

**BANKA**  

---

**SLOVENIJE**

**BANK OF SLOVENIA**

**EUROSYSTEM**

**PRICE STABILITY  
REPORT**

OCTOBER 2007



**BANKA SLOVENIJE**

BANK OF SLOVENIA  
EUROSYSTEM

Published by:

Bank of Slovenia  
Slovenska 35  
1505 Ljubljana  
Tel.: 01 47 19 000  
Fax.: 01 25 15 516

This publication is based on figures and information available on 28 September 2007, except where stated otherwise.

This publication is also available in Slovene.

ISSN 1854-0295 (print version)  
ISSN 1854-0309 (electronic version)

## Contents

Summary and Positions of the Governing Board of the Bank of Slovenia	7
1 Price Developments	11
2 International Environment and Projection Assumptions	19
3 Outlook for Economic Activity and Labour Market	25
4 External Balance and Competitiveness	35
5 Terms of Financing	43
6 Price Projections and Risks	51
 Annex: Bank of Slovenia Projections and Eurosystem Projections	 60

## Boxes, tables and figures

### Figures:

Figure 1.1: Maastricht inflation criterion	11
Figure 1.2: Headline inflation	11
Figure 1.3: Core inflation	12
Figure 1.4: Output gap	12
Figure 1.5: Producer prices of manufactured goods on the domestic market	14
Figure 1.6: Contribution to change in year-on-year inflation by individual price categories	14
Figure 1.7: Individual price categories	15
Figure 1.8: Food prices in Slovenia and the euro area	16
Figure 1.9: Food prices	16
Figure 1.10: Prices of services in Slovenia and the euro area	18
Figure 1.11: Prices of selected categories of services	18
Figure 2.1: Business confidence in Slovenia and abroad	21
Figure 2.2: Euro area economic growth and European Commission projections	21
Figure 2.3: Prices on world commodity markets	22
Figure 2.4: Euro/US dollar exchange rate and central bank interest rates	23
Figure 3.1: Domestic demand and GDP	26
Figure 3.2: GDP growth projections	26
Figure 3.3: Industrial production	27
Figure 3.4: Contributions to GDP growth by components of expenditure	27
Figure 3.5: Household spending and disposable income	28
Figure 3.6: Productivity, employment and real average gross wage	30
Figure 3.7: Contributions to employment growth by sector	31
Figure 3.8: Unemployment rates and participation rate	31
Figure 3.9: Labour shortage and labour force	32
Figure 4.1: Current account projections	36
Figure 4.2: Terms of trade	38
Figure 4.3: Real effective exchange rates	39
Figure 4.4: Real effective exchange rates in 2006 compared with average over 1994 to 2006	39
Figure 4.5: Real effective exchange rates in 2006 compared with 2004	40
Figure 4.6: Real effective exchange rate	40
Figure 5.1: Savings-investment gap	43
Figure 5.2: Depth of financial intermediation	44
Figure 5.3: Financing of investments of non-financial corporations	45
Figure 5.4: Nominal and real central bank interest rates	45
Figure 5.5: Interest rates on loans of more than EUR 1 million for non-financial corporations	45
Figure 5.6: Breakdown of household lending	45
Figure 5.7: Interest rates on consumer loans to households	47
Figure 5.8: Interest rates on household deposits of up to 1 year	49
Figure 6.1: Inflation projections	51

**Tables:**

Table 1.1: Structure of HICP and price movement indicators	13
Table 2.1: Assumptions regarding factors from the international environment	19
Table 3.1: Activity, employment and wages	25
Table 3.2: Components of domestic demand	27
Table 3.3: Labour costs	32
Table 4.1: Balance of payments current account	35
Table 5.1: Financial accounts (net)	43
Table 6.1: Inflation	51
Table 6.2: Assumed direct impact on inflation due to government measures in 2007	52
Table 6.3: Model simulations of certain macroeconomic shocks	54
Table 6.4: Alternative scenario of projections: higher nominal wage growth	55

**Boxes:**

Box 1.1: Surveyed assessment of perceived inflation and inflationary expectations	17
Box 2.1: Uncertainty in financial markets following the sub-prime mortgage loan crisis in the US	20
Box 3.1: Public sector wages over the projection period	34
Box 5.1: Increased lending activity following entry to the euro area	46
Box 5.2: Adjustment of certain balance of payments categories following the introduction of the euro	48
Box 6.1: Comparison of 2007 and 2008 forecasts with those of other institutions	58

**Abbreviations used in the Price Stability Report**

AJPES	Agency of the Republic of Slovenia for Public Legal Records and Related Services
BLEU	Belgium and Luxembourg
DARS	Motorway Company in the Republic of Slovenia
EA13	Euro area (of 13 Member States)
EC	European Commission
ECB	European Central Bank
EIPF	Faculty of Law Institute of Economics
EMU	Economic and Monetary Union
ERM II	European Exchange Rate Mechanism
ESA95	European System of Accounts (1995)
ESCB	European System of Central Banks
EU27	European Union (of 27 Member States)
EUR	euro
GDP	gross domestic product
HICP	harmonised index of consumer prices
IFRS	International Financial Reporting Standards
ILO	International Labour Organisation
IMAD	Institute of Macroeconomic Analysis and Development
IMF	International Monetary Fund
iTraxx EU	iTraxx Europe Crossover 5 year index is an indicator of the movement of the credit risk swap premium for European companies
MoF	Ministry of Finance of the Republic of Slovenia
NCB	national central banks (of euro area Member States)
OECD	Organisation for Economic Cooperation and Development
OPEC	Organisation of Petroleum-Exporting Countries
p.p.	percentage point
PSR	Price Stability Report
REER	real effective exchange rate
RS	Republika Slovenija
RULC	real unit labour costs
SORS	Statistical Office of the Republic of Slovenia
ULC	unit labour costs
USD	US dollar
VAT	value added tax
WIIW	Wiener Institut für Internationale Wirtschaftsvergleiche

# Summary and Positions of the Governing Board of the Bank of Slovenia

*Current economic developments mean a shift from macroeconomic equilibrium.<sup>1</sup> The growth of gross domestic product exceeds its potential growth. Data for the first half of 2007 indicate growth in economic activity above expectations. At the same time the data indicate a rise in inflation above a level compliant with the process of sustained real convergence and an increase of the current account deficit. For the coming medium-term period, projections until 2009 indicate that inflation will remain above three percent, that there will be a slowdown in the economic cycle and a gradual improvement in the external equilibrium. However, general projections are subject to greater risks for price stability and external equilibrium than in the past, which requires a higher level of readiness of economic policymakers to respond appropriately.*

*Part of the rise in inflation in the first half of 2007 is the result of rising refined petroleum product and food prices. However, the significant acceleration of core inflation in Slovenia since 2005 with regard to the euro area also indicates an internally driven rise in inflation. The majority of macroeconomic indicators show that the high level of economic activity in the previous period exceeds the supply potential, resulting in a trend of rising prices and significantly increasing the risk that such pressures could continue to persist in the medium term. Growth in the harmonised index of consumer prices (HICP) was 2.5% in 2006. In recent months this year, the HICP has fluctuated between 3% and 4% and will likely exceed 4% in the coming months due to base effects. Core inflation, excluding refined petroleum products and seasonal food, was 1.5% last year. In recent months, core inflation has exceeded 3.5% and has shown no signs of slowing down. Current price movements have surpassed a level which is still in line with the equilibrium process of real long-term convergence. Inflation in the euro area in the same period has remained stable. Moderate growth in labour costs, which has lagged behind the growth in output per employee, and to a lesser extent the appreciation of the nominal effective exchange rate, continue to curb the rise in inflation. The rise in the price of oil on world markets, which will likely be USD 10 higher than the forecasted USD 60 per barrel, has contributed significantly to the upward revision of inflation projections, thus leading to the realisation of a risk set out in previous projections. The accelerated growth in food prices (8.8% year-on-year in September; 2.3% on average for the euro area in August) has also exceeded expectations. Services have contributed significantly to inflation in the past year, while growth in the prices of manufactured goods remains low, lagging behind the euro area average.*

*Favourable economic growth continues in the international environment. These favourable conditions could deteriorate slightly in the future due to the high growth of commodity prices, emerging inflationary pressures and uncertainty in financial markets. Growth in the euro area this year has been moderate and close to output potential, which has contributed to maintaining a stable level of inflation in accordance with the ECB's medium-term objective. Despite the recent shocks in financial markets, somewhat accelerated growth in foreign demand is expected in the year ahead, when economic growth in the US should also strengthen. Pressures on prices from the international environment should intensify in the projection period, primarily as a*

---

<sup>1</sup> Based on figures available and statistical methodologies applicable on 28 September 2007.

result of the rapid growth of oil prices, which should fluctuate between USD 70 and USD 75 per barrel, and food prices which by mid-year had already risen to approximately 30% year-on-year. Growth in the prices of other commodities should gradually stabilise following high growth rates in recent years. Due to the timely measures of central banks, there is currently no indication that the increased uncertainty in financial markets arising from the sub-prime mortgage loan crisis in the US will result in a longer-term financial crisis and significantly hinder economic activity in the international environment.

Economic activity in Slovenia exceeded expectations in the first half of the year. Thus economic growth for 2007 was revised upward to 5.7%. Economic growth is expected to fall to 4.4% in 2008 and below 4% in 2009. At this time the output gap should gradually begin to close, which according to available indicators of economic activity and the labour market exceeds potential output. The increase in economic activity is primarily the result of strong growth in gross capital formation, which grew at a rate of more than 20% in the first half of the year. In this respect construction is noteworthy, more specifically civil engineering, for which works grew at a year-on-year rate of more than 30% in the first half of the year, partially as the result of favourable winter weather conditions. Domestic demand, which should gradually stabilise, will remain the driving force behind the growth of economic activity. At the same time, domestic lending activity should also slow down. Growth in household spending is also rising, stimulated by a sharp increase in disposable income following tax reform, a significant decrease in unemployment and favourable terms of financing. Although the internationally comparable unemployment rate has already fallen to a record low of below 5%, labour costs remain moderate and lag behind output per employee; this is also foreseen throughout the projection period. However, tightening conditions in the labour market, a steep economic cycle and a noticeable rise in the prices of some goods, especially food, already point to the risk that incomes policy could be relaxed in the future.

High domestic demand has resulted in the deterioration of the balance of payments current account, while growth in imports has exceeded the high growth in exports. Domestic savings are not sufficient to finance the rapid growth in investments. A consequence of insufficient public sector savings is the need to finance the negative savings-investment gap with foreign sources. The external deficit in the balance of payments current account is expected to exceed 3% of GDP this year. In the coming years, the deficit should decrease by approximately one half of one percentage point annually. More moderate growth in domestic demand and increased growth in foreign demand on the export side will contribute most to an improved balance. However, a decrease in price and cost competitiveness in the medium term could make maintaining an external equilibrium difficult. The deficit in the balance of income has also risen sharply in recent years and could exceed 1.5% of GDP during the projection period, primarily due to exceptionally high levels of borrowing in recent years and the gradual rise in interest rates on the European market.

Given current inflationary pressures and taking into account the likely development of economic factors, inflation projections have been revised upwards to 3.3%, 3.3% and 2.9% for 2007, 2008 and 2009, respectively. As a result, risks are distinctly higher. The cumulative upward revision of price growth rates in the projection period amounts to one and a half points, because macroeconomic factors, primarily a positive output gap, have a delayed effect on inflation. The greatest risk, that inflation could continue to exceed the projected level, is linked to output capacity utilisation and tightening conditions in the labour market, which could begin to be reflected in the costs of companies, particularly as an increase in labour costs. Simulations show that inflation could rise to over 5% in the projection period if current inflation and the growth in current output per employee, which to a great extent is cyclical in nature, were fully built into wages. Significant risks remain linked to the continuing acceleration of excessive growth in domestic demand and uncertainty regarding the development of commodity prices on world markets, particularly the prices of oil and food. In terms of reducing inflation, more restrictive fiscal policy could become a significant factor, as it was possible to assume in the baseline scenario of projections given currently available data.

Maintaining the price stability achieved in recent years is a condition for balanced long-term economic development, particularly following entry to the Monetary Union. To a great extent, successfully maintaining price stability has an impact on basic



*macroeconomic categories such as inflationary expectations, the level of real interest rates and international price competitiveness. If excess demand, reflected as an excess output gap, has an impact on rising prices, macroeconomic policy should curb excess demand without threatening price stability. Pressures on the prices of certain products, as seen recently in the prices of refined petroleum products and food, generally emerge during a period of supply-side shocks. In this case it is important that suitably restrictive macroeconomic policy lowers inflation to a level of price stability before inflation is built into wages and carried over to other prices. By responding appropriately, macroeconomic policy must therefore prevent inflation from a longer-term deviation from a level consistent with price stability, and thus maintain medium-term and long-term inflationary expectations at a level of price stability. Maintaining price stability in the medium-term does not limit movements between relative prices, which in market economies typically respond to structural changes in the economy. When certain prices rise faster, the role of restrictive macroeconomic policy is to ensure that average inflation remains consistent with price stability in the medium-term.*

*The Governing Board of the Bank of Slovenia position is that the inflation rate in the most recent period is higher than the level consistent with the assessment of price stability in the euro area, and that projections for the 2007 to 2009 period indicate that inflation will likely remain too high. Pursuant to the findings of the convergence reports of the European Commission and European Central Bank, the Governing Board of the Bank of Slovenia believes that, following the successful conclusion of the disinflation process, it is necessary and possible to maintain an inflation rate in the medium-term that falls within the euro area price stability criteria. High inflation and increased price stability risks in Slovenia represent a test of the effectiveness of macroeconomic policy, and at the same time an opportunity to build the credibility of domestic macroeconomic policy while maintaining macroeconomic equilibrium. By decreasing the structural deficit, fiscal policy can act to curb demand, slow current economic activity, and thus influence the lowering of prices. Within the scope of incomes policy, it is necessary to continue preventing the growth of labour costs from outstripping productivity, and to take into account data regarding the movement of these costs in competitive markets. At the same time, this requires that the one-off increase in prices, which are supply-side in nature and do not increase labour productivity, do not carry over into the growth of wages or labour costs. This would in effect act as a hidden indexation.*

	2002	2003	2004	2005	2006	Projections					
						2007		2008		2009	
						Oct	Δ	Oct	Δ	Oct	Δ
<b>Activity, employment, wages</b>											
						<i>real growth, %</i>					
Real GDP	3.7	2.8	4.4	4.1	5.7	<b>5.7</b>	1.1	<b>4.4</b>	0.0	<b>3.9</b>	-0.1
Employment	1.5	-0.2	0.4	0.7	1.2	<b>2.2</b>	1.1	<b>0.5</b>	-0.1	<b>0.3</b>	-0.2
Net wages	2.1	1.8	0.8	3.6	2.6	<b>5.0</b>	1.0	<b>3.3</b>	0.5	<b>3.0</b>	0.3
Gross wages	2.1	1.9	1.0	2.2	2.3	<b>3.0</b>	0.3	<b>3.3</b>	0.5	<b>3.0</b>	0.3
Productivity	2.2	3.0	4.0	3.4	4.5	<b>3.5</b>	-0.1	<b>3.9</b>	0.1	<b>3.6</b>	0.1
<b>Domestic demand</b>											
						<i>real growth, %</i>					
Domestic demand	2.6	4.8	4.9	2.2	5.7	<b>6.2</b>	1.7	<b>4.0</b>	0.1	<b>3.4</b>	-0.4
Private consumption	1.8	3.5	3.0	2.9	4.0	<b>3.8</b>	0.3	<b>4.0</b>	0.6	<b>3.4</b>	0.2
Government spending	3.4	1.9	3.1	3.2	4.4	<b>1.7</b>	-1.5	<b>1.9</b>	-0.8	<b>1.5</b>	-1.2
Gross investment	3.8	10.2	10.5	0.4	9.9	<b>13.5</b>	7.5	<b>5.5</b>	0.1	<b>4.8</b>	-0.4
<b>Balance of payments</b>											
						<i>real growth, %</i>					
Exports of goods and services	6.8	3.1	12.5	10.1	12.3	<b>13.3</b>	4.9	<b>11.6</b>	1.9	<b>8.5</b>	0.7
Imports of goods and services	4.9	6.7	13.3	6.7	12.2	<b>13.8</b>	5.7	<b>10.9</b>	1.9	<b>8.0</b>	0.7
Current account (EUR million)	329	-127	-720	-559	-858	<b>-1100</b>	-500	<b>-900</b>	-200	<b>-800</b>	-170
as % of GDP	1.4	-0.5	-2.8	-2.0	-2.9	<b>-3.3</b>	-1.3	<b>-2.6</b>	-0.5	<b>-2.2</b>	-0.4
Terms of trade*	1.9	0.8	-1.0	-2.0	-0.6	<b>-0.2</b>	-0.2	<b>0.0</b>	0.1	<b>0.3</b>	0.3
<b>Prices</b>											
						<i>average annual growth, %</i>					
Consumer prices (HICP)	7.5	5.7	3.7	2.5	2.5	<b>3.3</b>	0.6	<b>3.3</b>	0.6	<b>2.9</b>	0.3
Non-administered prices	7.6	5.9	3.0	1.1	1.7	<b>3.6</b>	0.5	<b>3.5</b>	0.6	<b>3.3</b>	0.3
Administered prices	6.7	4.6	6.9	9.1	6.2	<b>1.9</b>	1.4	<b>2.4</b>	0.7	<b>1.0</b>	0.3
<b>International environment</b>											
						<i>annual growth, %</i>					
Foreign demand**	3.2	6.4	7.9	5.0	9.3	<b>6.9</b>	0.1	<b>7.2</b>	-0.1	<b>6.5</b>	0.0
Oil (USD per barrel)	25.0	28.8	38.3	54.2	64.9	<b>70</b>	10.0	<b>73</b>	10.0	<b>73</b>	10.0
Commodities	4.6	11.3	16.0	6.0	27.7	<b>20.0</b>	3.0	<b>5.0</b>	0.0	<b>5.0</b>	0.0
EMU inflation	2.3	2.1	2.1	2.2	2.2	<b>2.0</b>	0.1	<b>2.0</b>	0.1	<b>1.9</b>	0.0
PPI Germany	-0.6	1.7	1.6	4.6	5.5	<b>2.0</b>	-0.4	<b>1.9</b>	0.1	<b>1.9</b>	0.1

\* On the basis of national accounts deflators.

\*\* Basket of foreign partners import volumes.

Δ : The difference between October 2007 and March 2007 projections.

Source: Bank of Slovenia, Eurostat, Consensus Forecasts, JP Morgan, OECD Outlook, IMF World Economic Outlook

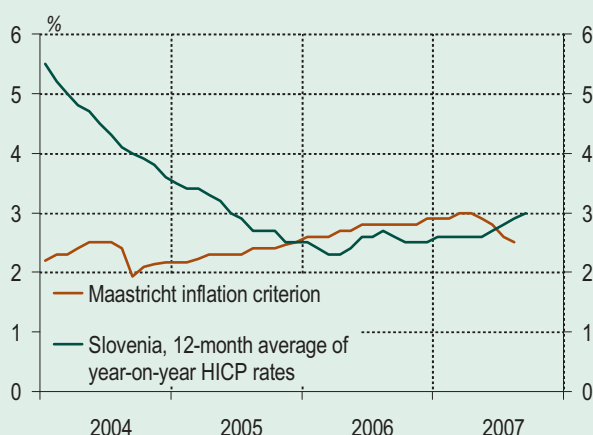
# 1 | Price Developments

**Following relatively moderate average price growth in the last two years, inflation is rising this year.** The average annual growth in consumer prices, measured by the harmonised index, has risen from 2.5% in September last year to 3.0% this year. Low growth in labour costs, a slowdown in economic activity with regard to economic potential and the restrictive nature of macroeconomic policies contributed to low inflation in 2005 and 2006. Amongst the microeconomic factors which have contributed to the relatively low growth in the prices of manufactured goods in the last two years, particularly clothing and footwear, are increased competition in the international environment and the import of less expensive products from countries with cheaper labour forces. The abolition of customs duties following Slovenia's entry to the EU and the arrival of retailers with low-priced products were

reflected in the low growth in food prices in the recent years. These factors were temporary in nature, thus the gradual adjustment of inflation to a level of between 2.5% and 3%, also consistent with the real convergence process, was expected.<sup>2</sup>

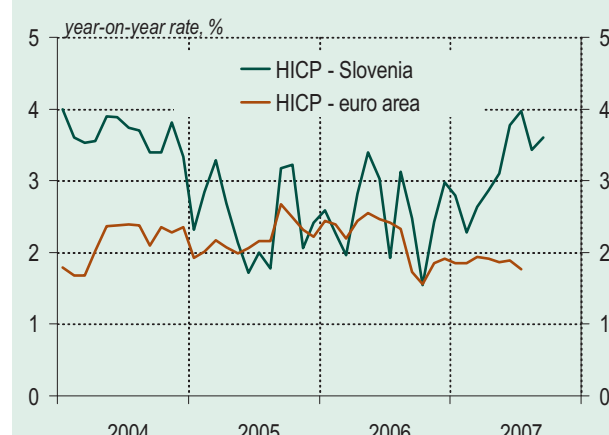
**In the first half of this year, inflation exceeded spring projections, and in recent months has already exceeded the level consistent with sustainable real convergence process. The rise in inflation was partly the result of unfavourable developments in the prices of food and other commodities on world markets, while the significant rise in core inflation was primarily the result of accelerated economic activity in the most recent period.** The high growth in the prices of food and other commodities on world markets had an impact on

Figure 1.1: Maastricht inflation criterion



Source: Eurostat.

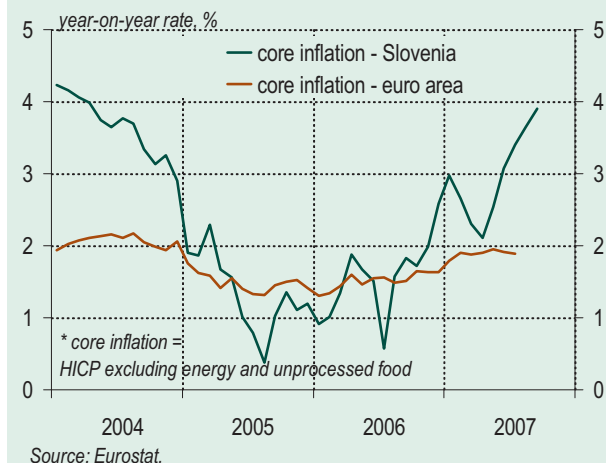
Figure 1.2: Headline inflation



Source: Eurostat.

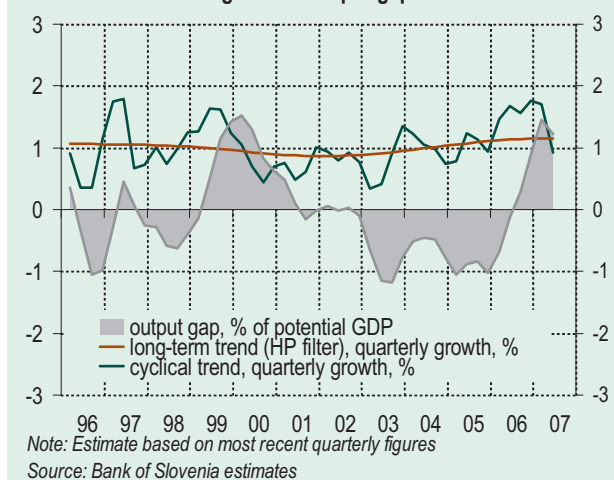
<sup>2</sup> See, for example, PSR, October 2006.

Figure 1.3: Core inflation\*



the prices of both manufacturers and retailers, which in turn contributed to an increase in domestic food prices. The higher prices of refined petroleum products compared to spring assumptions should be noted as an external factor. However reversal of the core inflation cycle since 2005 is also shown in the acceleration of economic activity. The Harmonised Index of Consumer Prices excluding energy and unprocessed food has risen on average 2.7% in the last 12 months ending September 2007, an increase of 1.2 percentage points from the average growth recorded last year, while year-on-year growth

Figure 1.4: Output gap



reached 3.9% in September. This year's high level of inflation has already exceeded the level that can be attributed merely to the equilibrium process of real convergence, when the level of domestic prices is catching up with the level of prices in wealthier countries. The effects of long-term real convergence, which are also linked to Balassa-Samuelson-type effects, are reflected in the real appreciation of the currencies of countries in the catching-up process, and in higher inflation under conditions of monetary union. In the period since 1995, the real effective exchange rate of the domestic currency against the other twelve euro area Member States has appreciated on average by approximately 0.8 percentage points annually, which is a possible indicator of the expected long-term discrepancy between domestic inflation and inflation in the euro area, and shows that inflation consistent with the process of real convergence in Slovenia fluctuates between 2.5% and 3%.<sup>3</sup> Macroeconomic indicators therefore tend to suggest that this is a cyclical development which could further deepen since the current dynamic of macroeconomic factors is more inflationary than was expected in spring projections.

**Amongst macroeconomic factors, high economic activity, which according to estimates exceeded potential output in the second half of last year, has the most impact on inflation.** Since that time the dynamics of the output gap are almost the same as the economic cycle of 1999, the only year since the beginning of transition period in which annual average inflation rose compared to the previous year. The effects of accelerated economic activity on inflation were partly taken into account in spring projections. The aforementioned are one of the factors which have contributed to the rise in inflation in non-administered prices from 1.7% in 2006 to approximately 3% this year. It should be noted that this year's economic activity is significantly above the values set out in spring projections, and that GDP growth was revised upwards by more than one percentage point.

<sup>3</sup> The same has been determined by ECB and European Commission convergence reports from May 2006, which state that these effects in Slovenia are minor due to the high level of real convergence achieved. The assessment of sustainable price stability, which is taken into account in the process of real convergence, is also built into Maastricht price stability criteria.

Table 1.1 Structure of HICP and price movement indicators

	weighting	average annual growth, %					year-on-year growth in quarter, %				
		2003	2004	2005	2006	07H1	06Q2	06Q3	06Q4	07Q1	07Q2
<b>HICP</b>	100.0%	5.7	3.7	2.5	2.5	2.9	3.1	2.5	2.3	2.6	3.2
<b>Breakdown of HICP:</b>											
Energy	12.8%	3.4	7.0	11.9	8.5	2.0	12.4	7.7	2.3	0.6	3.3
Food	22.1%	6.1	1.3	0.2	2.7	5.1	2.4	3.6	3.9	4.0	6.1
processed	14.7%	7.3	2.7	0.6	2.5	3.7	2.4	2.3	3.5	3.4	3.9
unprocessed	7.4%	3.8	-1.4	-0.8	3.1	7.8	2.3	6.3	4.7	5.2	10.4
Other goods	31.1%	4.8	1.8	-0.3	-0.9	0.1	-0.7	-1.4	-0.4	0.1	0.0
Services	34.0%	7.1	5.8	3.3	3.5	4.5	3.6	3.5	3.8	4.6	4.4
<b>Core inflation indicators</b>											
HICP excluding energy, seasonal food and tax effects	83.2%	6.0	3.0	0.7	1.2	2.4	1.4	1.1	1.7	2.4	2.4
HICP excluding energy and unprocessed food	79.8%	6.3	3.7	1.3	1.5	2.6	1.7	1.3	2.1	2.6	2.6
HICP excluding energy, food, alcohol and tobacco	65.1%	6.0	3.9	1.5	1.3	2.4	1.5	1.1	1.8	2.5	2.3
<b>Administered and free prices:<sup>1</sup></b>											
Administered prices	21.5%	4.4	6.1	7.4	4.8	1.3	7.2	4.5	1.1	0.5	2.0
Free prices	78.5%	5.9	3.0	1.2	1.9	3.3	2.0	1.9	2.6	3.1	3.5
<b>Other price indicators:</b>											
Producer prices of manufactured goods		2.5	4.3	2.7	2.3	4.7	2.3	2.7	2.7	4.6	4.8
GDP deflator		5.8	3.3	1.5	2.3	3.9	2.3	2.7	2.7	4.1	3.8
Import prices <sup>2</sup>		2.0	4.1	5.0	4.7	3.6	4.2	5.2	4.7	2.7	4.5
<b>Macroeconomic indicators:</b>											
Output gap (HP trend)		-0.9	-0.6	-0.9	0.1	1.3	-0.1	0.3	0.9	1.5	1.2
Unit labour costs <sup>3</sup>		4.4	0.7	1.1	0.8	1.5	1.0	-0.2	1.4	0.6	2.4
Labour costs per employee <sup>3</sup>		7.6	4.6	4.9	4.8	5.5	4.8	4.0	5.1	5.4	5.6
Productivity <sup>3</sup>		3.1	3.9	3.7	4.0	3.9	3.8	4.2	3.7	4.7	3.1
Profit indicator <sup>4</sup>		1.3	2.6	0.4	1.5	2.4	1.3	2.9	1.4	3.5	1.3

Notes: <sup>1</sup> ECB methodology, <sup>2</sup> National accounts data, <sup>3</sup> Gross wages only, <sup>4</sup> Calculated as difference between GDP deflator and unit labour costs  
Sources: SORS, Eurostat, Bank of Slovenia calculations

Since the transmission from excess demand through the overheating of the economy is gradual, it is likely that the unexpected part of acceleration of economic activity will be reflected in inflation sometime in the future. Due to the expected transmission of high economic growth, the dynamics of core inflation could continue to rise.

**High growth in producer prices of manufactured goods and movements of real interest rates represent potential risks of transmission to consumer prices.**

The year-on-year growth in producer prices of manufactured goods has exceeded 5% in recent months. This poses less risk since the growth in prices of capital goods and consumer goods is relatively stable at approximately 2.0%. The growth in the prices of intermediate goods has been significantly sharper. Similar to 2004, prices of the

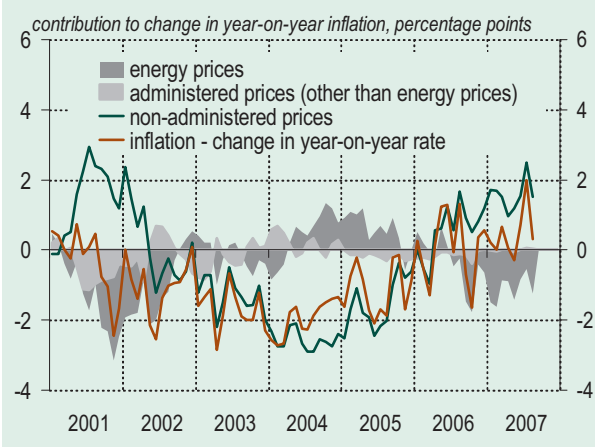
latter have risen this year as the result of new three-year electricity supply contracts. The prices of intermediate goods have evidently not yet been built into consumer goods prices. Therefore the rise in inflation in the most recent period cannot be attributed to the growth in producer prices of manufactured goods. In the most recent period, inflation has risen faster than interest rates, and as the chapter on terms of financing shows, lowered the level of monetary policy real interest rates. The real interest rates for loans and deposits are also low. Low real interest rates gradually stimulate domestic demand and discourage economic entities from bank savings. Since monetary policy nominal interest rates are determined outside the domestic environment, the level of interest rates could have an inflationary effect, stimulate credit

Figure 1.5: Producer prices of manufactured goods on the domestic market



Sources: SORS, Bank of Slovenia calculations

Figure 1.6: Contribution to change in year-on-year inflation by individual price categories



Source: Bank of Slovenia

activity and domestic demand and widen the output gap. Additional inflationary pressures could lead to a further decline in real interest rates.

**Some macroeconomic factors are still acting as price stabilisers or even acting to reduce inflation: growth in labour costs which continue to lag behind productivity growth, moderate appreciation of the exchange rate and a higher growth trend in economic potential.** The movement of labour costs remains relatively subdued this year. For the third consecutive year, annual growth in gross wages is stable at just over 5%. Thus on average, real wages noticeably lag behind growth in output per employee. The strong nominal appreciation of the euro against the currencies of main trading partners has also contributed to dampening inflation pressures. Chapter four shows that domestic relative prices are above the long-term trend compared to foreign prices. Furthermore, high economic activity is primarily based on high growth in investments and increased employment which contributes to growth in economic potential where cyclical developments of production factors do not play a role. Growth in household spending has also remained at a moderate level of between 3.5% and 4%, and according to the latest data from SORS shows no sign of accelerating, in contrast to the economic cycle of 1999. The latter also shows that relatively high growth in disposable income,

which significantly exceeds growth in labour costs per employee due to high growth in employment and tax reforms, was not an inflationary factor in the first half of the year.

**Analysis of the effects of movements of individual price categories on inflation shows that the contribution of non-administered prices to inflation is on the rise.** This year, non-administered prices have contributed 1.5 percentage points to inflation, the highest amount in the past six years. By contrast, slower growth in energy prices until September this year has contributed a negative 0.7 percentage points to inflation. Similar to last year, growth in administered prices has not resulted in changes to year-on-year inflation rates.

**Higher growth in prices in every major sub-group of the index of non-administered prices has led to relatively high growth in non-administered prices this year.** This year the prices of food and services have recorded the fastest growth, while growth in energy prices has been significantly slower, being three to four times lower than in the previous two years. Growth in prices of other industrial goods remains relatively low this year, recording only a gradual rise.

**Similar to past years, the Slovenian Government continued to conduct a consistent administered prices**



**policy this year, while it is not yet possible to accurately assess the inflationary pressures of other measures.** The Government conducted the administered price policy in accordance with its plan for managing regulated prices for 2006 and 2007 which was adopted in February last year. Growth in administered prices therefore has not exceeded growth in non-administered prices. Final assessment of the effect of changes in taxation on inflation is not yet possible. While the reduction of payroll tax rates reduces the costs of companies and thus eases inflationary pressures, changes to income tax legislation have increased disposable income which could lead to additional inflationary pressures. The liberalisation of electricity prices in the summer did not result in higher pressures on the growth of these prices, as was expected. Current indications are that the 5% increase of these prices in April was an appropriate adjustment to the market level. As in previous years, excise duties on tobacco products were adjusted in July in accordance with the EU Directive. In contrast to previous years, this year's adjustment was somewhat higher. The Slovenian Government has decided to bring the level of excise duties in line with the EU Directive six months before the deadline to partially offset the loss of revenues resulting from changes to personal income tax rates. Inflation will be higher by slightly less than 0.1 percentage points due to the early alignment of excise duties.

**In addition to inflationary pressures resulting from the unexpected acceleration in economic growth, which will also be reflected in the future, a significant part of the deviation in the rise of inflation from the spring projection can be attributed to the growth in prices of food and refined petroleum products.** In contrast to the downward pressure on the prices of food, clothing and footwear exerted by retailers in the last two years, upward pressure is being put on prices this year, particularly on producers and growers who evidently lack internal reserves, given the increasing growth in food prices on the world market. At the beginning of the year, the prices of unprocessed food rose, while in recent months growth in the prices of processed food has been particularly evident, which raises questions about the efficiency of the food industry in Slovenia given the slow decline of growth in the prices of unprocessed food. Oil prices on world markets have also risen surprisingly and will exceed the assumption from spring projections by USD 10 per barrel on an annual average. This has contributed approximately 0.3 percentage points to the upward revision of the inflation projection for 2007. In contrast to previous years, this year's growth in energy prices is curbing growth in prices, but to a lesser extent than previously expected. Average oil prices on world markets in the first eight months of the year are approximately USD 65 per barrel, similar to the average price in 2006.

**Although gradually increasing, the movement of prices of other industrial goods is still subdued.** On average, their level has remained unchanged in the past 12 months, while year-on-year growth in September was just 0.2%. Growth in these prices represents the only major sub-group of prices which still remains below the euro area average. Growth is however approaching euro area levels. Following two years of relatively low growth, prices of clothing and footwear have risen this year, recording year-on-year growth of 4%, an increase of approximately 3 percentage points. Faster growth in prices has been also recorded for household equipment

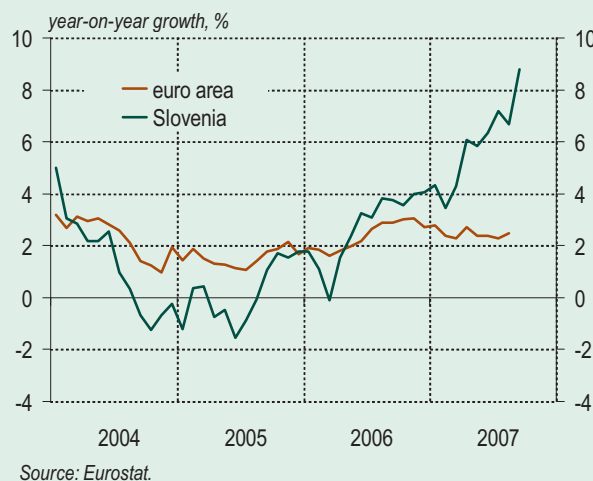
Figure 1.7: Individual price categories



(approximately 4% on average in the past 12 months). This growth was primarily the result of last year's price increases for household maintenance products. There have been no further price increases since then. The year-on-year growth rate of household equipment prices fell to below 3% in September. On the other side, car prices continue to fall. The negative growth in prices of the latter is primarily the result of falling used car prices, while new car prices have more or less stagnated at the level from the last quarter of 2006. Similar to last year, there could be a surge in the prices of new cars in the last quarter when manufacturers define prices of new models. The effects of the introduction of the euro on car prices will likely be seen at this time. In contrast to last year, a gradual slowdown in the decline of used car prices is evident: last year prices fell by around 22% compared to approximately 16% this year. It is likely that the fall in used car prices will be further limited by the measures of government institutions aimed at preventing continued tax evasion, and thus restricting the import of used cars. In addition to aforementioned products, the trend of falling audio-video, photography and computer equipment prices has continued this year. Prices of such products have fallen approximately 5% annually on average over the last four years.

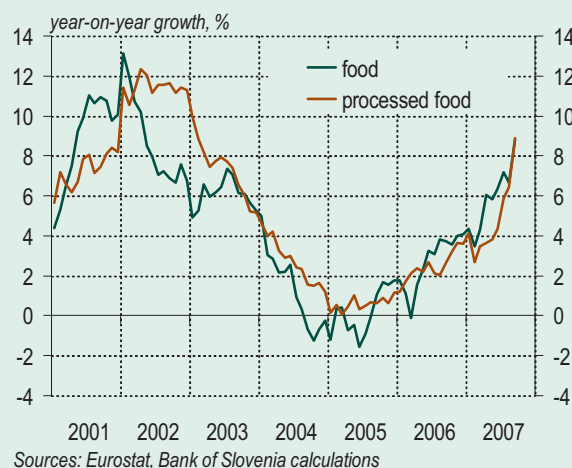
**Growth in food prices this year is once again unexpectedly high, actually doubling compared to last year.** Food prices have risen by approximately 5% on average in the last 12 months, while year-on-year growth of 8.8% was recorded in September. Growth in food prices in Slovenia significantly deviates from growth in food prices in the euro area (2.5% in August). The fastest growing prices in the first half of this year were those of unprocessed food, whose year-on-year growth has risen since the middle of last year, topping out at 10.9% in April 2007. The high growth in the prices of unprocessed food in Slovenia is, to a great extent, the reflection of growing food prices on world markets, where the year-on-year growth in US dollar prices was approximately 30% in August. With the arrival of new seasonal products to the

Figure 1.8: Food prices in Slovenia and the euro area



market in April, the setting of new prices following the introduction of the euro was perceptible. After a delay of several months, prices of processed food followed the movement of unprocessed food prices. Their year-on-year growth has also risen since the beginning of last year, reaching nearly 9% in September this year. The fastest growing prices are that of milk, dairy products and eggs, which have risen by more than 11% on average compared to August 2006. In contrast, the prices of bread and grains have risen at a significantly slower pace (approximately 3.4% year-on-year), although expected future price increases for this group were actually the highest. The movement in the prices of other products in

Figure 1.9: Food prices



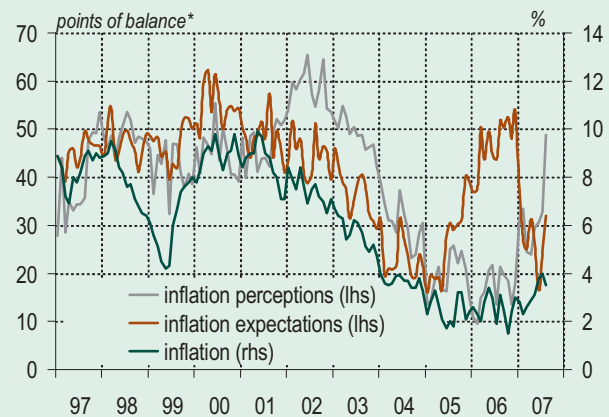


**Box 1.1: Surveyed assessment of perceived inflation and inflationary expectations**

Prior to Slovenia's entry to the euro area, there was little sign of deviation in the trend between measured inflation and inflation perceptions. This trend differs from that in most euro area Member States where inflation perceptions rose sharply prior to the introduction of the euro. The aforementioned difference likely stems from the fact that Slovenian consumers were well informed prior to the adoption of the euro in Slovenia about the single currency and price increases experienced in other euro area Member States when the euro was introduced. Necessary trust was also bolstered by well organised campaigns to warn consumers about excessive price increases. The notably sharp rise in inflation perceptions in recent months is likely the result of the actual increase of the overall level of prices and the prices of products that consumers purchase most frequently (particularly food and energy), which to a great extent influence the inflation perceptions. However, the growth of perceived inflation was significantly sharper than the growth of actual inflation. This highlights the risk that perceived inflation will remain at an elevated level in the future. A similar situation was experienced by other euro area Member States where perceived inflation is still at a higher level than measured inflation.

From the middle of 2005 until the end of 2006, inflation expectations continuously rose although actual inflation in the period was relatively stable. At the beginning of 2007, following the exchange of tolar for euros, inflation perceptions rose, while inflation expectations markedly decreased. Similar divergent trends of actual and perceived inflation were also present in other euro area Member States during the introduction of the euro. Growth in expected inflation is again on the rise in the past several months and is evidently the reflection of a sharp acceleration in certain HICP categories, particularly food, and at the same time the gradual rise in overall inflation. The rise in inflation expectations is one indicator which shows the growing risks linked to maintaining price stability. Expectations may be built into prices and wages and thus become an inflationary factor.

the group of processed foods has been moderate, with no indication of higher trends of deviation. At this time it is difficult to assess how much the accelerated economic cycle or the lack of competition in the market contributed to the growth in food prices.

**Figure: Inflation, perceptions and expectations**

Source: SORS, European Commission

\* The European Commission verifies consumer perceptions of inflation with regular monthly surveys. Indicators reflect consumer perceptions of inflation in the past and over the next 12 months. The indicator of perceived inflation is calculated as the difference between the weighted average percent of questions for which the answers were that consumer prices "rose a lot" or "rose moderately" in the past 12 months and the weighted average percent of questions for which the answers were that prices "fell" or "stayed about the same" in the same period. More moderate answers receive half the weight of more extreme answers. This means that equilibrium statistics only indicate how prices have changed in the last 12 months according to the opinion of consumers. They also do not provide any information as to how high the inflation rate experienced by consumers actually is. The same methodology is valid for inflation expectations. This must be taken into account for the explanation of data presented in the figure.

Sources:

Del Giovane, Sabbatini: The cash changeover: the impact on prices and inflation perceptions in the euro area. Rome: „L'euro e l'inflazione", 2005.

ECB: Monthly Bulletin. May, 2007.

Linden Staffen: Quantified Perceived and Expected Inflation in the Euro Area- How Incentives Improve Consumers Inflation Forecasts. Bruxelles: Joint European Commission - OECD Workshop on International Development of Business and Consumer Tendency Surveys, 2005.

**Growth in energy prices has been moderate in 2007 compared to last year.** Average annual growth fell all the way to 1.8% until September, compared to 8.5% last year. Nevertheless, year-on-year and average annual growth in energy prices could rise again at the end of this

Figure 1.10: Prices of services in Slovenia and the euro area

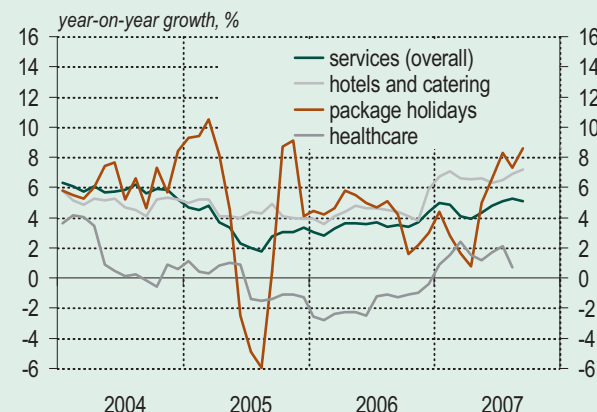


Source: Eurostat.

year due to the last year's considerable drop in prices. The most notable growth was recorded by solid fuels, whose growth this year is significantly higher than of the other fuels, reaching approximately 22% year-on-year. Electricity prices have also recorded higher growth than last year (approximately 5.5% higher this year), due to adjustments to market conditions following liberalisation. Heating oil and gas follow solid fuels and electricity with year-on-year growth in prices of approximately 3.4%. By contrast, growth in the prices of petrol and liquid fuels are negative, hovering around -3% year-on-year.

**Growth in the prices of services is on the rise again this year, although it was still relatively stable in 2006.** In the last 12 months to September, average growth has risen by approximately one percentage point, reaching 4.5%. Growth in the euro area was just over 2% in the same period. Most shifts in prices came at the end of last year and can be partially attributed to a concentrated adjustment of prices at the introduction of the euro. The most notable growth was recorded in catering and accommodation services prices which have risen by approximately 2.7 percentage points to 7.2% year-on-year. The rapid growth of these prices can in part be attributed to the rising number of tourists visiting Slovenia. High growth in prices was recorded for package holidays, which are still at a seasonally high level. The relatively high 8.6% year-on-year growth in these prices is partially

Figure 1.11: Prices of selected categories of services



Sources: SORS, Bank of Slovenia

the result of seasonal deviations and may not reflect actual market conditions. The high growth in prices in this category could also be the result of rapid growth of consumer lending and high growth in disposable income, as well as more favourable weather conditions this summer compared to last year. Prices of health services are also up this year: prices of outpatient services are up approximately 4%, while prices of hospital services have not changed significantly. With regard to the latter, inflationary effects are primarily the result of base effects. Growth in transport services remains stable at around 2.5%, and shows no sign of deviating from this trend. As in recent years the prices of communication services remain more or less unchanged. Government-controlled prices of municipal services are gradually rising, but their year-on-year growth remains negative due to last year's methodological changes to accounting for water supply and sewage fees. Reverse effects on the year-on-year growth in municipal services can therefore be expected in October and November. In addition to the decline of real disposable income of consumers, increases in certain components of municipal service prices, which are not under government control and not included in the HICP, also influence the population's perception with regard to price movements.

## 2 | International Environment and Projection Assumptions

**Economic growth in the euro area in the first half of 2007 was lower than in 2006, but has nevertheless exceeded expectations. In the US, a significant downward revision was made due to the crisis on the real estate market.** Growth in household spending slowed in the first quarter due to the VAT increase in Germany in January 2007. The slowdown however was less than expected. Investments also rose faster in the first quarter than expected owing partly to the mild winter. In the second quarter, economic growth slowed down due to somewhat lower growth in investments brought about primarily by slower growth in the construction sector. At the same time growth in household spending in the second quarter improved. Economic growth in the US in the first quarter of 2007 was influenced to a great extent by a slowdown in growth on the real estate market, which resulted in decreased investment activity and thus economic growth, which was significantly lower than last year. The eco-

nomic growth of other important trade partners such as Croatia, Russia, Serbia and Poland was exceptionally strong in the first quarter, while growth slowed somewhat in the second quarter.

**Somewhat more moderate growth is expected for important trade partners this year compared to 2006, with downside risks prevailing, primarily due to shocks in financial markets.** Growing confidence in the retail sector, a continued drop in unemployment and increased growth in wages in the euro area point to a possible increase in household spending. The volume of industrial orders picked up in the first half of 2007, while business confidence indicators fell in the summer, but remain at a relatively high level. Decreased business confidence is partly the result of spreading uncertainty in financial markets linked to sub-prime mortgage loans in the US. It could also partly be an indication that the in-

**Table 2.1 Assumptions regarding factors from the international environment**

						Projections					
	2002	2003	2004	2005	2006	2007		2008		2009	
						Oct	Δ	Oct	Δ	Oct	Δ
	annual growth, %										
Foreign demand*	3.2	6.4	7.9	5.0	9.3	6.9	0.1	7.2	-0.1	6.5	0.0
Oil (USD/barrel)	25.0	28.8	38.3	54.2	64.9	70	10	73	10	73	10
Commodities prices	4.6	11.3	16.0	6.0	27.7	20.0	3.0	5.0	0.0	5.0	0.0
EMU inflation	2.3	2.1	2.1	2.2	2.2	2.0	0.1	2.0	0.1	1.9	0.0
PPI Germany	-0.6	1.7	1.6	4.6	5.5	2.0	-0.4	1.9	0.1	1.9	0.1

\* Basket of foreign partners import volumes.

Δ: The difference between October 2007 and March 2007 projections.

Source: Bank of Slovenia, Consensus Forecasts, JP Morgan, OECD Outlook, IMF World Economic Outlook.

vestment cycle has reached its peak. Confidence indicators in the construction sector also fell at the beginning of

the third quarter. Moderate forecasts regarding economic growth in the US and the appreciation of the euro against

### Box 2.1: Uncertainty in financial markets following the sub-prime mortgage loan crisis in the US

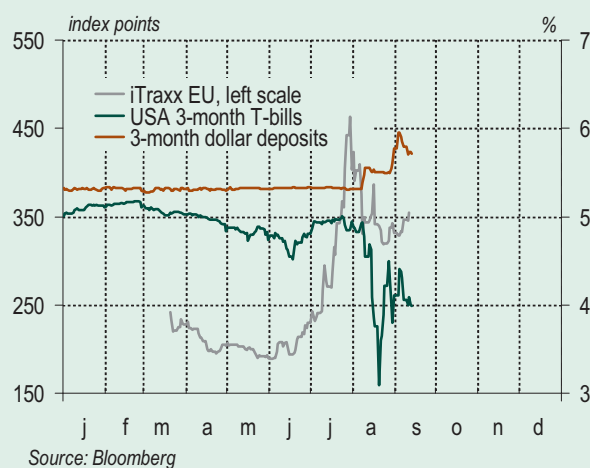
In the middle of the year, conditions in financial markets tightened further as a result of the sub-prime mortgage loan crisis in the US. From the middle of 2003 to the middle of 2004, when the key US interest rate was 1%, growth in housing mortgage loans rose sharply. With the gradual raising of the key interest rate to 5.25% in 2006, interest rates for housing loans also rose, making it increasingly difficult for borrowers to repay their debts. Initially, financial institutions with a large portion of so-called sub-prime mortgage loans (i.e. loans with poor credit ratings) in their balance sheets found themselves in difficulties. At the same time, investment banks issued securities backed by these loans, leading to the spread of uncertainty in the financial market, as risk assessment became extremely difficult due to the complexity of these instruments. In addition to the securitisation process (the issuing of securities based on housing loans), financial innovations took on another dimension. Banks transformed securities issued into a new financial instrument which were excluded from balance sheets through a "conduit" (Special Investment Vehicles). These are less regulated than financial instruments that appear in bank balance sheets. By issuing securities backed by risky mortgage loans and the transfer of credit risk off balance sheets, banks "cleansed" or hid risks in their balance sheets. At the same time, by transferring risky financial instruments to off-balance sheet items, banks freed up funds for loans which are disclosed in their balance sheets.

News about the difficulties of banks, linked to securities backed by risky mortgage loans, generally caused a drop in investors' appetite for risk. At the same time, banks for the most part stopped lending excess liquid assets on the inter-bank market. Due to concerns regarding liquidity on global money and credit markets, a number of central banks, including the ECB and Federal Reserve increased the supply of liquid assets.

Increased uncertainty on sub-prime mortgage loan markets was carried over to stock exchanges at the beginning of August, exchange rate developments, market yields of government securities, commodity prices and influenced expectations regarding movements of central bank interest rates. For the most part, stock exchange indices fell in August as financial investors moved their investment to less risky government securities due to increased risk aversion in a "flight to safety" which resulted in a drop in market yields. Prices of oil

and other commodities (primarily metals) fell as the market expected global economic growth to slow due to the financial crisis, which could have led to falling demand for oil and other commodities. Due to shocks in financial markets which led to the tightening of banks' liquidity and increased uncertainty regarding future economic growth, expectations regarding the movement of central banks' interest rates also changed. Following the spread of the crisis, sentiment prevailed in the market that the trend of rising central bank interest rates across the world could (at least temporarily) be halted. Increased risk aversion also influenced exchange rate developments as financial investors changed their attitude concerning borrowing for investments in foreign currencies and began closing so called "carry trade" positions, shifting to lower-risk currencies and investments. Amongst these, US Government bonds were the most sought after. For example, this reallocation of financial assets caused the temporary appreciation of the US dollar against the euro, the appreciation of the Japanese yen and the depreciation of higher-risk currencies such as the Turkish lira.

Figure: Indicators of increased risk premium in 2007



Source: Bloomberg

With regard to shocks in financial markets, the most frequently asked question is how long will increased uncertainty persist and what will be its possible negative effect on economic growth, which would most likely occur through the contraction of lending activities of banks.

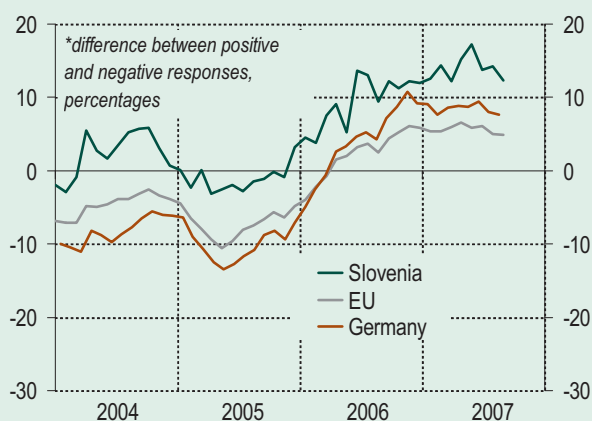
the US dollar have also led to expectations of a slowdown in the growth of euro area exports. This all indicates a possible reversal in the structure of economic growth sources in the euro area, whereby the contribution of household spending is expected to gradually increase while the contribution of investment growth is expected to fall. Until the tightening of conditions in financial markets in August, Consensus forecasts indicated improved economic growth in the euro area. In March, the Consensus forecast for euro area economic growth was 2.3%, and was revised upwards to 2.7% in August just prior to the notable tightening of market conditions. Forecasts for 2008 were also improved, but not as markedly as for 2007. A slowdown in economic growth is expected in the US until the end of the year. Consensus has gradually lowered growth forecasts for this year and next. In March, the growth forecast for the US was 2.4%; in August it was lowered to 1.9%. The lowering of forecasts was primarily the result of the decline in growth on the real estate market.

**Available forecasts of economic trends in the international environment indicate a virtually unchanged assumption regarding the growth in foreign demand in the projection period with regard to previous projections.** Forecasts of euro area economic growth have improved considerably. Demand, primarily from Italy, France and Austria, should rise in 2008. US economic

growth is also expected to strengthen. Therefore the assumption for growth in foreign demand for next year is higher than for 2007. Deepening of uncertain conditions in financial markets and their spread to other markets represents the greatest risk at the moment, which, taking into account current assumptions, could result in lower foreign demand this year and in 2008. The European Commission therefore lowered its preliminary estimate of euro area economic growth by 0.1 percentage points to 2.5% in its September forecasts. At the same time it emphasised that the good state of the economy was a factor in limiting the effect of shocks in financial markets on the economy in the middle of the summer. Despite this assessment the possibility exists for increased negative effects on economic growth, especially if the period of uncertainty is protracted. The ECB, in its interim forecasts in September, also lowered its range of the forecast for euro area economic growth in 2007 by 0.1 percentage points. Growth in imports of main trading partners should fluctuate around 7% in 2007 and 2008, and slow somewhat in 2009.

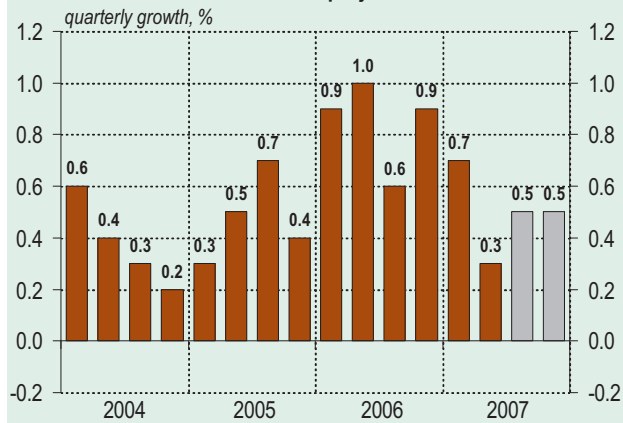
**The prices of oil and other commodities rose sharply on the world market in the first half of 2007, and stabilised somewhat in August.** The main factor in rising oil prices remains the gap between high demand and relatively slow growth in supply. The price of Brent crude oil has risen from an average of USD 54 per barrel in

Figure 2.1: Business confidence in Slovenia and abroad



Source: Eurostat.

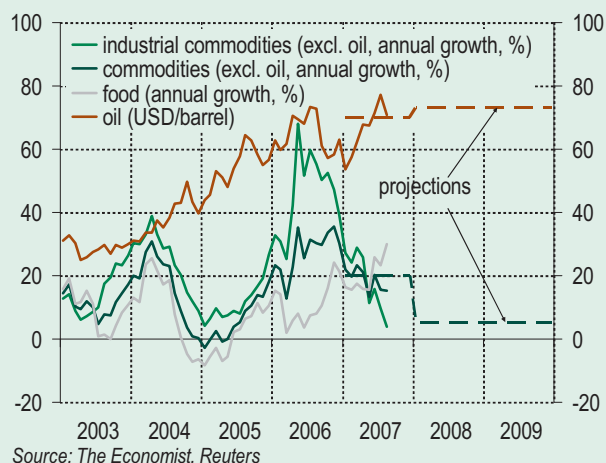
Figure 2.2: Euro area economic growth and European Commission projections



Source: European Commission forecasts, September 2007; projections for two quarters



Figure 2.3: Prices on world commodity markets



January 2007 to USD 77 in July. This growth has been driven primarily by the robust global economic upturn, the unwillingness of OPEC members to increase oil production and the resulting low oil stocks. Further contributing to growth were unfavourable weather conditions in the US during winter months and the seasonally high demand for oil during the summer in the US due to increased travel. Geopolitical tensions in oil-rich areas, particularly in Iran and Nigeria, have also persisted, as well as supply problems in some refineries. Oil prices slid to an average of USD 71 per barrel in August due to the fear that uncertainties in financial markets would slow global economic growth and thus the demand for oil. Another reason for falling oil prices was reduced disposition to risk following the start of shocks in financial markets, brought about by the withdrawal of speculative investments from the oil market. Oil prices began to rise again at the end of August. Despite the rapid rise in oil prices in the first half of the year, year-on-year average US dollar oil prices in the first eight months of 2007 fell by 2.1%, reflecting the high level of prices in the same period last year. Euro oil prices fell by 9.3% in the same period due to the rising value of the euro.

**Taking into account current developments and expectations on commodity markets, the previous assumption regarding oil prices was revised upward for**

**2007 and the next two years. Growth in prices of other commodities should stabilise in the future, except food prices which are expected to continue rising, at least in the short-term.** The upward revision of oil prices can be attributed to high oil prices in the first half of the year. Furthermore, the global economic upturn this year and in 2008 should continue to be relatively favourable. Taking into account the assumption of an average oil price of USD 70 per barrel in 2007, there will be a significant rise in year-on-year US dollar oil prices from September onwards which, due to the low basis in the last four months of the year, could reach approximately 30%. Based on high growth rates in commodity prices, excluding oil, in the first seven months of 2007, the assumption regarding the total year average growth in commodity prices was also revised upwards. With a slowdown in the growth of metal prices, which in recent years and 2007 are the fastest growing component of the commodities basket, growth in food prices, particularly corn and other grains, is accelerating. Grain prices on world markets are rising at a year-on-year rate of more than 40% primarily due to increasing demand from developing countries, the use of grains in the production of bio-fuels, unfavourable weather conditions in some large producer countries and due to agriculture policies aimed at reducing agricultural surpluses. Prices of milk and meat are likewise rising rapidly as grains are used as animal feed. Growth in commodity prices is expected to slow in the next few years with somewhat more moderate growth in the global economy.

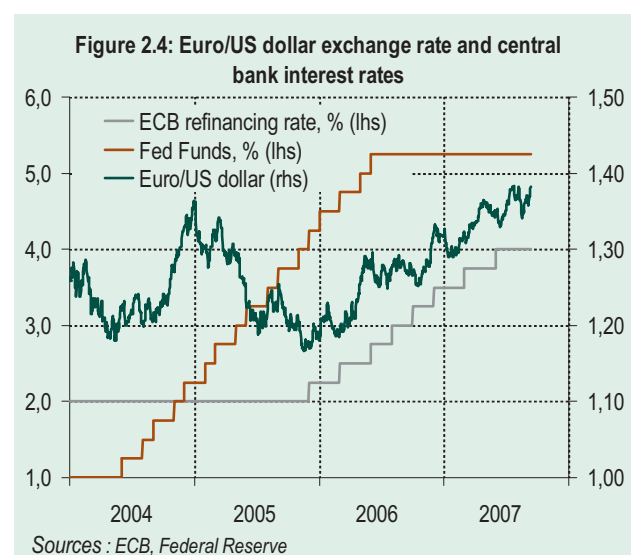
**In the first half of 2007, euro area inflation has remained stable at a level below 2%. In the US, inflationary pressures have lessened following a rise in the first half of the year.** Year-on-year euro area inflation has remained at approximately 1.9% in the first seven months of 2007. Core inflation (inflation excluding energy and unprocessed food prices) has also risen to this level. Reasonably moderate inflation in the first seven months was primarily the result of the high basis from last year when energy prices rose rapidly. Housing category

prices contributed the most (approximately 0.4 percentage points) to average year-on-year inflation in the first seven months. Contributions from electricity prices and rents were predominant in this category, although the contribution of electricity prices to inflation gradually fell in the period up to July. Food, hotel and restaurant prices also contributed a significant 0.3 percentage points each to average year-on-year inflation during the first seven months of the year. Core inflation rose by 0.3 percentage points in the period from December 2006 to July 2007, linked primarily to the VAT increase in Germany. Growth rates of euro area producer prices of manufactured goods gradually declined in the period up to July driven by lower growth in energy sector prices. This development in producer prices was also characteristic in Germany. Inflation in the US rose until the middle of the year, and then fell to 2.4% year-on-year in June driven by the slower growth in energy prices. Core inflation in the US began falling in the second quarter and was 2.2% year-on-year in July, indicating a reduction in demand-side inflationary pressures. This is also consistent with the somewhat lower economic growth recorded this year compared to 2006.

**Assumptions regarding price growth in the euro area and US were revised upward due to the presence of some inflationary factors in the international environment and also due to increased cost pressures on prices in the euro area.** The increase of assumed euro area inflation to 2.0% for 2007 was primarily the result of higher energy prices and sustained growth in food prices on the world market. Besides high commodity prices, inflationary pressures also stemmed from indirect taxes in 2007. In 2008, additional pressures on prices can be expected from labour costs, a gradual increase in corporate profits and higher production capacity utilisation, while growth in commodity prices is expected to stabilise. The assumption regarding the inflation rate in the US is revised markedly higher than in the euro area. In 2007, the higher assumption regarding inflation in the US is primarily the result of high inflation over the first seven months

of the year. Furthermore, prices of energy and other commodities, particularly food, were also rising faster than anticipated. Expectations of more moderate growth in prices in the US in the next two years are also consistent with expected moderate growth in prices on commodities markets, while the same is true for euro area inflation. The assumption regarding growth in German producer prices is also higher due to higher inflation in the first seven months. With the favourable economic upturn in Germany and the absence of shocks in commodity markets, growth in German producer prices will remain largely unchanged in the next two years compared to 2007.

**In the first half of 2007, the ECB continued the gradual increase of interest rates, while the US Federal Reserve has left its key interest rate unchanged.** From January to September 2007, the ECB raised its interest rate twice by 0.25 percentage points (in March and June). The key refinancing rate was 4.0% in September. The Federal Reserve last raised its key Federal Funds interest rate (to 5.25%) in June 2006. Expectations of market participants regarding movement of the key interest rate in the US have changed significantly in 2007. In August, market sentiment was dominated by the conviction that the Federal Funds interest rate would likely be lowered by year-end following the spread of problems linked to sub-prime mortgage loans. In September, the Federal



Reserve lowered its key interest rate to 4.75%. The technical assumption in projections is that interest rates in the euro area will be aligned with the expectations of financial markets that prevailed at the beginning of September 2007.

**From January to September 2007, the euro has appreciated significantly against the US dollar, while exchange rate assumptions remain unchanged for the projection period.** More favourable indicators of economic growth in the euro area than in the US have led to the euro's appreciation against the US dollar. Furthermore, market sentiment that the interest rate gap would widen in favour of the euro prevailed until around May. Movement of the EUR/USD exchange rate has been quite volatile this year and influenced by changing outlooks with regard to economic conditions in the euro area and US and related expectations regarding changes in interest rates.



# 3 | Outlook for Economic Activity and Labour Market

**Gross domestic product rose by 6.5% in the first half of 2007, while projections indicate a gradual reduction in economic activity during the projection period to the long-term average.**<sup>4</sup> Economic growth in the first half of 2007 was considerably higher than expected, which has also influenced projections of growth for the entire year. Significant upward revisions of projections regarding economic growth are primarily the result of high growth in investment spending. Furthermore, the high export cycle will continue since, consistent with assumptions, economic growth will continue to be favourable in the main trading partners of Slovenia. Other factors in

maintaining high domestic spending, accompanying incentives from the external environment, will include continued favourable financing terms, a high level of confidence in industry and the construction sector, high profits, high growth in disposable income supported by changes in tax legislation in 2007 and the reduction of unemployment. Projections in this regard indicate that GDP growth will slow down in the next two years, which is consistent with the slowdown of growth dynamics in the second quarter and with previous projections. Expected growth in the next two years will be similar to the long-term trend of just over 4%. This growth will continue to

**Table 3.1 Activity, employment and wages**

							Projections					
	2002	2003	2004	2005	2006	2007		2008		2009		
						Oct	Δ	Oct	Δ	Oct	Δ	
	real growth, %											
Real GDP	3.7	2.8	4.4	4.1	5.7	5.7	1.1	4.4	0.0	3.9	-0.1	
Employment	1.5	-0.2	0.4	0.7	1.2	2.2	1.1	0.5	-0.1	0.3	-0.2	
Net wages	2.1	1.8	0.8	3.6	2.6	5.0	1.0	3.3	0.5	3.0	0.3	
Gross wages	2.1	1.9	1.0	2.2	2.3	3.0	0.3	3.3	0.5	3.0	0.3	
Productivity	2.2	3.0	4.0	3.4	4.5	3.5	-0.1	3.9	0.1	3.6	0.1	

Δ: The difference between October and March 2007 projections.

Source: SORS; Bank of Slovenia calculations.

<sup>4</sup> Projections were compiled based on figures available and statistical methodologies applicable on 12 September 2007. Since annual data published by SORS on national accounts for the period 2000 to 2006 and quarterly data up to the second quarter (published 10 September 2007) are not comparable and quarterly data are not consistent with revised data on the balance of payments, differences are possible from the currently known dynamics and level of data from national accounts in the next publication of national account statistics (foreseen in December 2007).

The projections of macroeconomic factors in the Price Stability Report are based on assumptions for movements in variables in the international environment and certain domestic factors conditioned by economic policy decisions. The domestic factors under the influence of economic policy and exogenously included in the forecasting process are public sector spending and investment, public sector wages, the movement of administered prices and certain other variables of a fiscal nature. The assumed forecasts used in the projections are not the same as those used in its projections by the ESCB.

facilitate the process of real convergence to more developed EU Member States, with Slovenia recording faster GDP growth than old EU Member States. At the same time expectations are that GDP growth will maintain economic activity and aggregate demand above the supply potential which means a positive output gap and pressures on price growth throughout the projection period.

Figure 3.1: Domestic demand and GDP

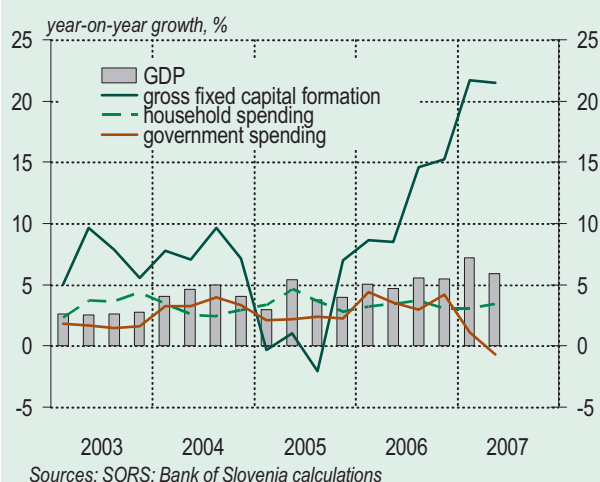
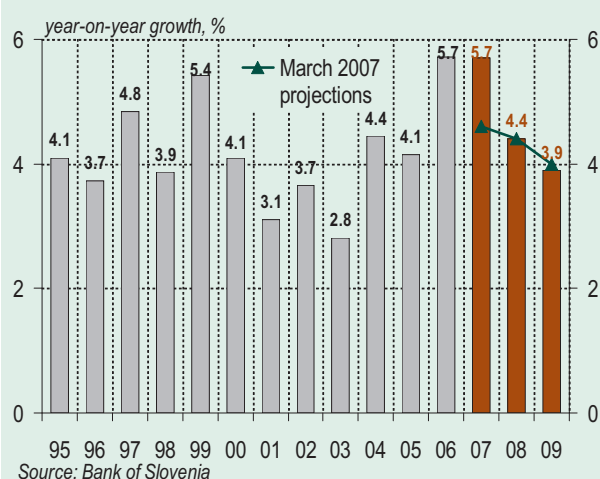


Figure 3.2: GDP growth projections

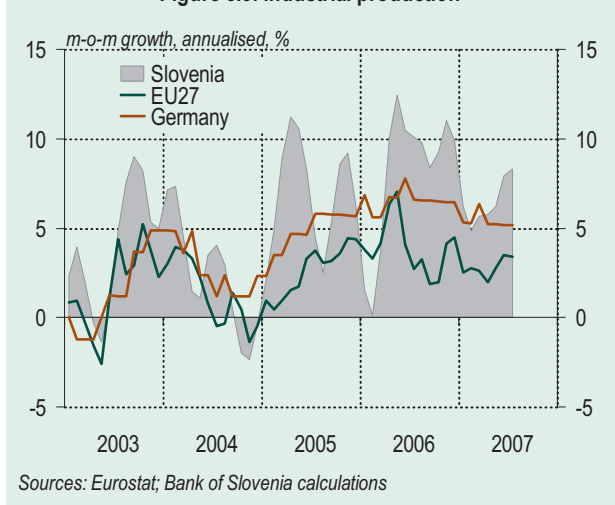


**The structure of growth in value added has remained mostly unchanged during the first half of 2007 with regard to last year.** The greatest impetus to growth in value added in 2006 came from the construction and financial intermediation but also from trade and manufacturing. Industrial production grew by 8.6% in the first half of the year. This high growth stood out from the rates recorded in the euro area, but slowed down at the end of the second quarter as in the rest of the world. The structure of economic growth points to a favourable economic cycle inside and outside Slovenia, as a sharp increase in growth in added value was recorded both by companies connected mainly to domestic demand and by companies that produce primarily for foreign markets.

**Domestic demand is expected to remain the driving force behind the economic cycle this year, while forecasts also indicate moderate growth in supply potential.** Relatively rapid growth in investment will be a factor in maintaining the importance of domestic demand in 2007. The fastest growing component of domestic spending in the first half of 2007 was investment in non-residential construction which recorded average year-on-year growth of 30%, partly due to a low basis from 2006 and favourable weather conditions in the first quarter, as well as a high level of investment activity at state-controlled companies. Despite gradually rising interest rates, the main factors in strong investment spending in the first half of 2007 were continuing relatively favourable financing conditions, expected growth in domestic and foreign demand, certain one-off events and the anticipated end of the transitional period of a reduced VAT rate for residential building and house repairs at the end of 2007.<sup>5</sup> In parallel with anticipated high employment growth, rapid growth in investment will continue to con-

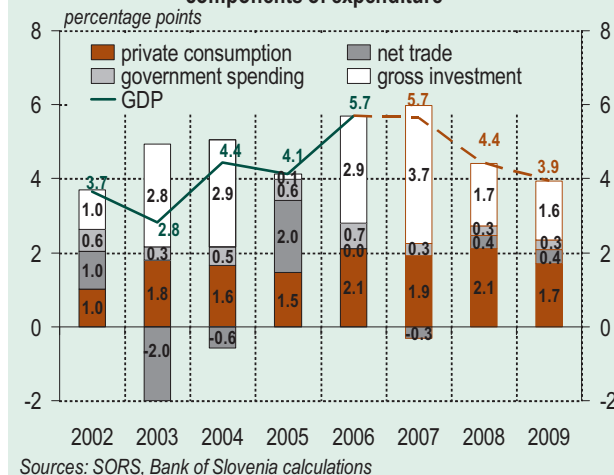
<sup>5</sup> At the beginning of July 2007, the ECB granted the request of Slovenia and certain other new Member States that the period of a reduced value added tax (VAT) rate for the construction, renovation and maintenance of residential buildings, not provided in the scope of social policy, be extended beyond the current expiration date of 31 December 2007 to 31 December 2010. Slovenia sent the request to maintain a VAT rate of 8.5% on construction, renovation and maintenance of residential buildings, which it achieved in accession negotiations with the EU, to the Commission at the end of March 2007. According to the currently valid arrangement, sellers of new constructions would be required to begin charging VAT at a rate of 20% in 2008, and no longer at the reduced rate of 8.5%. Pursuant to the EU directive on VAT, the reduced VAT rate may only be used for residential construction in the scope of social policy and not for other housing. The European Commission's proposal for a three-year extension of the existing derogation for individual Member States, including Slovenia, must still be approved by the EU Council. The aforementioned extension of the period for applying the reduced VAT rate also relates to services linked to the preparation of meals.

Figure 3.3: Industrial production



tribute to an increase in the economy's supply capacity, which provides the basis for a more sustainable and durable economic growth in the medium term. Nevertheless, it is necessary to take into account that a good portion of employment growth and the acceleration in investment is cyclical in nature, which only deepens the economic cycle, and that there will be a gradual reversal in the dynamics of these factors when economic activity returns to the level of supply potential. The contribution of net trade will be negative in 2007 compared to its neutral contribution last year. Notwithstanding slightly lower foreign demand, exports will grow faster than in 2006, primarily due to the high level of growth in the first half of 2007. On the other hand, growth in imports, together with high domestic spending and in line with the high import component of exports, will accelerate slightly.

Figure 3.4: Contributions to GDP growth by components of expenditure



**The contribution to aggregate demand made by domestic demand will decline by the end of the projection period.** Despite this decline, domestic demand will continue to account for the majority of aggregate demand during the period from 2007 to 2009, while the average contribution made by net trade will be positive. The decline in the contribution made by domestic spending will mostly be the result of the cooling of investment spending following the sharp increase in total investment in 2007.

**Household spending rose 3.2% year-on-year in the first half of 2007, while solid growth is expected to continue in the future. The contribution made to economic growth by household spending will increase only slightly during the projection period compared to the contribution from 2006.** After falling slightly be-

Table 3.2 Components of domestic demand

							Projections					
	2002	2003	2004	2005	2006	2007		2008		2009		
						Oct	Δ	Oct	Δ	Oct	Δ	
	<i>real growth, %</i>											
Domestic demand	2.6	4.8	4.9	2.2	5.7	6.2	1.7	4.0	0.1	3.4	-0.4	
Private consumption	1.8	3.5	3.0	2.9	4.0	3.8	0.3	4.0	0.6	3.4	0.2	
Government spending	3.4	1.9	3.1	3.2	4.4	1.7	-1.5	1.9	-0.8	1.5	-1.2	
Gross investment	3.8	10.2	10.5	0.4	9.9	13.5	7.5	5.5	0.1	4.8	-0.4	

Δ: The difference between October 2007 and March 2007 projections.  
Source: Bank of Slovenia.

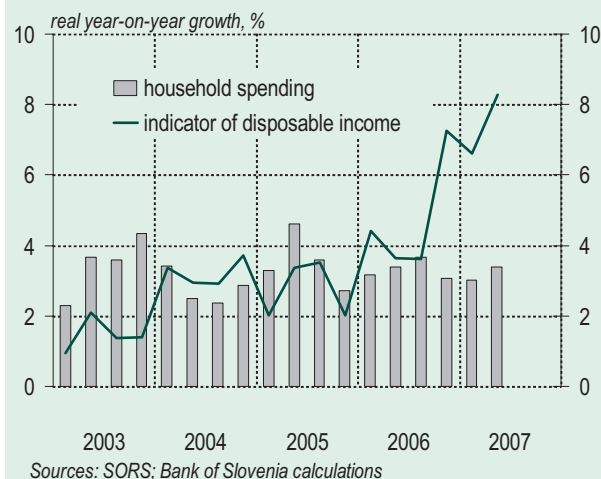
low expectations in the first quarter, growth in household spending picked up somewhat in the second quarter. Growth in household spending is expected to be relatively high in the future primarily as a result of favourable conditions on the labour market, which are increasing consumer optimism. In the first half of the year, consumer confidence indicators reached their highest level in recent years, while improvement in expectations for future economic developments declined somewhat during the summer. Continuing relatively favourable financing conditions are still a leading factor in high household spending, but to a lesser extent. However, certain anticipated changes in the area of taxation and the assumed tightening of financing conditions will prevent excessive consumer spending. Expected faster growth in prices will also restrict disposable income and thus growth in household spending. In this regard, a significant risk factor of current household spending projections is the extent of a possible transmission of higher growth in prices to wages. Consumers will continue to be encouraged to use longer-term forms of savings by institutional changes already made in pension insurance and by the availability of new alternative forms of savings.

**Growth in household spending has lagged behind the relatively rapid growth in disposable income over the last year. Growth in disposable income should remain at a high level in the future. A significant portion of its growth is linked to employment growth and the effects of tax reforms.** The level of disposable income has risen this year due to the growth in average earnings and rapid employment growth. Although at the beginning of 2007 changes in tax legislation led to a significant increase in net wages, which represent the majority of disposable income, certain other components of disposable income have recorded rather subdued growth. Since net wages have risen the most in higher income brackets with a generally lower marginal propensity to spend, this increase has not had any considerable impact on household spending. The number of income earners in households has risen in the first half of the year mainly due to

rapid employment growth. In the first half of the year, the number of pension recipients rose by approximately 7,000, or just under 1.5%, while the number of unemployment benefit recipients fell sharply (by approximately 16,000), as did the number of social security benefit recipients (by approximately 11,000). Since a large portion of the rise in employment in 2007 is the result of additional employment of the foreign labour force, the increase in disposable income is not reflected to a great extent in household spending. According to estimates, the level of real disposable income rose by approximately 7.5% in the first half of 2007, which is considerably higher than the average growth of just under 5% in 2006. Rapid growth in public sector wages is expected to have the greatest impact on higher growth in disposable income in the coming years compared to previous projections.

**According to baseline projections, household spending will continue to lag behind GDP growth in the future and remain stable. It therefore should not be an additional inflationary pressure factor.** The main risk factors affecting household spending are the undefined package of tax reforms (e.g. real estate tax, VAT), and price increases, which could encourage additional wage increases in the event of substantial wage growth facilitated by the current favourable economic climate. Because pension increases have been tied to gross wages since the middle of 2005, disposable income from

Figure 3.5: Household spending and disposable income



pensions is also a risk to the forecast for household spending.

**According to available data regarding the future development of government spending, the contribution made by government spending to aggregate demand throughout the projection period is expected to be lower than the average from the past few years.** In the first half of 2007, there was a noticeable slowdown in government spending which totalled 0.2% and was primarily the result of lower expenditure for collective spending. Given the relatively high rate of growth last year, the assumption for government spending for this year has been revised downwards; the difference from previous projections is 1.5 percentage points. The assumption for real government spending in 2008 and 2009 is also lower compared to previous projections and indicates that a considerable slowdown in government spending will continue. Growth in government spending should settle above 2% in the next two years. Nominal growth in government spending has fallen in 2007, while the assumption for nominal government spending has increased slightly for 2008 due to anticipated higher wage expenditure.

**Developments in the structural general government deficit and the transparency of government-controlled investment programmes are crucial for assessing the fiscal policy effects on the economic cycle.** The extent of structural general government deficit<sup>6</sup> in 2007 is not yet clear. Public finance developments this year are under the influence of the economic cycle, which will result in an increase in revenues compared to budget assumptions and a decrease in the general government deficit. In its Stability Programme from December 2006, the Ministry of Finance states that the medium-term objective of public finance policy is to achieve a structural government deficit in the amount of 1% of

GDP, which Slovenia is expected to achieve in 2009. This year's Stability Programme foresees maintaining the structural deficit at last year's level of 1.7% of GDP. According to the latest estimates of the Ministry of Finance, Slovenia is expected to record a deficit in the amount of 0.6% of GDP in 2007, a considerable improvement compared to the 1.5% of GDP planned in the Stability Programme and this year's April notification. New official calculations regarding the development of the structural deficit are expected to be published at the end of the year in the new Stability Programme. According to rough estimates, assuming GDP will exceed supply potential by 1 to 1.5 percentage points, the structural general government deficit in 2007 is expected to be between 1.1% and 1.5% of GDP.<sup>7</sup> In the given cyclical conditions it is necessary to implement a more distinct counter-cyclical fiscal policy and, in addition to a slowing effect on inflation, create reserves for stimulating economic activity when it has slowed down. Nominal growth in government spending this year is low primarily due to low growth in wages. According to estimates, government spending will rise next year due to planned growth in public sector wages. Planned financing of the railway infrastructure represents uncertainty, as do government-controlled infrastructure projects (i.e. investments by DARS) outside the government sector which, due to the remarkable acceleration in investment, have a significant pro-cyclical effect.

**Gross fixed capital formation rose by 21.6% in the first half of 2007, significantly exceeding estimates from spring projections.** The investment dynamics was strong last year, and picked up further at the beginning of this year. The fastest-growing components of investment expenditure were residential construction and investment in transport equipment. High growth in investment in non-residential construction at the beginning of the year was partially the result of favourable weather conditions which sped up motorway construction already planned for this

<sup>6</sup> The structural deficit is a deficit adapted for the effects of the economic cycle and one-off and temporary measures on the government sector's position which represent transitory effects on public finance trends and which can distort the deterioration/improvement of the public finance position.

<sup>7</sup> An estimate of the output gap in this publication and an assumption of public finance balance elasticity of 0.5% on economic activity have been taken into account. See Cajner: *Cyclically Adjusted Budget Balances in Slovenia* (Bank of Slovenia: Surveys and Analyses, 2005).



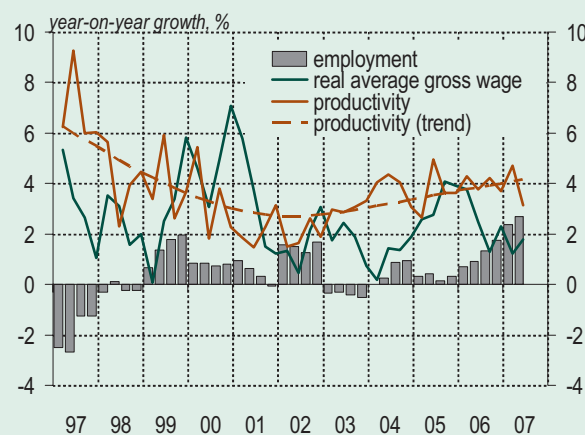
year. Investments in this area also grew rapidly due to the construction of facilities intended for trade activities and the construction and renovation of facilities in the scope of preparation for Slovenia's EU presidency in the first half of 2008. High growth in investment in residential construction was partially driven by high demand and partially as the result of shifts in timing and increased residential construction prior to the anticipated end of the transitional period of reduced VAT rate, which had been expected at the end of 2007. Despite the extension of the transition period, relatively high growth in investment in residential construction is expected to continue in the future. Further evidence for these projections comes from indicators of granted building permits for residential construction which also point to high growth in the area of facilities intended for catering activities in the first half of the year. Total investments in equipment in the first half of the year rose by 17% year-on-year, with investments in transport equipment recording the fastest growth. The rapid growth of investment in transport equipment in the first half of 2007 was driven by certain one-off transactions, primarily the purchase of aircraft in the second quarter. Growth in investment in transport equipment is thus expected to be slightly slower in the future.

**The projections are that the fastest-growing component in gross fixed capital formation will be investment in non-residential facilities.** Despite the slight increase in investment in machinery and equipment owing to the favourable outlook and the high level of production capacity utilisation, and continued high growth in investment in residential construction, investment in non-residential facilities will record the highest growth, led by high government investment spending on the road infrastructure. According to expectations, investment growth in construction and facilities will be somewhat slower than in the first half of the year, as indicated by the results from surveys of business trends in construction in the recent months. Growth in government investment and investment of government-controlled public undertakings (primarily DARS) is expected to gradually slow in the

coming years. The assumption of real government investment growth is 5.6%, 6.3% and 4.3% in 2007, 2008 and 2009, respectively. Rapid growth in exports will also have a favourable impact in the future on private sector investment, as will the gradual reduction of corporate income tax, which will be cut gradually from 25% in 2006 to 20% by 2010. Conversely, investment spending over the next several years will be restricted primarily by the slight downturn in the climate in the rest of the world, the anticipated tightening of financing conditions and especially due to increased risk premiums accompanying recent financial market turmoil and the abolition of investment relief that came into force at the beginning of this year.

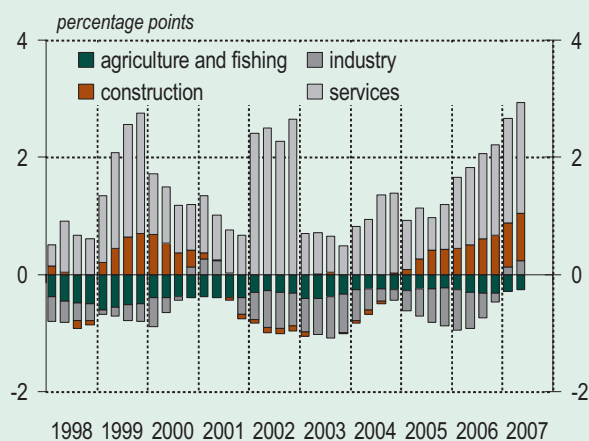
**In addition to the rapid growth in investments, increasing capacity utilisation also contributed to employment growth in the first half of 2007.** Manufacturing companies, which represented approximately 88% of industry and 21% of total GDP in 2006, have reported increased capacity utilisation (both in terms of personnel and technology) also in 2007. In this period, fewer companies have reported that they have appropriate current production capacity at their disposal with regard to expected demand in the next 12 months. As a consequence companies have significantly increased employment, which achieved high growth of 2.5% year-on-year in the first half of 2007.

**Figure 3.6 : Productivity, employment and real average gross wage**



Sources: SORS; Bank of Slovenia calculations

Figure 3.7 : Contributions to employment growth by sector



Sources: SORS - national accounts; Bank of Slovenia calculations

**Most of the net new jobs created in 2007 were in the services and construction sectors.** In the first half of the year, year-on-year employment growth of 4.7% and 10.1% was achieved in the services and construction sectors, respectively. Since the first quarter of 2007, employment in industry has also risen (since independence, employment in industry has fallen, especially in labour-intensive sectors). Employment in agriculture and fishing continued to decline in the first half of the year. During this period, the share of temporary and part-time workers in total employment has continued to rise, achieving 17.8% and 9.3%, respectively in the second quarter of 2007.

Figure 3.8: Unemployment rates and participation rate



Sources: SORS, Labour Force Survey

**Consistent with the favourable business cycle and growing employment, the trend of declining unemployment in the labour market from 2006 continues.** The unemployment rate, according to the Labour Force Survey, and the registered unemployment rate fell significantly in the second quarter of 2007 to 4.6% and 7.6%, respectively. The fall in unemployment and the increase in employment could stimulate a portion of the inactive population to actively enter the labour market, thereby contributing to an increase in the labour force. The record low levels of unemployment indicate tightened labour market conditions, which generally increase the bargaining power of unions during wage negotiations.

**Growth in employment is expected to become more moderate during the projection period, consistent with the slowdown in the business cycle.** The greatest slowdown is expected in sectors where employment rose most under the influence of the business cycle. It is worth highlighting construction and to some extent the transport and real estate sectors which recorded average year-on-year growth of 5.4% and 6.9%, respectively. Employment is expected to fall, primarily due to a declining number of workers with fixed-term contracts. These represent a "flexible" segment of the labour market or that segment of the labour market which is most dependent on changing labour market conditions. In the short-term, business tendency indicators regarding employment over the next three months remain very favourable, especially in the retail and construction sectors. The number of manufacturing companies, which expect additional employment in the next three months, has also risen sharply in the last year.

**In addition to low unemployment, other indicators point to increasingly tighter labour market conditions.** Since the beginning of 2006, an increasing number of companies have reported a shortage in labour, particularly of skilled labour. If companies draw additional labour from the increased labour force (based on an increase in the working-age population or an increased participation rate); this additional workforce could ease wage pres-

tures. Since the beginning of 2006, the average year-on-year growth rate of the labour force is only 0.7% which, given a favourable business cycle, could indicate tightening labour market conditions. Migration, particularly in sectors with the highest labour shortages, has contributed the most to the increased labour supply. Additional

indicators of labour market conditions are the number of vacancies per unemployed and the number of unfilled vacancies. The number of vacancies per unemployed has risen by 0.5 since the beginning of 2006 to 1.3 in the second quarter of 2007, partly due to a higher number of vacancies and partly due to the declining number of unemployed. At the same time, the number of registered vacancies at the Employment Service of Slovenia which have remained unfilled has doubled since the beginning of 2006. In August, there were 9,830 unfilled vacancies, or one half of all advertised vacancies. Growth in the share of unfilled vacancies also indicates a discrepancy between the supply and demand for labour, primarily with regard to the educational mismatch. Eurostat data indicate that most unfilled vacancies were in the construction, real estate, trade and agriculture sectors.

**Increased employment is reflected in increased growth in total real labour costs. Available data regarding average growth in unit labour costs in the**

**Figure 3.9 : Labour shortage and labour force**



Sources: SORS, Bank of Slovenia calculations

**Table 3.3 Labour costs**

	2002	2003	2004	2005	2006	07Q1	07Q2
	year-on-year growth, %						
Average real gross wage per unit of output*	-0.2	-1.4	-2.7	-0.4	-1.5	-3.5	-1.4
Real compensation of employees per unit of output**	-0.7	-1.8	-0.8	-2.8	-0.6	-4.6	-1.5
	1.3	-1.4	-2.5	-0.9	-5.0	-7.8	-5.7
Average real gross wage per unit of output in manufacturing*							
Real unit labour costs***	-0.6	-1.6	-0.7	-2.6	-1.2	-5.2	-2.1
Average gross wage (nominal)	9.8	7.6	4.6	4.9	4.8	5.4	5.6
Average gross private sector wage (nominal)	9.5	7.8	5.3	5.4	5.3	6.4	6.3
Average gross public sector wage (nominal)	11.6	6.7	2.7	3.3	3.4	3.5	4.6
Labour costs per employee*** / productivity	7.1	3.9	2.5	-1.2	1.8	-0.4	2.6
Labour costs per employee*** / 10-year average productivity	5.3	3.3	2.7	-1.2	2.1	0.7	2.0
Average compensation of employees / productivity (national accounts)	6.4	5.0	3.6	1.5	1.2		
Average compensation of employees / 10-year average productivity (national accounts)	4.9	4.7	4.2	1.9	2.0		

\* The usage of GDP deflator.

\* Compensation of employees includes gross wages (SORS), other earnings from employment (AJPES) and employers' social security contributions (MoF).

\*\* Labour costs include gross wages (SORS), other earnings from employment (AJPES), and employers' social security contributions and payroll tax (MoF).

\*\*\* Labour costs include gross wages (SORS) and other earnings from employment (AJPES).

Sources: SORS, AJPES, MoF; Bank of Slovenia calculations.



**first half of the year do not yet indicate inflationary pressures, even when elements of productivity linked to cyclical activity are eliminated.** Due to the high economic activity which increases output per worker and due to high deflators all indicators of real unit labour costs in the first half of 2007 are low and to a great extent negative. This means that growth in real labour costs lag behind productivity growth. Table 3.3 shows the particularly strong lag in growth of real labour costs behind productivity growth in industry (by more than 6 percentage points) as a result of high growth in the volume of production in the first half of the year. Figures for the whole economy also point to a decline in real unit labour costs by approximately two percentage points year-on-year during the first half of 2007. A gradual decline in payroll taxes contributed to an improved situation. A comparison of growth in nominal labour costs and growth in average long-term (ten-year) productivity is shown for the purpose of stripping out the effects of the business cycle on the productivity estimate and the effects of fluctuations in deflators. This indicator points to an inflationary effect of labour costs if the economic cycle is balanced. Growth rate of the indicator below two percent in the first half of the year do not currently point to inflationary pressures. Nevertheless there are some indications that growth in labour costs in the second quarter increased slightly and that this growth is faster than the growth of the same indicators in the last three years. Accelerated deterioration of these indicators could result from a notable reversal of the currently high growth in economic activity, similar to events in 1999. Growth in gross wages is somewhat higher this year than in 2006. Growth has actually accelerated in the past several months, whereby gross wages do not include data regarding the favourable effect of lower payroll taxes on labour costs. Data regarding labour costs are fairly dubious since quarterly labour cost figures from national accounts are not available. Significant differences between labour cost figures available on a quarterly and monthly basis and annual figures from national accounts are shown in Table 3.3.

**Negotiations between employers and unions in the last quarter of 2007 will be the key to realising wages pressures in the private sector.** Negotiations regarding the Collective Agreement on the Method of Pay Adjustment, the Refund of Work-Related Expenses and the Annual Leave Bonus for 2008 and 2009 will begin on 20 September 2007. This agreement concerns all workers in the private sector not covered by other valid sectoral collective agreements. Given that sectoral collective agreements will informally take into account the provisions of the Collective Agreement on the Method of Pay Adjustment, the Refund of Work-Related Expenses and the Annual Leave Bonus for 2008 and 2009, the outcome of negotiations between employers and unions will be important for the realisation of wages pressures in the private sector in the future. For 2007, most sectoral collective agreements regarding increases in wage rates were concluded in August this year. A significant portion of wage adjustments was realised in the range of 2.5% to 3%. Companies which already have higher wages than the collective agreement were not obliged to take into account these provisions. Inflation was the primary factor taken into account in the wage adjustment, while productivity adjustments are governed at the company level and not by these agreements.

**Projections indicate somewhat higher growth in real average gross wages, owing in part to higher growth in gross wages in the public sector. However assumptions regarding wage policy remain unchanged compared to previous years.** Based on the high growth in real average gross wages and accelerated economic activity since the beginning of the year, 3% growth in real average gross wages is expected in 2007. During the remainder of the projection period, growth in real average gross wages will rise primarily due to growth in real average gross wages in the public sector, which will surpass growth in real average gross wages in the private sector (see Box 3.1). Due to changes in personal income tax legislation, real average net wages will grow significantly faster (at around 5%) than real average gross wages in

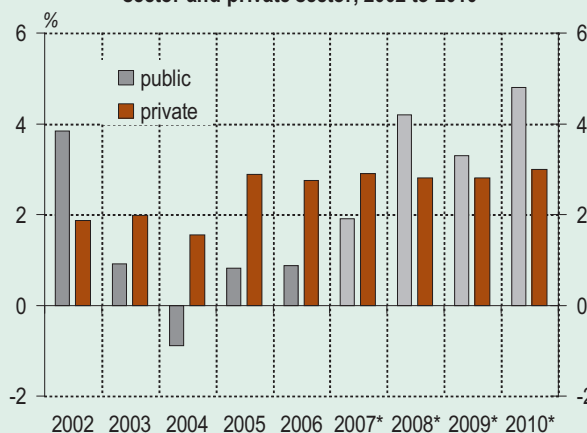
**Box 3.1: Public sector wages over the projection period**

In 2008, a new wage system is expected to be introduced in the public sector. The Salary System in the Public Sector Act was passed in 2002, and became the basis for eliminating wage disparities. In mid-July this year the Government and majority of public sector unions initialled the Public Sector Collective Agreement. This agreement defines reference jobs, supplements and work performance and governs wages for the entire public sector. Transition to the new system is planned for 1 January 2008, when the elimination of wage disparities is scheduled to begin. Prior to this, sectoral collective agreements or annexes thereto must be signed. Basic public sector wages have been adjusted for 62% of expected inflation this year. In 2008 and 2009, the agreed adjustment is 50% of expected inflation. Additional adjustments to basic wages are expected in January 2008 if inflation in the current year exceeds the expected rate, by the difference between expected and actual inflation. Basic wages rose by an agreed 1.3% in July this year, and by an additional 0.45%, taking into consideration also the period January to June.<sup>1</sup>

According to government estimates, EUR 270 million will be required for the elimination of wage disparities until 2010. Funds for this purpose have been collected since 2005. In the past several years, adjustments to basic wages have generally been modest. The remainder of wage adjustment was intended for creating a fund for eliminating wage disparities. Basic wages were adjusted by 2% in July 2005, while 0.5% was intended for the elimination of disparities. In 2006 and 2007, the regular July adjustment of wages was only 1.3%, while 1.05% and 1.26%, respectively were earmarked for eliminating disparities. Wage disparities will be eliminated by quarters, at the following intervals: 1 January 2008, 1 September 2008, 1 September 2009 and 1 March 2010. According to IMAD estimates, growth in public sector wages in the period 2008 to 2010 will be higher than in previous years and also higher than growth in private sector wages (see figure). The highest wage increase is expected in the cultural, social

security and health sectors (primarily in health care), while the lowest increase can be expected in the education sector. Depending on macroeconomic circumstances, the initialled Public Sector Collective Agreement enables either a more rapid or slower elimination of wages disparities in the public sector.

**Figure: Growth in average real wages in public sector and private sector, 2002 to 2010**



Source: Public Sector Collective Agreement (IMAD estimates)

Despite the nominal increase in wage expenditure in the public sector, wage expenditure as a share of GDP could remain more or less unchanged given favourable economic trends. Last year, compensation of employees accounted for one-quarter of government sector expenditure or 11.4% of GDP, which is less than in previous years. If expected favourable macroeconomic trends and estimated growth in average public sector wages are realised and contraction of employment in the public sector is maintained or decreases, expenditure for public sector wages as a share of GDP is not expected to increase in 2008 and 2009.

<sup>1</sup> Last year, an adjustment of 1.3% was carried out in July pursuant to the agreement. Since average inflation was higher than planned, an adjustment covering the difference was necessary from January 2007 onward.

2007. Over the remainder of the projection period real average net wages are expected to grow in line with growth in real average gross wages.

## 4 | External Balance and Competitiveness

The current account position has been gradually deteriorating since 2003. Projections until 2009 indicate the current account deficit will gradually decrease following an increase in 2007. The current account deficit reached 2.9% of GDP in 2006 and is expected to rise by 0.4 percentage point this year. The increase in the deficit compared to last year's results and to that of previous projections is believed to be primarily the result of faster growth in imports than exports, continuing negative trends in the income account and less favourable flows of official transfers (from the EU). The current account deficit is therefore expected to rise from EUR 857 million<sup>8</sup> in 2006 to EUR 1.1 billion in 2007. A decrease of current account deficit of approximately EUR 100 million, on average, is expected in the next two years. According to estimates, the current account deficit is expected to reach

3.3% of GDP in 2007, 2.6% in 2008 and 2.2% in 2009. Growth in exports and imports from 2007 to 2009 has been revised upwards from previous projections. The largest revision relates to 2007 as figures regarding trade in goods in the first half of 2007 have significantly exceeded expectations. Faster growth in exports can be attributed to stronger demand for capital goods and consumer goods from EU Member States outside the euro area, as exports to these countries rose by more than 50% in the first half of this year. By contrast, continued high growth in domestic spending at the beginning of 2007 has influenced the high growth in imports, especially imports of capital goods and consumer goods in the second quarter. Projections indicate that growth in exports and imports in 2008 will also be somewhat higher than in previous projections. On the export side, growth

**Table 4.1 Balance of payments current account**

	2002	2003	2004	2005	2006	Projections					
						2007		2008		2009	
						Oct	Δ	Oct	Δ	Oct	Δ
<i>real growth, %</i>											
Exports of goods and services	6.8	3.1	12.5	10.1	12.3	13.3	4.9	11.6	1.9	8.5	0.7
Imports of goods and services	4.9	6.7	13.3	6.7	12.2	13.8	5.7	10.9	1.9	8.0	0.7
Current account (EUR million)	329	-127	-720	-559	-858	-1100	-500	-900	-200	-800	-170
as % of GDP	1.4	-0.5	-2.8	-2.0	-2.9	-3.3	-1.3	-2.6	-0.5	-2.2	-0.4
Terms of trade*	1.9	0.8	-1.0	-2.0	-0.6	-0.2	-0.2	0.0	0.1	0.3	0.3

Δ: The difference between October 2007 and March 2007 projections.

\* On the basis of national account deflators.

Source: Bank of Slovenia.

<sup>8</sup> During a regular annual revision of balance of payment data, the current account deficit in 2006 was increased by EUR 80 million, or 0.3% of GDP. The largest data changes resulting from the September revision were made to trade in services, primarily due to a simultaneous change to the methodology of monitoring travel.

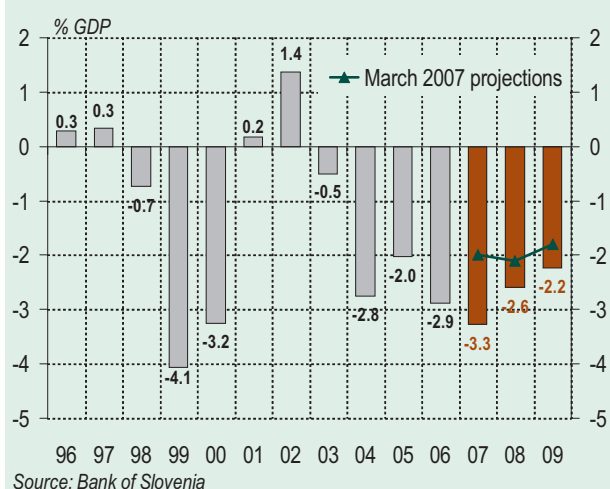
will primarily be led by expected additional exports of the car industry. In previous projections, improvement of net transfers was foreseen for this year given realised transfers three times higher than expected in 2006. Given realised flows this year so far, indications are that the net outflow in transfers will deteriorate compared to spring projections and will be lower by more than one-third compared to 2006, reaching EUR 130 million.

**Favourable export growth is expected to continue in the future and facilitate the gradual reduction of the balance of payments deficit.** Although relatively strong domestic demand will stimulate imports, the continuing good climate in the rest of the world will ensure that growth in exports remains at a relatively high level. Both real imports and real exports of goods and services grew at rates close to 15% in the first half of 2007. Growth in trade in services was even stronger than growth in trade in goods. The favourable outlook in Europe, especially in new EU Member States, has led to higher demand for the export of Slovenian goods and services than expected given the estimate of foreign demand at the beginning of 2007. Part of the acceleration in exports to the euro area can be attributed to the increased integration of the Slovenian economy with other euro area Member States. This primarily related to the effects of changes to the level and dynamics in the trade of goods and services. Effects of changes to the level will be felt in 2007, while

effects of changes to dynamics in exports and imports will be to a larger extent reflected in the coming years. Another factor contributing to growth in exports will be increased production and exports by the car industry. The latter is, like most exporting industries, closely linked to imports of equipment and material, and will thus contribute to maintaining high growth in imports. According to estimates, additional exports by the car industry will contribute an additional 0.5 percentage points to growth in total exports of goods and services in 2007, and 0.9 percentage points in 2008. Increased imports of intermediate goods resulting from additional exports by the car industry will add 0.3 percentage points to growth in total imports of goods and services in 2007, and 0.6 percentage points in 2008.

**A widening of deficit in goods trade can be expected in 2007, followed by a gradual reduction in 2008 and 2009.** Despite growth in foreign demand and strong domestic demand, the deficit in goods trade will reach EUR 1.5 billion, or 4.8% of GDP in 2007, up from EUR 1.2 billion, or 3.9% of GDP in 2006. With a gradual decrease in the growth in both investment and final domestic spending, growth in the import of goods in the coming years will lag behind growth in the export of goods by 0.3 percentage points, on average. Faster growth in the export of goods than in the import of goods and the simultaneous improvement in terms of trade with the rest of the world will lead to a decrease of the deficit in trade in goods by 0.6 percentage points to 4.2% of GDP in the next two years. Compared to the previous projections, export and import growth of goods was revised upward by 4 percentage points and 5.4 percentage points, respectively in 2007. Above average growth in demand for capital goods and consumer goods from the new EU Member States in the first half of 2007 resulted in the high revision to growth in the export of goods. High growth in demand from the new EU Member States is driven by high economic growth in these countries and the improved competitiveness of the Slovenian economy. At the same time, the competitiveness of the Slovenian

Figure 4.1: Current account projections



economy, measured by the nominal and real effective exchange rate, has improved due to the acceleration of real and nominal convergence in the new EU Member States. High growth in goods imports has been a consequence of both high growth in the export of goods, mirroring high import dependence of production for exports, and high growth in domestic spending in the first half of 2007. In the coming years, growth in the goods trade will gradually fall with regard to 2006 and 2007, and will develop in line with growth in foreign demand on the export side. Easing of the goods imports will be somewhat faster than the assumed slowdown in domestic spending. Average growth in the export and import of goods in the next two years will be between 10% and 11%.

**The balance of trade in services will be positive throughout the projection period, and the surplus is expected to increase gradually. The services balance will continue to be the main factor in decreasing the current account deficit.** The main factors for the increase in the surplus in trade in services are projected to be favourable foreign demand and slightly faster growth in export prices of services with regard to their import prices. Growth in trade in services was slower than growth in trade in goods in 2006. Nominal growth of exports of services was 7 percentage points behind the year-on-year growth in the exports of goods, while growth in the import of services was 4 percentage points slower than growth in the import of goods. The most significant factor in the slower growth in service exports was the slowdown in the tourism sector, with tourism revenues recording a year-on-year increase of just 3.3% in 2006. Despite these trends, trade in services remained positive in 2006, totalling 2.9% of GDP. The surplus in trade in services is expected to increase in the context of the projected growth in the export of services in line with the forecast for strong foreign demand. Revised figures up to July already indicate accelerated growth in trade in services, which is well ahead of growth in trade in goods in

the same period. This also increases the possibility of a surplus in trade in services.

**The deficit in the factor account of the balance of payments has risen sharply in recent years, and is expected to increase throughout the projection period and reach an average of 1.5% of GDP.** These projections are primarily the result of assumptions of relatively high interest rates in the context of the past and projected balance of external debt. The factor account was negative in 2006, totalling EUR 348 million, accounting for a little less than one-half of the total current account deficit. The balance of labour income has remained positive, but has been declining steadily. Labour income expenditure has risen sharply in the past several years in the context of virtually unchanged receipts. The labour income surplus has fallen by one-third in the past five years to EUR 120 million. With the entry to the EU, possibilities for employing foreign labour in Slovenia have increased. Growth in labour income expenditure and a reduction of its positive contribution to net labour income can therefore be expected in the coming years.

**The main contributor in the income deficit in 2006 was the deficit in capital income, which was driven primarily by high levels of borrowing in recent years and the rise in interest rates.** Net outflows of interest income rose significantly in 2006, while dividend payments and distributions of profit to the rest of the world also rose sharply last year. Dividend payments and profit distributions paid to the rest of the world totalled EUR 134 million in 2005 and rose to EUR 366 million in 2006. It is important to point out that the expenditure structure of income from capital investments in Slovenian companies has changed rapidly in the last several years. Dividends and profit distributions paid are rising at the expense of reinvested earnings. Of the EUR 561 million in equity income recorded in 2006, EUR 366 million was paid to the rest of the world,<sup>9</sup> while only EUR 195 million was reinvested in Slovenian companies. The main factors in

<sup>9</sup> Payments of retained earnings from direct investments of two large companies are included in this amount.



the widening of the deficit in capital income, which is expected to amount to approximately 2% of GDP during the projection period, are increasing interest payments and rising expenditure on dividends and reinvested earnings. An increase is expected in interest payments as the result of the increasing debt accumulation via loans from the rest of the world in comparison with accumulated loans approved to the rest of the world and the projected increase in interest rates. High and rising expenditure on dividends and reinvested earnings are partly, in terms of volume, a reflection of foreign direct investment (FDI) realised in the past in Slovenia, and also, in terms of dynamics, a reflection of the projected growth in FDI in the future. Rising income from investments in foreign debt securities, which are expected to significantly exceed expenditure on foreign investments in domestic debt securities, will contribute to a decline in the deficit in the capital income position.

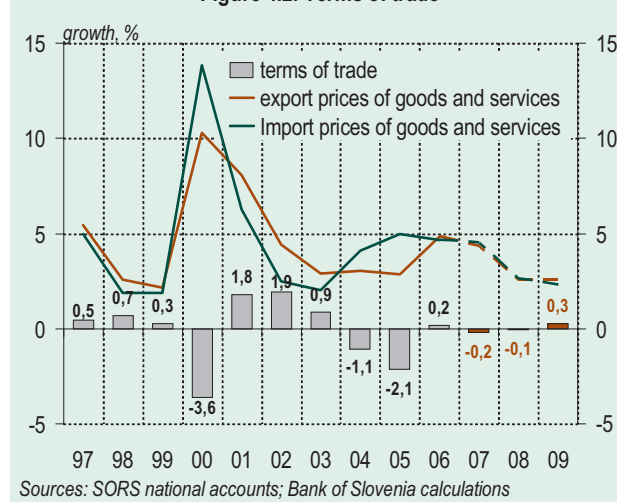
**The deficit of EUR 173 million in current transfers in 2006 was nearly double of that recorded in 2005, and was a major factor in the deterioration of the current account balance with the rest of the world.** The largest deterioration came in private sector transfers, while the main improvement in official transfers was in the use of available funding from the EU budget. Receipts from the EU budget amounted to 78% of the planned value in 2006, compared with 63% in 2005, while expenditure was 92% of the planned value. The result of these flows was a net inflow of EUR 66 million in transfers from the EU budget. Given current trends in the projection period, a sharp increase in all types of transfers, especially official transfers, can be expected, though both official and private transfers will remain in deficit. The positive balance in receipts and expenditure related to the EU budget will remain at a level of approximately EUR 50 million in 2007, followed by a settling of the surplus in flows with the EU at around EUR 20 million in the next two years. The amounts forecasted by the Ministry of Finance have been taken into consideration in the projections of EU budget flows, while the expected portion of planned flows

with regard to those from 2006 are somewhat lower due to the low realisation in the first eight months of 2007.

**Terms of trade are expected to deteriorate in 2007, while assumptions from the international environment indicate improvements in the next two years.**

Growth in export prices exceeded growth in import prices by 0.1 percentage points on average in 2006, with terms of trade improving significantly at the end of the year. Export prices were up 4.8% on average during the year, and import prices were up 4.7%. Such development in import and export prices was significantly more favourable than that seen in 2005, when terms of trade deteriorated by 2.1%. Terms of trade in 2007 will deteriorate by 0.2 percentage points with regard to last year due to high oil prices and persistently high price of other commodities. According to estimates, terms of trade will improve over the next two years. On the export side, expected growth in exports by the car industry will have a positive effect on terms of trade. On the other side, slower growth in the prices of commodities and the expected stagnation of oil prices on world markets will contribute to improved terms of trade. Services will also contribute positively to terms of trade developments, as according to estimates, export prices of services will grow 0.3 to 0.5 percentage points faster the import prices of services during the projection period. Under such assumptions, the contribution

Figure 4.2: Terms of trade

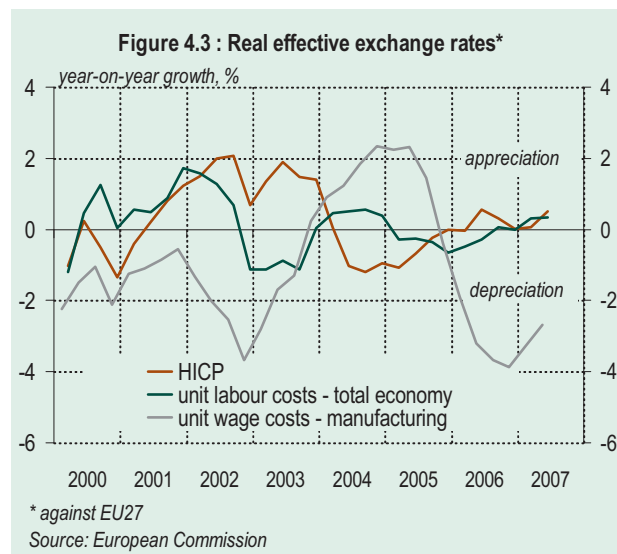


of terms of trade to the current account balance would be neutral in 2008. In 2009 the contribution would be a positive 0.3 percentage points.

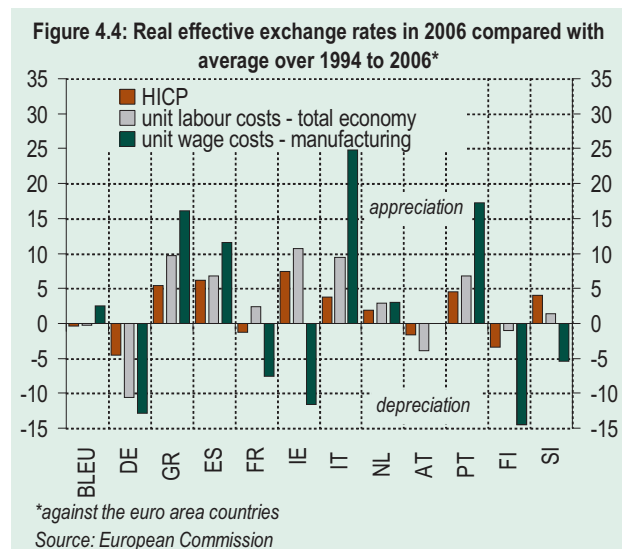
**The real effective exchange rate, based on consumer prices and total labour costs, appreciated last year, while the real effective exchange rate, based on labour costs in the manufacturing sector depreciated, although the rate of depreciation has slowed down.**<sup>10</sup>

This holds for the real effective exchange rate calculated versus the euro area and the EU27 Member States. The difference between these two indicators is in the weightings of individual countries and in the movement of the nominal effective exchange rate, which since Slovenia's entry to ERM II in June 2004 (since when the tolar-euro exchange rate remained virtually unchanged), has no impact on the measuring of competitiveness versus the euro area Member States. The real effective exchange rate, measured by the HICP and total unit labour costs, appreciated by 0.3% in the first half of 2007 against the EU27, while the real effective exchange rate, measured by unit labour costs in the manufacturing sector, depreciated by 3.0%. This is the only indication that the competitive position of the Slovenian economy and the manufacturing sector are improving as high growth in production and productivity last year and during the first half of 2007, more than offset growth in gross wages in the manufacturing sector.

**The nominal effective exchange rate against EU27 Member States has depreciated in the past four years, although the rate of depreciation has slowed down.** Euro area Member States have gained in competitiveness due to the appreciation of the domestic currencies of other EU27 Member States against the euro in the last four years, and also through movement of the nominal effective exchange rate in 2007. The nominal effective exchange rate has depreciated 5% in the last four years and by 0.5% year-on-year in the first half of 2007. If



we also take into account trade with countries outside the EU27, the nominal effective exchange rate versus 41 countries has appreciated in the last year, while in the first half of this year it has appreciated by an average of 0.7% year-on-year. Since the exchange rate against EU27 Member States has depreciated in the same period, the nominal effective exchange rate against non-EU27 states has appreciated by a quarterly average of around 1.2%, according to estimates. In the year to Au-



<sup>10</sup> Real effective exchange rates are nominal effective exchange rates reduced by a weighted average of foreign prices or costs, relative to domestic prices or costs. They are thus measures of price and cost competitiveness, where appreciation of the real effective exchange rate indicates deterioration in competitiveness and depreciation indicates an improvement. For the sake of comparability with other countries, the real effective exchange rates published by the European Commission are used in this report.

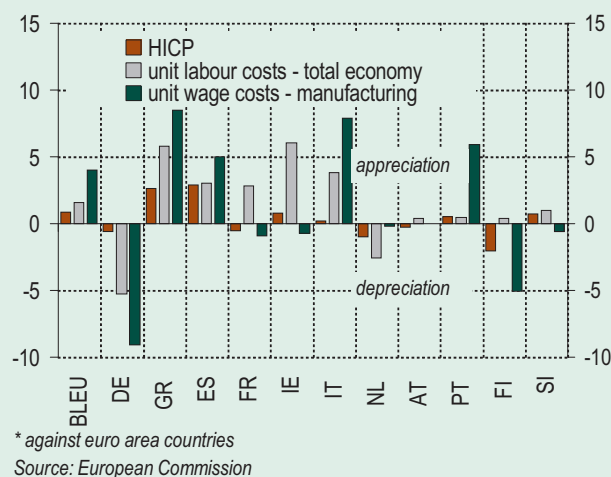
gust, the euro has appreciated most against the Japanese yen (by 7.1%) and against the US dollar (by 6.3%). The euro surpassed the level of 1.4 USD in September. The euro has risen more than 40% against the US dollar in the last five years. Since several currencies of industrially developing competitor countries from Asia are linked to US dollar, the euro's growth means significant pressure on the competitiveness of the Euro Area as well as of Slovenian economy. Control of costs and increasing productivity in terms of labour and capital remain the key factors to maintaining the competitiveness.

**A comparison of the real effective exchange rate in Slovenia with other euro area Member States for 2006 indicates that real effective exchange rate development in Slovenia was close to the average of euro area Member States.** This is shown by a comparison of indicators of price and cost competitiveness of euro area Member States versus the remaining European countries in 2006 with regard to the average for the period 1996 to 2006 and with regard to 2004, the year Slovenia joined ERM II and the year of setting the tolar-euro parity exchange rate. According to selected indicators, the competitiveness of the Slovenian economy was outstripped primarily by Germany, followed by Finland and Austria.

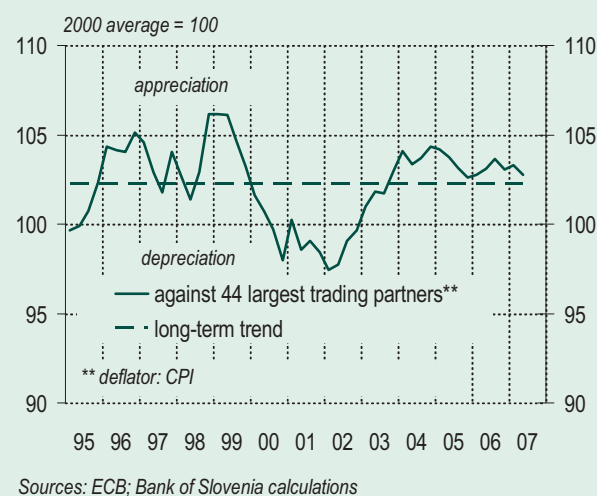
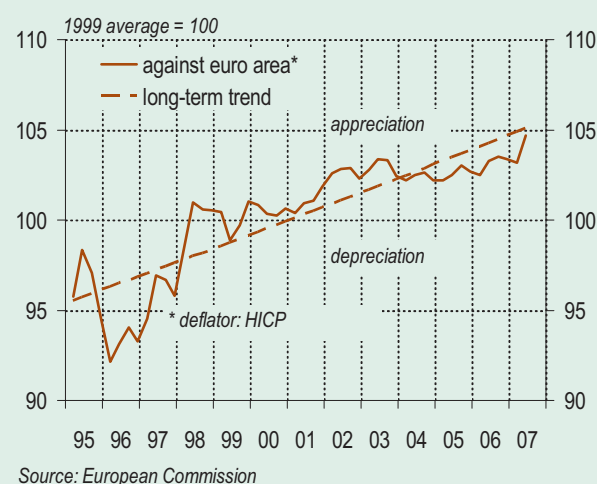
**Since ERM II entry, appreciation of the real exchange rate, based on the HCIP and labour costs of the total economy, compared with the average for the last ten years has slowed down, but so has depreciation of the real effective exchange rate, based on labour costs in the manufacturing sector.** This slowdown in the depreciation of the real effective exchange rate could indicate a reduced advantage in price competitiveness position with regard to other Euro Area Member States.

**Since 1995 the effect of long-term real convergence in Slovenia, measured by the trend of appreciation of the real effective exchange rate, has been quite moderate. A trend of appreciation in line with the process of real convergence does not harm the competitiveness of an economy. However, even taking into ac-**

**Figure 4.5: Real effective exchange rates in 2006 compared with 2004\***



**Figure 4.6: Real effective exchange rate**





**count these long-term effects, there are indications that price competitiveness has worsened in the last several years.** The effects of real convergence, which can also be reflected by Balassa-Samuelson effect, cause a rapid growth of prices in non-tradable sector in comparison to tradable sector, and are reflected in a trend appreciation of the real effective exchange rate of rapidly growing countries in the process of catching up with more developed countries and therefore have no adverse effects on price competitiveness. Given the high rate of real convergence achieved, these effects are relatively moderate in Slovenia and are not expected to have an impact on deviations between inflation in Slovenia and inflation in the euro area.<sup>11</sup> Figure 4.6 shows the log-linear trend of the real effective exchange rate against the euro area and against the 44 most important trading partners. On average, the real effective exchange rate has not appreciated much since 1995, although fluctuations of values have sometimes been significant. The relative stability of the real effective exchange rate indicates that

the average real depreciation of the exchange rate against less developed countries offset the appreciation with regard to relatively more developed countries. Against the euro area, where the majority of more developed countries are located, the Slovenian currency has appreciated moderately in the long-term (by an average of approximately 0.8 percentage points annually, and less if the assessment period is shorter). If the long-term trend is linked to the process of real convergence and does not influence the price competitiveness of the economy, the price competitiveness development can be explained as a deviation from the long-term trend. This explanation indicates that price competitiveness with regard to the euro area is still favourable, but is gradually worsening, and is to a large extent balanced at the end of the observation period. At the same time, the position with all major trading partners shows an appreciated real effective exchange rate since 2004. However, deviations from the trend are also relatively small until the end of the observation period.

---

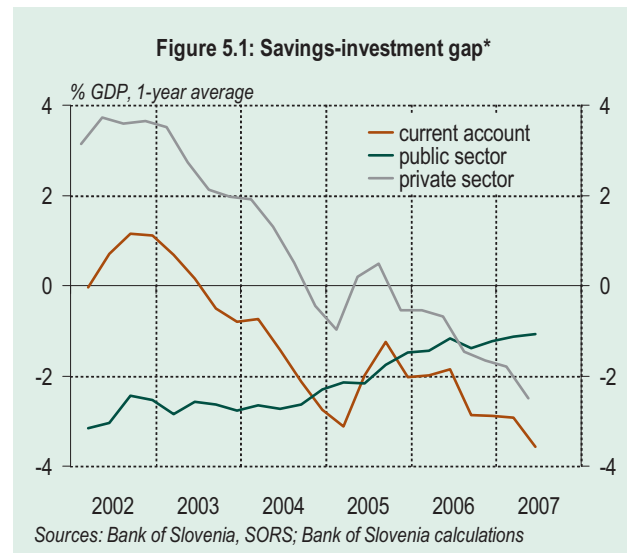
<sup>11</sup> See the ECB convergence report for 2006.



## 5 | Terms of Financing

**Domestic savings is insufficient to finance rapid growth in investments.** Gross investment of the Slovenian economy has risen from 26.0% of GDP in 2005 to 27.5% of GDP in 2006 to 29.6% of GDP in the first half of 2007. National savings has risen from 24.1% of GDP in 2005 to 24.8% in 2006 to 26.1% in the first half of 2007, meaning that the savings-investment gap (i.e. the difference between savings and investment) has continued to widen since 2005.

**Both the public sector and private sector savings-investments gaps are in deficit, indicating the need for financing through borrowing abroad.** As evident from Figure 5.1 the public sector savings-investment gap is approximately 1% of GDP. The private sector savings-investment gap has been rising since the beginning of 2003, and following a temporary reversal has continued to rise since the middle of 2005. Foreign savings and borrowing abroad are therefore rising, as reflected in the increase of balance of payments current account deficit.



\* The public sector savings-investment gap is defined as a deficit of the public sector position according to the ESA95 methodology. The private sector savings-investment gap is the difference between public sector savings-investment gap and the balance of payments current account

**Table 5.1 Financial accounts (net)**

	Non-financial corporations				Financial corporations				General government				Households				Rest of the world			
	2004	2005	2006	07Q1	2004	2005	2006	07Q1	2004	2005	2006	07Q1	2004	2005	2006	07Q1	2004	2005	2006	07Q1
	as % GDP																			
<b>Net financial trans.</b>	-8.0	-5.8	-6.4	-10.5	-0.4	0.0	1.0	7.8	-2.3	-1.4	-1.3	-2.6	7.3	3.6	3.4	-1.3	3.4	3.6	3.4	6.5
<b>Loans</b>	-7.6	-7.6	-9.4	-13.1	3.1	1.8	9.4	19.6	0.0	-0.4	0.3	-1.3	-1.5	-2.5	-4.4	-3.9	6.1	8.7	4.0	-1.3
<b>Securities</b>	0.0	-0.7	0.0	0.0	6.5	3.6	2.0	15.7	-2.3	-0.7	-2.4	-9.1	0.4	-0.4	0.0	0.0	-4.6	-1.8	0.3	-6.5
<b>Currency and depos.</b>	0.0	1.8	1.0	2.6	-7.3	-3.6	-8.4	-14.4	0.0	-0.7	1.3	6.5	5.3	4.0	4.0	-2.6	1.9	-1.4	2.0	7.8
<b>Other</b>	-0.4	0.7	2.0	0.0	-2.7	-1.8	-2.0	-13.1	0.0	0.4	-0.7	1.3	3.1	2.5	3.7	5.2	0.0	-1.8	-3.0	6.5

+ increase of claims, decrease of liabilities, - decrease of claims, increase of liabilities.

Source: Bank of Slovenia.

The balance of net financial transactions of households, defined as the savings-investment gap of households, has deteriorated since 2004. The balance of net financial transactions of non-financial corporations improved from 2004 to 2006, but has deteriorated this year. As evident from the simplified table of financial accounts, the balance of financial transactions of general government and of the rest of the world from 2004 to 2006 was broadly unchanged. On the other hand, the financial balance of non-financial corporations improved by 2.6% of GDP, while the financial balance of households deteriorated by 3.9% of GDP. According to figures for the first quarter of 2007, which due to the shorter period and seasonal factors are not fully comparable, the deterioration of the financial balance of households was accompanied by the deterioration of the financial balance of the general government and non-financial corporations, while the financial balance with the rest of the world improved. This indicates that increased financing of the general government and non-financial corporations was supported by borrowing from abroad.

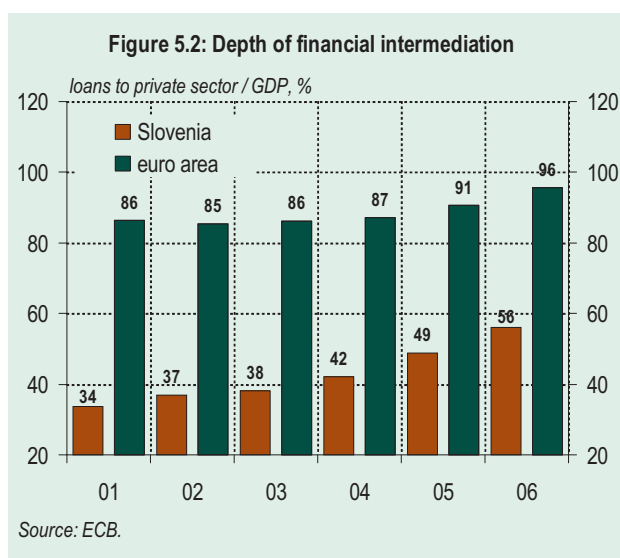
In recent years, non-financial corporations and households have increased their share of financing by loans, while the government has increased its

share of securities' financing. Financing by loans of non-financial corporations was 7.6% of GDP in 2004, 9.4% of GDP in 2006 and 13.1 of GDP in the first quarter of 2007. In the same period, household borrowing through loans rose from approximately 1.5% of GDP to more than 4% of GDP.

**The relatively high trend in corporate and household borrowing at banks can, to a great extent, be attributed to the process of financial intermediations deepening.** The high levels of borrowing are in line with the process of real convergence and catching up with the wealthier EU Member States. The deepening of financial intermediation, measured by private sector loans as a share of GDP, has risen at a rate of more than 5 percentage points of GDP annually in recent years in Slovenia, with the balance already exceeding 60% of GDP. As such, the difference of financial deepening between the euro area and Slovenia has fallen from more than 50% of GDP in 2003 to approximately 40% of GDP in 2006. Financial deepening generally increases economic potential and does not accelerate inflation.

**The increased borrowing of financial corporations is to some extent cyclical in nature, facilitates growth in investments and is stimulated by relatively low interest rates, primarily since the first half of 2006.**<sup>12</sup> If growth in loans facilitates acceleration of the economic cycle beyond supply potential and results in a positive output gap, growth in loans could have an inflationary effect. According to data (Figure 5.3), the share of investments, financed through loans, has risen from one-fifth in 2002 to more than one-third in 2006. A decreasing share of investments by non-financial corporations is financed from own funds. Table 5.1 clearly shows that the issue of securities by non-financial corporations for financing is negligible.

**Despite the gradual rise in interest rates since the end of 2005, financing terms for non-financial corpo-**



<sup>12</sup> The ECB attributes the relatively strong lending to non-financial corporations in the euro area to rapid economic growth, merger and acquisition activities and continuing favourable financing terms. (ECB, Monthly Bulletin, July 2007).

Figure 5.3: Financing of investments of non-financial corporations

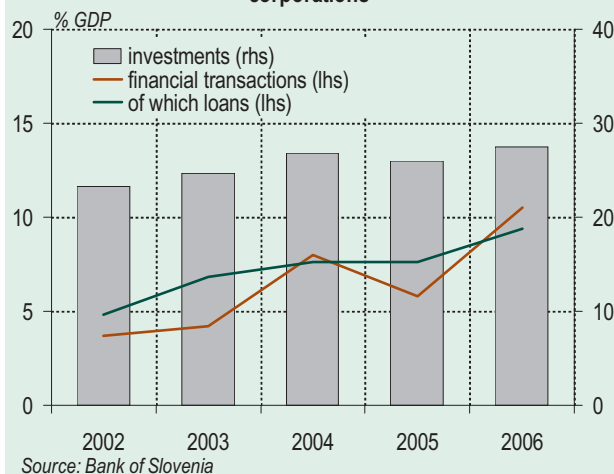
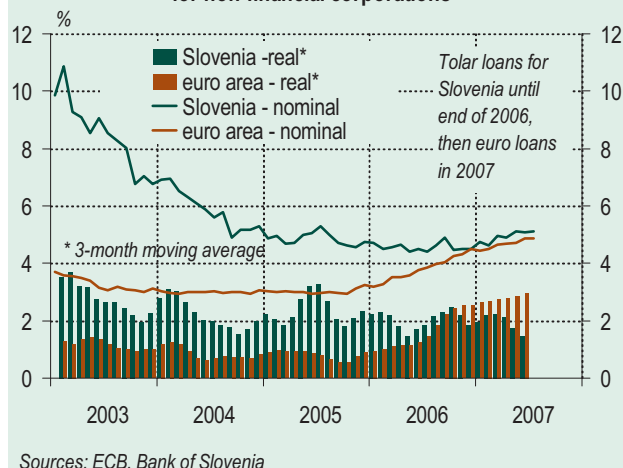


Figure 5.5: Interest rates on loans of more than EUR 1 million for non-financial corporations



**rations are still favourable.** As evident from Figure 5.4, nominal interest rates for non-financial corporations began to rise in the euro area at the end of 2005 as the result of tightened ECB monetary policy, following the low levels experienced in 2004 and 2005. Due to the Bank of Slovenia's restrictive monetary policy and the resulting higher nominal interest rates, real interest rates for loans to non-financial corporations in Slovenia were higher than those in the euro area until the end of 2006. Due to somewhat higher inflation in Slovenia, real interest rates have been lower than the euro area rates since the beginning of 2007, and have actually fallen recently. Real financing terms for non-financial corporations are there-

fore actually more favourable in Slovenia than in the euro area. For this reason, real financing terms could contribute to the continued high growth in lending to non-financial corporations in Slovenia, while the first signs of a gradual slowdown can be seen in the euro area.

**Expected developments in investments and interest rates indicate a gradual decrease in the year-on-year rate of growth in loans.** The recent rise in ECB interest rates has tightened the financing terms. Forecasts of economic trends point to a gradual slowdown in investments. A gradual decrease in year-on-year growth in lending to non-financial corporations from the current level of 30% to below 20% until the end of the projection period can

Figure 5.4 Nominal and real central bank interest rates

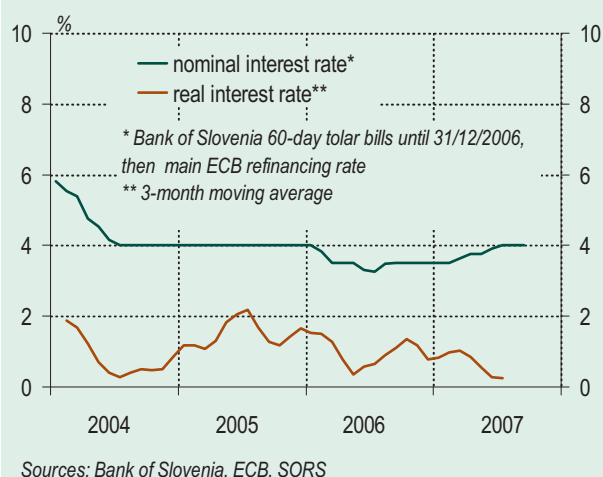
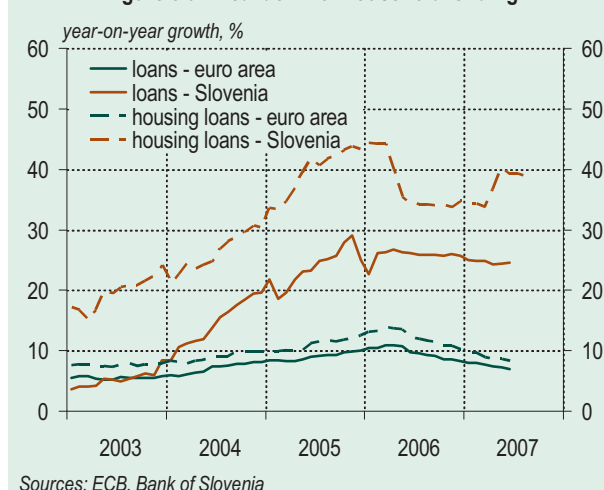
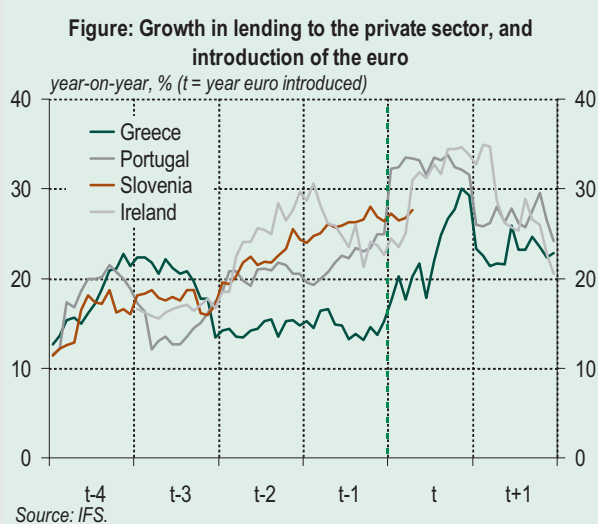


Figure 5.6: Breakdown of household lending



**Box 5.1: Increased lending activity following entry to the euro area**

Other countries, considered less developed EU Member States upon their entry to the euro area, have also experienced a similar growth in banking sector loans to the private sector<sup>1</sup> which is currently present in Slovenia. The most common reasons for the acceleration of growth in lending are: (1) gradual convergence of interest rates until the introduction of the euro and (2) the process of catching up with wealthier euro area Member States. Higher economic growth requires additional financing which is linked to increases in borrowing and the depth of financial intermediation.<sup>2</sup>



The countries which recorded the highest growth in lending prior to and following the introduction of the euro were Portugal, Ireland and Greece. The characteristics of growth in lending in the aforementioned countries were:

- Growth in lending began 1 to 4 years prior to the introduction of the euro and was highest in the year the euro was introduced. Rapid growth in lending in some countries has not yet subsided.
  - The highest growth rates were recorded in housing loans and loans to companies.
  - Despite growth in lending, performance indicators of the banking system did not deteriorate. Despite strong growth in lending, the burden of repayment didn't increase significantly due to falling interest rates. Furthermore, the beginning balance of loans was low compared to wealthier euro area Member States.
  - The ratio between loans and GDP doubled in the period from 1995 to 2003.
  - These countries adopted certain banking supervision measures to mitigate the possible negative consequences of growth in lending. However, these measures themselves did not have a significant impact on growth in loans. Following the introduction of International Financial Reporting Standards (IFRS) on 1 January 2006, the manoeuvring room of bank regulators was significantly narrowed and the adoption of such measures was no longer possible.
- It is clear that the characteristics of growth in lending in Slovenia were very similar to those in the aforementioned countries prior to and following the introduction of the euro:
- Credit expansion began approximately three years prior to the introduction of the euro. Current figures indicate that credit expansion was strongest in the year the euro was introduced.
  - The highest growth is recorded in housing loans, which currently exceeds 40% year-on-year. Growth in loans to non-financial corporations, whose year-on-year growth currently exceeds 30%, significantly outstrips the year-on-year growth in consumer loans (currently around 15%).
  - Performance indicators of the banking system have not deteriorated. Since 2003, average return on assets and average return of equity have risen. In the same period, interest margin and non-interest margin have fallen. The capital adequacy indicator has also remained broadly unchanged in this period.
  - The ratio between loans and GDP in the period from 2003 to 2006 has risen to over 60%.
  - Slovenia has not yet adopted additional restrictive banking supervision measures due to the introduction of the IFRS with an exceptional impact on the capital adequacy of banks through a so called "credit-rating filter", which requires banks to obtain additional capital when lending rises.

<sup>1</sup> The private sector includes all domestic sectors except the government sector.

<sup>2</sup> See: Brzezina, Lending booms in the new Member States, will euro adoption matter? (ECB Working Paper No. 543, November 2005)



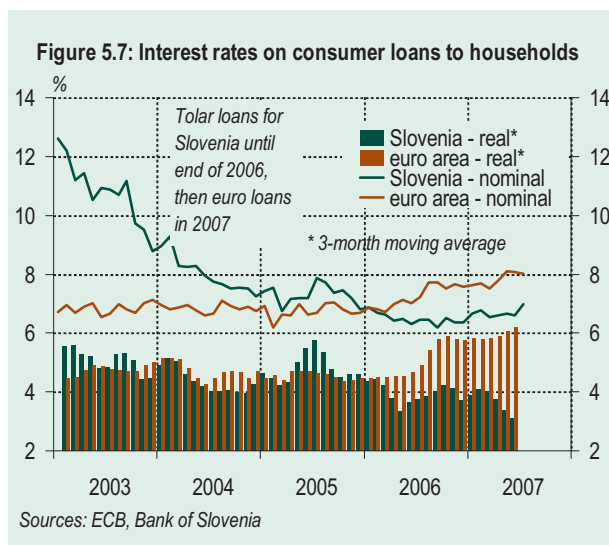
therefore be expected. In this way a component of growth in lending, linked to the economic cycle would gradually disappear. Growth in loans will continue to exceed euro area levels due to the process of real convergence of economic structures which can be seen in financial deepening.

**Household borrowing is primarily the result of strong housing loans.** It is evident from the structure of household lending that growth in lending to households, particularly in housing loans, rose until the end of 2005. Since that time, lending has gradually slowed down. Growth in housing loans has always exceeded total growth in loans to household, taking into account the fact that high growth in housing loans is also the result of a relatively low basis. Housing loans as a share of all loans to households has risen from approximately 25% at the beginning of 2005 to 40% this year. In the past year, consumer loans have risen at a rate of around 15% year-on-year. This is in line with domestic private spending which, with a growth rate of approximately 3.5%, has always lagged behind GDP growth.

**Terms of financing for household spending are also more favourable in Slovenia than in the euro area, while nominal interest rates for housing loans are higher.** Figure 5.6 clearly shows that since the beginning of 2006 nominal, and to a greater extent, real interest rates for consumer loans are lower in Slovenia than in the euro area. Consistent with historically low interest rates, growth in loans to households in the euro area rose until the end of 2005.<sup>13</sup> Since that time, growth in lending has fallen due to rising interest rates. Despite the process of real convergence, nominal and real interest rates in Slovenia for consumer loans remained on par with the euro area until the middle of 2006. Since that time, they are lower than euro area rate, which is one reason that growth in consumer loans has yet to slow down. Interest rates for housing loans are still significantly higher in Slovenia than in the euro area.

**A portion of increased housing loans is also the result of higher real estate prices.** Real estate prices rose 8.0% and 13.9% in 2005 and 2006, respectively. The latest figures indicate that growth in real estate prices has gradually slowed down since the last quarter of 2006. From the given growth in housing loans of between 40% and 50% year-on-year, one-third can be attributed solely to growth in real estate prices, while the remainder is the result of increased demand for real estate by borrowers.

**Trends for loans and interest rates for euro loans to households in Slovenia are similar to those in the euro area.** Consistent with falling interest rates, growth in loans to households rose in Slovenia and the euro area until the end of 2005. Since that time growth has declined under pressure from rising interest rates. Interest rates for consumer loans in euros have been lower in Slovenia in recent years than in the euro area, which is partially the result of a different maturity structure of loans in Slovenia. However it should be borne in mind that in 2005 and 2006 most consumer loans were still in domestic currency, for which the interest rate was slightly higher due to the Bank of Slovenia's restrictive monetary policy. Consumer loans terms therefore improved when the euro was introduced. Interest rates for housing loans are still higher in Slovenia than in the euro area.

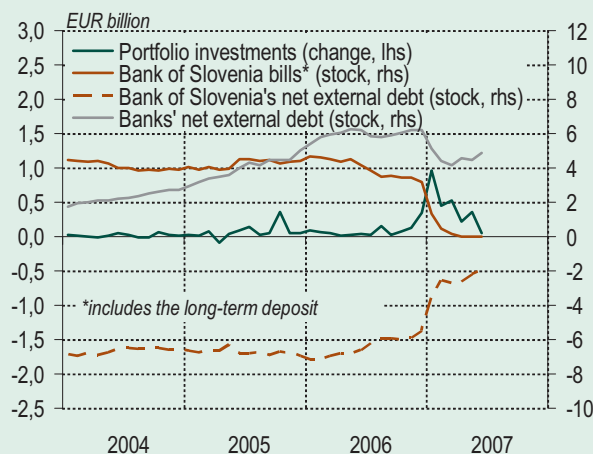


<sup>13</sup> The ECB attributes the gradual decline in lending to households in the euro area since the beginning of 2007 largely to a fall in real estate prices and the gradual rise in lending interest rates (ECB, Monthly Bulletin, July 2007).

**Box 5.2: Adjustment of certain balance of payments categories following the introduction of the euro**

With the introduction of the euro, ECB instruments replace Bank of Slovenia instruments during the implementation of monetary policy, which results in significant changes to the balance of payments financial account. In the first four months of 2007, bills and long-term deposits totalling EUR 3.2 billion fell due for payment at the Bank of Slovenia. Commercial banks invested the majority of liquidity released in portfolio investments abroad, which totalled EUR 2.6 billion in the first half of the year. In the same period last year, portfolio investments of banks abroad totalled just EUR 0.3 billion. On the other hand, banks did not require foreign sources (i.e. deposits) to finance strong credit demand. Deposits of non-residents remained virtually unchanged in the first half of 2007, while they rose by EUR 0.5 billion in the same period last year. Primarily as the result of a single major transaction, foreign borrowing by banks remained close to last year's levels, totalling EUR 1.3 billion in the first half of 2007.

Maturing bills and long-term deposits at the Bank of Slovenia and the subsequent increase in portfolio investments abroad can also be seen in the structure of external debt. The Bank of Slovenia's liabilities from bills and long-term deposits replace its liabilities to the Eurosystem, i.e. the Bank of Slovenia's net external debt to the Eurosystem. On the other hand, the reduction of bank claims to the Bank of Slovenia in the form of bills and long-term deposits are shown as portfolio investments abroad, which increases claims to the rest of the world. Therefore, the net external debt of the Bank of Slovenia has risen this year, while the net external debt of commercial banks has fallen. In the first half of this year, the net external debt of the Bank of Slovenia rose, i.e. net claims to the rest of the world fell by EUR 3.5 billion, while they rose by EUR 0.3 billion in the same period last year. By contrast, the net external debt of commercial banks fell by EUR 1.3 billion

**Figure: Maturing bills, portfolio investments and external debt**

Source: Bank of Slovenia

in the first half of this year, following an increase of EUR 1.2 billion in the same period in 2006.

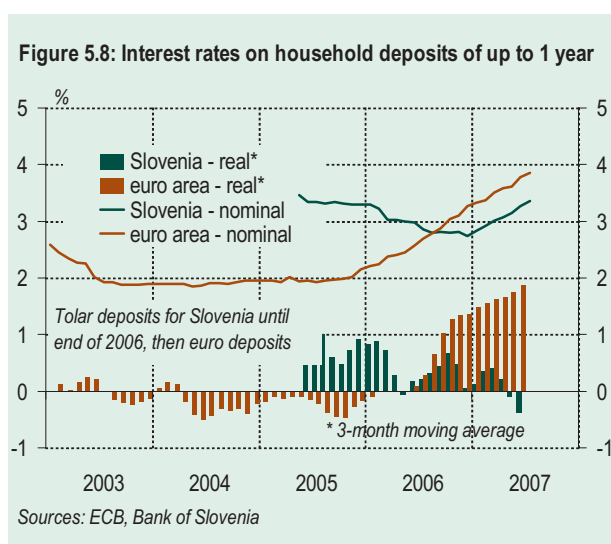
Other foreign holdings of the Bank of Slovenia were unchanged with entry to the euro area, while international reserves fell. International reserves include convertible foreign currencies, foreign currency deposits abroad and first-class foreign currency securities issued abroad. The euro became the domestic currency upon entry to the euro area. "Abroad" is defined as territories outside the euro area. Therefore after 1 January 2007, the Bank of Slovenia's international reserves only include holdings in non-euro currencies outside the euro area. As a result, international reserves fell by EUR 5.4 billion at the end of 2006 to EUR 0.8 billion at the beginning of January 2007, and remained at this level until the end of June. This of course does not mean that the Bank of Slovenia's holdings have fallen; they are no longer recorded in international reserves.

**A decrease in the year-on-year growth in loans can also be expected for household borrowing.** With declining growth in real estate prices and the gradual rise in interest rates, year-on-year growth in housing loans in Slovenia and the euro area have gradually slowed down since the end of 2005. The same trend is present for other loans. If these trends continue, the year-on-year

growth in household lending could drop below 20% during the projection period.

**Real interest rates for household deposits in Slovenia have gradually fallen in the last two years, partly as the result of convergence of nominal interest rates and higher inflation in Slovenia than in the euro area in recent times.** Falling real interest rates for household

deposits in Slovenia lower yields, result in a drop in the growth in deposits and a shift to other forms of investments, primarily to mutual funds, real estate and abroad. On the other hand, it causes a gradual increase in both nominal and real interest rates in the euro area due to increased opportunity costs and a decrease in M1 transaction money.<sup>14</sup> Trends of nominal interest rates for household deposits this year indicate a high level of integration in the euro area, where nominal, and to a greater extent, real interest rates for household deposits of up to one year are lower in Slovenia than in the euro area.



**Due to less favourable financing terms abroad, the continued gradual rise in nominal interest rates can also be expected in Slovenia.** Banks are making up for falling growth in deposits by borrowing abroad and with sources received from mature Bank of Slovenia bills. With rising foreign interest rates and the associated tightening of financing terms abroad, continuing gradual growth in nominal deposit interest rates can be expected.

**Financial inflows from the rest of the world and financial outflows to the rest of the world have remained heavy in 2007.** Slovenia's involvement in international financial flows has increased with the introduction of the euro and the resulting elimination of exchange rate risk

and the decreased risk of foreign financing. The private sector's financial inflows exceeded 15% of GDP in 2006, and were approximately equal to its financial outflows. Even when the transfer of banks' investments from Bank of Slovenia bills to portfolio investments abroad is ignored, private sector flows picked up in the first half of 2007.

**Portfolio investments abroad represent the fastest growing private sector financial outflows.** This development is primarily the result of maturing Bank of Slovenia bills.<sup>15</sup> Portfolio investments abroad totalled EUR 2.1 billion in 2006 and EUR 3.5 billion in the first half of 2007. Direct investment, lending to the rest of the world and bank deposits abroad already exceeded levels achieved last year 2006 during the first half of 2007. Trade credits are only slightly above last year's levels, while the rise in household currency has come to a halt.

**Direct investment represents the fastest growing financial inflows, while inflows from deposits of non-residents have slowed down.** Foreign direct investments totalled EUR 431 million in the first half of 2007, a significant increase over last year (EUR 303 million). On the other hand, inflows from deposits of residents totalled EUR 991 million last year, but amounted to just EUR 53 million in the first half of 2007. Loans to banks and companies from the rest of the world have remained on par with last year's levels.

**Strong financing from the rest of the world is reflected in an increase in net external debt and a deterioration of the balance of payments current account.** Net external debt rose by EUR 0.8 billion, EUR 1.2 billion and EUR 2.9 billion in 2004, 2005 and 2006, respectively. In the first half of 2007, net external debt rose by EUR 2.2 billion, reaching EUR 5.5 billion by the end of June. This also leads to an increase in the burden of financing (particularly in a period of rising interest rates), which adds to the deterioration of the balance of payments current account.

<sup>14</sup> ECB, Monthly Bulletin, July 2007.

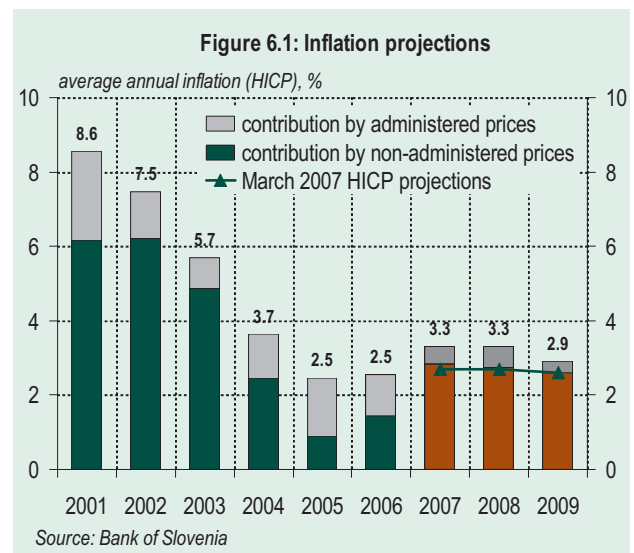
<sup>15</sup> See Box 5.2.

**A gradual increase in financial outflows to the rest of the world and financial inflows from the rest of the world is expected to continue, in line with past and present trends.** Outflows from direct investment and loans are expected to continue rising, while outflows through portfolio investments and bank deposits are expected to slow down in the next few years. The increase in outflows this year is primarily the result of maturing Bank of Slovenia bills on the asset side of bank balance sheets, as banks invested a considerable amount of maturing liquidity in portfolio investments abroad. On the inflow side, a rise in direct investments can be expected, driven by the realisation of the government's plans to sell off state assets and investments in the gaming industry. Inflows from loans from the rest of the world are also expected to rise and, together with domestic lending, finance relatively strong economic growth.

## 6 | Price Projections and Risks

With regards to expected macroeconomic trends, assumptions about the international environment and economic policy actions, inflation throughout the projection period is expected to be higher than the average inflation in the last two years. The projections indicate that this year's average annual inflation as measured by the HICP will be 0.8 percentage points higher than last year's, amounting to 3.3%. It should remain at this level for another year, but is expected to decline slightly in 2009 to 2.9%. The main factor in the rise in prices this year is expected to be faster growth in the prices of services and food, while energy prices growth is not expected to deviate significantly on average from last year's. After more than two years of negative growth, prices of other goods are expected to record slight average growth of 0.2% on average this year and somewhat higher average growth of 0.5% next year.

**Inflation trends will be affected primarily by domestic factors in the future.** For the second year in a row, high economic activity indicates a certain level of overheating in the economy, which is already partly reflected in the



**Table 6.1 Inflation**

	2002	2003	2004	2005	2006	Projections					
						2007		2008		2009	
						Oct	Δ	Oct	Δ	Oct	Δ
<i>average annual growth, %</i>											
<b>Consumer prices (HICP)</b>	7.5	5.7	3.7	2.5	2.5	<b>3.3</b>	0.6	<b>3.3</b>	0.6	<b>2.9</b>	0.3
<b>food</b>	8.7	6.1	1.3	0.2	2.7	<b>5.8</b>	1.9	<b>5.4</b>	...	...	...
<b>energy</b>	4.7	3.4	7.0	11.9	8.5	<b>2.6</b>	2.5	<b>1.8</b>	...	...	...
<b>other goods</b>	4.9	4.8	1.8	-0.3	-0.9	<b>0.2</b>	-0.3	<b>0.5</b>	...	...	...
<b>services</b>	10.2	7.1	5.8	3.3	3.5	<b>4.7</b>	0.0	<b>4.9</b>	...	...	...
<b>Non-administered prices</b>	7.4	5.9	3.0	1.2	1.9	<b>3.6</b>	0.5	<b>3.5</b>	0.6	<b>3.3</b>	0.3
<b>Administered prices</b>	8.2	4.4	6.1	7.4	4.8	<b>1.9</b>	1.4	<b>2.4</b>	0.7	<b>1.0</b>	0.3

Δ: The difference between October 2007 and March 2007 projections.

Source: Bank of Slovenia.

rapid growth in non-administered prices and is expected to be even more tangible in the future. Growth in non-administered prices, which is expected to exceed past average growth throughout the projection horizon, is expected to be the result of economic growth being higher than potential growth. Growth in non-administered prices is expected to rise to 3.6% this year and remain somewhere above or at 3% in the next two years. According to projections, the effects of rapid economic growth on inflation are expected to be limited by an appropriate income policy by maintaining the growth in labour costs at a moderate level. Fiscal policy is not expected to have any additional impact on inflation, which is reflected in projections with the assumption of the absence of unexpected tax measures and the assumption of low growth in government spending and investments. Estimates in projections indicate that growth in labour costs will continue to lag behind growth in productivity by close to 0.5 percent-

age points. The gradual slowing of economic activity will primarily be the result of a gradual slowing in domestic demand. Growth in private spending and government spending are expected to remain moderate at less than 4% and 2%, respectively. Both components of final spending are expected to limit growth in non-administered prices.

**Expected movements in the international environment over the projection horizon give no indication of additional inflationary pressures.** Oil prices are expected to stabilise at between USD 70 and USD 75 per barrel, while growth in prices of other commodities are expected to begin slowing down. According to expectations, euro area inflation is expected to remain stable at close to or less than 2% over the projection horizon. Growth in industrial goods prices in Germany is also expected to fall to a similar level over the projection horizon, following significantly higher growth in the last two years.

**Table 6.2 Assumed direct impact on inflation due to government measures in 2007**

Measure	expected change	expected impact on HICP (percentage points)	actual change, Jan to Aug 2007	actual impact on HICP (percentage points)
Changes in administered prices:				
- Planned increase in oil trader margins	rise in fuel prices of 1.2%	0.098	no rise	0.000
- Change in methodology for setting prices of municipal services	neutral effect	0.000	methodology still under preparation	0.000
- Change in prices of railway tickets	rise in prices of 2.3%	0.004	rise in prices of 2.1%	0.004
- Change in prices of certain textbooks	rise in prices of 2%	0.005	rise in prices of 2%	0.005
Changes in excise duties:				
- on tobacco products	rise in cigarette prices of 9.8%	0.324	rise in cigarette prices of 7.9%	0.261
- on alcohol to 21.5%	rise in prices of alcoholic beverages of 2.7%	0.049	no change in excise duties	0.000
- on electricity	rise in electricity prices of 1.1%	0.025	no change in excise duties	0.000
Other measures:				
- Liberalisation of electricity market	rise in electricity prices of up to 10%	0.229	rise in electricity prices of 5.5%	0.126
<b>Total impact on inflation</b>		<b>0.735</b>		<b>0.396</b>

Sources: Plan for managing regulated prices for 2006 and 2007; Excise Duties Act (Ztro-UPB3); Budget memorandums for 2007 and 2008.



Indirect pressure on domestic inflation from the external environment is expected to come from stronger growth in foreign demand, which according to assumptions is expected to remain at a relatively high level.

**Estimates of year-on-year inflation rates have been revised upwards compared to previous projections.**

The upwards revision of the estimate for this year are to a great extent the result of previous inflation developments, due to one-off shocks in foods prices and underestimated assumptions regarding growth in energy prices. The estimate of growth in food prices was revised upwards by 1.9 percentage points to an average of 5.8% this year. The estimate of growth in energy prices was also revised upwards by 2.5 percentage points and is expected to reach an average of around 2.6% this year. Short-term projections of prices of other industrial goods indicate more favourable developments. Current estimates indicate that the average growth in prices of industrial goods could this year be actually around 0.3 percentage points lower than it was previously projected and is expected to be only 0.2% on average this year. In contrast to other price categories, the estimate of growth in services prices remains unchanged for this year.

**Growth in administered prices is expected to remain lower than growth in non-administered prices over the projection horizon, assuming the continuation of the previous administered prices policy.** To a great extent, the slower growth in administered prices is the result of expected developments in energy prices which, given the assumptions, are expected to remain unchanged on average in the next two years. The assumption for other administered prices is that they will grow at the same pace as non-administered prices, as envisaged in the Plan for managing regulated prices in 2006 and 2007, which does not foresee any significant deviations from the general guidelines of the existing plan. The Plan for managing regulated prices in 2008 and 2009 is expected to be prepared and adopted by the end of this year.

**There are no expected economic policy measures in the areas of taxation and excise duties, which would result in additional price increases.** The necessary harmonisation of the excise duties with the European directives have already been carried out. As a result, inflation will be approximately 0.2 percentage points lower next year, due to the absence of the annual effect increases of the tobacco excise duties have had on tobacco prices in the previous years. Only possible deferred effects of the liberalisation of electricity prices represent a significant risk.

**Projections of inflation and economic developments are exposed to a number of uncertainties, which have increased with regard to previous projections.** On the external side increased uncertainty stems primarily from recent instability on world financial markets and the resulting increase in overall uncertainty with regard to developments in global activity and commodity markets. On the domestic side, uncertainties are primarily linked to wage developments, where discussions regarding wage setting in the private sector are still ongoing. Uncertainty in the setting of wage requirements has increased due to the unexpected rise in inflation and rising inflation expectations in recent months and at the same time high economic growth. Considerable uncertainty also exists with regard to investment activity, primarily of government-controlled companies. DARS' plan for development and reconstruction of motorways in 2008, which has already been submitted to the Ministry of the Economy, is the most comprehensive to date (EUR 800 million is foreseen for construction of motorways alone), and is expected to be mainly financed by loans and the bond issuance.

**Due to uncertainties linked to the realisation of assumptions, the Bank of Slovenia has prepared alternative scenarios of projections and simulations in addition to the baseline scenario, which indicate possible deviations from the original scenario.** Assumptions from the international environment, described in Chapter 2 and assumptions regarding fiscal and incomes policies described in Chapter 3, are taken into account in

the baseline scenario of projections. Alternative scenarios of projections are based on revised assumptions, primarily with regard to those variables which are most exposed to risks. From a comparison of scenarios, it is possible to assess the impact of deviation from assumptions included in the baseline scenario on projections (Table 6.3).

**Given available figures, risks linked to projections of inflation are on the upside, while risks linked to forecasts of economic growth are more balanced.** Risks for projections of inflations come from both external and domestic factors. The highest risk amongst external factors exists primarily with regard to higher commodity

prices such as oil and other commodities, where the prices of agriculture products are most prominent. Domestic factors represent the greatest risk for inflation and include assumptions, which directly affect inflation and economic activity, since economic activity also affects price pressures. Inflationary pressures increase when aggregate demand exceeds the economy's supply potential, as reflected in an increased level of production capacity and tightened labour market conditions. Higher growth in wages than expected represents the greatest risk among domestic factors, while companies find it easier to set prices at a level that is significantly higher than cost components in conditions of high economic growth.

**Table 6.3 Model simulations of certain macroeconomic shocks**

Simulation		Shock (change)		Estimated probability			
a) Foreign environment							
1.	Oil price	USD 5 per barrel higher than forecast		high			
2.	Commodities prices	10% higher than forecast		moderate			
3.	Foreign demand	1 percentage point lower than forecast		moderate			
b) Domestic environment							
4.	Wage growth	1 percentage point higher than forecast		moderate			
5.	Household spending	growth 1 percentage point higher than forecast		moderate			
6.	Government spending	growth 1 percentage point higher than forecast		moderate			
7.	Growth in administered prices	2 percentage points higher than forecast growth in non-administered prices		moderate			
Simulation		GDP			Inflation		
		2007	2008	2009	2007	2008	2009
Projections (baseline scenario)		5.7	4.4	3.9	3.3	3.3	2.9
Response of projections to shocks:							
a) Foreign environment							
1.	Oil price	5.7	4.3	3.8	3.6	3.5	3.0
2.	Commodities prices	5.7	4.4	3.9	3.4	3.5	3.0
3.	Foreign demand	5.7	4.2	3.8	3.3	3.2	2.9
b) Domestic environment							
4.	Wage growth	5.8	4.6	4.0	3.4	3.7	3.4
5.	Household spending	5.8	4.7	4.3	3.4	3.6	3.3
6.	Government spending	5.8	4.5	4.1	3.3	3.4	3.0
7.	Growth in administered prices	5.7	4.3	3.9	3.4	3.5	3.2

Notes: Year-on-year growth, %. The simulations were made using the model used by the Bank of Slovenia in its forecasts. Simulations 1, 2, 3 and 6 have changes in exogenous variables, while simulations 4, 5 and 7 have the change that defines the simulation in addition to the variables in the baseline scenario. All the other assumptions in the simulations are the same as those in the baseline scenario. The shocks last from the first quarter of 2007 to the final quarter of 2009.

Sources: SORS, Bank of Slovenia; Bank of Slovenia calculations.

**Amongst external factors, the greatest risk to the inflation trend is posed by oil and other commodity prices, especially prices of agriculture products.** Recently, the prices of oil and certain other commodities, particularly food prices have risen significantly. The developments of these prices and the pass-through to domestic prices remain uncertain. The risk exists that prices of commodities could be higher than expected due to higher global demand and due to supply-side shocks. Commodity prices on world markets determine the costs of companies, while their pass-through to the end user (and thus to HICP) depends on a number of factors, including market structure and hence the possibility of setting the mark-up on prices. In general, companies can transfer increased prices to end prices faster and to a greater extent in conditions of reduced competition, higher market concentration and higher aggregate demand. In addition to prices on world markets, movement of the euro exchange rate also affects import prices. The recent appreciation of the euro has helped somewhat to ease inflationary pressures which arise from growth in commodity prices on world markets. If the movement of the exchange rate reverses in the future, inflationary pressures could increase.

**Inflationary risks are linked to the developments in import prices, primarily for those products which have contributed significantly to inflation in past**

**years.** In the period following entry to the EU, imports from countries with cheap labour and imports of used cars from EU Member States have increased dramatically. In addition to a direct effect, the import of cheaper goods also had an indirect effect on lowering inflation due to the revised structure of the consumer basket (a shift to cheaper imported goods) and increased competition on the domestic market. It is possible that the favourable effect of global competition and imports from countries with cheap labour will be limited over time, which can already be seen in the gradual reduction of the contribution of manufactured goods prices to overall inflation. Despite this, the time-frame and extent of this factor is still quite uncertain.

**Amongst domestic factors, significant risks are primarily linked to growth in wages during the projection period, driven by uncertainty surrounding wage negotiations.** The currently high economic growth, which is just above the supply potential of the economy with regard to projections, is reflected in trends of growing inflation, insufficient production capacity and tightened labour market conditions. Taking into account expected high wage adjustments in the public sector in the coming years, there are increased risks of demands for higher wages in the public sector as well. Higher growth in wages from the baseline scenario could cause a rise in inflation, as it increases the costs of companies on the

**Table 6.4 Alternative scenario of projections: higher nominal wage growth**

	scenario of full indexation to current inflation rate and output per employee			deviation from baseline scenario		
	2007	2008	2009	2007	2008	2009
	year-on-year growth, %			percentage points		
Gross wages	3.1	5.1	6.1	0.2	1.8	3.1
Inflation (HICP)	3.3	3.8	5.3	0.0	0.5	2.5
GDP	5.7	4.4	4.0	0.0	0.0	0.1
Domestic demand	6.1	4.3	4.0	0.0	0.3	0.6
Exports	13.3	11.5	8.4	0.0	-0.1	-0.1
Imports	13.8	11.2	8.4	0.0	0.2	0.4

*Note: The scenario assumes that wage growth over the entire period of the projections will be entirely in line with productivity growth and price growth.*

*Source: Bank of Slovenia.*

one side and increases demand pressures on the other. Companies can pass on higher wages by increasing prices, which is easier in times of high economic growth, or reduce their mark-ups on prices (i.e. profits). In the current favourable economic conditions, raising prices is becoming a more likely response to excessive wage increases. This is particularly true for sectors, which are less exposed to competition, such as the services sector. Since this sector typically demonstrates a lower level of productivity, which could absorb higher costs in the form of wages, the risk of inflationary pressures arising due to growth in wages is greater in this sector. This means that in the new macroeconomic environment linked to entry to monetary union, wages must bear the greatest burden in the short-term during the adjustment of the economy in unfavourable conditions. Policies increasing the labour market flexibility in the long-term will ensure stable economic growth, greater price stability and greater employment stability.

**Due to the risks described above, an alternative scenario of complete indexation of wages is presented, which would result in wage-inflation spiral and inflation of more than 5% already during the projection period.** The scenario in Table 6.4 assumes that growth in wages throughout the projection period will be fully in line with growth in output per employee and inflation. This would result in growth in wages in the period 2008 to 2009 one percentage point higher than in the baseline scenario, amounting to approximately 4% in this period. If this scenario were realised, estimates indicate that inflation in the projection period would rise significantly above the projection in the baseline scenario and could reach more than 5%, compared to 2.9%, in 2009. At the same time, economic activity would increase slightly and on a solely transitional basis due to real growth in disposable income. This scenario points out the danger of a wage-inflation spiral occurring if one-off supply-side price pressures are built into wage dynamics, such as growth in energy and food price (these do not increase labour productivity) and that portion of inflation linked to accelerated

economic activity. The baseline scenario of projections suggests that wages policy will not change given the period of moderate growth in labour costs in the last several years. If there are deviations from this policy, the possibility of not achieving price stability also increases significantly.

**Favourable economic conditions and high domestic demand also create conditions for increasing the profit margins of companies, since the possibility of setting prices at a level, which does not reflect merely the cost components increases in such conditions.** This is especially true for markets which are less exposed to competition. The effect of increasing mark-ups on prices on inflation could have a significant impact of inflationary expectations and thus on inflation, especially if it relates to products purchased frequently by consumers, such as food.

**The plan for setting administered prices for the projection period is still being prepared. However, the risk that administered prices would differ from current assumptions is not high.** Projections assume that growth in administered prices will not exceed growth in non-administered prices, which is in line with the policy followed for the last several years. The Government will adopt the plan by the end of the year, which is not expected to vary significantly from the current plan in terms of basic guidelines. In addition to prices of refined petroleum products, there is particular uncertainty regarding the movement of electricity prices following the opening of the market in 2007. In the months following the opening of the market, the effect of higher prices was not realised, although some estimates indicated the need to adapt electricity prices by as much as 10%. Just prior to the opening of the market and the abolition of control over electricity prices, the Government approved a 5.5% price increase. However, the final effects on prices given the liberalisation of the electricity market in Slovenia are still widely unknown. It is clear that the programme of administered prices and the limiting of tax effects on prices cannot represent the core of policies for ensuring

prices stability: the short-term effects on inflation from such policies could result in a distortion of relative prices, which has an adverse effect on economic efficiency in the long-term. With regard to administered prices, it is particularly important to prevent the formation of inflationary factors due to insufficient cost control in sectors in which prices are administered. It is therefore necessary to implement appropriate structural policies.

**Risks to projections of economic activity are primarily linked to instability on world financial markets and uncertainty with regard to growth in wages and budget expenditure.** A decrease in economic activity could occur due the effect of recent instability on world financial markets and on foreign and domestic demand, which could to some extent mitigate inflationary pressures. On the other hand, there are risks that growth in domestic demand in the projection period will be higher and significantly exceed estimated growth in the economy's supply capacity, particularly if growth in wages is higher than expected and budget expenditure is more expansive, which could increase inflationary pressures.

**Recent events on world financial markets have increased the risk of tightened liquidity and financing conditions and significantly slower growth in foreign demand during the projection period.** The past years have been characterised by abundant liquidity, favourable financing conditions and high credit growth. Recent events on world financial markets could cause a reversal in the aforementioned trends. Revised financing conditions could have an adverse effect on global economic growth and thus a limiting effect on domestic investment and consumption if they were reflected in higher interest rates and more difficult access to credit. At the same time, slower economic growth in the rest of the world could result in lower export demand for Slovenian exports and slower economic activity, thereby restricting domestic inflationary pressures. Given model forecasts of the elasticity of macroeconomic factors on foreign demand presented in Table 6.3, it is possible to evaluate the effect of a slowdown in foreign demand on the Slovenian econ-

omy. If instability in financial markets led to a fall in foreign demand to 2001 levels (when growth in foreign demand fell by approximately 5 percentage points), economic growth and inflation next year would drop by approximately 1 percentage point and 0.5 percentage points, respectively.

**Risks relating to household income (including pensions, which are linked to wage growth) and to consumption and investment of the government and government-controlled companies (i.e. DARS) indicate that domestic demand could turn stronger than described in projections, which would increase the positive output gap and thus inflationary pressures.** Household spending could also be spurred by ongoing borrowing, stimulated by higher inflation than in the euro area, since this would lower the real costs of borrowing. The wealth effect on disposable income is also uncertain and could, given continued house and asset price growth, be reflected as a factor for generating additional domestic demand. Government spending could also rise due to the coming elections and the EU presidency, as well as due to investments conditional on EU funding. The effect of growth in investments on inflation depends on the nature of investments and on an appropriate increase in supply potential. In current conditions, the latter is uncertain, as investments in residential and road construction, which are currently the fastest growing components of investment, primarily increase cyclical growth and thus inflationary pressures, while investments in equipment generally increase supply potential.

**To maintain inflation at an appropriately low level in the medium-term, it is crucial that risks to inflation are not realised.** While ECB monetary policy is responsible for achieving price stability in the euro area as a whole, only domestic policies are available for managing inflation in Slovenia following entry to the single currency area. Given current identified risks, responsible behaviour of social partners during wage negotiations and restrictive budget expenditure are of great importance.



**Box 6.1: Comparison of 2007 and 2008 forecasts with those of other institutions**

Forecasts for Slovenia are compiled not only by domestic institutions, but also by international and private organisations. It is useful to compare forecasts because they highlight differences in thinking concerning future economic trends, despite the forecasts not being directly comparable as they cover different periods and therefore do not take into account the same information. Furthermore, the forecasts are based on different assumptions with regard to both exogenous variables in the international environment and to economic policy actions.

Economic growth forecasts for 2007 have again, as a rule, been revised upwards compared with the previous round of forecasts. Institutions which prepared forecasts in the second half of 2007 agree that real GDP growth will again exceed 5%

this year. The prevailing opinion for 2008 is that growth will slow, but should still exceed 4%. With regard to the current account balance, most institutions have revised forecasts in the direction of a widening deficit. A somewhat smaller deficit is generally forecast for next year compared to this year.

Differences in inflation forecasts are slightly higher in this comparison than in previous comparisons primarily due to the fact that certain institutions have not yet published revised forecasts. The forecasts of most institutions, which have recently published their forecasts, have been revised upwards. At most institutions, inflation forecasts have been revised upwards by approximately 0.5 percentage points. Institutions are forecasting only a gradual easing of inflation in 2008.

**Table: Comparison of forecasts for Slovenia and change from previous forecasts**

	Release of new / previous forecast	GDP annual growth, %				Inflation annual average, %				Current account % of GDP			
		2007		2008		2007		2008		2007		2008	
		new	Δ	new	Δ	new	Δ	new	Δ	new	Δ	new	Δ
Bank of Slovenia	Oct 07 / Mar 07	5.7	1.1	4.4	0.0	3.3	0.6	3.3	0.6	-3.3	-1.3	-2.6	-0.5
EIPF	Sep 07 / Jan 07	5.2	0.6	5.0	...	3.1	0.6	2.3	...	-2.4	...	1.1	...
IMAD	Apr 07 / Sep 06	4.7	0.4	4.4	0.2	3.0*	0.3	2.7*	0.2	-2.0	-0.4	-0.8	0.4
Consensus Forecasts	Sep 07 / Jan 07	5.6	1.3	4.7	0.6	3.0	0.6	2.7	0.4	-2.9	-1.1	-0.8	0.6
WIIW	Jul 07 / Feb 07	5.0	0.5	5.0	0.6	2.6	0.0	2.3	0.0	-2.2	0.0	-1.5	0.0
European Commission	May 07 / Nov 06	4.3	0.1	4.0	-0.5	2.6	0.1	2.7	0.1	-2.4	-0.6	-2.3	-0.9

\* Update of the Spring Inflation Forecast for 2007 and 2008, July 2007

Δ: The difference between October 2007 and March 2007 projections.

Sources: Bank of Slovenia, EIPF, IMAD, Consensus Economic Forecasts, European Commission, Wiener Institut für Internationale Wirtschaftsvergleiche (WIIW); Bank of Slovenia calculations.

**Labour cost growth exceeding productivity growth causes inflationary pressures. When forming a wage agreement it is important to take into account developments on the corporate and sectoral levels and labour costs trends in productivity in countries, which compete on the same markets.** In recent years, the trend of overall labour costs has contributed positively to achieving low rates of inflation, which is expected to continue in the future. In this regard, it is crucial to anchor inflation expectations in accordance with price stability. It is therefore important that the recent rise in inflation does

not spill over to wages, as this would signal the emergence of a wage-inflation spiral (pointed out in the alternative scenarios in this chapter) and higher inflation in the medium term. Higher wages would have a positive transitional effect of economic activity due to increased domestic spending, while at the same time rising inflation would decrease consumer purchasing power and competitiveness, and consequently, economic growth and employment. It should be taken into account that growth in productivity in the tradable sector typically outpaces growth in productivity in the non-tradable sector which requires



lower growth in wages in the non-tradable sector to prevent the emergence of inflationary pressures. In addition to domestic productivity, developments in countries which are Slovenia's main competitors must be taken into account in order to maintain competitiveness.

**Besides incomes policy, fiscal policy plays a key role in ensuring price stability and curbing inflationary pressures.** The budget spending stance must be counter-cyclical and ensure the creation of budgetary reserves when budget revenues are under the influence of a favourable cycle. Despite the current favourable outlook, additional consolidation of public finance is necessary. This is particularly true against a backdrop of high economic activity and high nominal revenues and given the fact that most projections indicate that the economic cycle is expected to gradually slow down. Prudence in managing fiscal policy is that much more important due to uncertainties regarding the stance of public finances, since figures on the current structural deficit are not yet available, making a precise estimate of the fiscal policy position impossible. Uncertainty when estimating the cyclical component also dictates prudence, since it is possible to underestimate the cyclical component when economic growth rates are high. A high level of prudence and a longer-term horizon are also necessary in decisions regarding investments of the government and government-controlled companies and the use of EU funds, since the nature and time-horizon of projects have an impact on demand-side inflationary pressures. Those responsible for macroeconomic policies must recognise the risk in a timely manner and prepare programmes, which will be deferred (i.e. road programmes) if risks of inflation and an overheating economy arise. These programmes could act as a reserve for stimulating economic activity in the long-term and pick up again when the economic cycle slows down.

**Fiscal policy also plays an important role in other parts of the economy through public sector wage setting, which has a significant demonstration effect on private sector wages.** The latest agreements indi-

cate public sector wage growth which does not restrict inflation anymore. High growth in wages can also pose a problem because certain incomes of the population, particularly pensions and social transfers, are linked to wage growth.

**Besides macroeconomic policies, structural policies are crucial for achieving sustainable economic growth in the medium and long-term period, consistent with maintaining price stability.** For the most part, measures are required for increasing the flexibility of the labour market, improving the competitiveness of the economy and reforms of social programmes. Structural policy measures typically impact economic activity with a time lag. Therefore, recent government measures in this area will be felt outside the period of current projections and their effects are not included in the baseline scenario.

## Annex: Bank of Slovenia projections and Eurosystem projections

The Bank of Slovenia has been participating in the Eurosystem's macroeconomic projections since autumn 2006.<sup>1</sup> The projections for Slovenia were included for the first time in the aggregate projections for the euro area in the ECB Monthly Bulletin in December 2006, for 2007 and beyond.

The projections produced by the Eurosystem are based on close cooperation between ECB and national central bank (NCB) experts.<sup>2</sup> The Monetary Policy Committee<sup>3</sup> is responsible for projections, supported by its Working Group on Forecasting.<sup>4</sup> The first step in producing Eurosystem projections is an agreement of assumptions, which contains sections on interest rates, exchange rate developments, the international environment and fiscal variables. In the next step, the ECB and NCBs use the same assumptions to prepare their own projections for individual countries, while the ECB also prepares an aggregate for the euro area, based on its own projections and NCB projections. After multiple iterations the final projection values are defined for individual countries, and then for the euro area, which is followed by the preparation of reports for the ECB Governing Council. A summary of this report is published in the ECB Bulletin.

The Bank of Slovenia uses its own assumptions in the projections set out in the Price Stability Report. According to the rules that apply to producing Eurosystem projections, these are not identical to those used in Eurosystem projections, and must be taken from other institutions.

The Bank of Slovenia projections<sup>5</sup> published are not identical to Eurosystem projections, and are not issued at the same time. The individual NCBs of euro area Member States may publish their own projections outside the regular Eurosystem projections, but their publication has time restrictions. The time difference for the publication of NCB projections is related to the publication of Eurosystem projections, which are generally issued twice a year – at the beginning of June and the beginning of December.<sup>6</sup> If NCB projections are published before Eurosystem projections, the publication date must be at least two months earlier than Eurosystem projection. If NCB projections are published within one month of a Eurosystem projection, the NCB projection must contain the same assumptions regarding the international environment as the Eurosystem projections.

<sup>1</sup> The projections of Eurosystem experts (the ECB and NCBs of euro area Member States) do not reflect the opinions of individual central banks or the ECB Board of Governors. The projections represent support material for the assessment of the ECB Board of Governors regarding economic events and risks relating to price stability

<sup>2</sup> For more on Eurosystem projections, see: <http://www.ecb.int/pub/pdf/other/staffprojectionsguideen.pdf>

<sup>3</sup> The committee is comprised of high ranking officials from the ECB and NCBs.

<sup>4</sup> ECB and NCB experts sit on the working group.

<sup>5</sup> Projections of the Board of the Bank of Slovenia, which it adopts and approves for publication in the Price Stability Report (previously: Monetary Policy Report).

<sup>6</sup> Since September 2006, interim projections by ECB experts have been published in the ECB Bulletin, which do not include NCB expert involvement. They are issued in September and March.