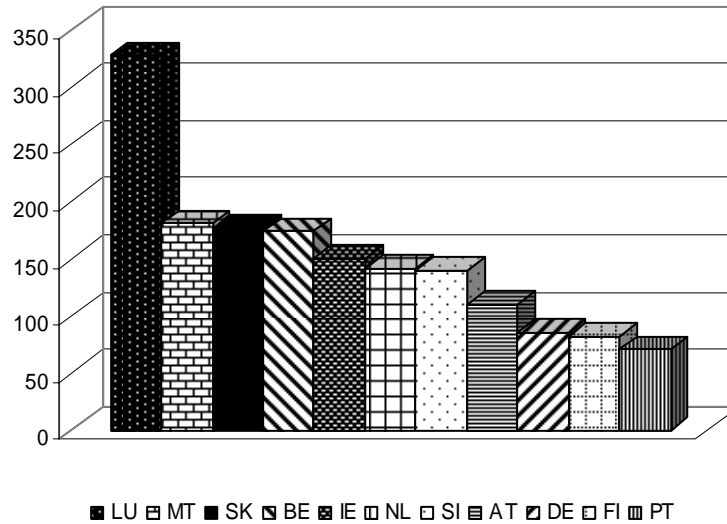
### *Openness of economy*

Slovakia is ranked among the most open economies in the EU, and after the entry to the Eurozone this could help to reach relatively higher economies in transaction cost as well as higher benefits due to reduction of monetary risk. The ratio between the totals of exports and imports of products and services and the GDP in current prices reaches higher values only in such small economies, like Luxembourg and Malta (graph 9). The unambiguous highest openness of Luxembourg is largely brought about by the high exports of services from the country. From among the present Eurozone countries a comparable level with Slovakia (176 %) in this indicator may be



found merely in Belgium, Ireland, the Netherlands, and in one of the latest member of the monetary union - in Slovenia.

Graph 9  
**Openness of the Slovak economy compared with selected Eurozone countries in 2007 (%)**



*Legend:* LU – Luxembourg, MT – Malta, SK – Slovakia, BE – Belgium, IE – Ireland, NL – the Netherlands, SI – Slovenia, AT – Austria, DE – Germany, FI – Finland, PT – Portugal.  
*Source:* The World Bank, 2008.

The high rate of openness of the Slovak economy originated mostly by the trade of goods. The volume of trade with services is for the present relatively low – its share in total openness makes only about one tenth. Due to the prevalent foreign investment directed into the motor-car and electrical engineering industries it can be expected that this ratio would not change substantially.

## Foreign trade

In 2007 the exports and imports of goods grew more slowly than in the previous year, the growth in exports was caused mainly in connection with introducing new export capacities in the motor-car and electro engineering industries, higher by 5 p. p. than the growth in imports, which gave rise to a large reduction of deficit in the balance of trade and to a decrease in its ratio towards the GDP only to 1.2 % (table 18). The mentioned year-to-year improvement was brought about also by the massive economic growth. Due to the positive development in items of the balance of trade simultaneously with the steep economic growth, the export performance of the Slovak economy mildly increased and the imports intensity decreased.

Table 18  
**Development of foreign trade of the Slovak Republic with goods  
 over 2003 – 2007**

	2003	2004	2005	2006	2007
Exports (billion SKK c. p.)	803.0	895.2	993.5	1 239.4	1 420.7
Annual change (% , c. p.)	23.2	11.4	11.5	24.6	15.2
Imports (billion SKK c. p.)	826.6	942.2	1 069.5	1 331.0	1 442.1
Annual change (% , c. p.)	10.5	13.8	13.7	24.3	10.2
Balance (billion SKK)	-23.6	-47.0	-76.0	-91,6 <sup>1</sup>	-21.4
Balance/GDP (%)	-1.9	-3.4	-5.1	-5.5	-1.2
Export performance (% GDP)	65.7	65.7	66.9	74.7	76.7
Import intensity (% GDP)	67.6	69.2	72.0	80.2	77.9

<sup>1</sup> This data was taken from the publication Foreign trade of Slovak Republic 12/2006 (March 2007), while the data in table 17 was obtained from the balance of payments published by the National Bank of Slovakia (November 2007).

Source: Foreign trade of Slovak Republic 2003 – 2007.SO SR, 2008; own calculations.

The territorial structure of foreign trade of SR in 2007 did not change as much compared to the previous year. The share of EU countries in the Slovak exports and imports increased only mildly, almost to 87 %, and 69 %

respectively (table 19). In connection with the approaching entry of Slovakia into the Eurozone it is expected in the foreign trade in view of relatively high volume of mutual trade with the members of monetary union additional improvement in synchronization of the economic cycle of the country with other states of this group, which could contribute to a moderate increase in suitability of the united monetary policy for the Slovak economy.

In 2007 the most intensive business was running traditionally with Germany and the Czech Republic, while their share in totals of Slovak exports and imports has been softly declining since two years. Slovakia announced the highest passive balance in foreign trade exchange with the Russian Federation, Korean Republic and China. The year-to-year price drop for crude petroleum decreased the trade deficit with Russia in 2007 compared with the previous year, the trade with China and South Korea brought deepening of deficit. Slovak Republic achieved the highest active trade balance with the United Kingdom, France and Austria.

Table 19  
Development of territorial structure of foreign trade of SR in 2005 – 2007

Country/ grouping	2005			2006			2007		
	Export (%)	Import (%)	Balance (billion SKK)	Export (%)	Import (%)	Balance (billion SKK)	Export (%)	Import (%)	Balance (billion SKK)
Total	100.0	100.0	-76.0	100.0	100.0	-91.6	100.0	100.	-21.4
EÚ	85.4	71.1	87.7	85.1	68.0	149.3	86.7	68.9	238.0
Russia	1.6	10.7	-99.4	1.6	11.3	-130.6	2.3	9.4	-103.5
USA	3.1	1.4	16.2	3.2	1.2	22.6	2.5	1.1	20.2
China	0.4	3.2	-30.6	0.5	4.0	-46.1	0.8	5.2	-63.8
South Korea	0.1	2.6	-27.2	0.1	3.9	-49.7	0.1	5.0	-70.6
Japan	0.3	1.9	-17.4	0.3	2.0	-23.6	0.2	1.6	-20.2

Source: Foreign trade of Slovak Republic 2005 – 2007. SO SR, 2008.

In the commodity structure of foreign trade compared to the previous two years we can observe growth of share in export of machinery and equipment

in total export (table 20), because of growth in export of personal motor-cars and their components and of TV receivers. A growth was recorded also in the share of imports of machinery and equipment caused by imports of parts, components and accessories for motor-cars as well as for electro engineering industries. The year-to-year lower price for petroleum which led to reduction of trade deficit with Russia as mentioned above, brought decline in share of imports of natural gas and petroleum, i.e. of crude materials in total imports.

Table 20  
Development of commodity structure of foreign trade of SR in 2005 – 2007  
(by commodity groups SITC Rev. 3, resp. 4)

Group SITC	2005		2006		2007	
	Export (%)	Import (%)	Export (%)	Import (%)	Export (%)	Import (%)
Total	100.00	100.00	100.00	100.00	100.00	100.00
SITC 0 Food	3.80	4.71	3.66	4.33	3.32	4.31
SITC 1 Beverages and tobacco	0.18	0.89	0.20	0.57	0.18	0.82
SITC 2 Crude materials	2.68	3.55	2.35	3.12	2.13	2.87
SITC 3 Mineral fuels	7.19	13.88	6.50	14.33	4.89	11.18
SITC 4 Oils and fats	0.16	0.19	0.13	0.21	0.09	0.15
SITC 5 Chemicals	5.85	9.56	5.50	8.89	4.87	8.73
SITC 6 Manufactured products	24.98	17.94	23.55	17.05	21.39	17.46
SITC 7 Machinery and equipment	44.60	37.76	48.66	38.39	53.72	43.84
SITC 8 Manufactured articles	10.41	10.90	9.35	12.83	9.21	10.47
SITC 9 Others	0.15	0.62	0.10	0.29	0.20	0.17

Source: Foreign trade of Slovak Republic 2005 – 2007. SO SR, 2008.

The key position of the motor-car industry in the Slovak economy is confirmed by the fact that its share in total export reached in 2007 almost 40 %. In 2007 Slovakia gained the first place in the manufacture of motor cars for personal use per thousand inhabitants with the quantity of 105.7, when it overran the Czech Republic. Behind this success stands the almost duplication

of output compared with 2006 to the number of more than 570 thousand motor cars per year. The growth of output in motor cars was supported mainly by the plants of PSA Peugeot Citroën and KIA Motors Slovakia, which became in 2007 the most significant Slovak exporters together with Volkswagen Slovakia. In this connection it is necessary to stress the importance of supporting the inflow of foreign direct investment also into other highly sophisticated branches with higher value added, in favour of building a competitive knowledge oriented economy in line with the Lisbon agenda.

### *Foreign capital*

After the last year decrease in surplus of capital and financial account caused by the outflow of short-term deposits of non-residents from the Slovak banks due to softening of the Slovak crown, the result of this item of the balance of payments in 2007 returned broadly to the level of 2005, i. e. to more than 180 billion SKK (table 21). The main reason of this favourable change lay again in the movements of short-term investment. In contrast to the previous year this item recorded in 2007 a vast inflow of capital of non-residents into the banking sector in the form of deposits in the Slovak banks evoked namely by revaluating the Slovak crown in March and April.

The portfolio investment after the high surplus in 2006 noted net outflow of means. This change was caused on the side of assets by higher interest of Slovak residents in long-term foreign bonds and on the other side of liabilities by lower inflow due to weaker interest of investors in long-term debt securities of the government.

The balance of foreign direct investment especially due to its low inflow in comparison with the previous year decreased by more than 40 billion SKK. Decrease in investment of SR abroad did not suffice to cover decrease in the FDI inflow directed to Slovakia. Contrary to 2006, when the Italian company Enel contributed to high value of this item by their entry to the Slovak power plants, no privatization took place in the previous year.

Table 21  
**Development of key items of the SR balance of payments  
 capital and financial account in 2004 – 2007 (billion SKK)**

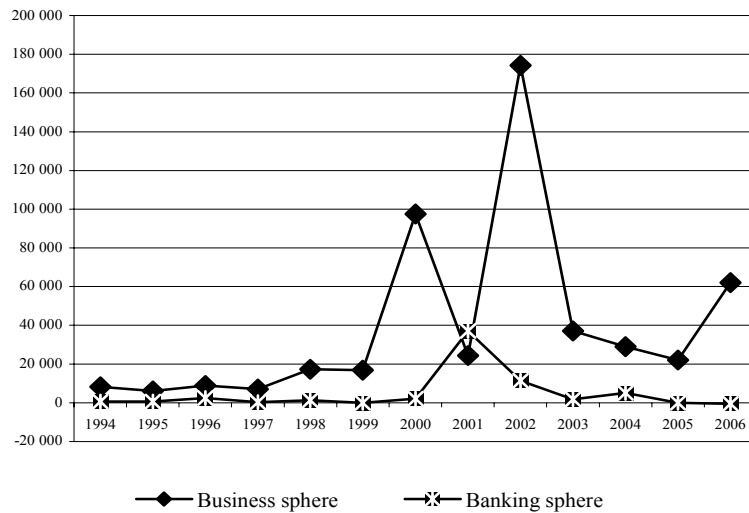
	2004	2005	2006	2007
<i>Direct investment</i>	98.4	70.7	112.9	71.2
SR abroad	0.7	-4.6	-10.9	-9.5
Of which: Direct investment abroad	-2.7	-3.5	-9.5	-6.0
Reinvested earnings	-2.5	-1.0	-1.2	-1.2
Other investment	5.9	-1.1	-0.2	-2.3
In SR	97.8	75.3	123.8	80.7
of which: Direct investment in SR	37.5	22.2	56.0	27.4
Reinvested earnings	52.0	27.1	25.0	24.5
Other investment	8.2	26.1	42.8	28.8
<i>Portfolio investment</i>	28.9	-30.2	48.2	-17.6
SR abroad	-26.0	-20.7	-5.7	-26.3
In SR	54.9	-9.5	53.9	8.6
<i>Other long-term investment</i>	-10.1	-15.0	18.6	18.9
Assets	-2.5	-9.8	5.3	-6.4
Liabilities	-7.5	-5.2	13.3	25.4
<i>Other short-term investment</i>	37.1	163.0	-141.3	100.4
Assets	-2.0	-4.7	-38.4	-29.3
Liabilities	39.0	167.7	-102.9	129.7
<i>Capital and financial account</i>	159.3	186.9	32.4	185.7

Source: NBS, 2008.

Graph 10 illustrates the FDI inflow into Slovakia since 1994 structured by the sphere of investment. In connection with the intensive privatization activities of the government the FDI reached its maximum into the banking sector in 2001. Privatization was also behind the massive inflow of investment into the enterprise sphere in 2002 (Slovenský plynárenský priemysel, Západoslovenská energetika, Stredoslovenská energetika etc.). A sharp decrease of FDI in the following three years was caused by reduction in privatization receipts until exclusively non-privatization inflow of equity capital in 2005, while in the following year privatization of the Slovak power plants again increased the FDI directed into the enterprise sector.

Graph 10

**Foreign direct investment inflow to SR in 1994 – 2006 (equity capital and reinvested earnings) by sphere of investment (mil. SKK, net change in the given year)**



Source: Monetary survey 2000 – 2008, NBS (data for 2007 not available in time of publishing).

As far as the regional structure of FDI is concerned, increased interest of foreign investors is directed in the regions of Middle and Eastern Slovakia. When looking at the created job opportunities, the regional differences still survive, while Western Slovakia is in this respect for a long time most successful. Investment is more and more directed into branches with higher value added, however, for the time being only as already mentioned in the Western Slovakia.

#### 4. LABOUR MARKET DEVELOPMENT

The number of economically active people decreased compared to previous year by 5 600. From the group of economically non-active people more than half of them comprised the group of pensioners (55.8 %), students and apprentices (28 p. p.) and persons keeping households (6,7 p. p.).

Increase was observed in the absolute number of discouraged people<sup>18</sup> and of persons unable to work. In recent years the rate of economic activity moved approximately at 60 %. However, in 2007 its value decreased to 58.8 %, due partially to the fact that certain part of labour force was transferred in retirement and also because of longer preparation of students for their future jobs. Difference in the rate of economic activity which survives among men (67.7 %) and women (50.5 %) originates mainly in that women keep their households or are on maternal leave. Historically Slovakia may be considered as migrating country, but in the 90's a change occurred when a positive migration balance appeared. In 2007 its value achieved a historical maximum (moved in 8 624, moved away 1 831 persons).

The share of primary sector in total employment declined and at the same time the share of employment in business services increased. Expansion in construction evoked a moderate increase in the secondary sector. Trends in employment development by sectors are illustrated in table 22.

Table 22  
Sectoral and branch structure of employment in %

	2000	2001	2002	2003	2004	2005	2006	2007
Primary sector	6.7	6.1	6.2	5.8	5.1	4.7	4.4	4.2
Secondary sector	37.3	37.6	38.4	38.3	39.0	38.8	38.8	39.4
Industry	29.3	29.6	30.1	29.3	29.6	29.3	29.0	29.3
Construction	8.0	8.0	8.3	9.0	9.5	9.5	9.8	10.1
Tertiary sector	56.1	56.2	55.4	55.8	55.7	56.3	56.8	56.4
Business services <sup>19</sup>	29.5	29.8	30.0	30.1	30.0	30.9	31.8	32.3
Public services <sup>20</sup>	26.6	26.5	25.4	25.7	25.7	25.5	25.0	24.1
Other	0.0	0.0	0.0	0.1	0.21	0.2	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Statistical office SR; own calculations.

<sup>18</sup> Jobless persons who would like to work, but they do not seek actively a job, because they do not believe to find adequate job.

<sup>19</sup> Business services are services for the wholesale and retail trade, repair of motor vehicles, motorcycles and consumer goods, hotels and restaurants, transport, storage, posts and telecommunications, financial mediation, real estate, renting and business activities.

<sup>20</sup> Among public services we reckon public administration and defence; compulsory social security, education, health care and social care; other community, social and personal services and private households activities with domestics.



Though the number of employed in 2007 achieved its historical maximum (2 357.3 thousand), the employment rate achieved its maximum value in 1996 in consequence of growing number of people in productive age. In all likelihood Slovakia will not meet the target in employment growth set by the Lisbon strategy. We are lagging largely behind the European average not only in the employment rate of the productive part of population (60.7 %) in which our goal for 2010 is 70 %, but also in employment of women (53.1 %) and people aged over 55.

Education is ranked into primary sector, and is the condition for an applicant to prove competent on labour market, it increases labour productivity and last but not least it contributes also to total performance of the country. While in 1994 the share of population with finished basic education represented 11.7 %, in 2007 it represented merely 4.5 %. On the contrary, the share of population with completed secondary professional and university education increased. In 2007 15.6 % of population with university education were employed, whereas in 2000 it was only 11.6 %. A fundamental differentiation in education among individual regions is taking place as a result of availability of education and learning facilities and as a result of structure of professional and working orientation in the given region. The share of Bratislava region in total university graduates represents as much as 31 %, while the share of Eastern Slovakia (Prešov and Košice regions) represents only 17 %.

Even the educational level of women is growing which confirms the growing number of women who completed their education in higher vocational and university education of I. grade. In contrast, men are more represented in vocational and specialized secondary education (without and with matura) and in annually growing difference in university education of III. grade, where the share of men makes 70.2 % and women only 29.8 %. The difference between the education of men and women in basic education, in complete secondary and university education of II. grade decreases.

A positive development in number of unemployed continued even in 2007. According to labour force sample survey the unemployment rate compared to

previous year decreased to 11 %. In comparison with the EU countries Slovak Republic is still reckoned among the countries with highest unemployment rate and is outside the European standard (EU is on the level of 7.1 %). According to the registered number of job applicants in the labour offices the unemployment rate was 8.4 %.

**Table 23**  
**Development of unemployment rate and effect of its main factors in %**  
**over 2000 – 2007**

	2000	2001	2002	2003	2004	2005	2006	2007
Unemployment rate in %	18.60	19.20	18.50	17.40	18.10	16.20	13.30	11.00
Annual change in the rate of unemployment in points	2.40	0.60	-0.70	-1.10	0.70	-1.90	-2.90	-2.30
of which								
Impact of change of econ. active population	1.29	1.19	-0.62	0.21	0.92	-0.42	0.35	-0.21
Impact of change of number of employed	1.11	-0.59	-0.08	-1.31	-0.22	-1.48	-3.25	-2.09

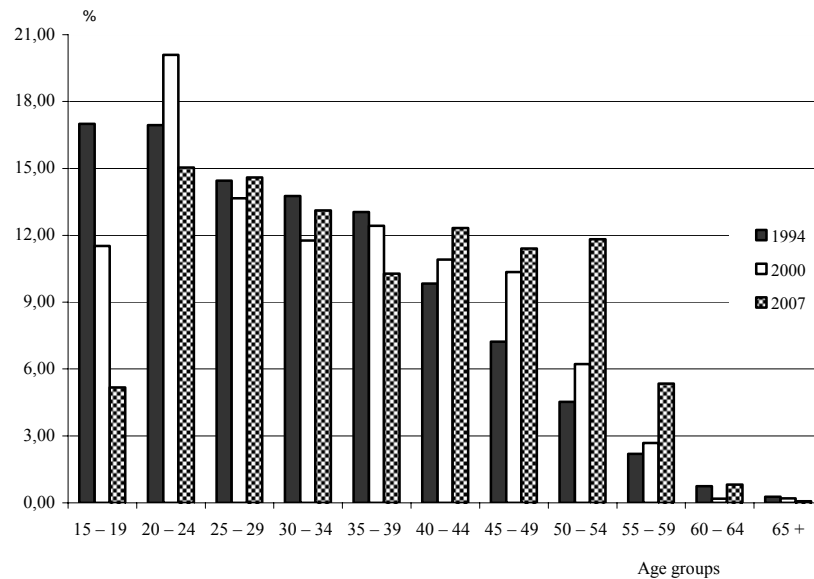
*Source:* Statistical Office SR; own calculations.

On basis of the previous table 23 we can state that in 2007 decrease in unemployment rate was positively impacted by the growth in employed (by 55 900) or generating new job opportunities and by demographic development connected with transfer of 5 600 people in the group of economically inactive population. Thus in decrease of unemployment rate participated in as much as 90 % the growth of number of employed and only 10 % the decline in number of economically active population.

Also connection between the size of unemployment and educational level was apparent. The decisive factor which was decreasing the risk of unemployment was the level of attained qualification. The highest number of unemployed from the economically active population was formed by men and women with basic (29.2 %) and vocational secondary education without maturita (36.5 %). The share of men with specialized secondary education in total unemployment represented only 0.5 %. Therefore bewildering is the fact about the unemployment among the university educated people

(4.9 %); their share in total unemployment in 2007 represented the highest growth.

**Graph 11**  
**Share of unemployed in particular age groups in total unemployment in selected years**

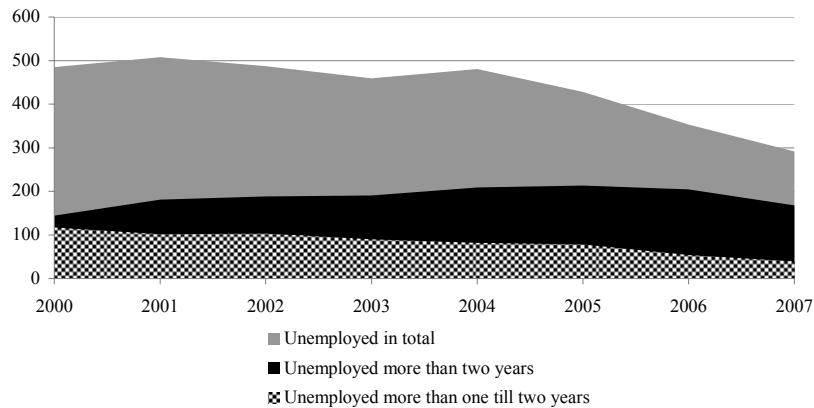


In graph 11 development of unemployment is depicted which is connected also with demographic development. While in 1994 the age group of 15 – 19 years old formed the highest share of total number of unemployed, in 2007 in contrary, its value was the lowest, which was caused by constantly growing length of studies and preparations for the future job and at the same time by decline in number of population in this age group. It is also remarkable that in the recent years the age group of 50 – 54 years has had serious difficulties in finding job on the labour market.

An unfavourable lasting sign of the labour market since the start of the independent Slovak Republic is the ever growing share of long-term unemployed (i. e. unemployed more than one year). More serious and hardly

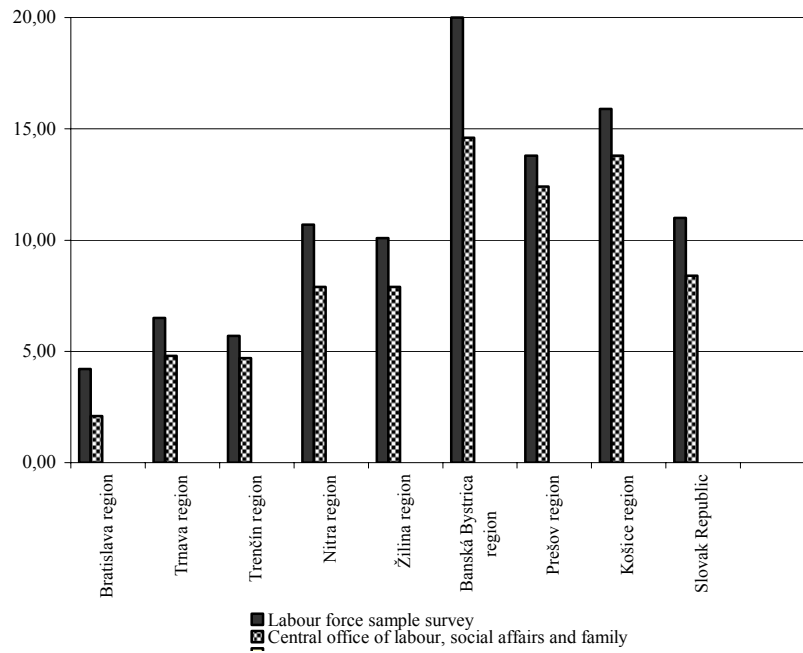
removable is the problem of very long-term unemployment (i. e. unemployment lasting more than 2 years). However, the year 2007 is the first one when the share of long-term unemployed (70.88 %) and very long unemployed (57.35 %) in total unemployment began to decline (see graph 12).

Graph 12  
**Development of number of unemployed, long-term unemployed  
 and very long-term unemployed over 2000 – 2007**



On basis of evaluating the goals of Lisbon strategy the European Commission stated in December 2007 that the Slovak Republic achieved progress in execution of the Slovak national reform program for 2005 – 2007. However, the field where the Slovak economy still lags behind, is just the highest rate of unemployment and the rate of long-term unemployment, regional disparities on labour market and insufficient labour productivity compared with EU countries. Development of the share of long-term and very long-term unemployment in total unemployment and different rates of unemployment by regions are illustrated in graphs 12 and 13.

Graph 13  
**Unemployment rate by Labour force sample survey and Central office of labour, social affairs and family in different regions of the Slovak Republic in 2007**



Compared to previous year the number of job vacancies grew which were registered by the offices of labour; in consequence of this the number of registered unemployed who fell on one job vacancy declined. As of December 31, 2007 the rate of vacancies achieved the value of 1.1 %.<sup>21</sup>

Acceleration of the growth rate of real wage by more than one percentage point (the growth rate of real wage in 2006 was 3.3 % and in 2007 4.4 %) compared to the previous year resulted from both the growing rate of growth in nominal wage (7.2 %), and from strong decline in growth rate of consumer prices to the level of 2.8 %. The average monthly wage of an employee

<sup>21</sup> The rate of job vacancies is calculated as a share of number of job vacancies in the sum of occupied jobs and the sum of job vacancies.

in national economy of SR reached the value of 20 146 SKK. There have survived even further differences in the nominal wage within particular regions of the Slovak Republic. The Bratislava region, where the average wages are the highest every year, was followed by regions with large foreign investors, i. e. Trnava and Košice regions.

As of October 1, 2007, the minimum monthly wage of an employee was fixed at 8 100 SKK, or for every hour worked at 46.60 SKK. In the following table we can see that in the main group of elementary occupations, subgroups of individual occupations are missing; in consequence of this we can see the inadequacy of an aerial application of minimum wage, which hinders the employers especially in the Košice, Banská Bystrica and Žilina regions to create low-paid jobs. It is irony, that right among the elementary occupations there is a group of long-term unemployed often with only basic education, which represents the largest core of unemployed in the Slovak Republic.

In 2007 the standard incomes of households increased in nominal value by 10.4 %. Out of total standard earnings, bonuses of employees in cash or in kind represented almost half, the rest of 29.3 % were the gross mixed incomes, 2.7 % income in the form of dividends, split incomes of corporations, interests etc.; 15.6 % social benefits paid to households in cash and the rest amount represented standard money income transfers.

Table 24

**Average monthly wage of employees by Classification of Occupation - KZAM in the last three months of 2007**

Occupation by KZAM / Region	Bratislava	Trnava	Trenčín	Nitra	Banská Bystrica	Žilina	Prešov	Košice
Helpers, cleaners in offices, hotels, hospitals (9 132)	11 757	9 573	9 214	9 502	8 772	9 673	9 506	8 909
Sanitarists (9 134)	14 540	-	10 494	11 208	10 037	-	10 482	10 987
Housekeepers, care takers (9 141)	11 359	10 462	9 270	8 408	8 564	8 212	10 953	9 424
School care takers incl. service men (9 142)	10 906	10 689	10 372	9 825	9 250	9 308	9 932	8 431

*Explanatory note:* KZAM – Klasifikácia zamestnaní, Classification of Occupations.

*Source:* TREXIMA.

Behind the positive labour market development in 2007 the continuing economic growth can be found, which was accompanied by combination of labour productivity growth (7.75 %) as well as by employment growth (2.43 %). Due to higher labour productivity growth as the growth of real wages (4.3 %) there occurred decline in unit labour costs in real as well as in nominal expression. The negative sign on labour market is, and even further will be, the disharmony between supply and demand in certain branches, need in skilled labour force and the share of very long-term unemployed in the total number of unemployed. Besides the unfavourable demographic development of Slovakia, which is expected to show itself in the nearest years, it is possible to consider even the positive migration balance as a supply source of labour force.

## **5. MONETARY POLICY AND PRICE LEVEL DEVELOPMENT**

The monetary policy was subject to realization of the Maastricht convergence criteria. Consequently it concentrated on support of desinflation and on corrections of development in the system of exchange rate mechanism ERM II. The monetary policy made use of adjustments in the interest rates, several interventions on foreign exchange markets as well as adjustment in central parity to the Euro.

Terms for operation of the monetary policy were different from those in 2006. The monetary policy was confronted with the lower inflation rate and it worked in the conditions of less turbulent development of exchange rate. Due to these reasons the monetary policy did not face as many challenges for operational actions (i. e. especially in the second half year).

Reduction of inflation rate is though the target of economic policy any time, but in 2007 this target acquired quite a special significance because of the need of meeting the convergence criteria for adoption of euro. Reduction of inflation rate is not merely the function of monetary policy, but this is most

frequently linked to monetary policy (especially in the absence of more expressive administrative interventions in prices).

The year 2007 was a year of desinflation, i. e. withdrawal of inflation (graph 14). Development of inflation rate, however, was not straightforward. Until August it was the phase of inflation rate reduction, while the 12-months value of the so called harmonized inflation rate got in August 2007 for the first time within the limit of convergence criterion. In September it came to unfavourable break in the price level: until then retreating inflation put on intensity and force.

Acceleration of price level increase in the second half year (mainly in the months of fall) was partly expected and had more reasons:

- The first one lay in a low statistical base for comparison from the same months of the previous year (at that time the prices for fuels were decreasing).
- The second one was in growth in food prices announced in advance. But the extent of this effect could hardly be estimated. This was not a pure domestic inflation factor, rather an event present in broader region, almost of a global dimension.
- The prices of fuels recorded after 13 months again a year-on-year increase.

In 2007 there appeared concern about fulfilment of the Maastricht criterion in respect of inflation. The inflation criterion is a moving objective, it is the function of inflation rate in other EU countries. Though the inflation rate in 2007 in Slovakia markedly declined, through the months in the fall development in prices dramatized. But the harmonized inflation rate, which is used for evaluation of fulfilment of the inflation criterion, did not record such significant deviations as the index of consumer prices and till the end of 2007 fulfilment of the inflation criterion was not threatened seriously.

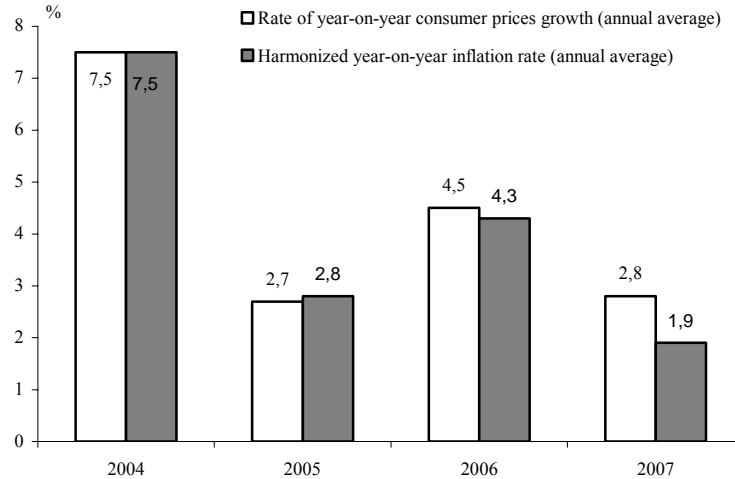
In December 2007 the year-on-year inflation rate got on the value of 3.4 %, its average round the year reached 2.8 %. Consumer prices measured by



the harmonized index (and this is vital in case of adoption the euro) increased by 1.9 % on average round the year.

Towards the end of year the NBS did not react on surge of inflation rate, because strengthening of the inflation was not caused by inland demand factors, but rather by global and cost factors. Intervention by means of monetary policy would not be effective.

Graph 14  
Development of consumer prices level



Dynamics in prices of producers was heterogenous. Construction works raised the price by 4.0 % on average in the whole year 2007, agricultural products increased by 5.4 %. Prices of industrial producers decreased by 1.2 %, which was outside the development of other price indices. The fall of prices of industrial producers was caused by that part of production, which was directed to export and this part lowered the price, due to exchange rate moves (calculation of realization price in foreign currency to strengthening domestic currency resulted in fall of price). This fall of price does not concern

domestic market: prices of the industrial producers for the output directed to domestic market increased by 2.0 %.

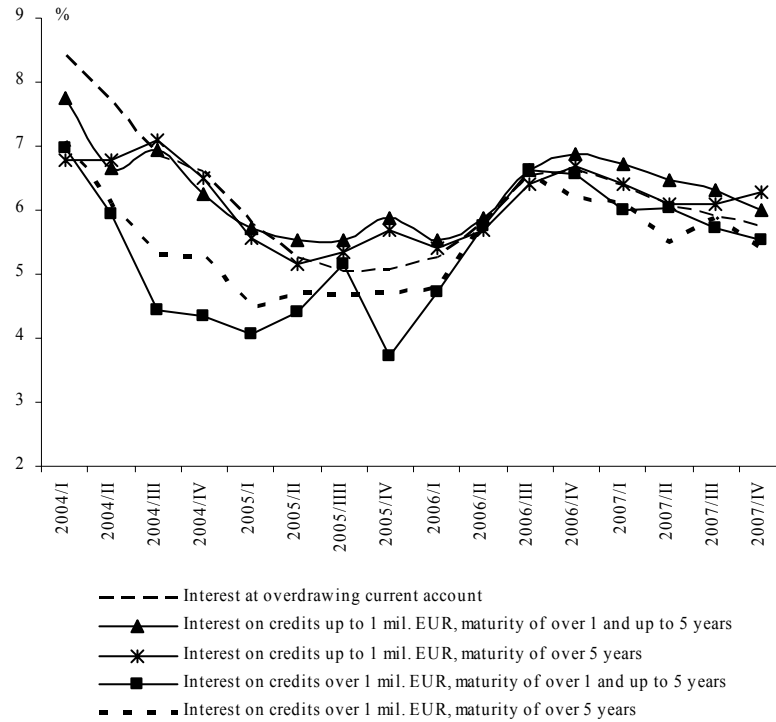
While in 2006 we have seen a distinct devaluation of exchange rate (July 2006) and towards the end of year this was replaced by distinct valorization, then in 2007 it was more a continuing evaluation of domestic currency towards euro and US dollar. This evaluation acted very likely as a moderate antiinflation factor.

As early as by the end of 2006 the adjustment of central parity was expected, by means of which SR has worked within the system of exchange rates ERM II since 2005. Strengthening of domestic currency and repeated need for NBS interventions gave rise to justified expectations that the exchange rate will not sustain within the specified band. Effective as from March 19, 2007 the central parity of crown to euro was revalued. Its value was set at the level of 1 € = 35,4424 SKK. This denoted a change in central parity by 8.5 %. The following continuing revaluations of exchange rate were characterized by the NBS as a revaluation which did not correspond to economic fundamentals, and so in March and April 2007 the NBS realized three interventions. During the months that followed the NBS did not realize any interventions, and the development in exchange rates was more calm and foreseeable.

The favourable inflation outlook and generally favourable atmosphere for the currency policy motivated the NBS to a repeated reduction of the key interest rates in the first half of 2007 (afterwards no adjustments were realized).

The average interest rates on new bank credits have stabilized gradually since the second half of 2006 (they survived lesser deviations than before – see graph 15). In case of credits to non-financial organizations a noticeable mutual approximation of interest rates and stabilization of their volume appears. It improves chances for calculations of entrepreneurs and forecasts for business environment.

Graph 15  
Average interest rates on new bank credits for non-financial organizations



The average interest rate on credits drawn-down in 2007 decreased compared to previous year but not to the level of 2005 (table 25). Then, while the year 2006 is characterized as a year of a more expressive „revaluation of money“, the year 2007 brought about soft „lowering the price“ of currency. The soft lowering can be understood as a factor implying weak cost inflation, but potentially strengthening the demand inflation.

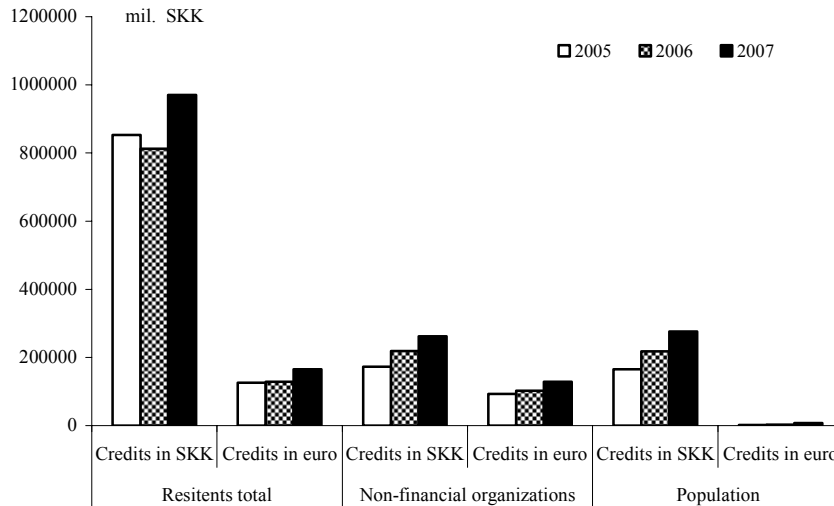
In 2007 it happened for the first time that the state of crown credits for the population was higher than their state for non-financial organizations (graph 16). It is true that this does not hold for credits granted in euro or in other foreign currency. This result tells on growth of weight of population in the credit portfolio of banks, also on the continuing tendency in population

indebtedness (however, indebtedness of households in comparison with economically advanced countries is all along not high).

Table 25  
Average interest rates from drawn credits in % (by selected sectors)

	2005	2006	2007
Short-term credits			
Credits total	6.12	8.68	7.39
Credits to non-financial corporations	6.61	8.39	7.27
Credits to general government	4.71	6.91	2.63
Credits to households – tradesmen	1.8	11.85	11.15
Credits to population	15.29	17.15	16.90
Long-term credits over 5 years			
Credits total	4.91	6.09	5.88
Credits to non-financial corporations	4.43	5.7	5.47
Credits to general government	4.66	5.45	5.16
Credits to households – tradesmen	5.11	6.84	6.32
Credits to population	5.63	7.25	6.74

Graph 16  
State of bank credits as of December 31 in relevant years in selected sectors



Several years performance of NBS in the policy of inflation targetting, but also performance of the overall economic policy assisted to that the inflation rate, development of exchange rate, also the amount of interest rates in 2007 came nearer to accomplishment of the Maastricht convergence criteria (the amount of interest rates was fulfilling this criterion long ago).

## **6. PUBLIC FINANCE**

The positive trend in managing the general government budget continued also in 2007. The share of total deficit of general government in gross domestic product is falling and deficit is diminishing also in absolute terms. As significant factors of this positive development can be named the acceleration of economic growth, increase in incomes joined thereto or fall of expenditure in some fields. Continuing fiscal consolidation, the primary goal of which was a long-term sustaining the public finances, was closely connected also with preparations for the entry to the Eurozone.

The framework of public finance management incorporated in the Convergence program of SR (the aim is to achieve a balanced or slightly deficit economy in public finance till 2010) and in medium termed outlook for public finance development proves well. According to preliminary data by Ministry of Finance SR in 2007 the deficit in general government budget achieved 2.16 % of GDP, in absolute terms 40 billion SKK including the impact of second pension pillar. Of the total deficit of 40 billion SKK the impact of second pension pillar reached 23.4 billion SKK which makes 1.26 % of GDP. The most important items which influenced the economy of public finance, are contained in table 26. Without calculating the costs of financing the pension reform the deficit of public finance would achieve the value of 0.9 % of GDP. Thus the management of general government was in harmony with fulfilment of the Maastricht budget criteria and along with the fulfilment of other convergence criteria it opened way to the positive recommendation of European Commission to adopt in Slovakia the common European currency in 2009.

The originally planned deficit of general government was 52.8 billion SKK, in reality it was lower by 12.8 billion SKK.<sup>22</sup>

**Table 26**  
**Impact of selected items on economy of public finance in 2007**

	Billion SKK
National property fund SR	-29.6
State financial assets	13.5
Economy of the off-budget accounts of state budget organizations	1.6
Chronological differentiation of paid interests	1.5
Release of receivables to abroad	-2.6
Chronological differentiation of taxes	-1.9
Chronological differentiation of dividends	-1.4
Narrowing receivables of state budget organizations	-1.4
Economy of the Social insurance agency	1.8
Economy of public higher education institutions	1.4
Municipality and municipal budget organizations	-1.1
Higher territory units and their budget organizations	-1.5

*Source: Ministry of Finance of SR.*

### ***State budget***

At a closer look at the revenues side of the budget we can state a long-term trend of higher than planned fulfilment of budget in all items except for foreign transfers from the EU budget. From the aspect of tax revenues and revenues from capital assets there was reached higher fulfilment of income taxes by individuals by 17 % (481 mil. SKK) and of income tax collected by check-off payments by 35 % (1,481 billion SKK). A marked raise in tax collection compared to plan was recorded also in taxes for goods and services.

<sup>22</sup> A more detailed and definitive look at the structure, resp. on economy of individual subjects of general government will be at the disposal after publishing the Final state budgetary account by the Ministry of Finance of SR.

The planned increase in excise duty on tobacco products since January 1, 2008, brought about the effect of filling the stocks of businesses with tobacco products in advance, which showed positively on the revenues side of budget in 2007 up to the amount of 0.5 billion SKK (IFP 2007). The total collection of excise duties compared to plan was higher by 8.4 % (4,643 billion SKK).

Table 27  
Development of the state budget revenues and expenditure 2002 – 2007

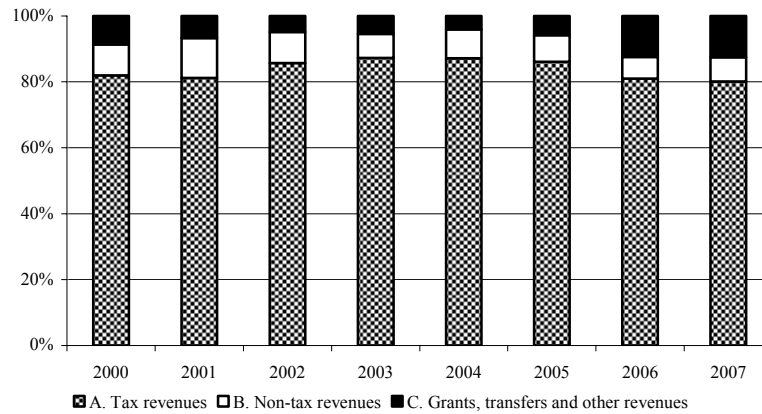
	Actual implementation (in billion SKK)						Budget fulfilment 2007	Index 2007/2006 (in %)
	2002	2003	2004	2005	2006	2007		
<b>Total revenues</b>	220.4	233.0	242.4	258.6	291.9	322.2	103.8	10.4
of which:								
A. Tax revenues	188.8	200.0	209.4	222.5	236.2	258.2	104.1	9.3
of which:								
Tax on income and capital assets	69.3	70.1	60.5	48.7	54.7	61.4	108.6	12.2
Tax on goods and services	115.6	123.2	144.2	172.3	180.5	195.7	102.6	8.4
Tax on international trade and transactions	4.0	4.0	1.8	0.5	0.6	1.0	146.6	66.7
B. Non-tax revenues	20.8	17.0	21.1	21.1	19.4	23.5	122.3	21.1
C. Grants, transfers and other revenues	10.7	12.4	9.8	14.9	36.2	40.4	93.6	11.6
of which:								
EU budget funds	.	.	4.5	13.9	20.4	25.6	87.8	25.5
<b>Total expenditure</b>	272.0	289.0	312.7	292.5	323.6	345.8		6.9
of which:								
A. Current expenditure	237.1	250.0	.	261.1	282.8	297.0	95.6	5.0
B. Capital expenditure	32.4	31.1	.	31.4	40.8	48.8	127.7	19.6
C. Property share and credits	2.4	7.8	.	.	.	.	.	.
Surplus (+), Deficit (-)	-51.6	-55.9	-70.2	-33.8	-31.7	-23.5	.	.
Share in GDP (in %)	5.0	4,7	5.3	2,3	1.9	1.3	.	.

Source: Ministry of Finance of SR.

With respect to non-tax revenues, higher amounts were recorded in item of interests on inland and foreign credits, loans and deposits by 20.6 % (1,082 billion SKK). A long-term decrease is seen in fulfilment of the revenues in item foreign transfers from the EU budget. In 2007 this reached 87.8 % in total amount of 25,543 billion SKK. An increase in this item by 25 % compared to 2006 indicates improving trend in drawing the EU structural aid.

This is confirmed by a gradual though not very significant growth in share of item grants, transfers and other income in total revenues of the state budget. The start of a new programming period in drawing the structural aid over 2007 – 2013 with a considerably higher expected volume of available sources, would increase the weight of this item even in the following years depending on the success of its drawing.

Graph 17  
Share of particular revenues groups in total revenues  
of the state budget through 2000 – 2007



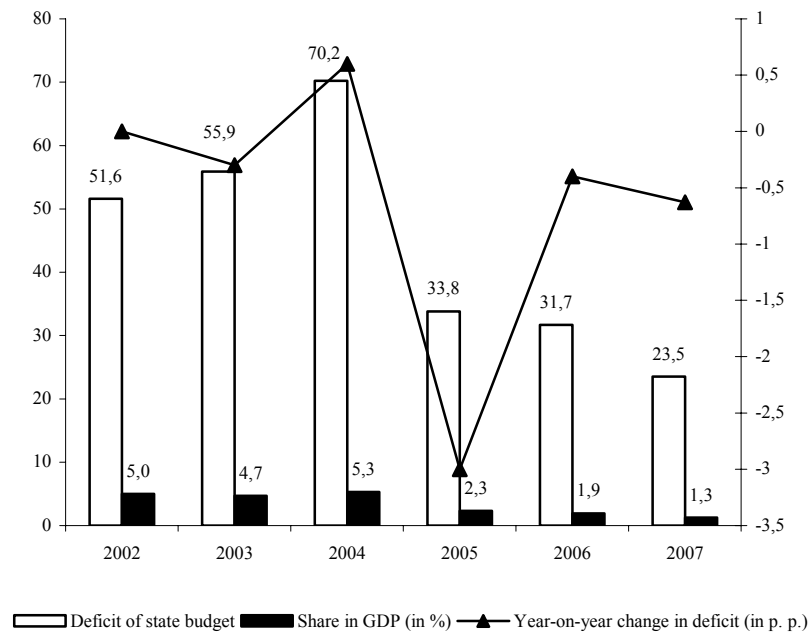
Source: Own calculations by Ministry of Finance of SR.



### *The state and public debt*

A positive trend in development of the state debt (in relation to GDP) can be assigned to the continuing consolidation in public finance and to strengthening the exchange rate, but above all to the record economic growth of the Slovak economy. At maintaining the present tendencies in management and in development of public finance along in combination with favourable economic growth through the following years, the deficit of public finance can be further preserved within the limits set by Maastricht budget criteria.

Graph 18  
Development of state budget deficit through 2002 – 2007

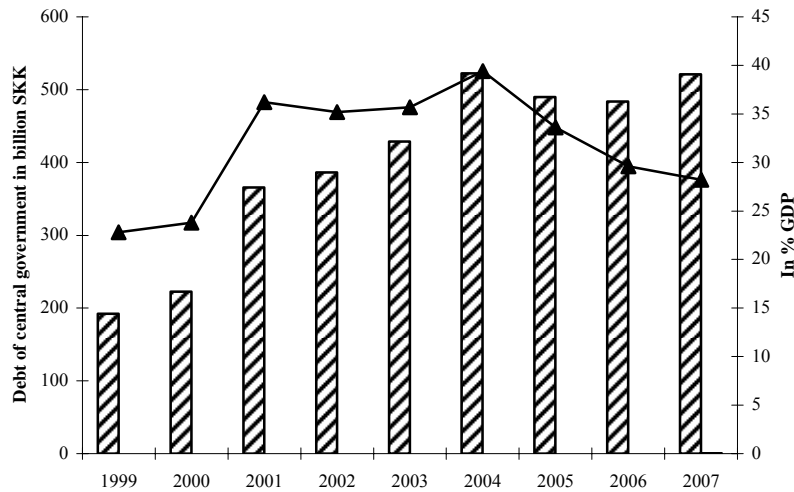


Source: Own calculations by Ministry of Finance if SR and SO SR.

The updated Proposal of starting points of general government budget for 2007 – 2010 reckons with achievement almost balanced economy with deficit on the level of 0.8 % of GDP in 2010.

The volume of public debt of the Slovak Republic reached to the end of 2007 the value of 543.8 billion SKK, which in relation to the gross domestic product represents 29.4 %. The main share in the public debt amounting to 522.2 billion SKK represented just the debt of central government. The year-on-year decline in public debt as a share in GDP has been caused above all by the higher speed of GDP growth than by the speed of public debt growth. While the GDP grew in current prices by the speed of 11.4 %, the speed of public debt growth reached the value of 7.7 %. From the level of 30.4 % from the last year it came to decline in public debt by 1.0 p. p.

Graph 19  
Development of central government debt through 1999 – 2007



Source: Ministry of Finance of SR and SO SR; own calculations.

## 7. SHORT-TERM OUTLOOK OF ECONOMIC DEVELOPMENT

The relative favourable macro economic development within the years 2006 and 2007 was evoked predominantly by long-term factors: by extensive investment and by improved entrepreneurial and investment environment in the previous years. Slovakia significantly advanced in catching up performance of most advanced countries. The economy of Slovakia achieved performance at the level of 62 % of average performance of the OECD countries (equally of the eurozone countries). Such a striking progress on the performance scale (from 57 % to 62 % of average performance of the OECD countries) was never observed in the history of the Slovak Republic. At the same time the SR considerably approached the accomplishment of the criteria for adoption of euro (i. e. it advanced also in the so called nominal convergence).

In 2008 it is foreseeable that the impact of several economic-political measures which were prepared in 2007 will manifest themselves. And what's more, it will be the year of final preparations for adoption of euro.

### *Development of external environment*

Perspectives for growth in economically advanced countries for 2008 are threatened owing to vibrations on financial markets. Development of real economy of Slovakia is not isolated from them. Conditions for granting credits were tightened, risk surcharges extended. Slump in property value (stemming in the so called hypothecary crisis) drew down the household sources which means limits in growth of private consumption.

Impact on demand dynamics will obviously be serious, but hardly measurable.<sup>23</sup> Besides that, the raise in price of crude oil and foods divides sources in favour of crude oil producers and farming food commodities, and at the same

---

<sup>23</sup> For more details: OECD (2008): What is the Economic Outlook for OECD Countries? An Interim Assessment., Paris: OECD.

time equally restricts household resources and reduces the speed of private consumption growth.

According to the prognosis by Kiel Institute for the World Economy (2008)<sup>24</sup> the US economy stands very likely at the point of recession, and in the Western Europe is felt as well impairment in growth (table 28). For 2008 evidently it is envisaged further reduction in speed of economic growth. The inflation rate in a number of advanced states would extend its usual rate

However, the direct lines which transfer the mentioned negative impacts to the Slovak economy are weak. These effects are partly filtered and mediated.

The impact of slow down in demand refers mainly to the US economy, partly is being transferred to the Western Europe and only in this mediated form it impacts the Slovak exporters. The impact of slump down in demand is softened by the fact that in comparison with the 90's the originally strong prosperity sensitiveness of the Slovak export output reduced. This reduction in prosperity sensitiveness is connected with the change in commodity structure of export. The weight fell down in exported semifinished articles and exported goods which were scheduled for intermediate consumption (in this commodity sensitiveness on prosperity deviations is considerable) and the Slovak export is more dependent on the policy of supranational corporations.

Table 28  
Economic growth and inflation rate in external environment

	Real GDP growth in %		Inflation rate in %	
	2007	Prognosis for 2008	2007	Prognosis for 2008
EÚ 27	2,9	1,9	2,2	3,0
USA	2,2	1,5	2,9	3,5
Advanced industrial states in total*	2,5	1,7	2,2	2,8

\*EÚ 27 plus Norway, Switzerland, USA, Canada, Japan .

Source: Kiel Institute for the World Economy (2008): Folgen der US-Immobilienkrise belasten Konjunktur.

<sup>24</sup> Kiel Institute for the World Economy (2008): Folgen der US-Immobilienkrise belasten Konjunktur.

The impact of increased inflation rate (table 28) is softened also by temporary running strengthening of Slovak currency.

As positive impact of external environment is considered the adjustment of rating evaluation. The adjustment of rating by the agency Standard and Poor's in March 2008 may work as a positive incentive for investors (a similar, maybe even stronger incentive will appear after the final decision on euro adoption is made).

The impact of external environment in 2008 will not be optimal, it will not support the growth of Slovak economy. But the negative effects will rather be only mediated, weak and as per our estimates they would not seriously threaten the macro economic development in the SR.

### *Assessment of development in economy performance*

The Slovak economy attained in 2007 not only a strong, but also a healthy growth accompanied by acceptable rate of stability (declining deficit of current account of the balance of payments, reduction of unemployment rate). Also in future there exist presuppositions for a favourable development of parameters of economy performance. They are based on a great deal of dynamics of investment in previous period, on the arrival of several big investors, on consolidation of public finance and on the effect of economic integration (smaller and economically less advanced countries have the tendency to catch up those larger and stronger economies).

Rather high comparison base from 2007 may involve lower dynamics of economy growth. The speed of real GDP growth according to our estimates will decline to the interval of 6.6 % - 7.6 % (table 29). Lowering of dynamics of real GDP growth cannot be understood as unfavourable development or bad success. It is rather an expected consequence of extra ordinary values attained in the previous period. Even the estimated lower speed of GDP growth in 2008 is still very attractive.

Table 29  
**Prognosis of growth in components of GDP use**

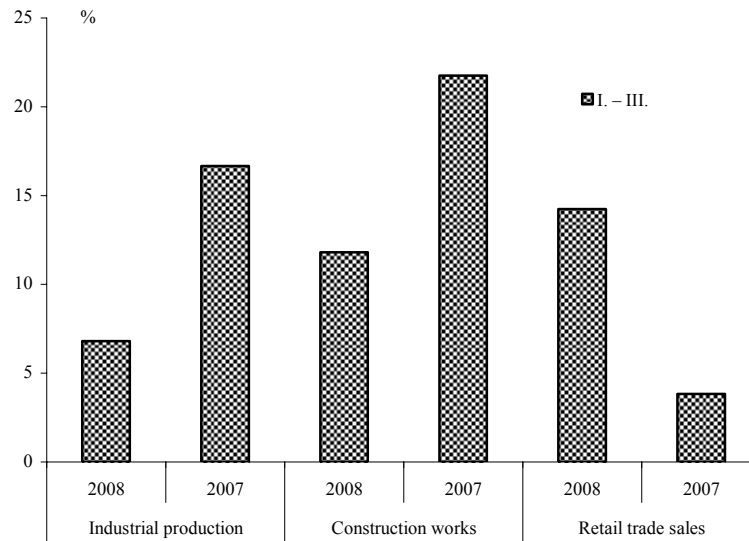
Component of GDP use	Speed of real growth in 2007 (in %)	Estimated speed of real growth in 2008 (in %)
GDP	10.4	6.6 – 7.6
Final households consumption and of non-profit organizations	7.1	6.8 – 7.4
Final consumption of general government	0.7	0.7 – 1.0
Formation of gross fixed capital	7.2	5.7 – 6.4
Export of goods and services	16.0	9.4 – 10.5
Import of goods and services	10.4	8.2 – 8.7

Decline in the speed of real GDP growth and other indicators of economic activity is well-grounded by the following facts:

- Specially high comparison base from the previous period. Such a high comparison base makes of the fall in speed of growth a mathematical logic.
- Absence of such massive growth stimuli, which existed in 2006 and 2007. It was mainly the launching of operation of extra large (especially in Slovak economy conditions) industrial enterprises.

Already in the first months of 2008 it is seen the slow down in output (but this slow down is running at constantly high growth speed). The growth speed in the industry and construction outputs slowed down in comparison with the first months of 2007 (graph 20). This does not hold in cases of retail trade performance where the growth dynamics from the outset of 2008 was higher than in the same period of 2007 (in this case the comparison base from the previous period is exceptionally low).

Graph 20  
**Comparison of speed of year-on-year growth in output of selected branches within the first months of 2007 and 2008**

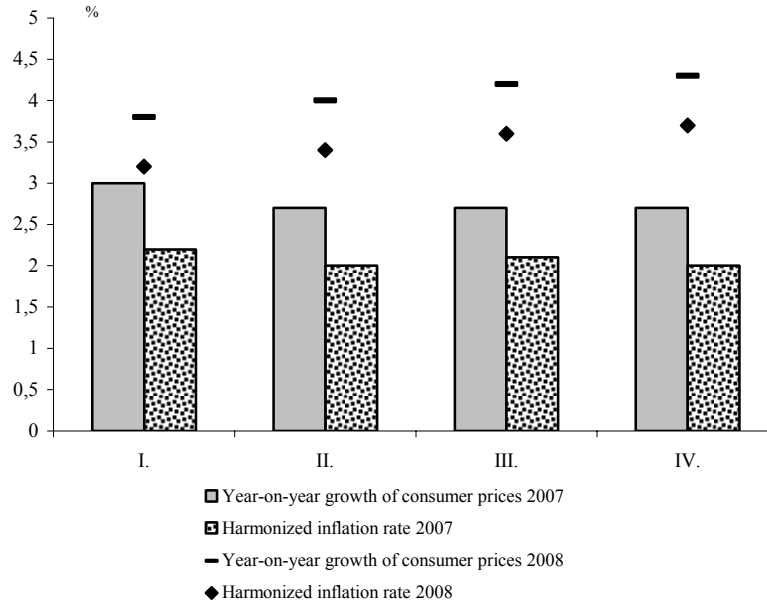


***Assessment of development in some indicators of balance and quality of economy growth***

In 2008 and very likely in 2009 as well (though not essentially) the tendency of inflation withdrawal will be disrupted, it may resume probably in 2010. In 2008 those will be predominantly the cost and administrative factors, which may lead to a moderate acceleration in price increase. On the other hand still a temporary moderate antiinflation impact of strengthening domestic currency is still present. After the exchange rate toward euro is fixed this impact will disappear. Fulfilment of the Maastricht criteria for inflation may reduce even the alertness of the economic policy authors in the direction of antiinflation.

Data for the first four months of 2008 reflect already strengthening in inflation (graph 21). For 2008 we estimate the average year-on-year inflation rate within the interval of 3.4 – 3.8 %, which is already by 0.6 till 1 p. p. more than in 2007.

Graph 21  
**Comparison of year-on-year price level growth within the first three months of 2007 and 2008**



Equally as we cannot reckon upon extremely high growth rates in economy performance, then we cannot reckon either with continuation of equally strong employment growth or fall in unemployment rate. Dynamics of moving growth rates in employment and unemployment rates will slow down. However, the favourable tendency in moving these parameters will survive (table 30).

The extensive foreign direct investment in the previous period will contribute to strengthening in the external balance. Significant in this respect is



the contribution of export capacities in the automotive industry, as well as the start of capacities in the electro engineering industry. We would estimate a slightly surplus balance of trade, but only very slightly decreased deficit in current account of the balance of payments (table 30). Despite the expected favourable development in the balance of trade, the balance of the current account of balance of payments would not proportionally improve, namely due to increasing repatriation of profits from the foreign direct investment. The net export will positively contribute to the GDP growth.

Table 30  
**Estimate of selected parameters of labour market, development of price and external balance of economy**

Parameter	2007	Estimate for 2008
Year-on-year growth in number of workers (in %)	2.4	0.6 – 1.0
Unemployment rate by LFS (in %)	11.0	9.1 – 9.5
Year-on-year growth in nominal wage (in %)	7.2	6.6 – 6.9
Year-on-year growth in real wage (in %)	4.3	2.8- 3.5
Year-on-year average growth rate in consumer prices (in %)	2.8	3.4 – 3.8
Balance of current account of the balance of payments (% of GDP)	-5.3	(-3.6) – (-4.1)
Balance of balance of trade (% of GDP)	-1.2	0.5 – 0.8

In the coming years a stable inflow of foreign direct investment is expected, which could be supported apart from the hitherto factors (relative favourable entrepreneurial environment, skilled and cheap labour force) also by the foreseen entry of the SR to eurozone, connected with abolishment of the risk of exchange rate and with saving the transaction costs. The favourable effect in FDI inflow is expected also in connection with new program of the SARIO Agency entitled *after-care* focused on attention paid to the established investors, who would intend further to expand in Slovakia. It is presumed that these impacts would again support the growth in foreign trade of SR.

Thus the economic growth would further be accompanied by strengthening the balance in economy (with the exception of price level) and by

a favourable development on the labour market (which is a significant pre-supposition of growth quality).

The Slovak economy is based in 2008 on a constantly good fundament for a long-term growth. At the same time it is confronted with the final phase of preparations for adoption of the common European currency and with the strict government regulation measures, which in some cases affect the co-ordination mechanism of the market.

## **8. AN OVERVIEW OF SELECTED LEGISLATIVE AND ECONOMIC-POLITICAL MEASURES**

In 2007 the National Council approved of 143 bills. One of the most extensive legislative measures was the amendment of Labour Code (amendment No. 348/2007 Code of Acts). The amendment comprises of more than 150 amending points. The largest changes concern especially the paragraphs on labour alertness and on chaining the labour relations for a fixed period. The definition of a „dependent work“ has been introduced and the power of trade unions in enterprises intensified. For example the amendment stipulates the average weekly work day of an employee and overtime work to maximum 48 hours per week (employees in health care are exception according to a separate rule). A legislative institute is being resumed – working upon contract, and a new form of labour-legislative relation is introduced – telework. The two latter aim at enforcing the flexibility of labour market.

An act on tripartite was passed (No.103/2007 Code of Acts) about three parties consultations on nation-wide level. This legislative measure resumes the act on tripartite, which was abolished in 2004 and formalizes the social dialogue. This act abolishes the consultative body of the government – The Council of economic and social partnership of SR and creates the Economic and social council as a consultation and contracting body of government and social partners on nation-wide level. This act amended also the act on

collective bargaining. The amendment extends the binding nature of collective agreement of higher degree also upon those employers who did not sign it.

The passed act No. 663/2007 Code of Acts on minimum wage defines the new system of calculating the minimum wage. In case the social partners would not come to agreement on its amount starting with 2009, the minimum wage will be heightened in harmony with the average wage growth. In 2007 the minimum wage amounted to 8 100 SKK.

Amended was the child birth allowance which was increased at the child birth (only for the first child) from 11 000 SKK to 20 440 SKK. Equally as in 2006 government approved also in 2007 granting Christmas benefits to pensioners (2000 SKK in case of pensions up to 3 753 SKK, 1 750 SKK to pensions within the band of 3 753 – 7 505 and 1 500 SKK to pensions within the band of 7 506 – 11 257 SKK).

In the field of health care several changes were adopted. Business activities of the health insurance agencies was impacted by the amendment (No. 530P/2007 Code of Acts) of act on health insurance agencies and on the healthcare supervision office, which sets down that any profits they make have to be fed back into the healthcare system for settlement of costs of the healthcare. Similarly the top limit of operational costs of health insurance agencies was decreased from 4 % to 3.5 % of collected insurance money. The amendment of act (No. 653/2007 Code of Acts) on providers of healthcare, healthcare employees, professional organizations in healthcare ceased the transformation of state healthcare facilities to joint stock companies. The capital assets of the state in already transformed facilities – joint stock companies – must not fall below 51 %. By setting down the minimum network of providers of institutional healthcare, which was done by the amendment (No. 504/2007 Code of Acts) of the decree on public minimum network of providers of healthcare, the network of providers of institutional healthcare providers was defined, which are of strategic importance for the state. Amendment of the act (No..594/2007 Code of Acts) on health insurance simplified the system of annual settlement of insurance money for public health insurance

(the range of persons was narrowed who are obliged to hand in annual settlement and also the duty to pay surplus or deficit up to 100 SKK was annulled).

The operation of higher education in Slovakia was adjusted in 2007 by amendment of the act (No. 363/2007 Code of Acts) on higher education institutions. The amendment enables to public higher education institutions to draw financial means from banking credits. The amended act sets down specialized work places of science and research in public higher education institutions supposed preferably to transfer knowledge into society and support of law subjects involved in research and development under particular rules in the starting phase. The public higher education institutions as well as the state higher education institutions are allowed to charge the external students tuition; the act leaves free of charge study on one higher education institution within the standard length of study. The category of research universities has been cancelled; according to the new act the higher education institutions are divided as follows: a) higher education institutions of university type (higher education institutions providing doctoral study programs); b) higher education institutions; c) professional higher education institutions (providing bachelor study programs). The bill introduces register of higher education employees and amends the provision on central register of students. The aim of this measure is to provide information on higher education institutions in real time and a gradual transfer away from the „paper“ statements to their electronic providing. The amendment sets down the duty to private higher education institutions to form academic tribunals and scientific councils in the same form as on the public higher education institutions.

A compulsory programming budgetary for municipalities, towns and higher territorial units starting up since 2009 introduces the passed amendment of act on budgetary rules of territorial self-governments (amendment No. 324/2007 Code of Acts). This measure is a part of complex reform in management of public finance and creates legislative terms for programmed budgeting in units of territorial self-government in particular phases of budgetary process.

In the previous year the act was passed (No. 609/2007 Code of Acts) on excise duty on electricity, coal and natural gas. This new tax the so called ecology tax represents transposition of the EU legislature with the aim to set minimum tax tariffs for the Slovak consumers and producers. Amendments occurred also in the value added tax the amendment of which (No. 593/2007 Code of Acts) decreased the GDP on books from 19 % to 10 %.

In connection with the currency integration of the Slovak economy there was passed the so called general act – act No.659/2007 Code of Acts on the adoption of euro in the Slovak Republic. By this act are created legislative presuppositions for a trouble-free entry to the eurozone. The act is amending as much as 27 acts, which refer somehow to the adoption of euro.

With the aim to narrow down the usury practice, to provide a satisfactory protection for the participants in financial market and making the conditions in granting consumption credits transparent - the act on consumption credits was amended. The amendment sets down a maximum limit for interests and fees for consumption interest.

The business environment was adjusted by the amendment of tradesmen act (amendment No. 358/2007 Code of Acts). Through this extensive amendment the trading offices are given new competencies – they establish unified contact addresses. A starting businessman will be able to meet all administration formalities in this place connected with launching his trading – declaration of trading and submitting the information concerning all tax and health care registrations. This legislative regulation brings liberalization into trading business, regulates number of businesses, amends administrative fees etc.

With the aim of complex price regulation, with detaching the regulation office from regulation council and social monitoring of price formation in the field of networking branches the amendment No. 107/2007 Code of Acts to the act on regulation in the network branches was passed. The decrees of the Regulation office concerning the energy prices will in the future be monitored by the Ministry of economy SR, or the Ministry of the environment SR.

The government approved in 2007 several strategic documents which are connected with the adoption of the *National Strategic Reference Framework of the Slovak Republic for 2007 – 2013* (NSRR) and are supposed to be a starting point for the medium-term economic policy in individual fields. According to the adopted *Development Strategy in Tourism of SR till 2013* the essential aim is at increasing the competitiveness of tourism at the simultaneous usage of the potential of the country to balance the regional disparities and to create new job opportunities. The other document is *Innovation Strategy 2007 – 2013*; its aim is to achieve higher rate of innovation as a main instrument for the knowledge economy and sustainable development. With the export development support deals the *Proexport Policy SR for 2007 – 2013*, focused on creating a stable supporting pillar of an active foreign trade policy of SR. The government approved also of the updated *Convergence program of Slovakia for 2007 – 2013* in which it is defined the position of the Slovak economy, especially in the fiscal aspect in connection with the entry of SR into the eurozone.

## List of Publications of the Institute of Economic Research of SAS

**HŔOŠOFF, B.:** Križovatky hospodárskej politiky USA (1980 – 2005). (Crossroads of Economic Policy of the USA 1980 – 2005). 2007. 186 pp. ISBN 978-80-7144-161-8.

**MENBERE, T. WORKIE a kol.:** Vývoj a perspektívy svetovej ekonomiky – Prínos informačných technológií a hrozba klimatických zmien. (Development and Perspectives of the World Economy – The Benefits of Information Technology and the Costs of Climate Change). 2007. 332 pp. ISBN 978-80-7144-159-5.

**ŔKÁLI, I. a kol.:** Hospodársky vývoj Slovenska v roku 2006. (Economic Development of Slovakia in 2006). 2007. 63 s. ISBN 978-80-7144-144-8.

**ŔKÁLI, I. et al.:** Economic Development of Slovakia in 2006. 2007. 64 pp. ISBN 978-80-7144-157-1.

**KLAS, A.:** Vývoj inštitúcií vyššieho vzdelávania na Slovensku (860 – 2005). (Development of Higher Education Institutions in Slovakia 860 – 2005). 2006. 195 pp. ISBN 80-7144-156-2.

**ŠIKULOVÁ, I.:** Konvergencia v procese európskej integrácie. (Convergence in the Process of European Integration). 2006. 150 pp. ISBN 80-7144-155-4.

**JURÍČKOVÁ, V. a kol.:** Podnikateľské prostredie a firemné stratégie. (Entrepreneurial Environment and Strategies of Firms). 2006. 172 pp. ISBN 80-7144-154-6.

**MENBERE, T. WORKIE a kol.:** Vývoj a perspektívy svetovej ekonomiky. Globálna konkurencieschopnosť a energetická a demografická kríza. (Development and Perspectives of World Economy. Global Competitiveness and Energy and Demographic Crises). Bratislava: EÚ SAV 2006. 302 pp. ISBN 80-7144-152-X.

**ŠIKULA, M. – HVOZDÍKOVÁ, V. (eds.):** Performance and Perspective of the European Union as Seen by the New Member States. Post-Acession Monitoring Conference. 2006. 185 pp. ISBN 80-7144-151-1.

**OUTRATA, R. a kol.:** Globalizácia a slovenská ekonomika. (Globalization and Slovak Economy). 2006. 379 pp. ISBN 80-7144-150-3.

**ŠIKULA, M. (ed.):** Konkurencieschopnosť slovenskej a českej ekonomiky – stav a perspektívy. (Competitiveness of the Slovak and Czech Economy – State and Prospects). 2006. 264 pp. ISBN 80-7144-148-1.

**KLAS, A. a kol.:** Technologický a inovačný rozvoj v Slovenskej republike. (Technological and Innovation Development in the Slovak Republic). 2005. 389 pp. ISBN 80-7144-147-3.

**MORVAY, K. a kol.:** Transformácia ekonomiky: skúsenosti Slovenska. (Transition of Economy: Experience of Slovakia). 2005. 330 pp. ISBN 80-7144-143-0.

**OBADI, SALEH MOTHANA:** Integračné zoskupenie juhovýchodnej Ázie a zahranično-obchodné vzťahy so Slovenskom a s Európskou úniou. (The Integration Block of Southeast Asia and Foreign Trade Relations with Slovakia and the EU) 2004. 84 pp. ISBN 80-7144-142-2.

**MENBERE, T. WORKIE a kol.:** Vplyv informačných technológií na ekonomický rast a zamestnanosť: teoretické a empirické pohľady. (The Impact of the Information Technology on Growth and Employment: Theoretical and Empirical Views). 2004. 92 pp. ISBN 80-7144-141-4.

**OKÁLI, I. a kol.:** Hospodárska politika Európskej únie a Slovenska v EÚ. (Macroeconomic Policy of the European Union and Slovakia in the EU). 2004. 352 pp. ISBN 80-7144-140-6.

**OKÁLI, I. et al.:** Concept Outline of Slovakia's Economic Policy at the Stage of Integration into the European Union. Summary. 2004. 30 pp. ISBN 80-7144-139-2.

**ŠIKULA, M. a kol.:** Ekonomické a sociálne súvislosti integrácie Slovenska do Európskej únie. (Economic and Social Context of Slovakia's Integration into the EU). 2003. 381 pp. ISBN 80-7144-135-X.

**ŠIKULA, M. (ed.):** Economic and Social Context of Slovakia's Integration into the EU. Summary. 2003. 47 pp. ISBN 80-7144-133-3.

**ŠIKULA, M. a kol.:** Determinanty formovania priemyselnej politiky v podmienkach globalizácie a integrácie. (Determinants of the Industry Policy Forming in the Conditions of Globalization and Integration). 2003. 166 pp. ISBN 80-7144-134-1.

**MORVAY, K. a kol.:** Aktuálne otázky fungovania verejných financií SR. (Current Issues of the Functioning of Slovakia's Public Finance) 2002. 129 pp. ISBN 80-7144-127-9.



**OUTRATA, R. a kol.:** Ekonomické a sociálne súvislosti vstupu SR do EÚ. (Economic and Social Context of Slovakia's EU Accession). 2002. 396 pp. ISBN 80-7144-125-2.

**Publications as well as individual volumes of Journal of Economics published by the Institute of Economic Research of the Slovak Academy of Sciences are available to order or in bookshops ELITA, ACADEMIA, VEDA – publisher of SAS in Bratislava.**

**Publications Economic development of Slovakia are published annually since 1993 in Slovak and English and in case of interest they are available at the bookshop ELITA.**

## ECONOMIC DEVELOPMENT OF SLOVAKIA IN 2007

*Authors:* Ivan Okáli et al.

Institute of Economic Research of Slovak Academy of Sciences, Šancová 56, 811 05 Bratislava 1

Telephone: 42-1-2-52 49 54 80, Fax: 42-1-2- 52 49 51 06  
E-mail: milan.sikula@savba.sk  
[www.ekonom.sav.sk](http://www.ekonom.sav.sk)