GOVERNMENT OF THE REPUBLIC OF SLOVENIA
INSTITUTE OF MACROECONOMIC ANALYSIS AND DEVELOPMENT

Autumn Forecast of Economic Trends 2008

(forecasts of economic trends for 2008–2010
with an analysis of current trends in 2008)

September 2008

Autumn Forecast of Economic Trends 2008

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Summary

This year, economic growth is expected to slow to a still relatively high level (4.8%) after posting a high in 2007 (6.8%). Against the background of a gradual cooling of international economic activity, the slowdown will be largely due to slower growth of exports and gross fixed capital formation, which remain the main drivers of the economy. The slowing of export growth is relatively more pronounced than the deceleration of investment growth. Their respective contributions to growth are therefore more balanced than last year, when exports contributed relatively more. Final consumption growth remains moderate and at a similar level to last year's; private consumption growth will be somewhat lower, while general government consumption will increase relative to last year. The autumn forecast of economic growth is revised upwards by 0.4 p.p. from the spring. Higher growth rates are expected in investment, given the vigorous growth in the first half of the year, while the upward revision of private consumption growth is mainly due to the impact of the national accounts revision for 2007. The autumn forecast for export growth, on the other hand, is lower than the spring forecast, given the less favourable situation in the international environment.

As regards investment this year, slower growth is expected in business investment. This forecast is supported by the data on capacity utilisation in manufacturing, which fell to the lowest in two and a half years in Q3, according to seasonally adjusted data. Weaker investment activity in this segment is also implied by the deterioration of business climate indicators. Infrastructure investment will continue to grow relatively robustly, while growth of housing investment will moderate slowly by the end of the year. The slowdown of investment in non-residential buildings will be somewhat faster. Value added in construction, which was still high in the first half of the year, will thus rise at a slower rate in 2008 than last year.

The decelerating growth of economic activity in the international environment this year is reflected in lower growth of merchandise exports and of value added in activities which are more integrated in international trade flows. Growth in the export of services, particularly in travel and business services, remains strong. Among major sectors, manufacturing will see a notable slowdown of value-added growth, as it had already dropped considerably below the 2007 average in the first half of the year. It is projected to moderate further, given withering economic growth in the euro area in the second half of the year. The deceleration of export growth is evidenced by business tendency surveys indicating a decrease in order-books and a deteriorating competitive position of enterprises on foreign markets. As already predicted in the spring, slower growth of exports and production activity in the second half of the year will also be due to substantially weaker growth in the manufacture and exports of vehicles, which will lag significantly behind the high figures posted in 2007. The slowdown in production and export activities will be partly offset by continuing strong demand in the new EU Member States, the countries of the former Yugoslavia and Russia. Value-added growth in market services remains relatively strong this year, albeit weaker than in last year, particularly in industries where it had been additionally stimulated by the vigorous industrial and construction activities (wholesale trade, road freight transport, the financial sector, various business services).

In 2008, the current account deficit will widen relative to last year (to 5.8%), largely as a result of a higher trade deficit. Exports will grow at a slower pace than imports, in nominal terms, mainly due to the slowdown in foreign demand growth, as well as deteriorating terms of trade (higher import prices compared to export prices). The capital income deficit will also widen because of the rising external debt and higher interest rates which are increasing the burden of debt servicing. A further increase is expected in the services trade surplus, mainly as a result of accelerated growth of transport and travel services.

In 2008, employment growth will continue to be relatively high. It was maintained at the 2007 level on average in the first six months (3%), but y-o-y growth rates gradually decelerated, which will also continue in the second half of the year. In the first half of the year, employment growth in most industries (construction, predominantly market-oriented services) also exceeded the spring expectations. Thus, the autumn forecast (2.3%) is notably higher than the spring forecast (1.1%). The number of unemployed and unemployment rates will also be lower than projected in the spring. However, due to the foreseen economic slowdown, the usual seasonal inflow of first-job seekers is expected to be somewhat larger than last year. Compared with last year, more people will lose work and fewer unemployed people will find it.

In 2008, nominal wage growth (8.6%) will be stronger than last year (5.9%), which is mainly a result of higher inflation and higher wage rises in the public sector. The latter is largely due to the payment of the first quarter of funds to eliminate wage disparities according to the new wage system, which took effect in August. The autumn forecast of total nominal wage growth is higher than the spring forecast. In addition to the larger volume of funds to eliminate wage disparities in the public sector, this is also due to higher-than-expected inflation. Given the acceleration

in 2008, nominal wage growth will surpass productivity growth. Real wage growth (2.3%) will remain at a similar level to last year (2.2%) and will be consistent with real productivity growth. In contrast to last year, real wage growth in the public sector (3.0%) will exceed wage growth in the private sector (2.2%), which will be weaker than last year, given the slower growth in economic activity.

Average inflation will reach 6.2% this year, 1 p.p. more than projected in the spring, primarily due to substantially higher commodity price rises than were assumed previously. The secondary effects of these price rises have strengthened as well, as a consequence of pass-through to certain price groups where the direct impact of price rises of food and liquid fuels for transport and heating is otherwise small. These inflationary pressures eased towards the end of the summer, as did oil price increases, and y-o-y consumer price growth started to slow. Given that oil and food prices on global markets are set to stabilise according to the latest forecasts by international forecasting institutions, the gradual decline in y-o-y rates will continue to the end of the year, partly also due to the base effect (high price rises in the autumn months of last year). The economic policy mix broadly maintains the orientation this year; following the adoption of the supplementary budget, fiscal policy is somewhat more restrictive while wage growth relative to productivity growth has a less constraining impact on price rises than anticipated in the spring. The relatively higher inflation level relative to the euro-area countries, which was also observed before the inflation surge in Q2 of 2007, is influenced by relatively stronger economic growth in Slovenia and convergence to a common level of prices, particularly in the non-trading sector.

In **2009**, a considerable deceleration of investment activity is broadly expected, following the high growth rates in the past years. Given the less favourable outlook for the international environment, a further slowdown of export growth is also anticipated. This will contribute to a notable slowdown in economic growth which is forecast at 3.1%, 1 p.p. lower than in the spring. This faster slowing is to a large extent due to the downward revision of expected economic growth in main trading partners relative to the spring forecasts. This is mainly due to the bigger extent and negative influences of the financial turmoil which started in August 2007. Given the business expectations and outlook for the international environment, as well as decreased capacity utilisation, the volume of business investment is not expected to continue to increase. Other investment segments will also increase significantly less, after reaching high growth rates this year. In infrastructure investment, the volume of investment in highway construction is expected to decline relative to 2008, while investment in energy infrastructure will strengthen. Investment in construction of buildings will continue to increase, albeit at a slower pace than this year. Private consumption will moderate further next year, as a consequence of weaker disposable income growth due to stagnating growth of employment. Its relative contribution to economic growth will be nevertheless larger than in the previous years, given that growth rates in exports and investment will decline. Uncertainty about the extent to which the financial turmoil will affect the U.S. and euro-area economies represents the main risk to the forecast of economic growth for 2009. A greater deceleration of economic growth in these countries would entail weaker export growth and a decline in business investment compared with the baseline scenario of the autumn forecast.

The current account deficit is expected to fall below 5% of GDP next year. Given the notable slowdown of domestic consumption, import growth will slow down more than export growth. In line with the assumptions for the international environment, the terms of trade will deteriorate less than this year. The trade surplus for services will continue to increase, while the current transfer deficit is projected to decline. The factor income deficit will continue to widen, due to higher payments of net interest on external debt.

The slowdown in economic growth will be reflected in the labour market. The number of employed on average is not projected to increase in 2009. In certain manufacturing activities, construction, agriculture and mining, employment will decline. In services, it will continue to increase, albeit at a slower pace than this year. The average survey and registered unemployment rates will remain at the 2008 levels.

In 2009, the private sector will see a slowdown in nominal wage growth. In the public sector, wages will accelerate significantly due to the agreed payments of two quarters of funds to eliminate wage disparities. The total gross wage per employee will thus increase by 7.8% in nominal terms, and exceed labour productivity growth by 0.8 p.p. The spring forecast for nominal gross wage growth was 1.4 p.p. lower. As with the forecast for 2008, the difference is a result of higher inflation and the higher estimate of the volume of funds for eliminating wage disparities in the public sector. The total gross wage will increase by 3.7% in real terms, exceeding productivity growth by 0.6 p.p.

Given that inflationary pressures are expected to ease off, y-o-y inflation will drop to 3.6% and average inflation to 3.9% in 2009. Based on the latest projections by international forecasting institutions regarding food prices on the global markets, these prices are estimated to make a smaller contribution to domestic inflation in 2009 than was projected for 2008. Based on these assumptions, the contribution of oil price rises to inflation will be modest and significantly smaller than this year. Inflationary pressures in 2009 will also ease due to the foreseen slowdown of economic activity in both the international environment and Slovenia. Given that Slovenia's economic growth remains well above the euro-area average, the level of prices will still be influenced by the Balassa–Samuelson effect. Among domestic economic policies, price policy measures will have a favourable effect on domestic inflation, while the contribution of fiscal policy measures is expected to be neutral. At the same time, wages rising faster than productivity will build inflationary pressures. The decline in inflation will thus be slower than would otherwise be the case. In addition to the commodity and food price development on the global markets, higher wage rises than projected in the baseline scenario also represent the main risk to the envisaged slowdown of inflation.

Economic growth is expected to accelerate to 4.0% in **2010**. This will be the result of higher growth rates in exports and investment following an upturn in the international environment. After the stagnation in 2009, employment will increase again. Nominal wage growth will be slower compared to the year before and lower than labour productivity growth. In 2010, public sector wages will continue to rise faster than private sector wages, largely due to the payment of the last quarter of funds for the elimination of wage disparities in the public sector. Assuming that current economic policies are maintained and in the absence of any major external price shocks, inflation will return to its estimated long-term equilibrium level.

Last year, Slovenia reached 89% of the EU average in terms of gross domestic product per capita in purchasing power standards. Given that economic growth in Slovenia is projected to stay stronger than in the EU, on average, in 2008 and in the next two years, the development gap is also expected to gradually decline over these years.[1] Against the background of the projected economic slowdown, this closing of the development gap to the EU average will crucially depend on the structural move of the economy towards higher value-added activities.

[1] The change in the development gap depends on economic growth as well as the change in the relative price level

Autumn forecast of the main macroeconomic aggregates and comparison with spring forecasts

Real growth rates in % (unless otherwise indicated)

	2007	2008		2009		2010	
		Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)	Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)	Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)
GDP	6.8	4.4	4.8	4.1	3.1	4.4	4.0
GDP (EUR m, in current prices)	34,471	36,308	37,725	39,234	40,343	42,270	43,470
INFLATION (Dec/Dec of the preceding year, %)	5.6	4.0	5.3	2.9	3.6	2.9	3.0
INFLATION (Jan-Dec/Jan-Dec annual average, %)	3.6	5.2	6.2	3.2	3.9	2.9	3.3
GDP deflator (%)	4.1	3.7	4.5	3.8	3.7	3.2	3.6
USD/EUR exchange rate	1.371	1.526	1.52	1.537	1.50	1.537	1.50
EMPLOYMENT according to the SNA (% growth)	3.0	1.1	2.3	0.6	0.0	0.6	0.4
REGISTERED UNEMPLOYMENT RATE (%)	7.7	7.3	6.8	7.1	6.8	6.8	6.7
ILO UNEMPLOYMENT RATE (%)	4.9	4.8	4.6	4.8	4.8	4.7	4.8
PRODUCTIVITY - GDP per employee (% growth)	3.7	3.3	2.4	3.5	3.1	3.8	3.7
GROSS WAGE PER EMPLOYEE	2.2	2.4	2.3	3.1	3.7	3.2	3.5
EXPORTS OF GOODS AND SERVICES	13.8	9.7	6.6	9.4	5.2	9.7	7.4
- exports of goods	13.1	9.4	4.7	9.3	4.6	9.5	6.8
- exports of services	17.0	10.9	15.5	10.0	8.1	10.5	10.2
IMPORTS OF GOODS AND SERVICES	15.7	8.5	6.9	7.5	4.0	8.6	6.5
- imports of goods	15.1	8.3	6.5	7.2	3.2	8.3	6.0
- imports of services	19.7	9.8	9.7	9.7	9.0	10.6	9.5
CURRENT ACCOUNT BALANCE (EUR m)	-1,455	-1,686	-2,203	-1,103	-1,900	-899	-1,764
- as % of GDP	-4.2	-4.6	-5.8	-2.8	-4.7	-2.1	-4.1
GROSS FIXED CAPITAL FORMATION	11.9	5.4	8.8	2.6	1.3	4.5	4.5
- as % of GDP	27.5	28.9	28.3	28.1	27.6	28.1	27.5
PRIVATE CONSUMPTION	5.0	3.6	4.5	3.7	3.5	3.8	3.6
- as % of GDP	52.2	52.7	52.9	52.2	53.2	51.8	52.9
GOVERNMENT CONSUMPTION	2.5	3.9	3.4	2.3	2.2	2.4	2.6
- as % of GDP	17.7	18.6	18.0	18.5	18.5	18.6	18.7

Source of data: SORS, BS, forecasts by IMAD.

Background documents and data for the Autumn Forecast of Economic Trends for 2008–2010

The Autumn Forecast is based on currently implemented or adopted economic policy measures. The projections of general government current and investment consumption for 2008 and 2009 take into account the supplementary budget for 2008 adopted in June 2008 and the effective budget for 2009 adopted in December 2007.

The Autumn Forecast of economic trends is based on the IMAD's expert estimates using the following source data: (i) revised data on GDP, the main national accounts aggregates, and employment for the period 2000–2007; (ii) quarterly data on GDP in the first and second quarters of 2008; (iii) available statistical data on current economic trends published by 26 September 2008; (iv) data on economic growth in the international environment in 2008; (v) autumn forecasts of international institutions regarding economic trends in Slovenia's main trading partners published by 12 September 2008; (vi) prevailing expectations of international forecasters regarding the price dynamics of oil and other commodities and the euro/dollar exchange rate; (vii) results of the dynamic factor model and other econometric models used in forecasting; and (viii) consultations with other organisations that prepare forecasts for Slovenia.

Forecasts of economic trends for 2008–2010

Assumptions of the autumn forecasts

Global economic growth is expected to slow considerably in 2008 and 2009. According to the International Monetary Fund, global economic growth is expected to reach around 4.0% in 2008–2009. The rate of growth will be roughly 1.0 p.p. lower than in the last two years, albeit at the average level recorded over this decade. It will slow in advanced as well as developing economies, mainly for cyclical reasons. The downturn of the business cycle in the last year was additionally underpinned by two shocks, the financial turmoil and the sharply increasing prices of oil and primary commodities (agricultural commodities, in particular). These shocks reached global dimensions, but the magnitude of their effects was different for individual economies.

According to the latest forecasts of economic growth in our main trading partners from the euro area for 2008 and 2009, the slowdown will be even more pronounced than projected in the spring (see Table 1). In the first half of the year, real GDP growth in the euro area remained in line with the spring expectations (1.8%). In Q1, it was somewhat stronger than expected, mainly due to high growth in construction, while in Q2 it moderated more than had been expected. The prospects for economic growth in the euro-area countries in the period to the end of 2008 and in 2009 worsened due to the consequences of the financial turmoil, reflected in more expensive loans, cooling of housing markets in certain countries, an increasingly strong euro as well as high commodity price rises, which have already pushed inflation above the level expected in the spring. Private consumption growth is expected to remain weak or even slow further in the euro-area countries, owing to high consumer price rises affecting the purchasing power of households. The worsened outlook for economic growth will not be conducive to wage rises, and the unemployment rate is projected to start increasing again, albeit from the lowest level witnessed in the last decades. Domestic demand will moderate, in large part owing to notably weaker investment growth, particularly in construction as a result of the real estate price slowdown.[2] A significant deterioration in sentiment indicators observed in recent months, which is mostly linked to the expected moderation in foreign demand growth, also suggests weaker growth of investment in machinery and equipment. Export growth is expected to be weaker as a result of modest foreign demand and partly also of decreasing competitiveness due to the strong euro. In all Slovenia's main trade partners, economic growth will start strengthening again in the second half of 2009, but is not expected to reach the rates recorded over the past two years. The forecasts for 2010 predict that economic growth in the euro area will stand at around 2.0%.

[2] The most notable slowdown in construction investment is expected in the countries which posted the strongest housing price rises over the last few years (Spain, Ireland, France, Great Britain).

Table 1: **IMAD's assumptions on economic growth in Slovenia's main trading partners in 2008–2010 and comparison with spring forecasts**

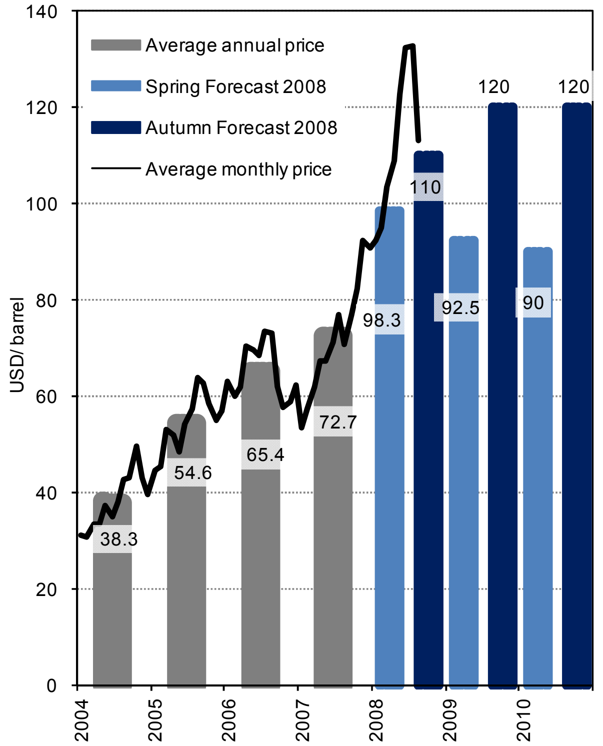
	2006	2007	2008		2009		2010	
			Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)	Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)	Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)
EU	3.1	2.9	1.9	1.4	2.1	1.1	2.2	2.0
Euro area	2.8	2.6	1.6	1.3	1.9	1.0	2.0	1.8
Germany	3.0	2.5	1.6	1.6	1.9	0.9	1.9	1.6
Italy	1.8	1.5	0.7	0.1	1.4	0.5	1.2	1.2
Austria	3.4	3.1	2.4	2.2	2.3	1.8	2.3	2.3
France	2.2	2.2	1.6	1.1	1.9	1.0	2.2	2.0
UK	2.9	3.1	1.7	1.2	2.0	0.9	2.0	1.8
Czech Republic	6.8	6.5	4.6	4.6	5.0	4.7	5.0	5.0
Hungary	3.9	1.3	2.5	2.4	3.8	3.2	4.3	4.3
Poland	6.2	6.6	5.5	5.5	5.0	5.0	5.0	5.0
Croatia	4.8	5.6	4.8	4.4	4.5	4.7	5.0	5.0
Bosnia and Herzegovina	6.7	6.0	5.0	5.0	5.0	5.2	6.0	6.0
Serbia	5.7	7.5	5.5	5.5	5.5	5.5	5.0	6.0
Macedonia	4.0	5.1	5.0	4.8	6.0	5.5	6.0	6.0
USA	2.8	2.0	1.2	1.6	2.4	1.4	2.8	2.8
Russia	7.4	8.1	6.5	7.5	6.2	6.9	5.5	6.0

Source of data: Eurostat; Consensus Forecasts, August 2008, September 2008; Eastern Consensus Forecast, August 2008; European Commission, DG Ecfin – Interim Forecast, September 2008; European Commission, DG Ecfin – Economic Forecasts, Spring 2008, Economist Intelligence Unit Country Reports (for Bosnia and Herzegovina, Serbia, Macedonia), August 2008, September 2008; OECD Economic Outlook, June 2008; WIIW Current Analysis and Forecasts, July 2008; IMAD estimates.

In line with the spring expectations, this year economic growth will also moderate in Slovenia's main trading partners from the group of new EU Member States and in the countries of the former Yugoslavia, but will remain strong. The slowdown in GDP growth expected in these countries in 2008 and in the next two years does not diverge significantly from the spring assumptions. In most countries from this group, private consumption growth, which has already moderated significantly due to higher oil and food price rises this year, will see the most notable slowdown in 2008 and 2009. Investment growth is also projected to slow, but will remain relatively strong due to the necessary infrastructure construction and restructuring of the economy. Exports will also record weaker growth than in the past two years. Economic growth in the new EU Member States and the countries from the former Yugoslavia is forecast to remain significantly stronger than the euro-area average.

The autumn forecasts assume higher oil prices than the spring forecasts. The average price of Brent crude was USD 112.6/barrel in the first eight months of 2008. The price rose steeply in the period to July; from January, when it averaged around USD 90/barrel, it rose to more than USD 130/barrel in July and dropped by USD 20/barrel in August. Given significant oil price fluctuations this year, the autumn forecast is based on the technical assumption that the average price of Brent crude will stabilise at the average level of the first ten days in September by the end of the year, at around USD 110/barrel, which is USD 12 more than assumed in the spring (see Table 2). As in the last two months, the downward pressure on prices will come from weaker growth of oil demand expected as a result of deteriorated prospects for economic activity in the coming months. Oil prices are projected to be at USD 120/barrel in 2009 and 2010, USD 30 more than envisaged in the spring (see Figure 1).

Figure 1: **Prices of Brent crude in 2004–2008 and technical assumptions used in the IMAD's spring and autumn forecasts, USD/barrel**



Source of data: World Bank, assumptions for 2008–2010 by IMAD.

This year, the euro/dollar exchange rate is forecast at USD 1.52 to EUR 1, in line with the spring expectations. The average dollar/euro exchange rate was USD 1.53 to EUR 1 in the first eight months of 2008. Given the increased exchange rate volatility in the summer months, the technical assumption is based on the average exchange rate developments recorded in the six weeks before the beginning of the preparation of the forecast (between 27 July and 5 September 2008). The average exchange rate is expected at USD 1.52 to EUR 1 for 2008 (almost equalling the spring assumption of EUR 1.526 to EUR 1), and USD 1.50 to EUR 1 for 2009 and 2010 (against USD 1.537 to EUR 1 in the spring forecast).

Table 2: **Autumn forecast assumptions of Brent crude prices in 2008–2010 and comparison with spring forecasts, USD/barrel**

	2006	2007	2008		2009		2010	
			Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)	Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)	Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)
Average oil price	65.4	72.7	98.3	110.0	92.5	120.0	90.0	120.0

Source of data: World Bank, assumptions for 2008–2010 by IMAD.

The current risks to developments in the international environment are even more pronounced than in the spring. International economic trends are subject to great uncertainties mainly related to commodity price dynamics and global impacts of the financial crisis in the U.S. (see Box 1).

Box 1**: Financial crisis increases risks to economic prospects in the international environment**

The main risks to the forecasts for economic growth in our main trading partners are associated with the financial turmoil which erupted last August as a result of the subprime mortgage market crash in the U.S. According to the Institute of International Finance, banks' losses totalled USD 476 bn in the period to June 2008. Banks also managed to acquire USD 354 bn new capital, but market capitalisation of banks dropped by USD 1,600 bn from the onset of the crisis until the end of June 2008. According to the spring estimates of the International Monetary Fund, the total losses due to the financial crisis are expected to reach USD 945 bn, but they may even be greater based on certain current estimates.

The financial crisis started with the bursting of the U.S. housing bubble. According to analysts, the end of the crisis is linked to the end of the housing market correction in the U.S. The y-o-y fall of housing prices observed since January 2007 continues; in June 2008, prices lost 18.8% of their peak values recorded in July 2006. Estimates of how far prices should drop for the normal relationship between supply and demand to be restored vary between 25% and 50%. Stocks of unsold new and pre-owned homes have remained high since the beginning of 2007. The surplus of housing supply over demand which causes prices to fall is additionally increasing on account of the growing number of foreclosures due to borrowers' inability to repay mortgages. Through the securitisation process, with financial companies issuing mortgage-backed securities, the troubles in the housing market cascaded to the financial sector.

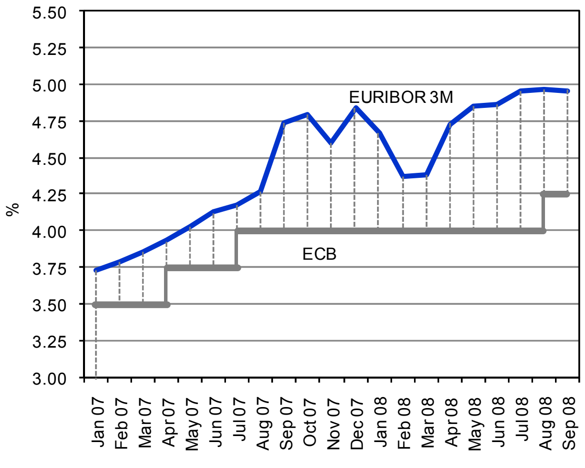
The direct result of the financial crisis is a growing distrust in financial markets which is mainly reflected in elevated interbank interest rates and a wider gap between interbank interest rates and the interest rates of central banks. Comparing the period from the beginning of 2007 to the end of July, before the onset of the crisis in the period from August 2007 to 17 September 2008 (Lehman Brothers bankruptcy), the average value of the three-month EURIBOR climbed from 3.983 to 4.733 and the average difference between the three-month EURIBOR and the ECB's interest rates increased by 43 basis points, to 0.69 (see Figure 2).

The results of the ECB *Bank Lending Survey* have pointed to a deterioration of lending conditions and reduced credit availability since Q3 of 2007. This deterioration was somewhat smaller in Q2 of 2008, but in Q3 of 2008 lending conditions will again tighten according to banks' July predictions, and credit availability will decline. Given the September trends, the tightening may be even more pronounced (see Figure 3).

The effects of the financial crisis have been most directly reflected in the drop of the world stock exchange indices. In the period to 17 September 2008, the major indices in the U.S., Great Britain and Germany lost around a quarter of their peak values of 2007, and the MSCI World Index dropped by 30.7% from its June 2007 peak. The Slovenian Stock Exchange Index (SBI) also declined and had lost 48.6% of its peak value of August 2007 by 17 September 2008.

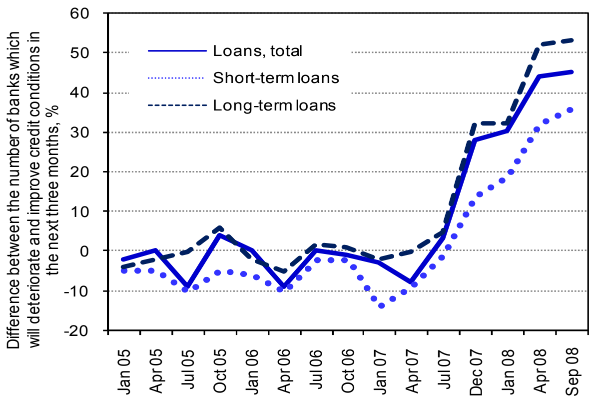
The September events show that the financial crisis is spreading, which is increasing the risk that economic growth in our main trading partners might decelerate even more than currently assumed as a result of the further tightening of financing conditions and the reduced availability of loans. A further possible increase of interbank interest rates, and consequently higher loan servicing costs, may impact on the most heavily indebted sectors of Slovenia's economy, particularly those posting short-term loans. The statistical data from companies' balance sheets for 2007 show that among the major sectors, the share of short-term financial liabilities in total assets is highest in the fields of other business activities, construction, and merchanting and wholesale trade.

Figure 2: **ECB interest rates and three-month EURIBOR**



Source of data: ECB.

Figure 3: **Banks' expectations for lending conditions**



Source of data: ECB.

Note: A higher percentage of the difference means that the number of banks that will deteriorate credit conditions is higher than the number of those which will improve them.

Economic growth

Economic growth started to slow this year, but was still high (5.5%) in the first half of the year. Real GDP growth in Q1 and Q2 was below the 2007 average (6.8% after the revision – for more on the revision of national accounts, see Box 2), but stayed positive in terms of structure. Exports remained an important driver of economic growth, even though export activity (particularly in merchandise exports) moderated in the first half of the year relative to last year. Y-o-y investment growth also remained at the high 2007 level, despite the slowdown recorded in Q2. Final consumption growth also slowed somewhat relative to last year, given weaker private consumption growth and continuing modest government consumption growth.

Investment activity remains relatively strong in all segments this year, with investment in buildings and construction works recording the fastest growth. In the first six months, growth of gross fixed capital formation exceeded 10 per cent (12.9%) year on year for the third year in a row. Growth of investment in buildings and construction works remained vigorous, albeit below the 2007 average (see Table 3). At the beginning of the year, growth of investment in non-residential buildings rose at the fastest pace, though it slowed somewhat in Q2, while strong growth in infrastructure investment continued. Investment in machinery and equipment also increased in the first six months of the year by almost 8%, significantly less than in the previous two years when business investment had been boosted by favourable economic conditions in the international environment.

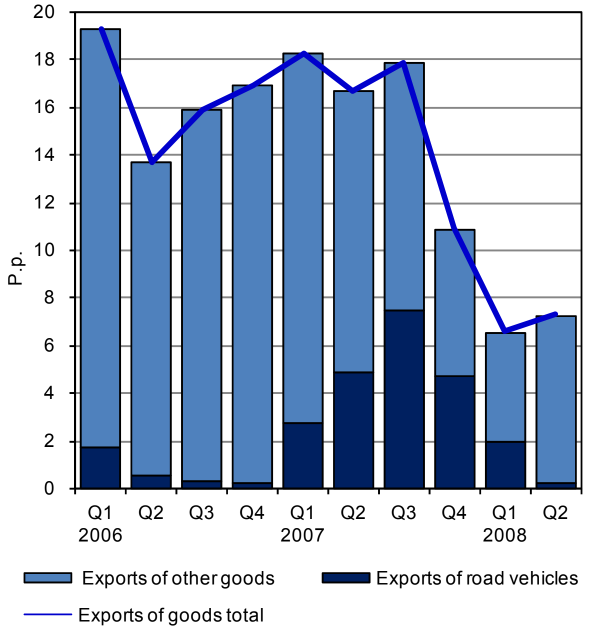
Table 3: **Growth of gross fixed capital formation in 2008, index**

	Shares in 2007	Q1 2008	Q2 2008
Gross fixed capital formation	100.0	116.9	109.0
Buildings and construction works	54.6	124.3	110.1
Residential buildings	15.7	115.6	110.8
Other buildings and constructions	38.9	127.6	109.8
Machinery and equipment	40.6	108.1	107.6
Transport equipment	12.1	105.5	107.2
Other machinery and equipment	28.5	109.0	107.8
Orchard development and breeding stock	0.3	95.1	92.7
Other products	4.6	107.4	107.9

Source of data: SORS

Given the cooling of activity in the international environment, real export growth slowed substantially in the first half of 2008. Exports increased by 7.3% in real terms year on year (merchandise by 5.6% and services by 16.1%). In the first half of the year, the largest contribution to y-o-y export growth came from road vehicle exports (see Figure 4), though growth for this group slowed notably relative to last year (6.6%, against 25.9% last year). Growth was also underpinned by exports of machinery specialised for particular industries, exports of electrical machinery and equipment, and exports of medicinal and pharmaceutical products. With regard to regional structure, merchandise exports to non-EU countries rose faster in nominal terms than exports to EU Member States. Given the weaker growth of demand from EU Member States, Slovenia increased exports to other markets, especially to the countries of former Yugoslavia and to the Russian Federation. Unlike merchandise exports, services exports recorded stronger growth in the first half of the year.[3] In the first six months, this growth was mainly underpinned by exports of merchanting services, though financial and construction services also recorded stronger growth. The increase in transport services exports was largely tied to the dynamics of merchandise export growth and was moderate. The receipts from travel also increased in nominal terms (by 12.5%).

Figure 4: **Contribution of road vehicle exports to merchandise export growth, in p.p.**



Source of data: SORS; calculations by IMAD.

Growth of final consumption slowed this year. General government consumption rose somewhat faster on average than in 2007, but remained moderate. Expenditure increased more rapidly, mainly as a result of the Slovenian Presidency of the EU Council, which required new jobs in state administration (of which a certain number have also been kept after the end of the presidency) and increased expenditure on material costs (transport costs, travel costs, current maintenance of buildings and other operating costs). In June, a supplementary budget was adopted, posting a 0.6% i.e. EUR 49.7 m lower expenditure (see also Box 3, p. 21).

[3] Since the adoption of the euro, trade in services has been increasing faster than merchandise trade.

Private consumption growth in the first half of the year was moderate. It increased by 3% in real terms according to the quarterly data,[4] against the background of weaker household income growth relative to last year.[5]

[4] The quarterly data are not harmonised with the annual data after the last revision of the main aggregates of national accounts (see Box 2) when large corrections were made for individual categories.

[5] The net wage bill increased by 4.2% in the first half of the year, recording 3.5 p.p. lower growth than in the same period last year (relatively high last year's growth was attributable to tax scale changes which generally reduced the tax wedge on wages).

Box 2: **Revision of the main national accounts aggregates for 2000–2007 used in the autumn forecast**

In September 2008, the Statistical Office of the RS (SORS) published a methodological revision of data on gross domestic product, the main aggregates of national accounts and employment for the 2000–2007 period. GDP figures for 2000–2006 were revised upwards by an average of 1.6% in nominal terms. The smallest revision was made for 2001 (1.3%) and the largest for 2006 (1.8%; routine annual revision). The revised estimates of real GDP growth rates for this period do not diverge from the hitherto published figures by more than 0.3 p.p. (see Table 4), while the estimate for 2007 was significantly revised. The revised value at current prices amounts to EUR 34,471 m according to the first annual estimate, 2.8% higher in nominal terms than was previously estimated by quarterly accounts (SIT 33,542 m). The new estimate of real economic growth according to the first annual estimate is 6.8%, 0.7 p.p. up from the first estimate from the quarterly accounts (6.1%).

Table 4: **Effects of the revision for the period 2000–2007**

	2000	2001	2002	2003	2004	2005	2006	2007
1. Nominal increase in GDP level relative to previous data release	1.5	1.3	1.6	1.6	1.5	1.6	1.8	2.8
2. GDP growth rates after the last revision, %		2.8	4.0	2.8	4.3	4.3	5.9	6.8
3. GDP growth rates before the last revision, %		3.1	3.7	2.8	4.4	4.1	5.7	6.1
4. Differences in GDP growth rates (4=2-3), p.p.		-0.3	0.3	0.0	-0.1	0.2	0.2	0.7

Source of data: SORS.

Table 5 shows the main revision points divided in two groups: methodological corrections due to improvements of sources and methods (corrections A), and other and routine corrections (corrections B). The values of each revision point are shown by the production approach as increase of gross value added.

In group A (corrections due to improvements of sources and methods), corrections from 1 to 5 were due to GNIC reservations.* The previous calculation of values had to be corrected from direct costs to basic prices in the estimate of own-account construction of dwellings by households (item 1) and own-account production (mainly of fixed assets) by corporations (item 2). Item 3 shows revised estimates of households' agriculture and forestry production, taking account of new data acquired through the introduction of accounts for forestry production. Item 4 is negative, because the value of own software production had to be removed from the previous estimate of output of non-market government activities and non-profit activities of households. Correction 5, which refers to the increase in intermediate consumption of self-employed persons due to the inclusion of costs for repairs of business cars which are directly financed by insurance companies, is also negative.** In item 6, the methodological corrections comprise a revised estimate of household housing activities including imputed rentals of households, and in item 7, a revised estimate of the adjustment for misreporting of data in households' production (item 7). Group B comprises all other adjustments, including routine revisions for 2004, 2005 and 2006. Item 8 shows individual revisions necessary due to inconsistency in previous estimates. Negative corrections were made to the estimated output of insurance services (due to the harmonisation of the total supply and use of insurance services in 2000, 2001 and 2004) and positive corrections to the estimated output of other financial services (2002, 2003 and 2006). Negative corrections were necessary in the estimate of maritime transport output in 2005. Item 9 shows routine revisions in 2004–2006, which are largely a consequence of the new estimate of changes in stocks of finished goods and work-in-progress within the estimated value of non-financial corporations' output.

The revision of the main national accounts aggregates also included the routine annual revision of the balance of payments for the 2005–2007 period. This time, the Bank of Slovenia particularly revised non-resident expenditure on the domestic market according to new statistical surveys. Net borrowing of Slovenia for 2007 was thus estimated at EUR 1,264 m (before revision at EUR 1.426 m), which is 3.7% of GDP (before revision, 4.1% of GDP).

* The Gross National Income Committee (GNIC) is organised within Eurostat in order to verify conformity of sources and methods of gross national income compilation with the valid European System of Accounts (ESA-95).
** Because of the small scope of this adjustment, the correction was only made for the period from 2004 onwards.

Table 5: **Gross domestic product, main revision – corrections by type and by production method, 2000–2006**

	GDP increase (in %)						
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
GDP increase, total (A + B)	**1.5**	**1.3**	**1.6**	**1.6**	**1.5**	**1.6**	**1.8**
A. Improvements of sources and methods	**1.6**	**1.4**	**1.6**	**1.5**	**1.5**	**1.7**	**1.5**
1. Correction of own-account construction costs of dwellings by households to basic prices	0.8	0.7	0.6	0.6	0.6	0.6	0.7
2. Correction of own-account production by corporations from direct costs to basic prices			0.3	0.3	0.3	0.2	0.2
3. Improvement of estimates of households' agriculture and forestry production	0.2	0.2	0.2	0.0	0.1	0.2	0.2
4. Correction of bookkeeping the value of own software production in general government and NPISHs	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
5. Repairs of business cars of households, which are directly financed by insurance companies					0.0	0.0	0.0
6. Correction of output of dwellings services by households (imputed rentals of households)	0.2	0.2	0.2	0.2	0.2	0.2	0.1
7. Improvements of exhaustiveness adjustment for misreporting of self-employed	0.4	0.4	0.3	0.4	0.4	0.6	0.4
B. Other adjustments and routine revisions 2004–2006	**-0.1**	**-0.2**	**0.0**	**0.1**	**0.0**	**-0.1**	**0.4**
8. Insurance, other financial services, maritime transport	-0.1	-0.2	0.0	0.1	-0.1	-0.1	0.0
9. Routine revisions					0.1	0.0	0.4

Source of data: SORS.

In the first half of the year, imports recorded significantly slower real growth than last year, largely due to weaker growth of exports. Imports increased by 8.5% in real terms, year on year (merchandise by 8.5%, services by 10.9%). Like exports, imports of merchandise from non-EU countries recorded a higher nominal increase than those from EU Member States. The largest contribution (almost a half) to total nominal growth of imports came from oil and oil product imports. Y-o-y growth of services imports also slowed somewhat in the first half of the year. It was largely driven by growth in business, financial and communication services imports.

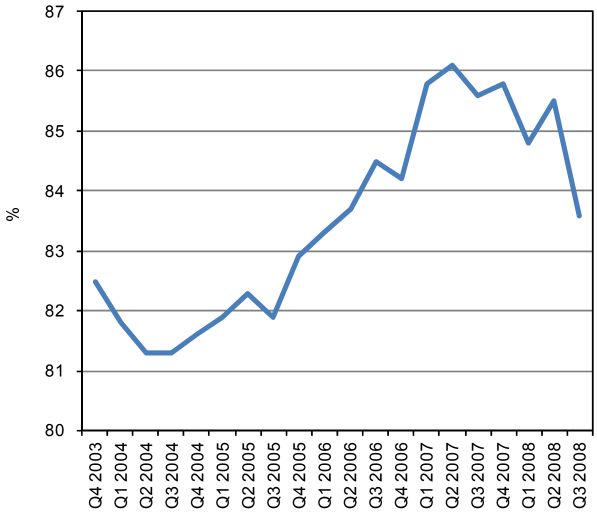
Given stronger-than-expected investment growth in the first half of the year, the forecast of economic growth for 2008 is higher than in the spring (4.8%). Based on certain short-term indicators which are worsening, a somewhat faster deceleration is expected in the second half of the year against the background of unfavourable developments in the international environment. Export activity will moderate amid weaker foreign demand growth as a result of the slowing of economic activity in Slovenia's main EU trading partners. Taking account of capacity utilisation trends and the deterioration of business expectations, investment growth is projected to be notably slower. Real GDP growth will be around one third lower in 2008 relative to 2007, which is in line with our expectations in the spring.

Real growth of fixed capital formation will slow in the second half of the year and average 8.8% for the year as a whole. The upward revision of almost 3.5 p.p. compared to the spring forecast is due to stronger investment growth in the first half of the year than projected in the spring. Relatively strong growth of investment in buildings and construction works is expected to continue also in the second half of the year. According to the existing infrastructure investment plans until the end of the year (further construction of roads and expansion of energy infrastructure), particularly investment in civil-engineering works will continue to increase. Growth of investment in new dwellings will moderate slowly in the period to the end of the year, while investment in non-residential buildings will slow at a somewhat faster pace. Tougher lending conditions in financial markets and worsened business prospects will also affect growth of investment in machinery and equipment in the second half of the year.[6] In Q3, capacity utilisation in manufacturing fell to its two-and-a-half year low according to seasonally adjusted data (see Figure 5). The shrinking investment activity of enterprises is also foreseen based on the less optimistic business expectations, both in industry and in service activities (see also p. 17).[7] The forecast for gross fixed capital formation growth in 2008 predicts that inventories will rise again, though the increase will be substantially smaller than in the previous two years, making a negative contribution to GDP growth (0.4 p.p.).

[6] The slowdown of investment activity in Q3 is evidenced by a considerable moderation of growth in the number of new car registrations. In July and August, the number of new freight vehicle registrations was 4.7% higher than the year before (12.3% higher in the first half of 2008), while the number of new drawing vehicle registrations decreased by 24.7% (15.3% higher in the first half of the year).

[7] The value of the confidence indicator in manufacturing dropped to its two-year low in August and the confidence indicator in services was lower than the year before for the fifth month in a row.

Figure 5: **Capacity utilisation in manufacturing in 2003–2008, seasonally adjusted, in %**



Source of data: SORS.

Real growth of exports will moderate considerably in the second half of the year under the influence of a faster slowdown of economic activity in EU countries. Total exports will increase by 6.6% in real terms this year, by some 3 p.p. less than projected in the spring. The downward revision is due to slower growth of merchandise exports to the EU Member States in the first half of the year than projected in the spring. As envisaged in the spring, a large contribution to the slowdown in merchandise export growth, particularly in the second half of the year, will come from substantially weaker growth in vehicle exports (3.9%), which is expected to fall considerably below the high level recorded last year (36.4%).[8] Merchandise export growth will be 4.7% this year, much weaker than forecast in the spring (9.4%). Deceleration of services export growth, which was predicted in the spring forecast, has not yet been observed and the forecast growth in exports of services has therefore been revised to 15.5% (up from 10.9% in the spring). Higher growth rates of services exports are largely attributable to increasingly strong growth of higher value-added and knowledge-intensive services (e.g. various business, professional and technical services), and travel services.

Real growth of private consumption is expected to moderate this year (to 4.5% from 5.0% recorded last year). Household consumption will rise in line with the increase in disposable income, which will be somewhat smaller in real terms compared with last year. Due to stronger employment growth (see Employment, p. 24) and higher wage rises in the public sector as a consequence of the modified agreement on the elimination of wage disparities, the nominal increase in the gross wage bill will be somewhat higher than forecast in the spring.

[8] The negative base effect in vehicle exports has impacted on merchandise export growth since May.

Real growth of government consumption will strengthen to 3.4% this year (against 2.5% in 2007). The autumn forecast was revised 0.5 p.p. downwards compared to the spring forecast, taking into account the adopted supplementary budget, estimated realisations of local government budgets and the revised budgets of the pension and health care funds. Stronger government consumption growth this year will be largely attributable to a larger rise in the compensation of employees due to the increased number of employees in the state administration (an increase of 1.4%, compared to 0.3% in 2007). Growth of expenditure on material costs will increase more than last year, due to the Slovenian Presidency of the EU Council. Notably greater increases will also be recorded in expenditure on medicines and expenditure on other transfers to households due to measures aimed at reducing the negative impacts of high inflation on the welfare of the population adopted in May 2008 (reimbursement of expenses for transport and food, housing rents, etc., and newly introduced meals for high-school pupils and subsidised payments in kindergartens).

Real growth of imports will decelerate as a result of modest consumption and weaker export growth. The forecast for import growth was revised downwards by 1.6 p.p. (to 6.9%) compared with the spring forecast. The expected weaker growth of exports will be reflected in weaker growth of imports of intermediate goods this year. Imports of goods for private consumption will also grow at a somewhat slower pace, given that domestic demand will decline. A slight deceleration of growth in imports of services will be largely due to weaker growth in imports of transport services.

The negative contribution of net exports to economic growth (-0.3 p.p.) will this year be smaller than last year (-1.3 p.p.).

Economic growth is expected to slow to 3.1% in 2009. The slowdown will be mainly due to the considerable deceleration in investment activity growth amid the further moderation of export growth.

The considerable slowdown in investment growth will be the key reason for decelerating economic growth. Growth is expected to slow in construction as well as in business investment. The volume of investment activity will be somewhat higher than this year, but growth rates are expected to moderate significantly after achieving a high level this year. Growth of gross fixed capital formation will thus stand at 1.3% next year. Looking at current plans, the volume of investment in highway construction will be smaller in nominal terms. According to the adopted budget for 2009, there will also be no significant acceleration in railway infrastructure construction. Only construction of energy facilities is projected to record a slight increase. On the evidence of building permits issued, growth of investment in buildings will moderate next year – residential construction will slow and growth of investment in non-residential buildings will be weaker as well.[9] Enterprises will curb investment, given low capacity utilisation and deteriorating conditions in the international environment (see International environment, p. 8). According to the survey statistics, enterprises are faced with difficulties obtaining loans (business tendencies in construction) or with a worsening of their financial situation (retail trade). Growth of investment in machinery and equipment is therefore projected to be weak or to stagnate.

Assuming that deteriorated trends in the international environment will continue, export activity will remain moderate next year. Exports will thus increase at a slower pace than this year and will be 5.2% higher in real terms. Looking at merchandise exports, the slowdown will be mainly seen in growth of exports to EU Member States, while growth of exports to non-EU countries will remain at the level of this year. Growth in exports of services will also decelerate compared to 2008, largely on account of the slowdown of transport and merchanting services, and various business, professional and technical services.

Private consumption growth will decelerate further in 2009. Reaching 3.5%, real growth of private consumption will follow disposable income growth in real terms and is expected to remain above the 2000–2006 average. The gross wage bill will post 3.6% real growth. Given the expected stagnation of employment, this growth will be based on relatively high 3.7% average gross wage growth, in line with the payments foreseen for two quarters of the adjustment eliminating disparities between wages in the public sector (see Wages, p. 23).

Government consumption growth will also ease somewhat next year. It will increase by 2.2% in real terms as the number of employees will increase at a similar rate to this year (1.3%). Growth of social security expenditure in kind will be substantially higher, as a consequence of measures adopted in 2008 (subsidies for pupils' meals, free kindergarten care for the second child and all subsequent children attending kindergarten at the same time). Intermediate consumption will moderate compared with 2008.

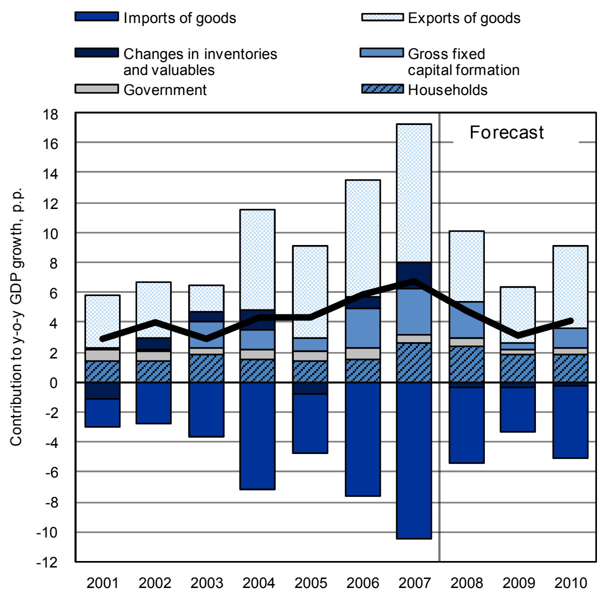
Import growth will slow against the background of moderate growth of domestic consumption and weaker export growth. Imports will increase by 4.0% in real terms. Growth of merchandise imports will decelerate largely due to slower growth of intermediate goods linked to weaker export activity and slower import growth of machinery and equipment. Growth in imports of services will remain at a similar level to the year before.

Given that import growth will be notably slower, net exports will make a positive contribution to economic growth next year (increasing GDP by 0.9 p.p.).

In 2010, economic growth will pick up to 4.0% in light of the cyclical acceleration of economic growth in the international environment, which will contribute to stronger growth of exports and investment.

Investment activity is expected to record somewhat stronger growth. Business investment growth will strengthen under the influence of more favourable conditions in the international environment. Infrastructure investment growth will otherwise remain modest in 2010, taking into account the foreseen volume of funds earmarked for highway construction and energy capacity expansion. Export growth will pick up thanks to the improved international environment and approach the long-term average. Growth of exports to the EU countries will accelerate. Further growth is also expected in exports to non-EU Member States. Private consumption growth will remain modest, roughly at the level of expected disposable income growth. Government consumption growth will also be moderate. The increase in the number of employees in the public sector will be smaller than in the previous year. Social security expenditure in kind will again grow faster. Import growth in 2010 will thus largely strengthen as a consequence of stronger export growth and increased investment in machinery and equipment, which will give rise to imports of investment goods. The contribution of net exports to economic growth is projected to remain positive in 2010.

Figure 6: **Contributions to economic growth by components, 2001–2010, in p.p.**

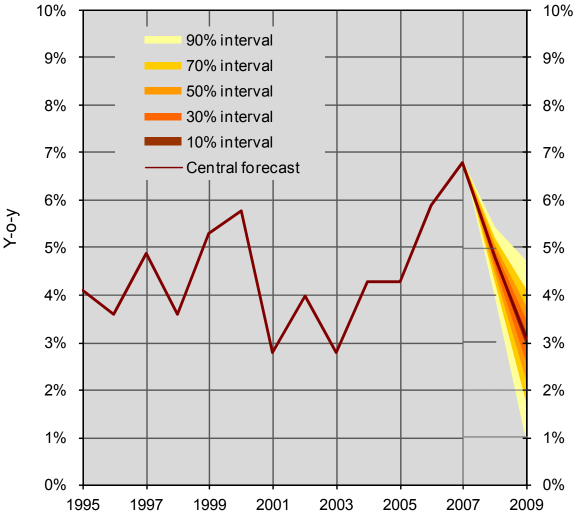


Source of data: SORS, forecasts by IMAD.

[9] The total floor area of residential buildings planned by issued building permits was 23.8% smaller in the first half of 2008 than the year before; the total floor area of non-residential buildings was 27.6% smaller, the lowest total since 2004.

The main risk to the autumn forecast is increased uncertainty in the international environment associated with the financial crisis. The largest risks are associated with global consequences of the financial and housing crisis (see Box 1, p. 10), which may result in a notable deceleration of economic growth in our main trading partners. The situation in the international environment may also tighten due to the instability of primary commodity prices, which can substantially aggravate price stability. If these risks are realised, economic growth could be lower next year than predicted in our central forecast (see Figure 7).

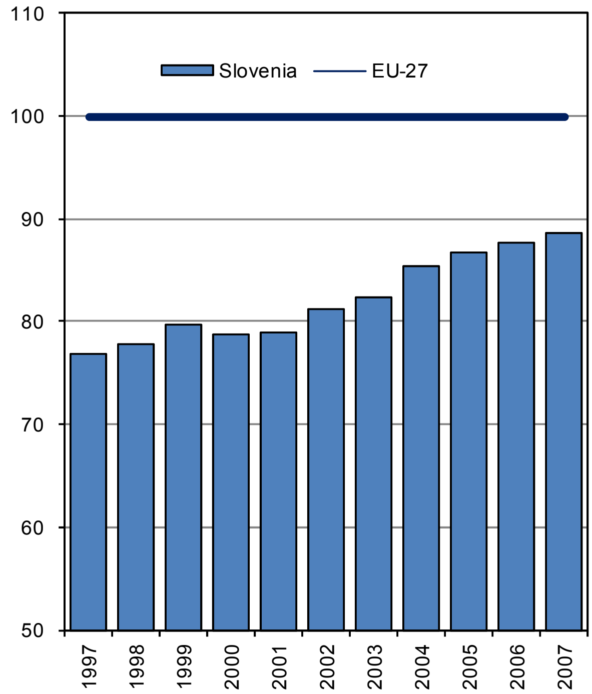
Figure 7: **Central forecast of economic growth and the probability of expected deviations**



Source of data: SORS, forecasts by IMAD.

Given that economic growth is expected to be stronger in Slovenia than in the EU, convergence is expected to continue gradually in the coming years. Slovenia has reached 89% of the EU average in terms of GDP per capita in purchasing parity standards (PPS); see Figure 8. Given that economic growth in Slovenia is projected to stay stronger than in the EU in 2008 and in the next two years, the development gap is expected to also gradually narrow over these years.[10] Against the background of the projected economic slowdown, closing of the development gap to the EU average will crucially depend on the structural move of the economy towards higher value-added activities.

Figure 8: **GDP per capita in PPS, volume indices, EU-27=100**



Source of data: Eurostat.

[10] The change in the development gap depends on economic growth as well as the change in the relative price level.

Table 6: **Autumn forecasts of GDP growth and consumption aggregates for 2008–2010 and comparison with spring forecasts**

Real growth rates (in %)

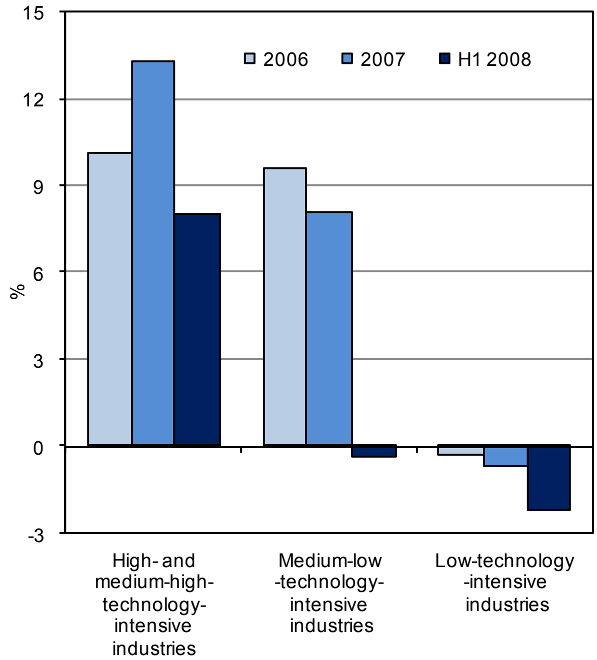
	2007	2008		2009		2010	
		Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)	Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)	Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)
GDP	6.8	4.4	4.8	4.1	3.1	4.4	4.0
Exports of goods and services	13.8	9.7	6.6	9.4	5.2	9.7	7.4
Imports of goods and services	15.7	8.5	6.9	7.5	4.0	8.6	6.5
Net exports, contribution to growth in p.p.	-1.3	0.7	-0.3	1.3	0.9	0.9	0.7
Private consumption	5.0	3.6	4.5	3.7	3.5	3.8	3.6
Government consumption	2.5	3.9	3.4	2.3	2.2	2.4	2.6
Gross fixed capital formation	11.9	5.4	8.8	2.6	1.3	4.5	4.5
Inventories, contribution to growth in p.p.	1.8	-0.5	-0.4	-0.3	-0.4	-0.1	-0.2

Source of data: SORS, forecasts by IMAD.

Dynamics of value added by activity

Y-o-y growth of value added reached 5.1% in 2008, posting a moderate slowdown in comparison to the very strong growth recorded last year. In Q1, real y-o-y value-added growth was 5.4%, while in Q2 it was somewhat lower (4.8%). This year's slowdown was largely due to considerably slower value-added growth in manufacturing (2.4%). In the first half of 2008, growth rates in market services (G–K; 7.4%) and construction (19.9%) still hovered at the high levels recorded last year. The high figures in construction reflected exceptionally high Q1 growth, which halved in Q2 of this year. In public services (L–P), the increase in value added remained modest year on year (at 1.1%). In line with international economic trends, industrial production growth in *manufacturing* has already been gradually easing in most industries since Q2 of 2007.[11] In the first half of 2008, industrial production in high-technology-intensive industries was still 8% higher in real terms than in the same period last year,[12] while in less technology-intensive industries it had already dropped on average below the level of 2007 (see Figure 9).[13] The slowdown in activity is also gradually showing in labour market trends – in Q2, the number of people employed in manufacturing was lower than in the previous quarter for the first time in two years, according to seasonally adjusted data.[14] According to data on the value of *construction* put in place, the largest y-o-y increases in the first half of the year were recorded in residential construction, followed by civil-engineering and non-residential construction. After accelerating in Q1, growth moderated in Q2 in all three segments, most notably in non-residential construction. In the *market services* group, the first six months saw relatively high average value-added growth in financial intermediation, distributive trade and transport.[15] Value-added growth in financial services moderated in Q2, which is consistent with the slowdown in banks' lending activity as a result of the tightened lending conditions (particularly due to the impacts of the financial crisis on domestic interest rates) and slowing activities in manufacturing and construction. Value added in business services and hotels and restaurants is this year rising at a slower pace than in 2007. Modest value-added growth in the *public services* group continued due to decelerated growth in public administration, and community, social and personal services, while value-added growth strengthened somewhat in education[16] and health and social care.

Figure 9: **Real growth of industrial production in manufacturing industries by technology intensity, 2006–2008, y-o-y growth rates in %**



Source of data: SORS; calculations by IMAD.
Note: Classification of industries with regard to technology-intensity is based on OECD methodology.

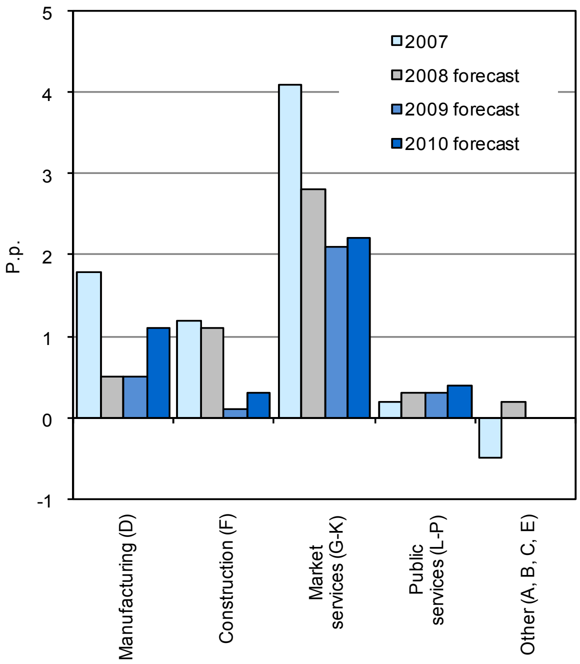
In the second half of the year, value-added growth will easefurther, reaching 4.9% on average in the year as a whole. Manufacturing and construction are expected to see a further gradual moderation in value-added growth. The estimate of the slowdown in value-added growth in *manufacturing* (2.1% in 2008) is based on weaker growth rates expected in foreign demand, in addition to the modest growth of domestic demand observed since the second half of 2007. The deceleration of production activity in the rest of the year is also suggested by data from the business tendency surveys indicating a decrease in order-books and a deteriorating competitive position of enterprises on foreign markets (see Price and cost competitiveness, p. 25). Value-added growth in *construction* will be 14.5% this year; it is projected to slow in all sectors by the end of the year, most notably in non-residential construction. The overall growth of *market services* will also be somewhat lower (6.3%) relative to the previous year, though still above the average. The most notable slowdown is expected in those market services the growth of which was additionally boosted by favourable economic developments in industrial and construction activities in past years (e.g. wholesale trade, road freight transport,

[11] Growth rates of industrial production and value added in Q2 were somewhat higher than in Q1, largely thanks to the Easter holiday, which fell in Q1 this year and in the Q2 last year.
[12] The highest growth rates were recorded in the chemical industry (14%) and in the manufacture of transport equipment (12.5 %). Y-o-y growth rates in the transport industry are largely attributable to the shrinking of production activity experienced by this industry in the first months of 2007.
[13] The largest y-o-y drops were recorded in the leather, wood, food-processing and metal industries.
[14] The gradual cooling is also evidenced by data on payments for overtime work, which dropped by 1% in the first half of 2008 y-o-y (compared with the first half of 2007, when they were 26.4% higher).
[15] Based on the available figures, we estimate that growth was still mainly driven by road freight transport, as well as airport transport and air traffic activities, which increased due to the Slovenian EU Council Presidency.

[16] Data on the number of persons in employment show that in education, activity strengthened especially in kindergartens and in primary education.

the financial sector and various business services). In *public services*, the increase in value-added growth will again be small this year (1.6%). Growth in public administration and education will hold at roughly at the same level as last year, while growth will strengthen somewhat in health and social care, and in community, social and personal services.

Figure 10: **Contributions of individual activities to value-added growth, 2007–2010, in p.p.**



Source of data: SORS, forecasts by IMAD.

In 2009, value-added growth will continue to slow (3.0%), but is expected to strengthen gradually in 2010 (4.0%). Consistent with expected international trends and anticipated weaker growth of exports, value-added growth in *manufacturing* will remain low (2.1%), but is projected to strengthen to around 5% in 2010. Value-added growth in *construction* will ease substantially in 2009 (to 1%) and will remain relatively low also in 2010 (3.5%). The slowdown is mainly attributable to infrastructure investment (road infrastructure, in particular), which is set to decline in 2009 for the first time after several years of growth. Growth of investment in construction of buildings will slow as well. Given the significant slowdown in value-added growth in manufacturing and construction, *market services* will be among the fastest-growing industries of the economy in the coming two years (4.8% and 4.9%, respectively), albeit with smaller growth rates reflecting the slowdown in industrial production and construction. Slovenia's convergence with the more developed countries is expected to continue, which will be also reflected in above-average growth rates in the field of knowledge-intensive services (various business, financial and telecommunication services). Growth rates in *public services* will remain low in 2009–2010 (1.8% and 1.9%, respectively), yet above the average of the past three years (2006–2008) when they recorded a notable slowdown. The figures will be particularly affected by the gradual extension of the health and social-security network and the expansion of higher education and education of adults.

Table 7: **Autumn forecast of value added by activity, 2008–2010, real growth rates in %**

	2007	Forecast		
		2008	2009	2010
A Agriculture, forestry, hunting	-11.1	-2.0	3.5	2.0
B Fishing	0.6	0.0	1.5	1.5
C Mining	-3.0	-2.5	-0.5	-3.0
D Manufacturing	7.8	2.1	2.1	5.0
E Electricity, gas and water supply	-6.5	8.0	-3.0	0.0
F Construction	16.0	14.5	1.0	3.5
G Distributive trades	5.8	6.0	4.5	4.0
H Hotels and restaurants	8.7	2.5	3.0	3.5
I Transport, storage and communications	9.2	6.0	5.5	5.5
J Financial intermediation	13.8	10.0	7.0	7.5
K Real estate, renting and business activities	11.2	6.0	4.0	4.5
L Public administration, defence and social security	1.4	1.0	1.0	1.0
M Education	1.9	1.9	1.9	2.1
N Health and social work	0.9	2.2	3.0	3.2
O Other community, social and personal services	-2.1	1.5	1.5	1.5
P Private households with employed persons	0.6	0.2	1.0	1.0
VALUE ADDED	**6.8**	**4.9**	**3.1**	**4.0**
a) Taxes on products and services	6.0	4.0	3.4	4.0
b) Subsidies on products and services	-2.8	5.0	4.5	2.9
GDP	**6.8**	**4.8**	**3.1**	**4.0**

Source of data: SORS, forecasts by IMAD.

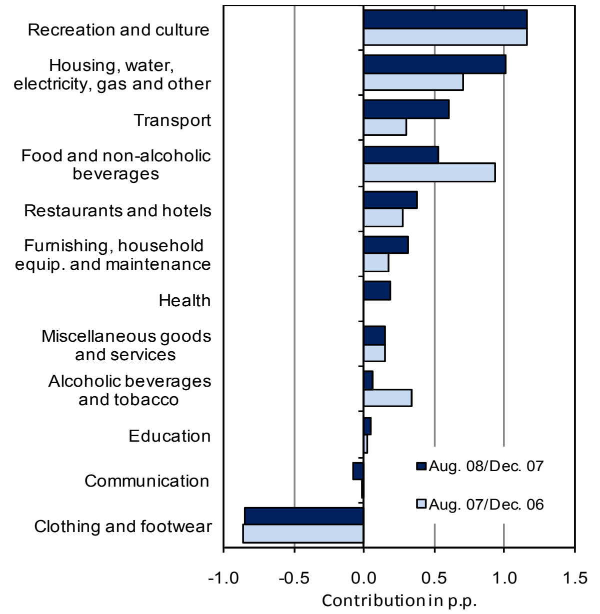
Inflation

Inflation remains high this year, largely due to further commodity price rises on global markets. Inflation ran between 6% and 7% y-o-y in the first eight months of 2008. Prices are rising faster in Slovenia than the euro-area average as a result of the process of convergence with the more developed countries: Slovenia's economic growth is twice as high as the euro-area average, which is reflected in relatively higher rises of prices through the Balassa-Samuelson effect. As in the last 18 months, the y-o-y rise in inflation this year is largely due to faster price rises of goods, particularly food and liquid fuels for transport and heating. Price rises of energy and agricultural commodities on global markets, which have affected all global economies, remain the key driver of domestic price growth.[17]

Unlike last year, higher oil and food prices spilled over into other price groups this year, by our estimate. This year, prices of goods and services increased in more groups than last year. In eight out of twelve price index groups, growth in August was stronger than in the same period last year (see Figure 11). Services prices are also rising somewhat faster than last year. Most of the prices under various regimes of regulation are increasing in line with the government's administered price adjustment plan, with the exception of those fixed on the basis of current and past oil price trends on global markets (liquid fuel for transport and heating, district heating, natural gas).[18] The overall rise of administered prices was therefore relatively high in the first eight months (10.6%).

Prices increased by 3.5% in the first eight months this year, compared to 3.2% in the same period last year. In the months to August, higher prices of liquid fuels for transport and heating contributed 1.1 p.p. to inflation (against 0.6 p.p. last year). Food prices, which are still the key driver of domestic inflation, increased by 3.0% in the first eight months this year, which is less than in the same period last year (5.6%). They contributed a good 0.5 p.p. to inflation. The contribution of services prices, which increased by 6.2% in the first eight months (against 5.7% last year), was 2 p.p. this year, roughly the same as last year (1.8 p.p.). This relatively large contribution is expected to decline until the end of the year, given the strong seasonal impacts.

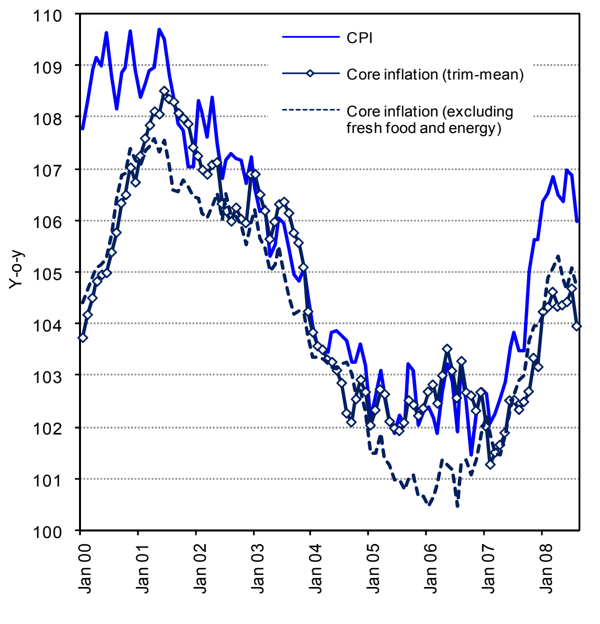
Figure 11: **Contributions of price index subgroups to inflation in the first eight months of 2008**



Source of data: SORS; calculations by IMAD.

Inflation started to slow in the last two months. On average, consumer prices remained unchanged in July and fell by 0.6% in August, largely due to lower prices of liquid fuels. Y-o-y inflation thus dropped from 6.9% in July to 6% in August. The slowing of price growth has also been suggested by indicators of core inflation. Y-o-y core inflation, measured by two indicators (trim-mean and consumer price growth excluding fresh food and energy), reached its peak value early this year, whereas in the last few months both indicators have shown a deceleration of domestic y-o-y price growth (see Figure 12).

Figure 12: **Consumer price index and core inflation in 2000–2008**



Source of data: SORS; calculations by IMAD.

[17] This year, prices in the euro area have increased faster than last year: y-o-y consumer price growth in the euro area totalled 3.8% in August (against 1.7% last year).

[18] Energy prices increased by 15.3% and administrative prices by 1.4% this year. Rises of administrative prices excluding energy thus lagged behind market-determined price rises.

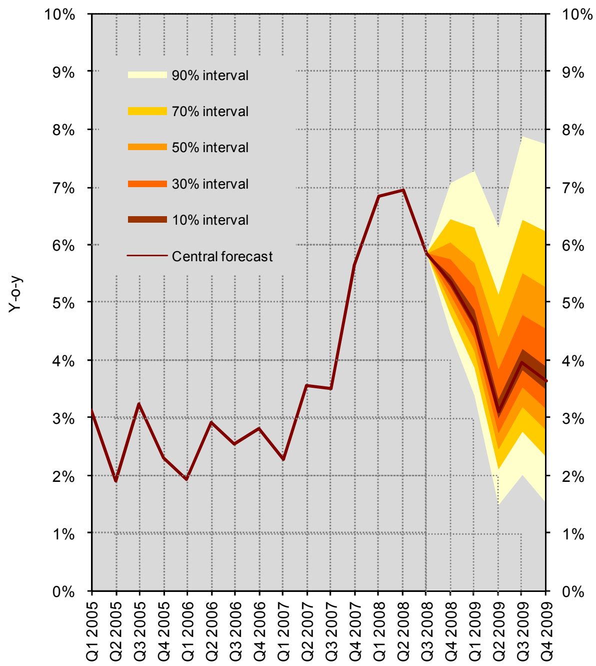
Amid the continuing decline in y-o-y price growth, inflation will reach 5.3% at the end of the year and average inflation will stand at 6.2%. The upward revision of the spring forecast arises from the actual price developments in the first eight months and the revised assumptions of food and oil price rises, while the assumed orientation of the economic policy mix remains largely unchanged. Despite the agreement on the rises of public sector wages for the gradual elimination of disparities (see Wages, p. 22), the supplementary budget confirmed a somewhat more restrictive fiscal policy framework (see Box 3, p. 21). Our autumn inflation forecast therefore envisages that the contribution of fiscal policy measures will be neutral. In the period to the end of the year, oil and food price rises are not expected to be higher than last year. Based on these assumptions, the y-o-y inflation rate will decrease gradually until December due to last year's base effect. Despite the foreseen decline in its y-o-y rates, average inflation will be higher at the end of 2008 than last year (3.6%), mainly on account of the high rates witnessed in the second half of 2007.

Given that inflationary pressures are expected to ease off, y-o-y inflation will drop to 3.6% and average inflation to 3.9% in 2009. According to the latest projections by international forecasting institutions regarding food prices on the global markets, we estimate that the contribution of these prices to domestic inflation in 2009 will be smaller (0.7 p.p.) than we project for this year (1.2 p.p.). Based on these assumptions, oil price rises will contribute around 0.2 p.p. to y-o-y inflation in 2009, significantly less than this year (around 1.2 p.p.). Inflationary pressures in 2009 will also ease due to the foreseen slowdown of economic activity in both the international environment and Slovenia. Among domestic economic policies, administered price policy measures will have a favourable effect on curbing domestic inflation, as, in line with the adopted plan, administered prices are estimated to add around 0.1 p.p. to inflation. Changes in taxation and excise duties are also not anticipated to exert any upward pressures on inflation, but the new wage system in the public sector may build up inflationary pressures in 2009.[19] As a result of the agreed elimination of wage disparities in the public sector, wages will rise more rapidly in 2009 than this year, and overall wage growth will exceed labour productivity growth, increasing the upward pressure on general price level rise.

In 2010, y-o-y inflation is expected to slow to 3% and average inflation to 3.3%. Assuming the absence of external shocks, domestic inflation will return to its long-term equilibrium level y-o-y. A further sustained lowering of inflation will crucially depend on the economic policy orientation, which is not expected to change substantially.

Risks for the realisation of the central inflation forecast are distributed unevenly. This year, risks are mainly associated with energy price developments on the global markets and the possibility of their pass-through to domestic energy prices (in 2008 or 2009). An oil price increase of USD 5/barrel would contribute around a 0.15 p.p. rise in domestic inflation, by our estimate, while a 5% rise in the final electricity price would increase domestic inflation by 0.14 p.p. The wage system in the public system and the related fiscal policy orientation present an additional risk to the realisation of the central inflation forecast next year, as any increase or broadening of demands could contribute to faster overall wage growth. These risks could be additionally aggravated by higher inflationary expectations leading to secondary effects. Risks for the realisation of the central forecast are distributed unevenly (upwards), by our estimates (see Figure 13).

Figure 13: **Central inflation forecast and probability of expected deviations**



Source of data: SORS, forecasts by IMAD.

[19] For the correlation between wage growth and inflation, see IMAD Working Paper Masten, I. (2008). Vpliv rasti plač na inflacijo. Delovni zvezek UMAR št. 3/2008, Letnik XII, available in Slovenian only at http://www.umar.si/publikacije/delovni_zvezki.

Table 8: **Autumn forecasts of inflation for 2008–2010 and comparison with spring forecasts**

	2007	2008		2009		2010	
		Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)	Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)	Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)
Inflation (annual average, %)	3.6	5.2	6.2	3.2	3.9	2.9	3.3
Inflation (Dec/Dec, %)	5.6	4.0	5.3	2.9	3.6	2.9	3.0

Source of data: SORS, forecasts by IMAD.

Box 3: **Supplementary budget for 2008 and fiscal policy**

Fiscal policy is expected to maintain its counter-cyclical orientation this year. Based on data from the adopted supplementary budget for 2008, the ratio between the actual and the cyclically adjusted balance is expected to be at approximately the same level as last year. Fiscal policy thus remains counter-cyclically oriented, given the anticipated narrowing of the positive output gap.*

In June, a supplementary budget for 2008 was adopted. Following the amendments to the 2008 budget of December 2007, general government revenues increased by EUR 250 m or 2.9%, while general government expenditure decreased by EUR 49.7 m or 0.6%. The supplementary budget targets a surplus of EUR 69 m, or 0.2% of GDP, instead of a deficit in the amount of EUR 230 m, or 0.6% of GDP. Revenues as well as expenditure will increase at a faster pace than projected economic growth, which means that in 2008 respective shares in GDP are set to increase again after the drop in 2007. The predicted general government balance for 2008 will improve (by 0.8% of GDP), due to the increase in revenues and the reduction in expenditure.

According to the adopted supplementary budget, general government revenues will increase by 13.9% compared to those in 2007 (by 7.3% in real terms). The share of revenues in GDP will thus increase by 1.0% of GDP in 2008. The supplementary budget revised upward particularly revenues from corporate income tax, value added tax and excise duties. Only the funds received from the EU budget are expected to be smaller (by 2.4%).

According to the adopted supplementary budget, general government expenditure will increase by 13.6% (7.0% in real terms) compared with 2007. The share of expenditure in GDP will rise by 0.9%. The supplementary budget revised downward expenditure for goods and services by EUR 48.5 m, especially due to a decrease in expenditure on special materials and services for the Slovenian Army. Despite the decline, expenditure for goods and services will increase by 19.4% relative to 2007. Transfers to the pension fund will also decline (by EUR 34 m), as a result of higher estimates of social security contributions. Contributions will rise by 8.7% relative to 2007. The supplementary budget envisages lower capital expenditure by EUR 67 m, but it will be nevertheless still nearly 46% higher than in 2007. While capital expenditure is smaller, expenditure on subsidies has been increased. It will be 28.4% higher than in 2007, which in terms of development signifies a deterioration of the original budget's economic structure. Expenditure for transfers to individuals and households will increase by around EUR 33 m, especially on account of the legislative changes increasing child allowances. Expenditure on wages in government bodies and public institutions will also increase, due to the implementation of the agreed wage adjustment according to the Salary System in the Public Sector Act.

Implementing the supplementary budget involves certain risks. Risks are associated with possible deviations of macroeconomic aggregates assumed during the preparation of the supplementary budget on the basis of the IMAD's spring forecast. The autumn forecasts would entail somewhat higher general government revenues than foreseen in the supplementary budget. More favourable economic growth, together with the higher growth rates of private consumption and imports of goods and services, higher growth in the number of persons in employment as well as higher inflation than forecast in the spring are the key factors contributing to somewhat higher-than-anticipated revenues. The expenditure side of the supplementary budget would not be considerably affected by the new macroeconomic forecasts. Risks nevertheless remain and are associated particularly with wage rises in the public sector as a consequence of wage adjustments eliminating wage disparities. As transfers to individuals and households are adjusted to inflation, this risk is also associated with higher inflation than forecast in the spring, especially in light of legislative changes stipulating that the adjustment be carried out twice a year. Somewhat faster nominal growth of all wages will also require more funds in relation with the adjustment mechanism of the pension system. This may, together with September's compensatory cost-of-living allowance for pensioners with low pensions, necessitate higher state budget transfers into the pension fund. Additional risk is the assumption on drawing of funds from the EU budget foreseen by the supplementary budget (in the amount of EUR 783 m, which is 125.4% more than in 2007), as only 28% of funds were utilised in the period from January to August.

* For more on fiscal policy orientation, see Economic Issues 2008, available at http://www.umar.si/en/publications/economic_issues.

Wages

In 2008, nominal growth of the total gross wage will be higher than last year. Due to higher inflation and a larger amount of funds disbursed to eliminate wage disparities in the public sector than projected in the spring, it will also exceed the spring forecast. In the first half of the year, nominal wage growth was higher than last year, mainly thanks to extraordinary payments resulting from the adjustment for higher-than-expected inflation in 2007. Based on developments in the first six months, and considering that the amount of the first quarter of funds to eliminate wage disparities in the public sector was higher than anticipated in the spring, the total gross wage is expected to increase by 8.6% in nominal terms, 2.7 p.p. more than last year and 0.9 p.p. more than in the spring forecast. Wage growth will thus exceed productivity growth (6.9%) in nominal terms. Real gross wage growth will be 2.3% this year and approximately consistent with the estimated total labour productivity growth (2.4%).

In the private sector, the average wage will increase by 8.5% in nominal and by 2.2% in real terms in 2008. The gross wage per employee in the private sector increased by a nominal 8.8% and a real 2.1% in the first half of the year. Wage growth in this period was underpinned by payments based on business performance of companies in the previous year, an extraordinary 5.2% adjustment of the minimum wage in March and wage rises due to an extraordinary adjustment in May (in line with the agreement[20] that basic wages for May shall increase to meet the difference between the 5.2% adjustment and the adjustment already carried out at the end of the year due to unexpectedly high inflation in 2007). Growth of wages will be slower in the second half of the year. It will be influenced by the fact that starting-level and lowest basic wages will be adjusted for the foreseen growth of inflation in 2008 according to sectoral collective agreements (by at least 3.9%, as determined by the *Collective Agreement on the Extraordinary Wage Adjustment*).[21] The forecast also takes account of the 4% increase of the minimum wage for August. The gross wage per employee will thus increase by a nominal 8.5% in the year as a whole, 1.2 p.p. more than forecast in the spring, and will exceed labour productivity growth in the private sector by 1.5 p.p. The gross wage will rise by 2.2% in real terms and will thus approach the real 2.3% labour productivity growth in the private sector.

In the public sector, wages will increase more this year than in 2007. This stronger growth will be due to the beginning of the elimination of wage disparities with the introduction of the new wage system in the public sector and to higher inflation. In the first half of the year, the gross wage per employee in the public sector increased by 7.1%[22] in nominal and 0.5% in real terms. In July, wages were adjusted for half of the inflation anticipated this year (2%).[23] Faster growth in the second half of the year will be linked to the payment of the first quarter of funds to eliminate wage disparities. The introduction of the new wage system was determined by the *Agreement on the demands of the strike committee of the representative public sector trade unions*[24] (hereinafter referred to as the *Agreement*). The funds necessary to eliminate wage disparities increased significantly relative to the spring forecast, as a result of compromise solutions reached at the conclusion of annexes to collective agreements for certain professions. In the spring, around EUR 313 m was allocated for this purpose, but around EUR 420 m will be necessary, according to the most recent official estimates. For the complete elimination of disparities, wages are projected to increase by around 14.5% (10.8% according to the spring forecast); a quarter of the increase in the funds necessary thus amounts to around 3.5% (compared with 2.6% in the spring forecast). The forecast for wage growth in the period until the end of the year also takes into account increased expenditure on regular promotions, rewards for outstanding performance and the higher workload of judges and prosecutors due to the Lukenda project. Based on these assumptions, wages are projected to increase by 11.7% in nominal and 5.5% in real terms y–o-year in the second half of the year. The gross wage per employee in the public sector will increase on average by a nominal 9.4% and a real 3% in 2008, which is considerably more than recorded last year (4.1% and 0.5%, respectively); it will thus exceed nominal total labour productivity by 2.5 p.p. (0.6 p.p. in real terms).

In 2009, total wage growth will exceed labour productivity growth in nominal and real terms. Gross wage per employee is projected to rise by 7.8% in nominal terms (3.7% in real terms), exceeding labour productivity growth by 0.8 p.p. The spring forecast for nominal gross wage growth was 1.4 p.p. lower. The difference is due to a higher inflation forecast and a higher estimate of the funds earmarked for the elimination of wage disparities in the public sector.

Wage dynamics in the *private sector* will be essentially influenced by decelerated economic activity, three

[20] *The Collective Agreement on the Extraordinary Wage Adjustment for 2007 and the Wage Adjustment Mechanism, Reimbursement of Work-related Costs and Other Personal Income for 2008 and 2009* (hereinafter the *Collective Agreement*).

[21] According to the provisions of the *Collective Agreement*; see Note 20.

[22] In January, the social partners reached an agreement, which, with an adjustment for January, determined February's gross wage increase of 3.4% to compensate for higher inflation than was anticipated in 2007.

[23] Based on the *Act Amending the Act on the Wage System in the Public Sector*.

[24] The actual calculation of wages according to the new system was made for August, with payments for the difference accrued from May.

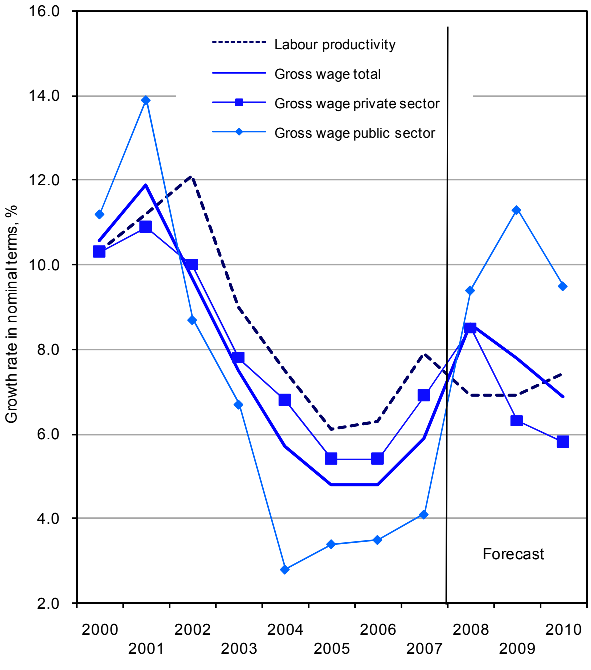
working days more and the adjustments of the starting-level and lowest wages by around 1.6%[25] in January and 2.3%[26] in August. The gross wage per employee is projected to increase by a nominal 6.3% in 2008 as a whole (0.5 p.p. more than projected in the spring forecast) and by a real 2.3%, thus lagging 1.4 p.p. behind the projected 3.7% real labour productivity growth. In the *public sector*, the adjustment mechanism from the *Agreement on the Basic Wage Adjustment Mechanism and the Level of Expenditure Earmarked for the Elimination of Wage Disparities 2007–2009* was taken into account in nominal gross wage growth. Wages are expected to be adjusted to consumer price growth twice. In January, basic wages will increase by around 1.3% (for the difference between the autumn forecast of inflation at the end of 2008 and that taken into account in the adjustment of wages in July of this year). In July, wages will increase by an additional 1.8%, which is half of the inflation projected for 2009. Besides these adjustments, wage growth will be strongly influenced by payments of the second and third quarters of funds to eliminate disparities in public sector wages, which will be carried out in January and September according to the *Agreement*. Based on these assumptions and taking into account the regular funds for promotion and performance bonuses, the gross wage in the public sector will increase by 11.3% in nominal terms in 2009, 3.3 p.p. more than envisaged in the spring forecast. Taking into account the expected inflation, gross wages in the public sector will increase by 7.1% in real terms.

Wages in the public sector will also rise faster than wages in the private sector in 2010. Total wage growth will be weaker than productivity growth in both nominal and real terms. The total gross wage will increase by a nominal 6.9%, posting 0.7 p.p. higher growth than projected in the spring as a result of a higher inflation forecast and increased funds foreseen to eliminate wage disparities. Wage growth will lag half a percentage point behind nominal productivity growth. The total gross wage will increase by 3.5% in real terms (productivity by 3.7%).

The forecast for the increase in the gross wage per employee in the *private sector* takes into account that the economic environment will improve and that 2010 has one working day more than 2009. The adjustment mechanism for 2010 has not yet been agreed. Based on these assumptions and anticipated inflation, the gross wage is projected to increase by 5.8% in nominal and 2.4% in real terms. The increase in the gross wage per employee in the *public sector* takes into account the adjustment of wages through the final quarter of funds for the elimination of wage disparities in March. In the projected growth of public sector wages, we have also taken into account the estimate of July's adjustment for anticipated inflation and wage rises due to promotions and regular performance bonuses. In 2010, the gross wage will increase by a nominal 9.5% and a real 6.0%.

If growth of wages in the public sector exceeds productivity growth by more than half a percentage point in 2009, the payment of the third and the last quarters can be postponed to 2010. The *Agreement* includes a safeguard clause that the payment of the third and fourth quarters of funds for the elimination of disparities between public sector wages may be postponed if real wage growth in the public sector should exceed labour productivity growth by more than 0.5 p.p. The elimination of wage disparities must nevertheless be completed by the end of 2010. If the social partners agree upon the postponement of the third quarter to 2010, the 2009 increase in the gross wage for the public sector will be smaller than projected in the basic forecast. This will contribute, to a certain extent, to weaker growth of the total gross wage in 2009,[27] but at the same time will accelerate wage growth in 2010.

Figure 14: **Nominal growth of gross wage and labour productivity, 2000–2010**



Source of data: SORS; calculations and forecasts by IMAD.
Note: Labour productivity is measured by GDP growth per employee.

[25] The difference between 4.55% and 6.2% inflation forecast for this year as a whole.
[26] According to the *Collective Agreement*; see Note 20.

[27] The wage in the public sector would increase by a nominal 10.2% (a real 6.1%) in this case, and the total wage by 7.4% (a real 3.4%).

Table 9: **Autumn forecasts of labour market trends for 2008–2010 and comparison with spring forecasts**

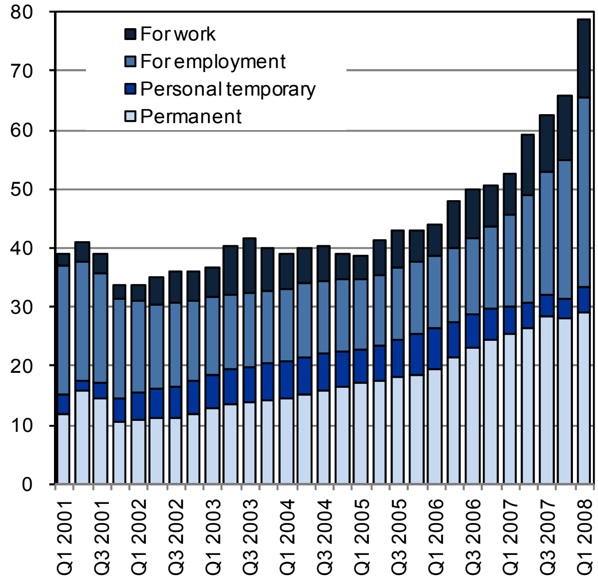
	2007	2008		2009		2010	
		Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)	Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)	Spring Forecast (Mar. 2008)	Autumn Forecast (Sep. 2008)
Employment according to national accounts (increase in %)	3.0	1.1	2.3	0.6	0.0	0.6	0.4
Registered unemployment rate (%)	7.7	7.3	6.8	7.1	6.8	6.8	6.7
ILO unemployment rate (%)	4.9	4.8	4.6	4.8	4.8	4.7	4.8
Employment rate (%)	67.8	68.3	68.0	68.3	67.9	68.5	68.1
Gross wage per employee, nominal growth (%)	5.9	7.7	8.6	6.4	7.8	6.2	6.9
- private sector	6.9	7.3	8.5	5.8	6.3	5.5	5.8
- public sector	4.1	8.4	9.4	8.0	11.3	8.0	9.5
Gross wage per employee, real growth (%)	2.2	2.4	2.3	3.1	3.7	3.2	3.5
Nominal labour productivity growth (%)	7.9	7.1	6.9	7.5	6.9	7.1	7.4
Real labour productivity growth (%)	3.7	3.3	2.4	3.5	3.1	3.8	3.7

Source of data: SORS, forecasts by IMAD.

Employment and unemployment

Employment growth started to slow in the first half of this year, but remained high. The increase in the number of employed and self-employed persons was much higher in 2008 than anticipated in the spring, which is shown by the monthly statistics (3.3%) as well as in the first estimate based on the quarterly national accounts (3.1%). At the same time, the number of persons in informal employment has declined.[28] The number of employed persons according to the labour force survey thus recorded notably lower growth in the first half of this year compared to the same period last year (0.5%). Among formally employed persons, a great increase was recorded in the number of foreigners[29] hired by enterprises for temporary works (see Figure 15). Given such employment growth, productivity increased by 2.3% in the first half of this year relative to the same period last year.

Figure 15: **Number of work permits for foreign workers by type of employment, 2001–2008, in 1000**



Source of data: Employment Service of Slovenia; calculations by IMAD.

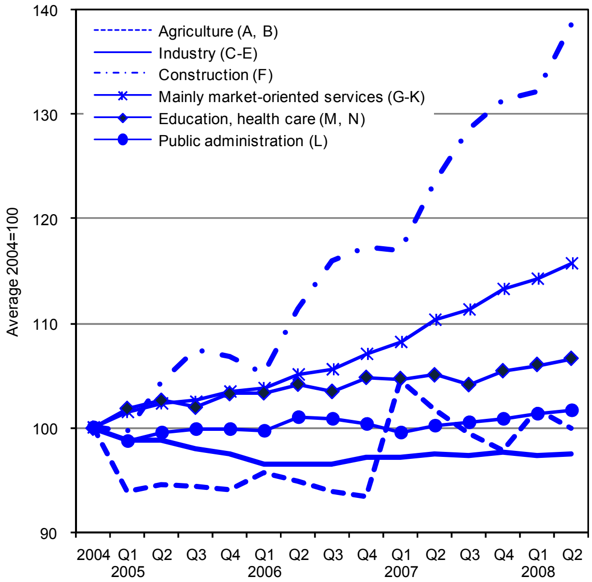
In the first half of 2008, employment increased in almost all activities, particularly in construction. According to the national accounts methodology (see Figure 16), the number of workers employed in construction rose by 13.1% this year. Increased employment in construction, which is also this year the result of increased residential and highway construction, and the main reason for further increases of foreign worker inflows, accounted for 37.6% of the total increase in the number of persons in formal employment in the first half of this year. Employment also rose (by 4% or more) in business services, transport, and other community, social and personal services. Strong employment growth (1.4%) relative to the first half of 2007 (0.3%) was recorded in the general government. The number of workers employed in manufacturing still posted a slight increase (up 0.2% y-on-y), particularly in the production of machinery and equipment, while in the textile, wood, food-processing, leather and other miscellaneous industries, employment declined.

[28] I.e. the number of people who work either as unpaid family workers, on a contractual basis, or on the black market. In simplified terms, it is estimated as the difference between the number of employed people according to the survey plus the number of temporary work permits for foreigners, and the number of formally employed people i.e. those in paid employment and licensed self-employed workers.

[29] The biggest problems in recruiting skilled workers were reported in construction, metal processing and in hotels, restaurants and tourism. The demand for these profiles is met by hiring foreign workers, which is also most often the case in construction.

Compared to the first half of 2007, the number of employed persons was lower only in agriculture, fishing and mining.

Figure 16: **Quarterly gains in the number of employees by sector, 2005–2008, index**



Source of data: SORS.

Unemployment has continued to decline this year. In the first half of 2008, the number of unemployed was lower than in the same period last year: the number of registered unemployed dropped by 13.4%, on average, and the number of unemployed according to the labour force survey decreased by 10.4%. Unemployment rates in 2008 also declined relative to last year: the registered employment rate fell to 6.4%[30] in the period to June and in Q2 and the survey unemployment rate hit the lowest level (4.2%) since measurement began. In the first half of the year, the average unemployment rates for women (registered unemployment rate 8.2%, survey unemployment rate 5.2%) remained notably higher than the unemployment rates for men (5.7% and 4.1%, respectively).

In 2008, growth of employment will be higher than projected in the spring despite the deceleration in the period to the end of the year. The spring forecast revision is due to the relatively strong employment growth recorded in the first half of the year in most activities. Stronger demand for labour was observed particularly in construction and all predominantly market-oriented services. Given the usual seasonal dynamics and the expected decline in value-added growth in certain activities, employment is forecast to increase by 1.7% in the second half of 2008, reaching 2.3% growth in the year as a whole.

This year, the number of unemployed and unemployment rate will be lower than projected in the spring. Due to the impact of the anticipated economic slowdown on the labour market, the usual seasonal inflow of first-job seekers is expected to be somewhat larger than last year. Compared to last year, more persons will lose work and fewer unemployed will find it. Until the end of the year, the number of registered unemployed will rise again, to around 63,500, increasing the registered unemployment rate to 6.8%. The average number of people registered as unemployed will total around 63,900 in the year as a whole (10.4% less than last year), while the average annual rate of registered unemployment will be the same as at the end of the year (6.8%). In view of the smaller number of unemployed, the survey unemployment rate will be even lower than projected in the spring: 4.6% (0.2 p.p. less, a 0.3 p.p. lower rate than last year).

In line with the projected economic trends, employment growth will come to a halt in 2009, while in 2010, the number of employees will again rise somewhat. The number of persons employed in agriculture, fishing and mining is expected to post a further drop in 2009. The number of employees in certain manufacturing industries and construction will also decline. Employment in services will increase, albeit at a slower pace than this year. The average total number of employed will thus settle around the 2008 level in 2009 and will increase by 0.4% on average in 2010. The number of persons in employment will increase in services and due to accelerated investment activities in construction. The number of employed will continue to decline in agriculture, fishing, mining and manufacturing. Even though employment growth is expected to be weak in the coming two years, productivity growth will increase slowly: 3.1% in 2009, 3.7% in 2010. In line with the revised employment forecast, the unemployment rate forecasts for 2009 and 2010 are somewhat higher than in the spring: for the registered unemployment rate 6.8% and 6.7%, respectively, and for the survey unemployment rate, 4.8% in both years.

Price and cost competitiveness

Price competitiveness deteriorated notably as a result of a more pronounced consumer price growth in Slovenia than in its trading partners. Nominal growth of the effective exchange rate was 1.1% y-o-y in the first seven months of 2008, when the euro appreciated strongly against the USD and GBP. The real effective exchange rate, as measured by relative consumer price growth, was 4.2% higher y-o-y (2.3% last year). The deterioration in price competitiveness in Slovenia was among the greatest in the group of euro-area countries.[31] It was less pronounced in manufacturing (1.4% against

[30] The lowest registered unemployment rate since January 1991.

[31] In the first seven months, only Ireland, Malta, Cyprus and Belgium saw a greater y-o-y deterioration in price competitiveness than Slovenia.

2.1% last year), as the relative producer price growth in Slovenia was similar to that in Slovenia's trading partners this year.

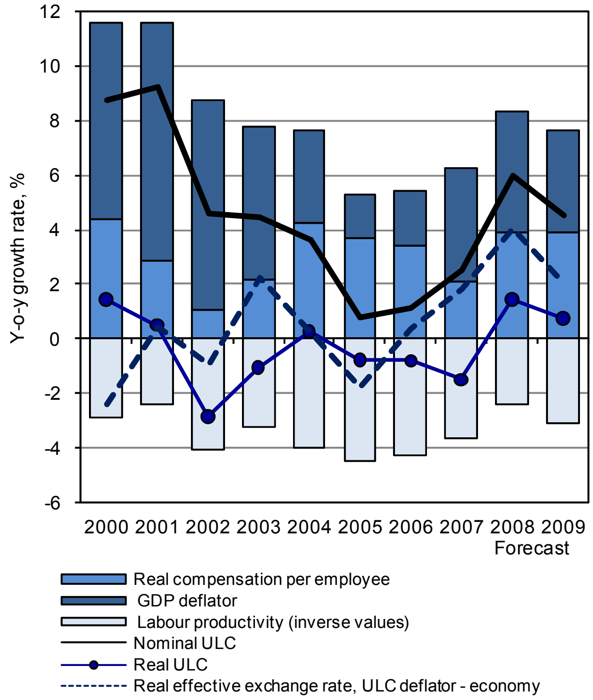
Cost competitiveness also deteriorated significantly in the first half of the year, given slower productivity growth and faster rising of wages. Y-o-y growth of the real effective exchange rate deflated by relative unit labour costs in the total economy was 3.4% in the first half of the year (1.8% last year) and 6.4% in manufacturing (1.6% last year). In the first half of the year, when nominal growth of compensation of employees increased under the influence of faster growth of wages,[32] labour productivity rose at a considerably slower pace than in the same period last year (2.3% for the economy, as against 3.7% in 2007, and 2.1% in manufacturing, as against 6.9% in 2007).

The deterioration in price competitiveness will moderate somewhat by the end of 2008, while cost competitiveness will deteriorate further at a faster rate. Against the background of weaker average appreciation of the euro in the second half of the year[33] and weaker relative consumer price growth, the real effective exchange rate is expected to increase by 3.4% (the same figure as in the spring). The deterioration in cost competitiveness will be more pronounced than forecast in the spring. In 2008, the real effective exchange rate deflated by relative unit labour costs will rise by 4% for the whole economy and 5% in manufacturing. Labour productivity growth will be modest (2.4% in the economy; 2.6% in manufacturing), given the slowdown in economic activity and continued employment growth with a concurrent notable increase in compensation of employees linked to higher rises of wages.

In 2009, the deterioration of price and cost competitiveness will be less pronounced than in 2008. Given the slowdown of inflation, real growth of the effective exchange rate deflated by relative consumer prices will ease to 1.2%. The moderation in the real effective exchange rate growth, as measured by relative unit labour costs, to 2.0% for the whole economy and 1.1% in manufacturing will be largely due to strengthened labour productivity attributable to worsened conditions on the labour market. As a consequence of slowing economic growth (to 3.1%), employment in the economy is not expected to increase, while in manufacturing it will even decline, since value-added growth in manufacturing will stagnate at the modest level of 2008 (2.1%) in the coming year.

[32] By a nominal 8.2% in the economy and 9% in manufacturing (see also Wages, p. 22).
[33] On the technical assumption of the exchange rate USD 1.50 for EUR 1, nominal growth of the effective exchange rate will drop to 0.7% by the end of the year. In 2009, the nominal effective exchange rate will depreciate slightly (0.3%) under the same assumption.

Figure 17: **Cost competitiveness of the economy and its components in 2000–2009, growth rates in %**



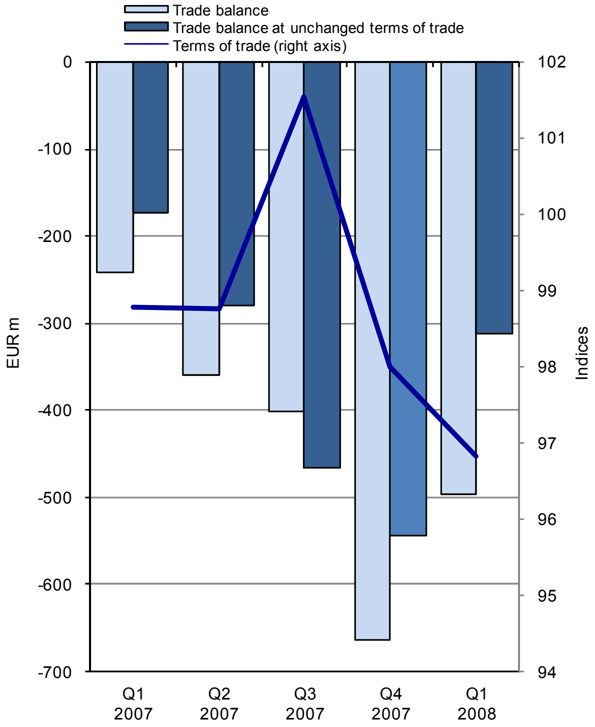
Source of data: BS, ECB, OECD, SORS; calculations and forecasts by IMAD.

Current account of the balance of payments

In the first half of 2008, the current account deficit was almost threefold relative to the same period last year. The current account deficit totalled EUR 995.3 m, EUR 684 m more than in the same period last year. Similar to last year, its increase was largely due to a higher trade deficit as a result of slower merchandise export growth[34] and deteriorated terms of trade, which contributed around 38% to the trade deficit in the first half of the year (see Figure 18).[35] The deficit in current transfers was also higher relative to last year, and was almost entirely a result of a higher general government deficit. The factor income deficit widened as well, largely due to higher domestic banks' net payments of interest on foreign loans. The deterioration of the external balance was mitigated by a higher surplus in services balance. The surplus in road and air transport, in particular, strengthened relative to last year.

[34] Relative to 2007, a higher deficit was observed in merchandise trade with the EU countries. The deterioration in the trade balance is largely due to the higher value of net oil and oil product imports.
[35] Given the accelerated oil price rises, the deficit widened relative to 2007 largely on account of the higher value of net oil and oil product exports.

Figure 18: **Trade account and the impact of the terms of trade in 2007 and 2008, in EUR m**



Source of data: BS; calculations and forecasts by IMAD.

Considering the economic trends of the first half of the year, the current account deficit is this year expected to reach 5.8% of GDP. The trade balance is expected to post a deficit of EUR 2,515 m (against EUR 1,665.9 m last year). By our estimates, around EUR 385 m of this deficit will come from the deteriorated terms of trade. Looking at regional dynamics, the trade deficit increase will be mainly due to a higher deficit in the trade with other EU countries. The deficit in factor incomes is expected to widen by the end of the year due to further growth of net payments of interest, as we expect the net interest paid on external debt to increase due to a larger volume of banks' external debt and rising interest rates on international capital markets. The current transfer deficit will also contribute to the widening of the current account deficit. According to our estimate, Slovenia's budget will record a surplus relative to the EU budget this year, but smaller than planned, given the trends to date.[36] Amid the expected strong growth of services exports in the period to the end of the year, the surplus in the services balance is expected to increase, mainly due to a higher surplus in tourism and transport services trade and a smaller deficit in the group of other services.

In 2009, the current account deficit is expected to narrow to 4.7% of GDP due to a lower deficit in the goods and services trade. Consistent with the expected faster real growth of exports than imports and a slight deterioration in the terms of trade, which will nevertheless be smaller than this year, the trade deficit will narrow. The current transfer deficit is expected to decline as well, under the assumption of increased net drawing of funds from the EU budget in 2009. At the same time the factor income deficit is projected to widen somewhat more. The surplus in the services balance will continue to increase, due to the rising surplus in tourism and transport services trade.

The current account deficit will narrow to 4.1% of GDP in 2010. The further improvement of the external balance will be in great part a result of the expected narrowing of the goods trade deficit. The year 2010 will again see greater current account and factor income deficits, largely due to the further widening of the deficit in the capital income balance.

[36] By the end of August, Slovenia paid to the EU budget 65.2% and received from the EU budget 28% of funds planned by the supplementary budget for 2008, according to the most recent data. Slovenia's net budgetary position relative to the EU budget has been improving since May, chiefly on account of the inflow of funds for the implementation of the common agricultural policy.

Table 10: **Autumn forecasts of the current account of the balance of payments for 2008–2010 and comparison with spring forecasts**

	2007	2008		2009		2010	
		Spring Forecast (Mar. 2008)	Autumn Forecast (Sept. 2008)	Spring Forecast (Mar. 2008)	Autumn Forecast (Sept. 2008)	Spring Forecast (Mar. 2008)	Autumn Forecast (Sept. 2008)
Current account of the balance of payments, EUR m	-1,445	-1,686	-2,203	-1,103	-1,900	-899	-1,764
Current account of the balance of payments, % GDP	-4.2	-4.6	-5.8	-2.8	-4.7	-2.1	-4.1

Source of data: SORS, forecasts by IMAD.

Assessing the accuracy of the IMAD forecast[37]

The accuracy of forecasts for the main macroeconomic aggregates has been regularly assessed at the IMAD for several years. A systematic comparison of discrepancies between our forecasts and the actual trends over a longer period of time shows the accuracy of the forecast and the average errors made when forecasting individual aggregates. A mean error deviating from the value "zero" may indicate a systemic underestimation or overestimation of future economic trends. It is noteworthy that the analysis should be made for a sufficient period of time, for in a short analysed period every error can have a significant impact on the conclusions with regard to the accuracy of the forecasts. The latest analysis thus covers data after 1997 and also includes a comparison of the quality of IMAD's forecasts and the forecasts by all other domestic and foreign institutions releasing comprehensive forecasts of economic trends for Slovenia.

All institutions, including the IMAD, underestimated real GDP growth for 2007 in their forecasts. The greatest underestimates in forecasts for 2007 were made in autumn 2006, when they totalled between 1.8 and 2.1 p.p. The errors in both subsequent forecasts were smaller, ranging between 1.4 and 1.8 p.p. in spring 2007 and between 0.1 and 1.1 p.p. in autumn 2007. This shows that all forecasting institutions had underestimated the strength of the expanding business cycle. The IMAD made the smallest error in the autumn forecast for next year and in the spring forecast of real GDP growth for the current year. Also in this case its error in the nominal GDP growth forecast for 2007, which is issued only by the IMAD, was larger than in the real GDP growth forecast (due to the fact that for the nominal forecast it is also necessary to predict the value of implicit deflators).

Similar to other institutions, the IMAD underestimated inflation for 2007. The most accurate forecasts of average inflation for 2007 were made last autumn. The institutions underrated average inflation for 2007 in all three forecasts. Errors made in the latest IMAD forecast of average and y-o-y inflation totalled 0.2 and 1.3 p.p., respectively.

Under the influence of errors in the forecasts for 2007, the analysis of the accuracy of the IMAD forecasts shows a slight tendency in the direction of underestimation of economic growth and inflation in the ten-year period. The mean error in the *forecasts of real GDP growth* for the period 1997–2007 totals 0.32 p.p. in the autumn forecasts for the year ahead and 0.20 p.p. in the spring forecasts for the current year. The corresponding mean errors in the *forecasts of nominal GDP growth* total 0.32 p.p. and 0.22 p.p., respectively.[38] The mean errors in the *forecasts of average inflation* amount to a respective 0.28 p.p. and 0.25 p.p. The mean error in the *forecast of y-o-y inflation* is 0.45 p.p. for the current year but somewhat higher, 0.76 p.p., in the autumn forecasts for the year ahead.

The most accurate forecasts of GDP growth were made by the IMAD, whereas the Bank of Slovenia was more accurate regarding inflation forecasts. The mean absolute errors (MAE)[39] in the forecasts of real and nominal economic growth ranged between 0.41 and 1.48 p.p. in 1997(8)–2007. The root mean square errors (RMSE), which assign greater weight to larger errors, were only slightly higher (between 0.53 and 1.88 p.p.). In forecasts of average inflation for the current year, the mean absolute errors totalled 0.16 in the autumn forecasts and 0.51 p.p. in the spring forecasts, whereas in the forecasts for the year ahead they totalled 0.80 in the autumn forecasts and 1.15 p.p. in the spring forecasts. The errors in y-o-y inflation are somewhat higher.[40] A comparison of absolute accuracy measures shows that the IMAD forecasts of GDP growth exhibit the lowest absolute accuracy measures among Slovenian forecasters, whereas only the BS achieves slightly better results in inflation forecasts. We come to the same conclusion if we compare the standardised values of accuracy measures (stdMAE and stdRMSE) which take into account the variability of the forecast phenomenon.[41]

[37] The analysis of the quality of GDP forecasts takes into account the first release of data on gross domestic product for 2007 (SORS, March 2008).

[38] The spring forecasts of nominal GDP growth for the year ahead are especially important from the aspect of budget planning, since they provide the macroeconomic basis for budget preparation for the coming year. The mean error of these forecasts for the period after 2002 totals 0.06 p.p.

[39] For methodological explanations, see Ferjančič, M. (2005): "Analysis of the accuracy of IMAD forecasts", Working Paper 2005/13, Ljubljana.

[40] Accuracy measures are presented in detail in the Statistical Appendix, Table 14.

[41] Compared to the European Commission's forecasts for the old EU Member States, the absolute accuracy measures are slightly worse, whereas in the relative accuracy measures no significant differences were found.
These findings generally apply to all new EU Member States (see e.g. Keereman, F. (2005): "Economic forecasts and fiscal policy in the recently acceded Member States", European Commission, Economic Paper, No. 234, November 2005.)

Table 11: **Errors made by forecasting institutions in their forecasts of real GDP growth and average inflation, by individual institution for 2007**

	GDP growth						Inflation					
	Autumn forecast for the year ahead		Spring forecast for the current year		Autumn forecast for the current year		Autumn forecast for the year ahead		Spring forecast for the current year		Autumn forecast for the current year	
	Forecast	Error in p.p.	Forecast	Error in p.p.	Forecast	Error in p.p.	Forecast	Error in p.p.	Forecast	Error in p.p.	Forecast	Error in p.p.
Realised	6.1	-	6.1	-	6.1	-	3.6	-	3.6	-	3.6	-
IMAD[1]	4.3	1.8	4.7	1.4	5.8	0.3	2.7	0.9	2.2	1.4	3.4	0.2
SKEP[2]	4.3	1.8	4.5	1.6	5.9	0.2	2.5	1.1	2.5	1.1	3.5	0.1
BS[3]	4.2	1.9	4.6	1.5	5.7	0.4	2.6	1.2	2.7	1.1	3.3	0.5
IMF[4]	4.0	2.1	4.5	1.6	5.4	0.7	2.3	1.3	2.7	0.9	3.2	0.4
EC[5]	4.2	1.9	4.3	1.8	6.0	0.1	2.5	1.3	2.6	1.2	3.5	0.3
WIIW[6]	4.0	2.1	4.5	1.6	5.0	1.1	2.4	1.2	2.6	1.0	2.6	1.0

Sources: [1]Spring Report, 2007; Autumn Report, 2006–2007. IMAD; [2]Economic Trends, 2006–2007. CCIS, SKEP. [3]Monetary Policy Report, 2006, Price Stability Report, 2007. BS ([4]World Economic Outlook, 2006–2007. IMF. [5]Economic Forecast, 2006–2007. EC. [6]Research Reports, 2006–2007. WIIW.

Notes:

Negative values indicate overestimation, while positive values indicate underestimation.

Until 2007 the BS forecast inflation as a % of the change in the current year's final quarter over the previous year's final quarter; the comparable realisation used in all comparisons totals 3.8%. From 2007 it started to forecast average annual growth rates in %. The European Commission forecasts inflation based on the harmonised index of consumer prices. The comparable realisation used in comparisons totals 3.8%.