Quarterly Newsletter of the Federal Planning Bureau

Short Term Update (STU) is the quarterly newsletter of the Belgian Federal Planning Bureau. It contains, in English, the main conclusions from the publications of the FPB, as well as information on new publications, together with an analysis of the most recent economic indicators.

HEADLINES BELGIAN ECONOMY

In the course of 2006, quarterly economic growth in Belgium slowed down in line with the international business cycle from 0.9% in the first quarter to 0.6% in the last quarter. This year, qoq GDP growth should stabilise around 0.5%. On a yearly basis, economic growth should slow down from 3% in 2006 to 2.2% in 2007.

In 2006, economic growth was only supported by domestic demand while net exports contributed negatively to it. In 2007, however, both domestic demand and net exports should support GDP growth. Despite the deceleration in quarterly Belgian export growth due to the slowdown of the euro area and the US economy, annual average export growth should rise to 6.5% in 2007 as it benefits from a considerable carry-over from 2006. After several years of decrease, the current account surplus should rise by 0.4% of GDP in 2007, mainly as a result of the decline in oil prices leading to an improvement in the terms of trade. Domestic demand growth should weaken this year, which is essentially due to the evolution of private consumption and public investment. Private consumption growth should be less buoyant than in 2006 as the personal income tax reform then gave its final boost to real disposable income. Public investment rose markedly last year in view of the local elections in October 2006, but should fall by the same extent in 2007.

After a net gain of about 44,000 persons in 2006, employment is expected to record an average annual rise of 45,600 persons this year. As the number of jobs grows faster than the labour force, the broad administrative unemployment rate is expected to decline from 13.9% in 2006 to 13.5% in 2007. The harmonised Eurostat unemployment rate (based on labour force surveys) should fall from 8.3% in 2006 to 7.9% next year.

This year, the increase in the national index of consumer prices (NICP) should amount to 1.8%, just as in 2006. It should be noted that the inflation picture in 2006 was blurred by the introduction of a new NICP-basket. The rise of the private consumption deflator, which is not affected by this factor, should decline from 2.3% in 2006 to 1.8% in 2007, mainly due to the decrease in oil prices.

STU 1-07 was finalised on 6 March 2007.

The Federal Planning Bureau (FPB) is a public agency under the authority of the Prime Minister and the Minister of Economic Affairs. The FPB has a legal status that gives it an autonomy and intellectual independence within the Belgian Federal public sector.

FPB activities are primarily focused on macro-economic forecasting, analysing and assessing policies in the economic, social and environmental fields.

Table of Contents

All FPB publications, mentioned in this STU, can be obtained either by sending a fax (+32 2 5077373) or by filling in the necessary form on our Internet site (http://www.plan.be).

An accuracy assessment of FPB's medium-term projections

The Federal Planning Bureau has been publishing medium-term macroeconomic projections for the Belgian economy since the beginning of the eighties. The prime objective of these projections is not to produce the forecasts that best anticipate the most likely policy decisions, but rather to provide, by extending underlying trends, a benchmark scenario pointing to possible future constraints and imbalances that may never materialise if prompt measures are taken. The quality of the analysis offered to policy makers and to the public in general in terms of diagnosis is probably the main criterion to apply to gauge its usefulness. However, in this special topic past projection errors are scrutinised to give to users a broad idea of the uncertainties surrounding the figures and also to identify possible methodological weaknesses that should be improved.

The economic outlook is a very detailed macroeconomic projection that covers developments in industry, the labour market, public finances and, in recent years, even energy consumption and associated greenhouse gas emissions. The tradition at the FPB of producing a baseline simulation with a medium-term horizon was inherited from the (failed) indicative planning experiments in the seventies. This baseline is a no-policy-change scenario, notably with regard to fiscal and social policies, that is based upon an international environment founded on projections prepared by international institutions such as the European Commission or the OECD. Scenario analysis is sometimes performed to illustrate the potential impact of risks included in the baseline or to analyse the effects of changes in economic policy. The baseline and variants for the Belgian economy are produced using the HERMES model. The economic outlook has been released in April since the mid-nineties, with an update in October in recent years used as the macroeconomic framework for the Belgian stability programme. Previously, a first version was published in February-March and an updated version in July.

Comparison between projected growth rates and outcome

The April releases (before 1996, the July issues) were used in the following analysis as we chose to select only one projection per year in our data sample, which starts, for technical reasons, with the outlook of July 1986 (covering the period 1987-1990) and ends with the April 2001 release (covering the period 2002-2006). Subsequent editions cannot be fully evaluated yet due to the lack of hard data beyond 2005. To analyse the projection errors we decided to work with growth rate averages covering the projection period. Until the 1997 release, the projection period covered four years beyond the year of the projection; from 1998 one extra year was added. In the analysis discussed below we examine four-year geometric growth rate averages beyond the current year for all releases.

A traditional problem faced when measuring forecasting errors is the choice of the data vintage to be defined as the outcome, as most macroeconomic data, notably national accounts, are regularly revised when new information sets become available or when methodological changes are introduced. As these factors can hardly be anticipated, we chose to compare the projection for year t with the estimate available in the database of year t+2. For instance, we defined as an outcome for the year 1990 the data available in spring 1992. This choice is based on the calendar of the national accounts as that data vintage will entail the first release of the national accounts for 1990 published in autumn 1991.

The key descriptive statistics used to assess the average growth rate errors, constructed as described above, are given in Table 1 for a selection of macroeconomic variables. Fiscal variables are not presented here, as their projections under the "no-policy-change" assumption require a different approach for investigation. The mean error in the first column indicates by how much the projected growth rates were on average overestimated (negative sign) or underestimated (positive sign) over the period 1987-2005. A desirable property of forecasts is unbiasedness, meaning that negative and positive errors should cancel out: this property has been examined by testing if the mean error was not statistically significantly different from zero (see next column No bias). Potential export market growth assumptions show a tendency to be too optimistic as all components of GDP (except housing investment) and disposable income, but only the projections for exports exhibit a statistically significant bias (imports being a borderline case). Growth of international prices expressed in dollars was also on average overestimated, while future growth in the exchange rate and domestic prices was predicted without systematic error, as was employment growth. Finally, the two supply-factor variables, namely labour force and productivity, were undeniably under- and overestimated respectively.

Table 1 - Key descriptive statistics for errors on projected four-year average growth rates *(1987-2005)*

	ME	No bias	MAE	RMSE/σ	Theil
Potential export markets	-0.54	0.35	1.70	0.63	0.69
International export prices (in $)	-1.44	0.25	3.28	0.59	0.66
Exchange rate (BEF/$ or euro/$)	0.02	0.99	3.94	0.51	0.52
Private consumption	-0.18	0.64	0.90	0.85	0.70
Gross fixed capital formation	-0.78	0.48	2.64	0.69	0.53
Business investment	-1.33	0.28	3.11	0.71	0.55
Housing investment	1.19	0.36	2.56	0.60	0.55
Exports of goods and services	-1.23	0.01*	1.72	0.81	0.81
Imports of goods and services	-0.90	0.11	1.68	0.78	0.69
Gross Domestic Product	-0.46	0.18	0.92	0.78	0.65
Private consumption deflator	0.01	0.98	0.74	1.18	0.60
GDP deflator	0.09	0.75	0.60	1.01	0.52
Real disposable income	-0.29	0.56	1.14	0.81	0.57
Labour force	0.47	0.00*	0.47	1.92	2.10
Employment	0.02	0.93	0.67	0.99	0.68
Labour productivity	-0.48	0.00*	0.55	0.65	0.86

Notes: Projection error = outcome - projection; ME is the mean error; No bias gives the significance level of the t-statistic (with standard error robust to autocorrelation) for the hypothesis H_o: ME=0 obtained by regressing the projection error on a constant, * indicating a rejection of no bias at a 5% significance level; MAE is the mean absolute error; RMSE/σ is the root mean square error divided by the standard deviation of the variable; Theil reports the RMSE of a given projection relative to the RMSE of a naive alternative given by the average growth of the four previous years, with a Theil statistic below unity indicating that the projection is more accurate than the naïve alternative.

The third column gives an indication of the absolute size of the error - with the mean error large positive and negative errors can cancel out. Absolute errors are clearly larger for investment and exports than for consumption, while absolute errors on domestic prices are more limited than on international prices. Note that the size of the absolute error on GDP is not higher than for first round forecasts of the economic budget due to the fact that over- and underestimates offset each other somewhat over the four-year projection period. In the case of the labour force, the mean error equals the mean absolute error implying that the average growth rate was underestimated in all projections, while labour productivity growth was overestimated in fourteen out of sixteen economic outlooks. In a similar study carried out by the CPB for the Dutch economy, labour force had been underestimated eight times out of nine analysed projections over the period 1976-2002, while productivity growth had been overestimated seven times.

The fourth column computes the size of the error, corrected for the volatility of the series as it is likely to make larger absolute errors on more volatile series. Taking this factor into account, the size of the error appears to be very similar among most variables, with international export prices and gross fixed capital formation now in line with the other series. On the other hand, the projections for the less volatile components, such as domestic prices, are now seen as less accurate. Projections on the labour force come out again as the weakest link. The last column compares the projections' errors with those obtained using a naive method that takes the four-year average growth rate recorded the year before the projection was made. Theil statistics below unity indicate that the projections are more accurate in all cases except for labour force projections.

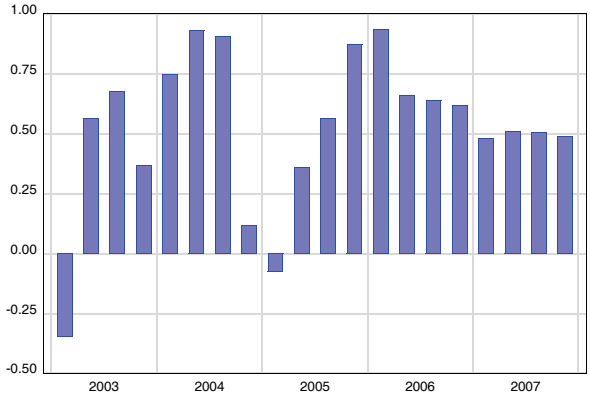
Methodological improvements in selected areas

As mentioned earlier, an accuracy assessment serves two purposes, namely to evaluate the uncertainty surrounding the projection but also to help establish a research agenda for areas where methodological developments need to be made. From table 1, we identified three main priority areas: exports, productivity and labour force projections. Concerning the first, a more detailed analysis shows that in the early nineties the relation between the errors on potential market and export growth implies a one-to-one relationship; while in more recent projection exercises, errors on export growth are clearly larger than those on export markets. Recent econometric evidence reveals that structural market share losses (in the sense that they cannot be explained by price competition) have appeared since the mid-nineties; research is ongoing at the FPB to understand their causes. Concerning productivity growth, a graphic investigation reveals that the decreasing trend was not captured sufficiently in the successive projections. Analysing the underlying causes of this decline in trend growth has been the focus of the 2005 economic outlook; in-depth research on the topic is currently under way within the EUKLEMS project co-funded by the European Commission. As mentioned above, projected average growth rates for the labour force have been largely underestimated. Aware of its past poor performance in the field, the FPB introduced in 2000 a refined methodology based on the evolution of participation rates by (5-year) age group and by gender. However, revisions in population projections, due for instance to one-shot measures to regularise illegal immigrants, remain an important potential source of error.

Economic forecasts 2007

In 2006, Belgian economic growth amounted to 3%. In line with the international business cycle, Belgian GDP growth slowed down from 0.9% in the first quarter to 0.7% in the second quarter and to 0.6% in the third and the fourth quarters. This year, quarterly economic growth should stabilise around 0.5%. On a yearly basis, real GDP growth should reach 2.2% in 2007.

Graph 1 - Quarterly GDP at constant prices
qoq growth rates, corrected for seasonal and calendar effects



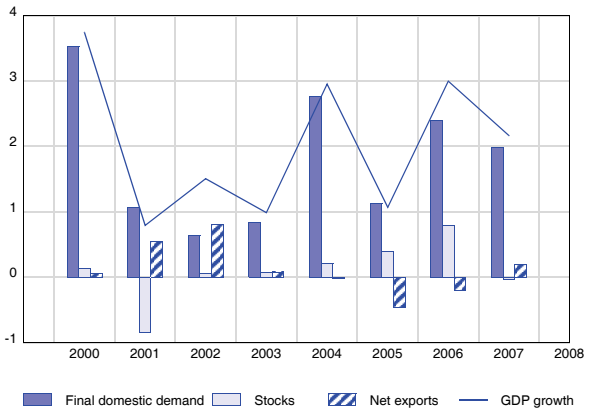
The European economy continues to grow at a substantial pace this year

During the first half of 2006, the euro area economy grew at its fastest pace since 2000 (0.9% per quarter on average). Just as in the USA, GDP growth in the euro area declined markedly in the third quarter (0.5%) and picked up again in the fourth quarter (0.9%). In 2007, European growth should remain firm, though less strong than last year. Indeed, the slowdown of the American economy and the appreciation of the effective exchange rate of the euro should hamper European exports. Moreover, domestic demand should slightly weaken as a result of budgetary measures such as the VAT rate increase in Germany. All in all, GDP growth in the euro area should slow down from 2.7% in 2006 to 2.2% in 2007. Although crude oil prices should remain relatively high, the average Brent oil price should drop from 65 dollars per barrel in 2006 to 59 dollars in 2007 (according to the forward market rates of early February).

Belgian GDP growth decelerates in 2007 but remains broadly based.

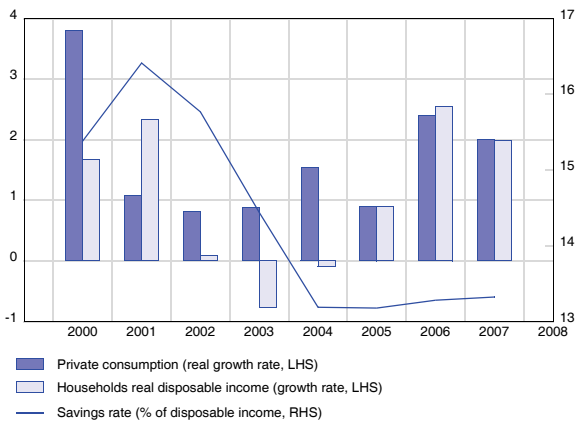
As a result of its weak performance in the first half of 2006, Belgian export growth (3.4%) strongly fell short of growth in the relevant export markets (8.7%) last year. The strong increase in exports during the second half of the year, however, provided a favourable starting point at the beginning of 2007, leading to stronger export growth this year than in 2006 (6.5%). As a consequence, the loss of market shares (measured as the growth differential between the relevant export markets and Belgian exports) in 2007 would be limited to 0.8%-points. Although imports increase at the same pace, the current account surplus should rise to 2.6% of the GDP (compared to 2.2% of GDP in 2006). Indeed, the lower oil prices and the appreciation of the euro should lead to a 0.3% improvement in terms of trade.

Graph 2 - Decomposition of real GDP growth
contributions to GDP growth in percentage points



This year, domestic demand should increase by 2%, compared to 3.3% in 2006. This drop is mainly related to the evolution of private consumption, public investment and stock building. After a quasi stabilisation between 2002 and 2005, the real disposable income of Belgian households increased by 2.6% in 2006, mainly as a result of the rise in labour income and the implementation of the last stage of the personal income tax reform. As a consequence, private consumption growth sped up to 2.4% and the household savings rate slightly increased after a four-year decline.

Graph 3 - Private consumption and savings rate



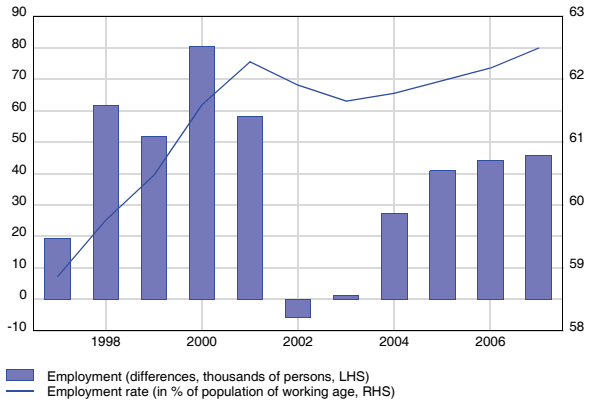
In 2007, the personal income tax reform will no longer give an additional boost to disposable income. Nevertheless, purchasing power will still increase by 2% due to a further increase in employment, an indexation of wages and social allowances that is higher than inflation, and an increase in property income (due to higher interest rates). Those factors should support consumer confidence resulting in a stabilisation of the savings rate and a rise in private consumption of 2%.

This year, growth of gross fixed capital formation (2.7%) should finally be much lower than in 2006 (4.1%). This is mainly due to the growth path of public investment, which is largely determined by local authorities' infrastructure works. They once again boomed in view of the local elections in October 2006. If the sales of public buildings are not taken into account, public investment rose by almost 10% in 2006 and should drop by the same extent this year. Quarterly growth of housing investment strongly accelerated until the third quarter of 2006, but slowed down afterwards due to the increase in mortgage rates - which raised financing costs - and the deceleration in real disposable income growth. Consequently, real housing investment growth in 2007 should slightly weaken to 3.6% (compared to 4.7% in 2006). Despite the relatively strong quarterly growth rates of business investment in 2006, the yearly growth rate remained limited to 3.2% (corrected for the purchase of public buildings) because some major investments (in the maritime transport sector) were completed in 2005. In line with GDP growth, the average quarterly growth of business investment should be lower this year than in 2006. Nevertheless, due to a favourable carry-over from 2006, business investment growth should still exceed 4% in 2007. This year, stock building should be neutral for economic growth, after a significant contribution (0.8%-points) in 2006.

Strong employment growth pushes back unemployment

The average annual rise in domestic employment amounted to 44,000 persons in 2006. As employment reacts with a time-lag to changes in growth in economic activity, employment should increase even more in 2007 (45,600 jobs) in spite of the slowdown in economic growth. Moreover, job creation should be stimulated for both years by a limited rise in wage costs. The employment rate should rise from 62.2% in 2006 to 62.5% in 2007. As employment increases faster than the labour force, the number of unemployed should diminish by 17,500 persons. The harmonised Eurostat unemployment rate is expected to fall from 8.3% in 2006 to 7.9% in 2007.

Graph 4 - Evolution of employment and employment rate
annual averages



Inflation amounts to 1.8%.

This year, inflation, as measured by the yoy increase in the national index of consumer prices (NICP), should amount to 1.8%, as in 2006. The health index, which is not affected by changes in the price of fuel, tobacco and alcoholic beverages, should increase by 2% (compared to 1.8% in 2006). According to the monthly forecasts for the health index, the pivotal index (currently 106.22) should be exceeded in September 2007.

Since January 2006, both index figures have been measured by a new basket of products (based on the Household Budget Survey conducted in 2004), which had a downward effect on their average increase in 2006. The deflator of private consumption, which is not affected by this technical factor, clearly indicates an easing of inflation to 1.8% in 2007, compared to 2.3% in 2006. The decline in inflation mainly results from moderation in wage cost increases, the appreciation of the euro and the decrease in oil prices. The packaging tax levied from 1 July 2007 onwards and the raise in excise duties on tobacco, two measures decided within the framework of the Budget for 2007, should add about 0.2%-points to inflation.

"Economische begroting 2007 – Budget économique 2007", INR/ICN, February 2007.

Economic forecasts for Belgium by the Federal Planning Bureau

Changes in volume (unless otherwise specified) (cut-off date of forecasts: 21 February 2007)

	2004	2005	2006	2007
Private consumption	1.5	0.9	2.4	2.0
Public consumption	2.1	-0.6	1.4	1.7
Gross fixed capital formation	7.9	4.0	4.1	2.7
Final national demand	3.1	1.6	3.3	2.1
Exports of goods and services	5.9	2.8	3.4	6.5
Imports of goods and services	6.3	3.5	3.8	6.4
Net-exports (contribution to growth)	0.0	-0.5	-0.2	0.2
Gross Domestic Product	3.0	1.1	3.0	2.2
p.m. Gross Domestic Product - in current prices (bn euro)	289.51	298.54	313.17	327.43
National consumer price index	2.1	2.8	1.8	1.8
Consumer prices: health index	1.6	2.2	1.8	2.0
Real disposable income households	-0.1	0.9	2.6	2.0
Household savings ratio (as % of disposable income)	13.2	13.2	13.3	13.3
Domestic employment (change in '000, yearly average)	26.6	40.8	44.1	45.6
Unemployment (Eurostat standardised rate, yearly average) [1]	8.4	8.4	8.3	7.9
Current account balance (BoP definition, as % of GDP)	3.5	2.5	2.2	2.6
Short term interbank interest rate (3 m.)	2.1	2.2	3.1	4.0
Long term interest rate (10 y.)	4.1	3.4	3.8	4.2

[1] Other unemployment definitions can be found on page 14

Economic forecasts for Belgium by different institutions

	GDP-growth		Inflation		Government balance		Date of update
	2006	2007	2006	2007	2006	2007	
Federal Planning Bureau [1]	3.0	2.2	1.8	1.8	.	.	02/07
INR/ICN [1]	3.0	2.2	1.8	1.8	.	.	02/07
National Bank of Belgium [2]	3.0	.	2.3	.	0.1	.	02/07
European Commission [2]	2.8	2.3	2.4	1.8	-0.2	-0.5	11/06
OECD [2]	2.9	2.3	2.4	1.7	0.0	-0.2	11/06
IMF [2]	2.7	2.1	2.4	1.9	0.0	-0.7	09/06
ING [1]	3.0	2.4	1.8	1.8	0.1	0.0	03/07
Fortis Bank [2]	3.0	2.3	2.3	2.1	0.1	-0.5	03/07
Dexia [1]	3.0	2.0	1.8	1.7	0.1	-0.3	03/07
KBC Bank [1]	3.0	2.5	1.8	1.7	0.1	-0.3	03/07
Petercam [1]	2.7	1.75	1.9	1.6	-0.3	-1.5	11/06
IRES [1]	3.0	2.2	1.8	1.7	-0.3	0.0	01/07
Consensus Belgian Prime News [2]	2.9	2.1	2.3	1.9	-0.1	-0.1	01/07
Consensus Economics [2]	2.6	2.2	2.2	1.7	.	.	02/07
Consensus The Economist [2]	3.0	2.1	2.3	2.1	.	.	03/07
Consensus Wirtschaftsinstitute [2]	2.7	2.3	2.4	2.0	0.0	0.3	10/06
Averages							
All institutions	2.9	2.2	2.1	1.8	0.0	-0.3	
International public institutions	2.8	2.2	2.4	1.8	-0.1	-0.5	
Credit institutions	2.9	2.2	2.0	1.8	0.0	-0.5	

[1] Inflation forecasts based on the evolution of the national index of consumer prices

[2] Inflation forecasts based on the evolution of the harmonised index of consumer prices

Collaborating institutions for The Economist: ABN Amro, Deutsche Bank, Economist Intelligence Unit, Goldman Sachs, HSBC Securities, KBC Bank, J.P. Morgan Chase, Morgan Stanley, Decision Economics, BNP Paribas, Citigroup, Scotiabank, UBS.
Wirtschaftforshungsinstitute: DIW (Berlin), Ifo (München), HWWA (Hamburg), IfW (Kiel), IWH (Halle), RWI (Essen)

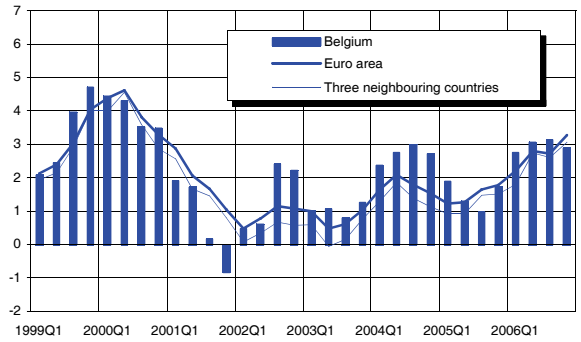
General economic activity

Table 1 - GDP growth rates, in % [1]

			YoY growth rates, in %					QoQ growth rates, in %				
	2005	*2006*	*2005Q4*	*2006Q1*	*2006Q2*	*2006Q3*	*2006Q4*	*2005Q4*	*2006Q1*	*2006Q2*	*2006Q3*	*2006Q4*
Germany	1.1	2.9	1.7	1.9	2.8	3.1	3.7	0.3	0.8	1.2	0.8	0.9
France	1.2	2.0	1.0	1.3	2.5	1.8	2.2	0.2	0.5	1.1	0.0	0.6
Netherlands	1.5	2.9	2.2	2.6	3.0	3.0	2.9	0.7	0.3	1.2	0.7	0.6
Belgium	1.5	3.0	1.7	2.8	3.1	3.1	2.9	0.9	0.9	0.7	0.6	0.6
Euro area	1.5	2.8	1.8	2.2	2.8	2.7	3.3	0.3	0.8	1.0	0.6	0.9
United States	3.2	3.3	3.1	3.7	3.5	3.0	3.1	0.4	1.4	0.6	0.5	0.6
Japan	1.9	2.2	2.8	2.7	2.2	1.5	2.3	0.4	0.7	0.3	0.1	1.2

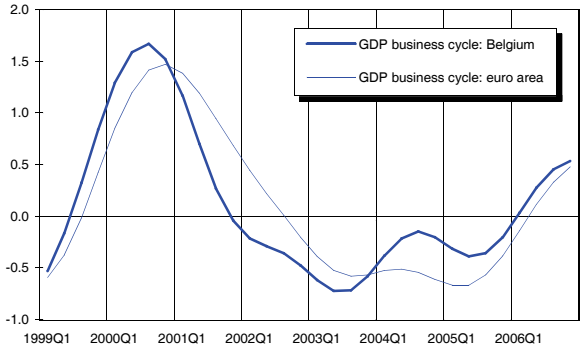
[1] Adjusted for seasonal and calendar effects
Source: INR/ICN, National sources, Eurostat

Graph 1 - GDP-growth (t/t-4), in %



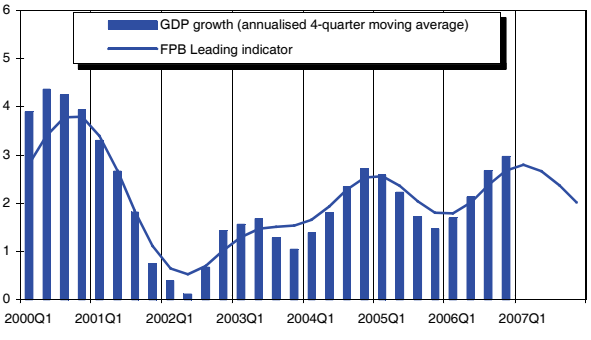
Source: INR/ICN, National sources, Eurostat

Graph 2 - GDP business cycle



Source: INR/ICN, Eurostat, FPB

Graph 3 - GDP growth and leading indicator



Source: INR/ICN, FPB

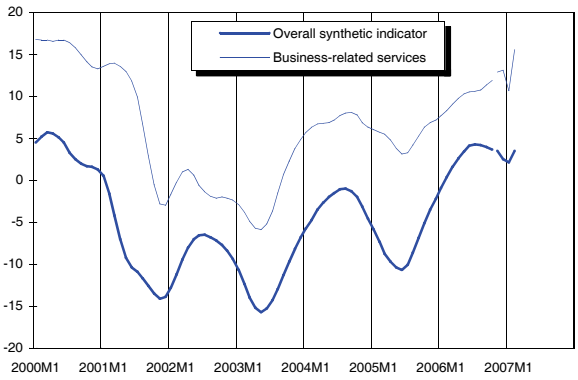
US qoq GDP growth slowed down from its very high pace in 2006Q1 (1.4%) for the rest of the year (0.6% on average) as a consequence of slower private consumption growth and a heavy decline in residential investment. Despite a serious inventory correction in 2006Q4, GDP growth still reached 0.6% thanks to a revival of private consumption growth. Private consumption should slow down in the course of 2007 as consumers benefited from a temporary decline in oil prices in 2006Q1, which had boosted disposable income. Moreover, the housing market should continue to weigh on economic growth in the coming quarters.

Average quarterly growth in Japan accelerated slightly between 2006H1 and 2006H2, from 0.5% to 0.6%. The slowdown in private consumption - caused by a surprising decline of wages - and in business investment was compensated for by a higher contribution from net exports. Although investment and export growth should remain robust this year, economic growth should slow down to 2%, from 2.2% in 2006.

Owing to a negative contribution from net exports and a slowdown of investment growth, economic growth in the euro area decelerated in 2006Q3 (0.5%) but rebounded to 0.9% in 2006Q4. The pick-up in French and Italian economic growth and the carry-forward effects in anticipation of the VAT-rate hike in 2007 by German consumers were responsible for this acceleration. This year, output growth will slow down from last year's rate (2.2% versus 2.8% in 2006) due to the temporary negative impact of the VAT-rate hike in Germany, the strengthening of the euro and slower world trade growth.

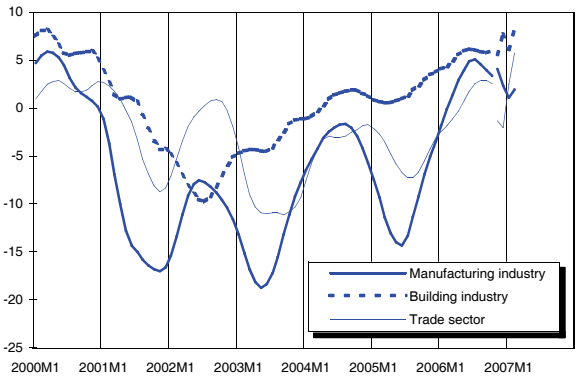
While Dutch and French GDP growth increased at about the same pace as in Belgium in 2006Q4 (0.6%), German economic growth surged by 0.9%. Both Belgium and its main trading partners reached the highest annual growth rate since 2000. The FPB leading indicator has clearly levelled off, pointing to slower growth in 2007 than last year (3%).

Graph 4 - Business cycle: global evolution



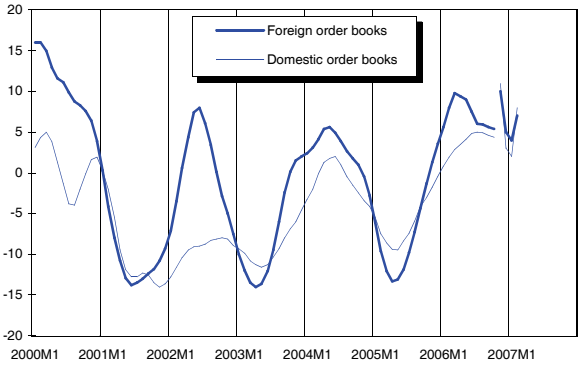
Source: NBB

Graph 5 - Business cycle: sectoral evolution



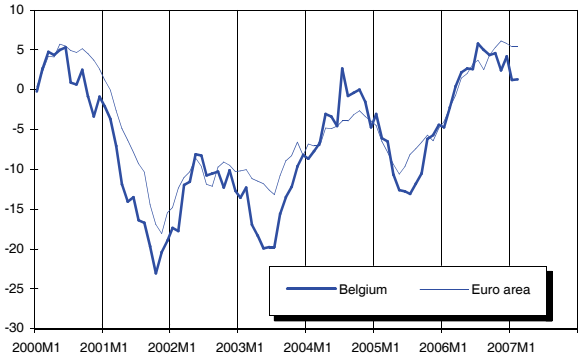
Source: NBB

Graph 6 - Manufacturing industry: order books



Source: NBB

Graph 7 - Industrial confidence: international comparison



Source: European Commission

After reaching an all-time high in June 2006, Belgian business confidence edged lower during the rest of the year, but rose slightly in February. The smoothed business confidence indicator reached a peak mid-2006, but has since moved downwards as companies fear that a slowdown in the US economy and the expected deceleration of German economic growth (related to the VAT-rate rise) will weigh on their future export performance. The rise in confidence in February suggests that the economic slowdown in the US and in Germany is likely to prove more temporary and less pronounced than initially feared. Belgian business confidence remains, however, at a high level and thus points to reasonably strong economic growth in the course of 2007 (albeit slower than in 2006).

The moderate decline in business confidence over the last few months was caused by a decrease in confidence in the export-orientated manufacturing sector, while it roughly stabilised in the trade and the building sector.

The deterioration of manufacturing sentiment was caused by a decline in production and less well-filled foreign and domestic order books. The weakening of foreign orders was more pronounced than that of domestic orders, but both bounced back in February. Both components are, however, still at historically high levels. Furthermore, it is clear that price pressures are receding, owing to the substantial decline of oil prices, the continuation of moderate wage growth and strong international competition leading to downward pressures on international prices.

Sentiment in the trade sector fell quite heavily by the end of 2006, but regained strength in the first two months of 2007. These fluctuations were caused by developments in the assessment of turnover and expectations related to domestic orders.

After a stabilisation during the second half of last year, the indicator for the building industry has strengthened somewhat in the last few months, owing to a surge in building activity. The recent slight weakening of expectations probably reflects that the rise in mortgage rates is expected to cool down construction activity in the course of 2007.

The business-related services cycle is not taken into account in the overall synthetic indicator. Services' sentiment, which has been on an upward path since mid-2005, has improved further in the last few months (save for a temporary weakening in January), owing to a strong appraisal of activity and an excellent demand and employment outlook.

While industrial confidence in Belgium started to decline from mid-2006 onwards, European industrial confidence is only now showing signs of levelling off.

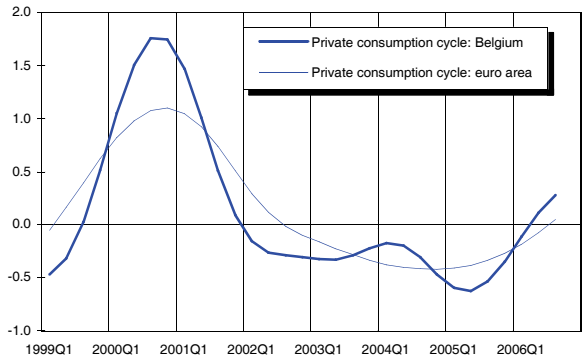
Private consumption

Table 2 - Private consumption indicators

	2005	2006	2006Q1	2006Q2	2006Q3	2006Q4	2006M9	2006M10	2006M11	2006M12	2007M1	2007M2
Turnover (VAT) - retail trade [1]	3.5	3.1	4.1	4.1	3.9	0.5	4.0	3.7	1.3	-2.7	.	.
New car registrations [1]	-1.0	9.6	20.0	6.9	2.5	4.6	-1.1	13.0	-2.0	1.2	-3.9	-10.4
Consumer confidence indicator [2]	-7.6	-2.7	-4.8	-4.4	-1.6	-0.1	-1.7	4.0	1.8	-6.0	-2.2	-0.7

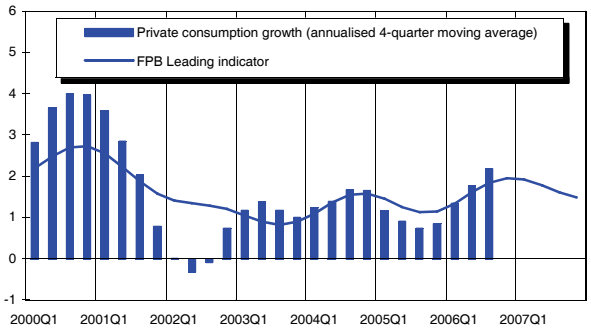
[1] Change (%) compared to same period previous year; [2] Qualitative data
Source: DGSB, European Commission, Febiac

Graph 8 - Private consumption cycle



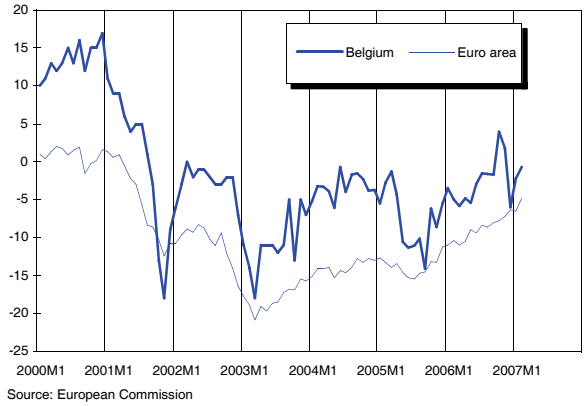
Source: INR/ICN, Eurostat, FPB

Graph 9 - Private consumption growth and leading indicator



Source: INR/ICN, FPB

Graph 10 - Consumer confidence: international comparison



Source: European Commission

Private consumption growth in Belgium and the euro area has been higher than trend growth since mid-2005. Both consumption cycles entered into positive territory in the course of 2006, which means that the level of private consumption is above its trend value.

From 2002 to 2005, real disposable income of Belgian households almost stagnated. Meanwhile, private consumption grew at a very moderate pace (1% per year on average), leading to a continuous decline in the savings rate from 16.4% in 2001 to 13.2% in 2005. Last year, real disposable income growth accelerated to 2.6% because it benefited from the completion of the last phase of the fiscal reform and stronger labour income growth. Most of these extra revenues were consumed, which made private consumption increase by 0.6% per quarter on average, compared to 0.4% per quarter between 2002 and 2005.

Although the FPB leading indicator points to a slowdown of private consumption growth in the course of 2007, this slowdown should be rather limited. The rising path of consumer confidence in the course of 2006 was mainly determined by growing optimism with respect to employment expectations. At the end of the year, however, this indicator experienced some transitory fluctuations due to the announcement of massive job losses in the motor vehicle industry. Apart from this event, consumer confidence seems to have stabilised from mid-2006 onwards. Car registrations followed their traditional pattern, which is determined by the motor show held in Brussels once every two years. As this event will not be held in 2007, car registrations will exhibit negative yoy growth rates during the first months of this year. Growth rates (yoy) of retail sales marked a significant deceleration in 2006Q4, which is mainly the consequence of a weak performance in December. At the moment, it is difficult to assess whether this is a temporary phenomenon.

Belgian and euro area consumer confidence both started to improve by mid-2005. Up to now, consumer confidence in the euro area has experienced a gradual, robust increase that is still going on, despite the VAT-rate hike (from 16% to 19%) in Germany in January 2007.

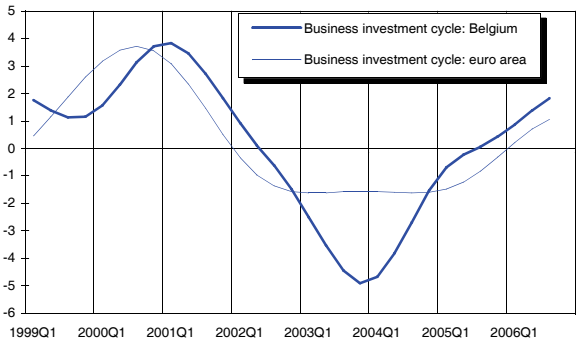
Business investment

Table 3 - Business investment indicators

	2005	2006	2007	2006Q1	2006Q2	2006Q3	2006Q4	2006M8	2006M9	2006M10	2006M11	2006M12
Investment (VAT) [1]												
Industrial companies	4.5	6.9	.	9.1	7.7	4.2	7.0	5.7	3.7	5.9	19.8	-0.4
Non-industrial companies	8.4	0.9	.	0.2	-17.0	13.3	11.6	5.4	10.3	15.2	8.7	11.5
Total companies	7.1	3.3	.	3.4	-9.8	10.6	10.4	6.3	8.5	12.4	13.1	7.4
Investment survey [1]	-1.7	3.2	19.6									
Capacity utilisation rate (s.a.) (%)	79.4	83.4	.	82.9	84.0	83.4	83.2					

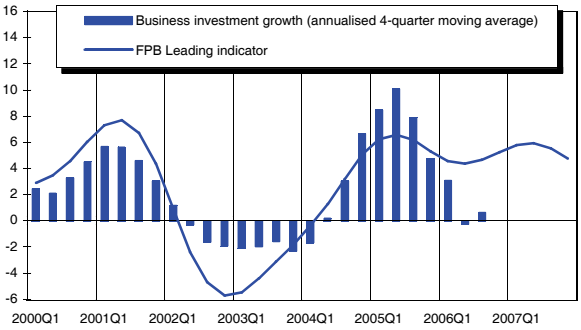
[1] Change (%) compared to same period previous year
Source: DGSB, NBB

Graph 11 - Business investment cycle



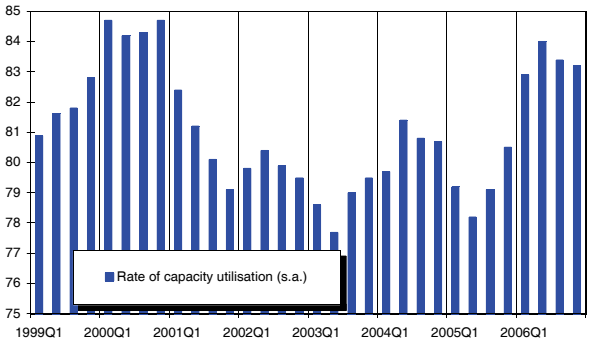
Source: INR/ICN, Eurostat, FPB

Graph 12 - Business investment growth and leading indicator



Source: INR/ICN, FPB

Graph 13 - Capacity utilisation in manufacturing industry



Source: NBB

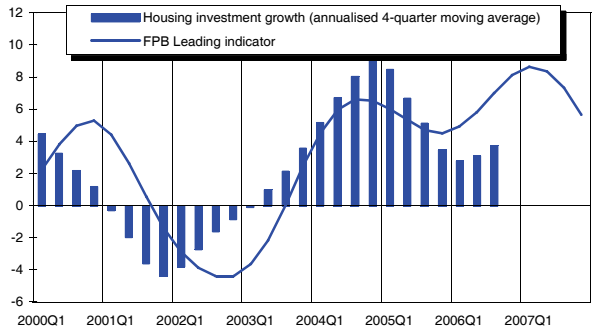
The current upturn in the investment cycle took off one year earlier in Belgium than in the euro area, compensating for the fact that the downturn in business investment from 2001 to 2003 was more pronounced in Belgium. In 2006Q3, investment both in Belgium and the euro area was 1 to 2% above its trend value.

Although Belgian business investment growth between 2004 and 2006 was certainly helped by an improvement in the business cycle, it was also influenced by some exceptional factors. Firstly, some maritime companies bought an exceptionally high amount of sea vessels in 2004 and 2005, pushing up business investment growth in 2004, but exerting a downward influence on it in 2006. Secondly, sales of government buildings to the private sector - which appear in the national accounts as a sale of assets by the government and an additional investment by the business sector - raised business investment growth in 2004 and 2006, but reduced it in 2005. Overall, the impact of maritime investment operations on business investment was larger than the influence of the sales of government buildings.

According to the latest quarterly national accounts, qoq business investment growth slowed down considerably during the first three quarters of last year due to a deceleration of economic growth that caused demand prospects to worsen. VAT-based statistics suggest a stabilisation of yoy investment growth in 2006Q4 and most other indicators point to robust investment growth in the near future. Despite the minor drop in the capacity utilisation rate during the second half of 2006, it is still significantly higher than during the period 2001-2005, which should lead to an extension of production capacity. The latest bi-annual investment survey (November 2006) in the manufacturing industry indicated that businesses plan to invest around 20% more (at current prices) than in 2006. Company directors are generally too optimistic about their investment expenditure for the coming year. However, as the figure is comparable to the projection made for 2006 in the November 2005 survey, this can be seen as an indication that investment growth in 2006 and in 2007 will not differ significantly.

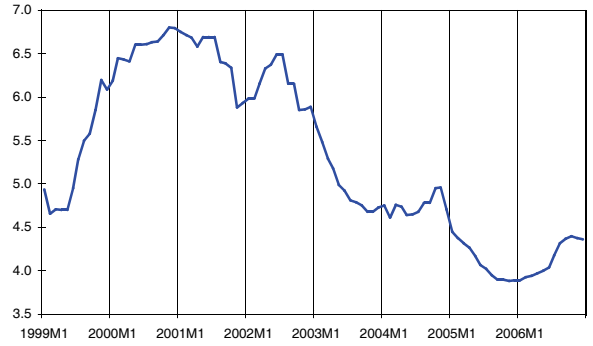
Housing investment

Graph 14 - Housing investment growth and leading indicator



Source: INR/ICN, FPB

Graph 15 - Mortgage rate (%)



Source: NBB

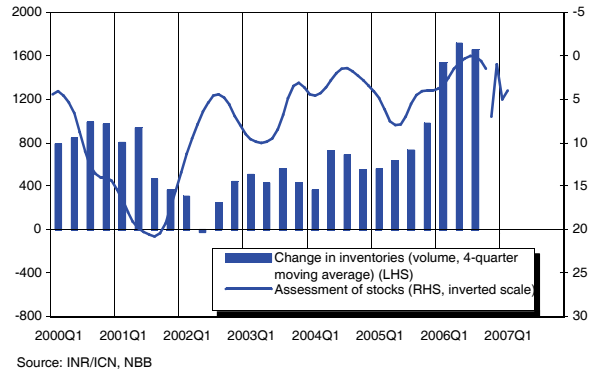
According to the latest national accounts, housing investment growth has increased strongly since mid-2005. Average qoq growth rates went up from 0.4% in the first half of 2005 to 1.5% in the first three quarters of 2006, resulting in an average annual growth rate of 4.7%.

As most housing investment indicators have gone down recently, the FPB leading indicator points to an easing of housing investment growth in the course of this year. The total amount of mortgage applications and indicators from the survey of architects, which all lead the development of housing investment by about four quarters, levelled off during the first half of 2006 and weakened significantly in the second half of the year. Moreover, yoy growth rates for the number of dwellings for which construction has started have gone down from 19% in 2006Q1 to around -10% in 2006Q3.

Although the mortgage rate remains at a historically low level, the rise from 3.9% by the end of 2005 to 4.4% by the end of last year will not be supportive to housing investment growth. A comparison of graphs 14 and 15 also shows that the decline in the mortgage rate from 2003 to 2005 has undoubtedly contributed to the housing investment boom in the last few years. As mortgage rates follow the path of long-term interest rates (with a time-lag of a few months), they should continue their upward path in the course of this year.

Stock building

Graph 16 - Stock building indicators



Source: INR/ICN, NBB

The steep rise in economic growth from -0.1% in 2005Q1 to 0.9% in 2006Q1 was - as with previous upturns - accompanied by an acceleration in stock building. The contemporaneous decrease in the number of company directors that considered their level of stocks as excessive indicates that the increase in the level of stocks was mainly intended to meet unexpected rises in demand. As GDP growth has lost some momentum since 2006Q2, sudden increases in demand have become less probable. Consequently, the number of company directors marking their level of stocks as 'too high' started to rise again in the second half of last year.

Due to the acceleration in the course of the year, changes in stocks contributed 0.4%-points to economic growth in 2005. Although the rate of stock building has lost strength since mid-2006, its contribution to economic growth amounted to 0.8%-points last year.

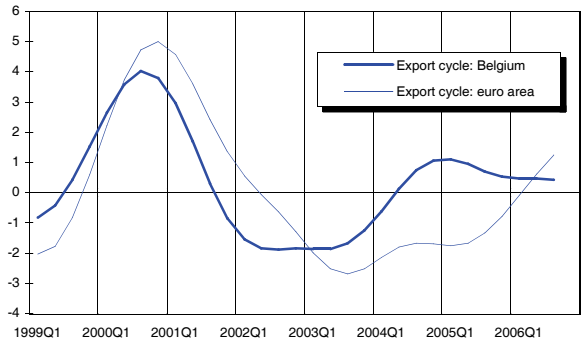
Foreign Trade

Table 4 - Belgium - Trade statistics (goods, intra/extrastat, national concept)

	2004	2005	2005Q4	2006Q1	2006Q2	2006Q3	2006M6	2006M7	2006M8	2006M9	2006M10	2006M11
Exports - value [1]	8.9	7.0	5.5	9.0	5.2	9.4	6.5	13.3	9.6	6.0	17.0	7.9
Imports - value [1]	10.5	8.9	9.0	13.7	5.8	9.7	3.5	9.7	8.8	10.4	14.0	7.0
Exports - volume [1]	6.6	0.4	-1.0	1.6	0.1	4.3	0.8	7.3	3.3	2.5	14.5	4.2
Imports - volume [1]	7.0	1.2	1.2	4.3	-0.1	5.4	-2.0	5.6	2.1	8.3	14.7	5.1
Exports - price [1]	2.1	6.5	6.6	7.3	5.0	5.0	5.7	5.6	6.0	3.5	2.2	3.6
Imports - price [1]	3.2	7.6	7.7	9.1	5.9	4.1	5.6	3.9	6.6	1.9	-0.6	1.9

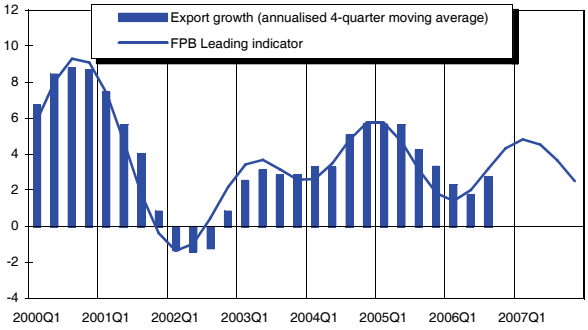
[1] Change (%) compared to same period previous year
Source: INR/ICN

Graph 17 - Export cycle



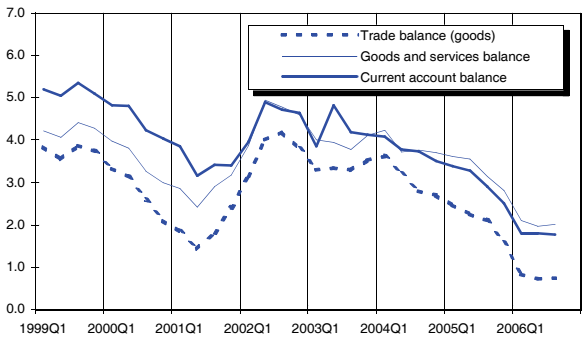
Source: INR/ICN, Eurostat, FPB

Graph 18 - Export growth and leading indicator



Source: INR/ICN, FPB

Graph 19 - Belgian foreign balances (4 quarters cumul,% of GDP)



Source: INR/ICN, NBB, FPB

The Belgian export cycle levelled off by the end of 2004 and has hardly declined ever since, which indicates that Belgian export growth has been close to trend growth. The euro area export cycle, however, has been on an upward path since mid-2005. This difference in evolution is mainly explained by a surge in German exports (+13% in 2006), owing to improved competitiveness (wage moderation), the ability to penetrate booming export markets (such as China and India) and the increasing relocation of labour intensive production processes to Eastern Europe.

Belgian export growth was surprisingly weak in 2006H1, pulling down the average annual growth rate, but bounced back markedly in 2006H2 thanks to an acceleration of economic growth in the euro area. During the course of 2007, export growth should weaken again because of a slowdown in world trade growth and weaker economic growth in Belgium's most important trading partner, Germany. Furthermore, the appreciation of the euro in 2006 should hamper exports somewhat in 2007.

This less favourable outlook for Belgian exports is confirmed by the FPB leading indicator, which points to a deceleration in export growth in 2007. 2007Q1, especially, might be weaker because of the VAT rate increase in Germany (implemented in January). Nevertheless, annual export growth in 2007 should outpace the growth rate of 2006, because of the large carry-over.

Thanks to a substantial decrease in oil prices, import price growth has slowed down considerably over the last few months and has moved below export price growth. This resulted in a stabilisation of the terms of trade in 2006, following three years of deterioration.

The Belgian current account surplus declined from 2.5% of GDP in 2005 to 2.2% of GDP in 2006 as export growth turned out to be lower than import volume growth. This year a small improvement of the surplus seems likely thanks to an improvement in the terms of trade.

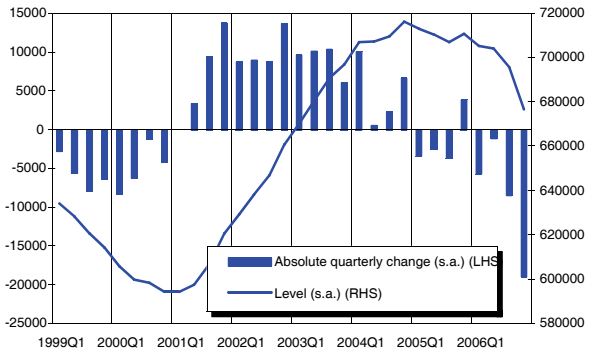
Labour market

Table 5 - Labour market indicators

	2005	2006	2006Q1	2006Q2	2006Q3	2006Q4	2006M8	2006M9	2006M10	2006M11	2006M12	2007M1
Unemployment [1][2]	710.4	695.4	705.2	704.1	695.6	676.6	694.6	691.8	681.4	675.7	672.8	673.6
Unemployment rate [2][3]	14.3	13.9	14.1	14.1	13.9	13.5	13.9	13.8	13.6	13.5	13.4	13.4
Unemployment rate-Eurostat [3][4]	8.4	8.3	8.5	8.5	8.1	7.9	8.1	8.0	8.0	7.9	7.8	7.8

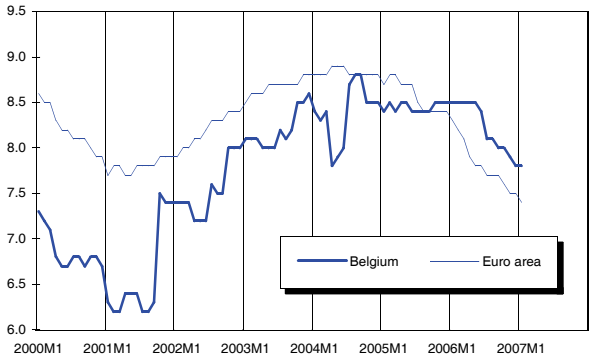
[1] Level in thousands, s.a.; [2] Broad administrative definition; [3] In % of labour force, s.a.
[4] Recent figures are based on administrative data and may be subject to revision
Source: RVA/ONEM, FPS Employment, Eurostat, FPB

Graph 20 - Evolution of unemployment (incl. older)



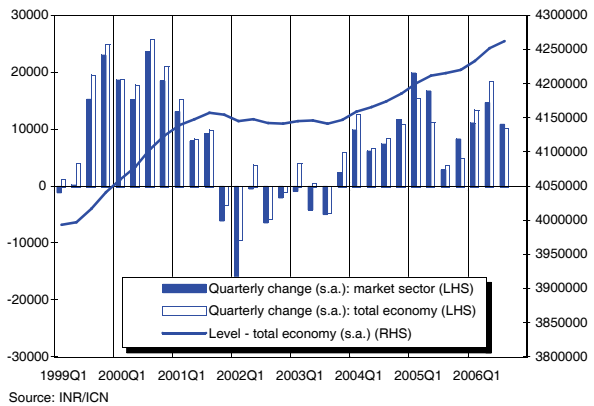
Source: RVA/ONEM

Graph 21 - Harmonised unemployment rates (% of labour force)



Source: Eurostat

Graph 22 - Evolution of domestic employment



Source: INR/ICN

Quarter-to-quarter growth of value added in the market sector accelerated further during the first half of last year (from 0.5% during the last quarter of 2005 to 0.9% and 1.0%, respectively), but tended to gradually loose steam during the second semester (increases of 0.8% and 0.5%, respectively). According to the data that are available at this stage, employment in the market sector grew by an average of 0.35% per quarter last year.

On a yearly-average basis, value added growth in the market sector strengthened from 1.4% in 2005 to 3.2% last year, the strongest growth figure since 2000. On the other hand, employment growth amounted to only 1.3% (marginally less than in 2005), implying that the spur in economic activity has been accompanied by strongly increasing productivity gains. Part of this increase may be explained by the pro-cyclical behaviour of average hours worked: for salaried employment, average hours worked per person decreased by 0.3% in 2005, but are estimated to have increased by 0.1% over last year.

Whereas employment in the public sector tended to pick up again in 2006 (growth of 0.7% against -0.3% the previous year), non-market employment in the household sector suffered from the government-subsidised transfer of a number of domestic services towards the market sector. Hence, growth in total domestic employment was slightly lower (1.0%) than in the market sector. In view of the considerable increase in the population of working age (growth of 0.7%), the rise in the employment rate remains relatively modest (from 62.0% to 62.2%).

The (broad administrative) unemployment rate, however, came down rather substantially last year, from 14.3% to 13.9%. More particularly, the decrease in unemployment figures during the second half of last year was surprisingly strong and does not – on the basis of the information currently at hand - seem to have been entirely mirrored in an acceleration of employment growth. This implies a strong loss in the pace of labour force growth as measured through administrative figures.

Prices

Table 6 - Inflation rates: change compared to the same period in the previous year, in %

	2005	2006	2006Q1	2006Q2	2006Q3	2006Q4	2006M9	2006M10	2006M11	2006M12	2007M1	2007M2
Consumer prices: all items	2.78	1.79	2.23	2.01	1.49	1.45	1.22	1.21	1.49	1.64	1.66	1.77
Food prices	1.93	2.21	1.06	1.00	2.89	3.92	4.13	3.83	4.19	3.75	4.44	3.90
Non food prices	3.60	1.56	3.05	2.54	0.52	0.19	-0.63	-0.41	0.33	0.65	0.48	0.77
Services	2.35	1.47	1.50	1.65	1.53	1.22	1.57	1.38	0.99	1.29	1.68	1.93
Rent	1.99	3.50	3.65	3.50	3.51	3.34	3.53	3.32	3.37	3.32	1.75	1.78
Health index	2.17	1.77	1.76	1.75	1.68	1.87	1.77	1.90	1.85	1.87	2.04	2.08
Brent oil price in USD (level)	54.4	65.2	61.8	69.6	69.6	59.7	61.8	57.8	58.9	62.3	53.9	57.5

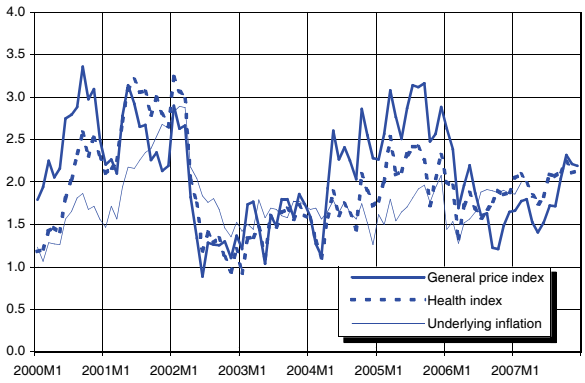
Source: FPS Economy, Datastream

Table 7 - Monthly inflation forecasts

	2006M1	2006M2	2006M3	2006M4	2006M5	2006M6	2006M7	2006M8	2006M9	2006M10	2006M11	2006M12
Consumer prices: all items	103.48	103.93	103.89	104.40	104.79	104.77	105.13	105.26	104.96	104.75	105.01	105.15
Consumer prices: health index	102.82	103.31	103.23	103.60	103.95	103.93	104.25	104.38	104.36	104.32	104.58	104.68
Moving average health index	102.66	102.89	103.03	103.24	103.52	103.68	103.93	104.13	104.23	104.33	104.41	104.49
	2007M1	2007M2	2007M3	2007M4	2007M5	2007M6	2007M7	2007M8	2007M9	2007M10	2007M11	2007M12
Consumer prices: all items	105.20	105.77	105.76	105.99	106.26	106.36	106.94	107.06	107.10	107.18	107.33	107.45
Consumer prices: health index	104.92	105.46	105.28	105.50	105.76	105.83	106.43	106.54	106.57	106.65	106.78	106.91
Moving average health index	104.63	104.91	105.09	105.29	105.50	105.59	105.88	106.14	106.34	106.55	106.64	106.73

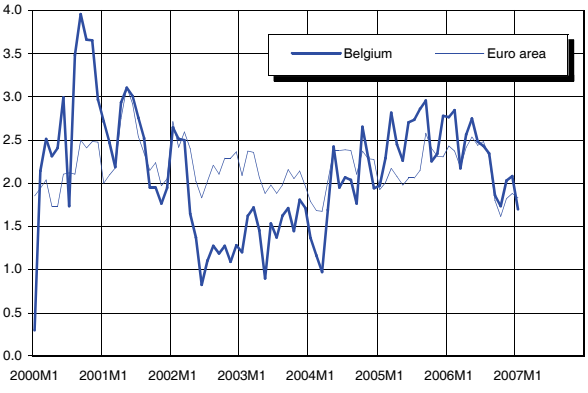
Source: Observations (up to 07M2): FPS Economy; forecasts: FPB

Graph 23 - Monthly inflation evolution in % (t/t-12)



Source: FPS Economy, from 07M3 on: forecasts FPB

Graph 24 - Harmonised inflation rates in % (t/t-12)



Source: Eurostat

Since January 2006, the base year of the national index of consumer prices (NICP) has shifted from 1996 to 2004, which implies an update of the basket of goods used to measure the development of consumer prices in Belgium. The harmonised index of consumer prices (HICP) has already been constructed on the basis of a basket that is very similar to that of the new NICP since 2004. A comparison between the evolution of both indices reveals that HICP-inflation was respectively 0.2 and 0.3%-points lower in 2004 and 2005 than NICP-inflation. As this cumulated difference was corrected for in January 2006, NICP-inflation was artificially low in 2006 (1.8%, compared to an HICP-inflation rate of 2.2%). From January 2007 onwards, the level shift has disappeared from the yoy growth rates and NICP-inflation has normalised.

Inflation will be influenced by two counteracting factors in 2007. On the one hand, oil prices expressed in euro should be, on average, 12% lower this year than in 2006, which will restrain (imported) inflation. On the other hand, inflation will be pushed up by a tax on packaged products that will be levied from July 2007 onwards and by a strong rise in excises on tobacco since the beginning of this year. Underlying inflation is expected to remain around 1.9% in the first half of this year and to decline somewhat in the second half of the year as the decline in oil prices is passed on. All in all, average NICP-inflation should amount to 1.8% this year, while the 'health index' should rise somewhat faster as it is not influenced by the price decrease of petrol and diesel.

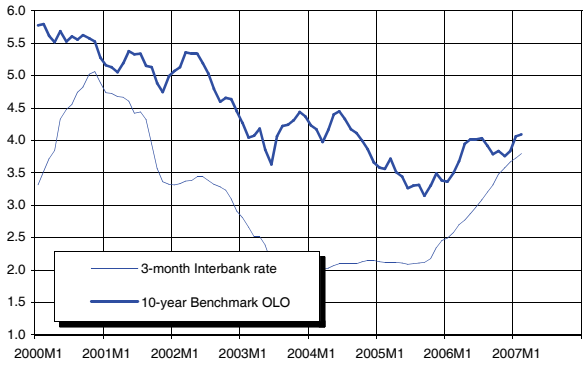
Interest rates

Table 8 - Interest rates

	2005	2006	2006Q1	2006Q2	2006Q3	2006Q4	2006M9	2006M10	2006M11	2006M12	2007M1	2007M2
Short-term money market rates (3 months)												
Belgium	2.16	3.06	2.59	2.86	3.20	3.58	3.31	3.48	3.58	3.67	3.73	3.80
Euro area (Euribor)	2.18	3.08	2.61	2.89	3.22	3.60	3.34	3.50	3.60	3.69	3.75	3.82
United States	3.51	5.15	4.72	5.18	5.39	5.32	5.34	5.33	5.32	5.32	5.32	5.31
Japan	0.01	0.27	0.05	0.19	0.39	0.46	0.40	0.41	0.45	0.54	0.53	0.55
Long-term government bond rates (10 years)												
Belgium	3.42	3.81	3.51	3.99	3.91	3.81	3.79	3.83	3.76	3.84	4.07	4.09
Germany	3.38	3.78	3.49	3.96	3.89	3.77	3.76	3.79	3.72	3.80	4.02	4.05
Euro area	3.42	3.84	3.54	4.02	3.95	3.83	3.82	3.86	3.78	3.86	4.08	4.11
United States	4.28	4.79	4.57	5.07	4.89	4.63	4.71	4.72	4.59	4.57	4.76	4.72
Japan	1.37	1.73	1.57	1.89	1.79	1.69	1.66	1.75	1.69	1.63	1.70	1.70

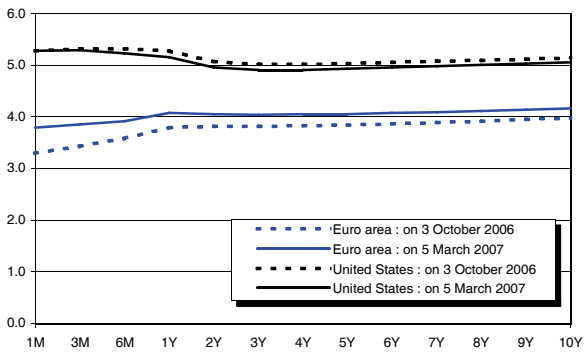
Source: NBB, ECB

Graph 25 - Interest rate levels in Belgium, %



Source: NBB

Graph 26 - Yield curves for the euro area and the US



Source: Datastream, data based on interest rate swaps

Following a substantial monetary tightening in the previous two years, the Federal Reserve has kept the Federal Funds rate unchanged at 5.25% since July 2006 as economic growth has slowed down considerably and as inflation has moderated (thanks to the decline in oil prices). Although a rate cut cannot be excluded altogether, the most likely outcome for 2007 is the status quo as the high rate of capacity utilisation remains an upside risk to inflation.

In December 2006, the ECB raised the refinancing rate for the sixth time by 25 base points since December 2005, bringing it to a level of 3.5%. As 2006Q4 GDP proved to be very strong and fears of a negative effect of the German VAT hike on economic growth in 2007 have diminished, more monetary tightening can be expected. The ECB's use of the expression "strong vigilance" with respect to inflation developments indicates that euro zone rates are likely to rise to 3.75% in March. Financial markets are hinting at a second rate hike during the summer.

After having crept up in the first half of 2006, US long-term interest rates started a downward trend during summer as the slowdown in US economic growth and the strong decline in oil prices reduced inflationary expectations. This decline in long rates ended in December when indicators pointed out that the cooling off of US and world economic growth would be less pronounced than expected. Euro area long rates experienced a comparable evolution although they declined less in the second half of 2006, resulting in a reduction of the spread between both rates (by some 25 points since October). Over the last few months, the yield curve in the US became somewhat less inverted, while it flattened slightly in the euro area.

Exchange rates

Table 9 - Bilateral exchange rates

	2005	2006	2006Q1	2006Q2	2006Q3	2006Q4	2006M9	2006M10	2006M11	2006M12	2007M1	2007M2
USD per EUR	1.244	1.256	1.202	1.257	1.274	1.290	1.272	1.261	1.289	1.321	1.300	1.308
UKP per EUR	0.684	0.682	0.686	0.688	0.680	0.673	0.675	0.673	0.674	0.673	0.664	0.668
JPY per EUR	136.8	146.1	140.6	143.8	148.1	151.9	149.0	149.7	151.1	155.0	156.5	157.6

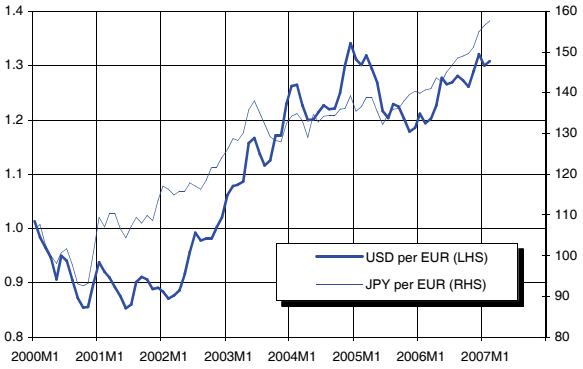
Table 10 - Nominal effective exchange rates (1990=100)

	2005	2006	2006Q1	2006Q2	2006Q3	2006Q4	2006M9	2006M10	2006M11	2006M12	2007M1	2007M2
Euro	120.8	121.7	119.2	121.6	122.6	123.4	122.6	122.2	123.2	124.7	124.0	124.7
Growth rate [1]	-0.5	0.8	0.2	2.0	0.9	0.6	-0.2	-0.3	0.8	1.3	-0.6	0.6
US dollar	84.9	83.9	86.0	83.4	83.1	83.1	83.2	84.0	83.0	82.2	83.7	83.5
Growth rate [1]	-2.3	-1.2	-1.4	-3.0	-0.3	-0.1	0.4	0.9	-1.2	-0.9	1.8	-0.2
Japanese yen	86.0	80.3	81.5	81.5	79.9	78.3	79.3	78.6	78.6	77.7	76.3	76.1
Growth rate [1]	-3.5	-6.6	-1.1	0.0	-1.9	-2.0	-0.8	-0.9	0.0	-1.1	-1.9	-0.2

[1] Change (%) compared to previous period

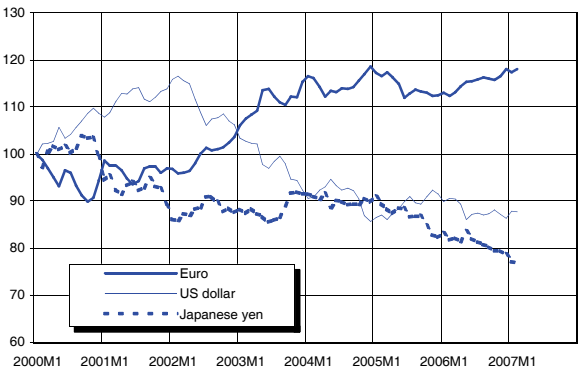
Source: BIS, NBB

Graph 27 - Euro-dollar and euro-yen bilateral exchange rates



Source: NBB

Graph 28 - Nominal effective exchange rates (Jan. 99=100)



Source: NBB, BIS

For most of 2006 the dollar was on a downward trend versus the euro. The dollar depreciation was driven by the slowdown of the US economy, the acceleration of economic activity in the euro area and the resulting expectation of a narrowing of the interest rate differential between both economic blocks. The decision of some central banks in Asia and in the Middle East to re-arrange their monetary reserves (weight of the dollar was reduced in favour of other currencies such as the euro) also weighed on the dollar. The expected further narrowing of the interest rate differential should allow for some further strengthening of the euro vis-à-vis the dollar in the course of 2007.

The Japanese yen initially appreciated versus the dollar in 2006 in anticipation of the first monetary tightening in many years by the Bank of Japan. However, a significant weakening of economic growth and a downward revision of inflation adjusted expectations with regard to monetary policy and hence weighed on the yen. Furthermore, the yen has been pushed down in recent months by a surge in the so-called carry trade, whereby investors borrow in yen at very low interest rates to buy higher-yielding assets such as American or European bonds (hereby selling the borrowed yen). While the depreciation of the yen versus the dollar remained limited in 2006, it lost ground versus the euro and reached an all-time low.

The euro gained ground vis-à-vis most currencies in 2006, although the British pound (helped by an unexpected rate hike by the Bank of England) and the Swedish krona were exceptions. Despite this, the nominal effective euro exchange rate only appreciated by 0.8% in 2006 because of its downward profile in 2005.

Tax indicators

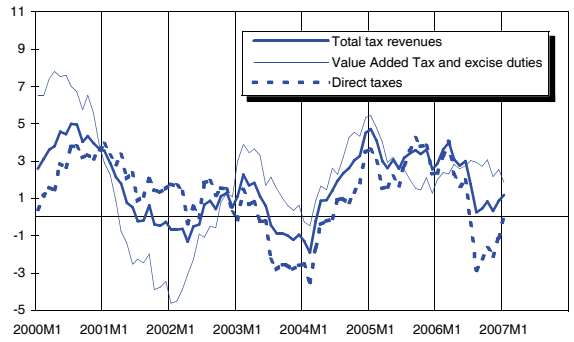
Table 11 - Tax revenues (1)

	2005	2006	2006Q1	2006Q2	2006Q3	2006Q4	2006M8	2006M9	2006M10	2006M11	2006M12	2007M1
Total [2], of which:	5.4	2.6	8.4	0.1	-1.9	5.1	-11.7	10.8	7.6	-0.9	6.4	11.3
Direct taxes, of which:	5.2	0.6	7.6	-3.1	-6.2	5.7	-28.0	20.3	8.1	-2.1	7.4	17.3
Withholding earned income tax (PAYE)	3.9	3.7	4.3	4.1	3.1	3.4	5.5	-10.6	8.3	-7.7	6.5	7.4
Prepayments	5.7	5.5	.	1.6	-1.7	12.1	.	.	11.8	.	11.6	.
Value Added Tax and excise duties	4.1	4.3	7.4	3.6	3.0	4.2	2.4	1.1	6.8	-2.3	6.5	2.3

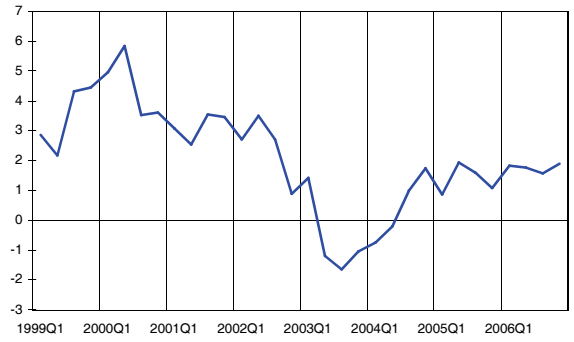
[1] Change (%) compared to same period previous year; [2] Total received by federal government, excl of death-duties

Source: FPS Finance

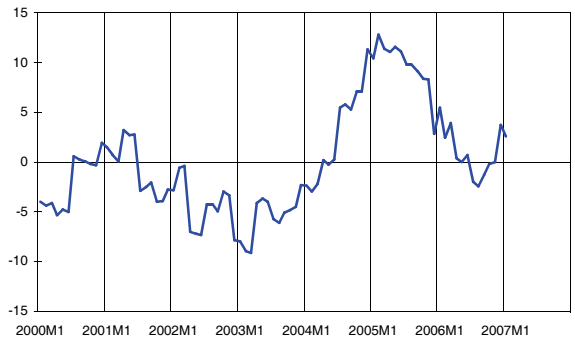
Graph 29 - Real tax revenues (3)



Graph 30 - Real withholding earned income tax (PAYE) (4)



Graph 31 - Real prepayments (3)



[3] Change (%) over past 12 months, compared to previous 12 month period, deflated by consumer price index

[4] Change (%) over past 4 quarters, compared to previous 4 quarter period, deflated by consumer price index

Last year, total revenue from taxes recorded a nominal increase of 2.6%, markedly less than in 2005 (5.4%). This is partly due to tax-cutting decisions affecting repayments of income tax to households. The growth rates of the other categories of taxes generally followed the evolutions of their economic determinants.

The strong increase in tax repayments to households (not shown in table 11) is related to the 2001 personal income tax reform. This reform has been implemented progressively from fiscal year 2002 onward, but about 35% of the total cost of the reform was programmed to arise in 2006 through assessments related to fiscal year 2005. Concerning PAYE revenue, mainly levied on wages, the 4-quarter moving average (graph 30) shows a moderate but constantly positive growth rate in real terms, following the increase in employment.

Prepayments by companies in 2006 incorporated the 'notional interest' deduction introduced by the 2005 reform. This new rule allows all companies subject to Belgian corporate taxation to deduct from their taxable income an amount equal to the interest that they would have paid on their capital in the case of long-term debt financing. This provision leads to a general reduction in the effective corporate tax rate. Though advance payments on a 12-month real term moving average basis (graph 31) declined until mid-2006, they recovered firmly thereafter. This evolution may result from an increase in profit expectations, in parallel with the strength of the business cycle.

Indirect taxes in 2006 were marked by a good performance of VAT receipts, partly compensated for by a (nominal) decrease in excise duties. Excise duty income was affected by the weakness of tobacco and road fuel consumption, and by reductions in the rate of duty on diesel introduced successively until August to safeguard purchasing power (and which were not cancelled thereafter when oil prices decreased). VAT receipts were boosted by the general dynamism of household demand (partly related to the above-mentioned tax cut), including car sales and housing investment.

A Medium-Term Outlook for the World Economy: 2007-2013

The January 2007 issue of the NIME Outlook for the World Economy presents a 2007-2013 macroeconomic outlook for the major areas of the world. The outlook was produced using NIME, the Federal Planning Bureau's macroeconometric world model.

After a year of sturdy economic growth in 2006, euro area GDP growth should cool down in 2007 while consumer price inflation should fall below the 2% upper limit of the European Central Bank's definition of price stability. The decline in growth is largely based on a more restrictive monetary policy stance and a softening of domestic demand. While the area's GDP should expand at an average annual rate of 1.8% over 2007-2013, growth rates will tend to decline over the projection period; the area's average annual growth rate is expected to fall slightly below the 2000-2006 average, in a context of a declining - but still positive - growth rate for the area's working-age population. Consumer price inflation should come out at an average rate of 2% per annum over the period, edging up to 2.3% at the end of the period. The short-term interest rate is expected to rise from a year-average level of 4% in 2007 to 4.9% in 2013 as the euro area's monetary authorities move to ensure price stability. Assuming no policy changes, the area's fiscal deficit should recede gradually from 1.9% of GDP in 2007 to 0.9% of GDP in 2013.

Over the 2007-2013 period, GDP growth should average 3% per annum for the group of countries comprising the United Kingdom, Sweden and Denmark. Real GDP in the United States is expected to rise at an average annual rate of 2.6% over the same period. However, growth will most likely be uneven from year to year as, under current us laws and policies, a number of significant tax cut provisions should expire, stymieing domestic demand growth over the projection period. At the same time, significant external imbalances should persist.

Real GDP in Japan is expected to progress at an average annual rate of 2.2% over the 2007-2013 period. Consumer price inflation should reach a year average rate of 0.2% in 2007 and average 1.3% per annum over the projection horizon. Japan's growth momentum should fall off noticeably by the end of the projection horizon as the ageing of the country's population leads to an ever stronger decline in the labour supply.

A stochastic evaluation of the risks surrounding the projection's main results indicate that, throughout the projection period, there is only a very low probability that GDP growth in the euro area will exceed 2.9%, or that it will fall below 0.2%. In comparison, GDP growth in the United States is unlikely to exceed 4.1% or to fall below 1.5%.

"A Medium-Term Outlook for the World Economy: 2007-2013",
The NIME Outlook for the World Economy, January 2007.

Energy policy and the climate issue: a challenge for Belgium

This paper sheds light on several challenges related to the development of the energy system in Belgium up to 2050, taking into account constraints on the emissions of greenhouse gases (GHG) in a European context. It is based on two studies carried out by the Federal Planning Bureau in 2006 that deal with the related energy and climate change issues.

Two different approaches are presented according to the time horizon of the analyses. Each approach focuses on different policy frameworks for reducing GHG emissions, reflecting the inertia of the energy system from both the production and the consumption sides. By the year 2030, the major element of policy will be carbon pricing. Indeed, a period of 20 to 25 years is often seen as too short for the development and deployment of a wide range of low-carbon and high-efficient energy technologies and for profound behavioural changes. Carbon pricing leads to energy price increases according to the carbon content of fuels and results in appropriate changes in energy production and consumption patterns. By the year 2050, however, it will be possible to implement more structural policies. This part of the paper describes transformations of the energy system and society that are significantly contributing to the achievement of a sustainable development. These transformations could materialise thanks to policies targeted to produce changes in technologies and in behaviours, leading to reductions in greenhouse gas emissions ranging from 50% to 80% between 1990 and 2050.

For the period up to 2030, a reference projection of the Belgian energy system has first been elaborated. This projection shows an increase in GHG emissions of 20% in 2030 compared to those for 1990 and energy imports meeting up to 95% of Belgian primary energy requirements, despite the development of renewable energy sources and noticeable improvements in energy efficiency

Two alternative scenarios have then been considered that are both compatible with the 30% reduction objective in EU-level GHG emissions by 2030 compared to 1990. The difference between the two scenarios lies in the use of nuclear energy for electricity generation: in one scenario, the law on the nuclear phase-out is implemented; in the other, nuclear power production is assumed to continue. The approach used for allocating the European reduction objective among Member States is based on the criterion of economic efficiency. According to this criterion, a common carbon price is set at EU level and emission reductions take place wherever they are cheapest. The carbon price corresponding to a 30% EU reduction target is estimated to 200 euro/t CO_2 eq. The consequence of this value for Belgium is a 12% reduction in GHG emissions by 2030 compared to those for 1990 in the scenario without nuclear energy and a 26% reduction in the scenario with nuclear energy. The paper then compares the effects on the structure of the energy mix, the level of energy demand, the deployment of energy technologies and the average cost of electricity production and describes the energy policy challenges that are raised in both scenarios.

Finally, the evaluation of the economic impact of climate policies in Belgium is taken from the FPB study carried out in 2006: it deals with reductions in GHG emissions of 4.8% and 13.7% by 2020 compared to 1990.

By the year 2050, a more extended set of policies can be considered than by 2030. Nevertheless, Belgium will face several policy challenges in order to reduce its GHG emissions by 50-80%, consistent with the European objective of limiting global warming to 2°C. Technological challenges include, among others, developing zero emission engines (based on hydrogen fuel cells) or low emission engines (using fossil fuels), and developing renewable energy technologies and carbon capture and storage systems. Behavioural challenges include developing demand management policies, limiting the rebound effect when improving energy efficiency, triggering a modal shift to public transport, increasing building renovations with better insulation levels and lowering the meat content of the average Belgian diet. This paper concludes that, to reach the necessary emission reductions, policies on technology and behaviour must be combined. There is thus a need to improve knowledge about these two fields and their integration.

"Toelichting bij sommige uitdagingen voor het Belgische energiebeleid in het kader van klimaatdoelstellingen. Eclairage sur des enjeux de la politique énergétique belge confrontée au défi climatique.", D. Gusbin, A. Henry.
Working Paper 1-07, January 2007.

Growth and productivity in Belgium

Over the past few years, productivity and economic growth have been major research topics covered by the Federal Planning Bureau. This work has included both efforts to improve the measurement of Belgian productivity growth, as shown by the development of a capital services index, and work to enhance the understanding of the drivers of productivity performance. The FPB acknowledges the funding by the European Commission via the EUKLEMS project, which is part of the 6th Framework Programme. Three working papers written in this context are presented here.

Capital services and total factor productivity measurements: impact of various methodologies for Belgium

This working paper presents different methodologies currently used to construct a volume index of capital services. Furthermore, it analyses the sensitivity of capital service and total factor productivity (TFP) estimates to methodological choices, based on time-series for Belgium over the period 1970-2004.

Economic growth is determined by the growth of capital, labour and TFP. TFP provides information on overall efficiency in how labour and capital are used together in the economy and is estimated as a residual in the decomposition of economic growth. It is therefore essential to have correct measures of capital and labour. According to OECD recommendations, the appropriate measurement of capital input for productivity studies is the flow of services produced by capital assets, rather than capital stocks. This allows inclusion of capital efficiency in capital contribution rather than in TFP. In Belgium, as in many other countries, no official data exist on capital services.

The measurement of capital services is realised in two steps. First, productive capital stocks have to be estimated for each type of investment good, referred to as asset. These stocks are then aggregated with the user costs of capital as weights to derive a global index measuring the productive contribution of all types of capital assets to output growth. Two age-efficiency profiles are generally used to construct productive capital stocks: the geometric profile and the hyperbolic profile. For each profile, several assumptions have to be made, such as the choice of the functional form of the retirement function or of the maximum service life. For the computation of the user costs, we have the choice between an ex-ante

and an ex-post rate of return of capital. The ex-ante rate of return is obtained from market interest rates and estimates of expected inflation. The ex-post rate is the rate that allows the value of capital services to exhaust all non-labour incomes computed in the national accounts.

For the economy as a whole and for the entire period, 1970-2004, under an ex-post approach, the volume indices of capital services estimated with a hyperbolic age-efficiency profile grow at a higher rate than the indices estimated with a geometric profile. Under an ex-ante approach, the different volume indices are more or less similar for the whole economy, even if the indices generally grow at a slightly higher rate with a geometric pattern. In the case of a hyperbolic profile, a longer maximum service life and/or a higher β parameter (slower loss of efficiency) increase the volume index of capital services in level and in growth rate. A higher growth rate of the volume indices generates a higher capital contribution and, consequently, a lower TFP contribution.

Over long periods of time, the different TFP estimates are relatively similar. Over shorter periods, the different methodologies generate more significant variations in the TFP contribution. Over the recent period 2000-2004, the average annual TFP contribution to output growth for the whole economy is estimated to be between 0.04% and 0.27%, according to the assumptions made.

In summary, this sensitivity analysis shows that methodological choices have certain effects on the volume index of capital services and consequently on the estimation of the TFP contribution to growth. These effects are greater when the analysis is realised at the industry level and when the studied period is short, underlying the importance of a long-term perspective in analysing productivity evolution. It seems credible that the appropriate age-efficiency profile differs according to the kind of assets and the industry in which these assets are used. Empirical studies on age-efficiency and retirement profiles of assets are necessary to determine the most appropriate profiles.

"Capital services and total factor productivity measurements: impact of various methodologies for Belgium",
B. Biatour, G. Bryon, C. Kegels,
Working Paper 3-07, March 2007.

Supply and Use Tables for Belgium 1995-2002: Methodology of Compilation

This paper presents the methodology for the compilation of a time series of supply and use tables for Belgium in current and constant prices for the period 1995-2002. These data have been produced at the Belgian Federal Planning Bureau relying on national accounts data and existing supply and use tables. The aim of this paper is to make the methodology transparent by briefly describing the stages of the compilation without producing an overload of methodological detail.

For the productivity database of the EUKLEMS project it was necessary to deliver a time series of Belgian supply and use tables. These tables describe in detail the domestic production processes of an economy. The tables had to respect the national accounts and the EUK72 classification that had been defined for the project. A thorough analysis of the data situation in Belgium led to the conclusion that, for Belgium, a series of current and constant price tables covering the period 1995-2002 was feasible.

For the compilation of the current price supply and use tables, we relied on national accounts data, existing current price tables produced by the National Bank of Belgium (NBB) and other detailed data received from the NBB. Our tasks then consisted in splitting some industries and products in order to respect the EUK72 classification, in adapting some of the existing tables to the latest national accounts and in estimating the tables for the missing years, 1996 and 1998.

Further work was required to obtain constant price tables. The use tables had to be converted from purchasers' prices to basic prices, and, since the NBB made separate price indices available for domestic output and for imports, it was necessary to compute use tables for domestic output and for imports. The sequential approach proposed in the UN input-output manual then allowed to deflate the existing current price supply and use tables in order to obtain constant price tables for 1995-2002.

In our approach, we have tried to respect the methods used for the construction of the national accounts and existing tables as much as possible. Even though the time span covered is not as long as we would have wanted it to be, this time series of current and constant price supply and use tables should prove very useful not only as input for the EUKLEMS database, but also for applied economic analysis at the industry level for Belgium..

"Supply and Use Tables for Belgium 1995-2002: The Methodology of Compilation", L.Avonds, C. Hambÿe, B. Michel,
Working Paper 4-07, March 2007.

Growth and productivity in Belgium

The objective of this report consists in providing an overview of the main drivers of economic growth and productivity evolution in Belgium over the 1970-2004 period, based on a consistent data set.

For the first time, a consistent long-term database including value added, hours worked and capital formation, has been created for Belgium at a 29-industry level. These series are fully compatible with the latest version of the national accounts.

The long-term series allows light to be shed on the declining trend of GDP per capita growth in Belgium. This evolution was mainly due to the slowdown of labour productivity growth over the whole period 1970-2004. This declining trend is in contrast with the evolution of labour utilisation. The latter, strongly negative during the seventies and the first half of the eighties, turned positive from the end of the eighties. This favourable evolution of labour utilisation is in turn explained by a rapid increase in the employment rate between 1995 and 2001, which has more than compensated for the declining share of the working age population in the total population. Although the Belgian employment rate is going in the right direction, it is still far from the Lisbon objective of 70%.

The growth accounting model allows labour productivity growth to be broken down into two components: capital deepening, which covers the effect of an increase in labour productivity driven by increases in the quantity and/or the quality of capital for a constant amount of labour, and multi-factor productivity (MFP). This latter component measures the evolution of the overall efficiency of how the factors of production, i.e. labour and capital, are used together in the economy. Since the beginning of the seventies, the slowdown in the labour productivity growth rate has been due to a deceleration of the contribution of both components: the capital-labour ratio and MFP. However, the slowdown of MFP has been much more pronounced than that of the capital-labour ratio. Since the beginning of the nineties, on annual average, the capital-labour ratio contribution has even been relatively stable. By contrast, the trend of MFP declined until 2000 and has stabilised only since then.

Growth and productivity evolutions are also the result of changes in the structure of the economy. Between 1970 and 2004, the activities that generate value added and employment growth changed. The contribution of manufacturing to aggregate value added growth has experienced a strong reduction over the last twenty years. As such, the contribution of manufacturing became almost negligible in the period 2000-2004. By contrast, an increasing part of aggregate value added growth is coming from market services. Between 2000 and 2004, market services alone accounted for almost 70% of total value added growth, and non-market services have become the second most important driving force of value added growth. Total labour input growth was mainly driven by the negative impact of the manufacturing industries, which has only been offset by market and non-market services since the 1990's. Over the whole period, the manufacturing contribution to productivity growth has always been positive but has declined. The contribution of market services to productivity growth has also always been positive but smaller, except between 2000 and 2004 when market services became the main component of labour productivity growth instead of manufacturing.

Within manufacturing, strong changes in the nature of activities have taken place during the last 34 years. In terms of real value added, some activities have seen a steady decline of their relative importance over recent decades. This is especially true for Textiles and textile products and for Leather and leather products and, to a lesser extent, for Basic metals and fabricated metal products, for Food, beverage and tobacco and for Pulp, paper and paper products, printing and publishing. By contrast, other activities have recorded an increase in their relative importance within manufacturing during the same period. This is clearly the case for Chemicals, chemical products and man-made fibres but also for Transport equipment, for Rubber and plastic products and for Wood and wood products.

Structural changes have also occurred in market services over recent decades. Between 1970 and 2004, two industries strongly increased their relative importance in market services in terms of real value added: Real estate, renting and business services, and Transport, storage and communication. By contrast, Wholesale and retail trade has recorded a large fall in its relative importance despite the strong growth between 2000 and 2004. A similar evolution, although of a lesser magnitude, has been observed for Financial activities.

"Growth and Productivity in Belgium",
B. Biatour, J. Fiers, C. Kegels and B. Michel
Working Paper 05-07, March 2007.

Recent history of major economic policy measures

March 2007	The ECB raised its main refinancing rate by a quarter of a point to 3.75%
February 2007	Some significant reductions in telecommunications tariffs were announced. In fixed services, the incumbent, Belgacom, and some competitors will reduce retail prices for calls to mobile networks, following reductions in wholesale prices in November 2006. In mobile services, the second largest operator, Mobistar, will reduce its tariffs for roaming services. The company expects to offset the incurred loss with an increasing use of mobile phones abroad by its customers.
January 2007	Full market opening for electricity and gas in Belgium was reached by allowing free choice of supplier to the remaining captive consumers: households in the Walloon and Brussels Capital regions. Meanwhile, to further spread demand (and noise), night tariffs were extended to the whole weekend throughout the country. Conforming to EU requirements, full market opening was also reached for freight services by rail by allowing free choice of supplier in domestic services. There are five entrants in this market now, who are essentially active in cross-border services. Meanwhile, the state took over the incumbent's pension fund. This will lead to more financial transparancy and a better comparability with other transport companies.
December 2006	The ECB raised its main refinancing rate by a quarter of a point to 3.5%.
November 2006	The European Commission approved the merger of Suez and Gaz de France (GdF), but under several conditions. Suez will sell the gas trading company Distrigas and give up control of the gas transport network manager Fluxys. GdF will sell its share in the Belgian power generation company SPE. Under these conditions the new company's dominant position on the Belgian energy markets will be alleviated. Furthermore, the international gas hub at Zeebrugge will be operated independently from Suez and new network capacity will be developed. Independently of the approved merger, two other projects in the area of energy were implemented. Firstly, the Belpex day-ahead electricity market became operational. It works in close co-operation with the Dutch and French electricity exchanges, which allows for equal prices in the three countries. Secondly, the German company Wingas received permission to operate a gas pipeline from the Port of Antwerp to the nearby Dutch gas network. This allows competition in infrastructure management. The potential market share of the new pipeline is 9%. In the area of electronic communications the first stage of reducing mobile termination prices has been implemented. This is based on decisions of the European Commission and the Belgian market regulator BIPT/IBPT. The stepwise reduction will be finalised in mid 2008.
October 2006	At the October budget conclave, the federal government announced its objectives for public finances for 2007. These are based on assumptions of 2.2% economic growth (2.7% in 2006) and 1.9% inflation (1.9% in 2006 as well). After an expected budget balance in 2006, the finances of general government should record a surplus of 0.3% of GDP in 2007, in accordance with the target defined in the Stability Programme and in the revised Ageing-fund law. The primary surplus should increase by 0.2% of GDP as compared to 2006, after five years of decrease. The budget surplus of 0.3% of GDP should be located in the social security budget for 0.2% of GDP (as in 2006) and in state governments (communities and regions) for 0.1% of GDP (0.2% of GDP in 2006). The federal government finances should be almost balanced (-0.1% of GDP in 2006), as should local government finances (which are expected to recover from a 0.2% of GDP deficit in 2006, related to a temporary surge in infrastructure investment ahead of the municipal elections). The forecasted 0.2% of GDP surplus in the social security budget is expected to be achieved through increased 'alternative financing' (transfers from the federal government) and a change in the mode of collection of social contributions on anticipated holiday pay. The total state debt-to-GDP ratio should decrease from 90.6% at the end of 2006 to 83.9% at the end of 2007. The government intends to keep the growth of expenses strictly under control, both in the federal departments and in social security. However, the budget allows for welfare increases in social allowances as proposed by the social partners within the envelope defined in the 2006 Generation Pact. The budget for health care will remain within the 4.5% real growth rate boundary defined in the 2003 government's agreement. The price that firms receive for household services provided within the framework of service vouchers will be lowered from EUR 21 to EUR 20 per hour. The extension of targeted labour cost reductions for researchers, and for night-time and shift-organised labour has been confirmed; the measure aimed at easing the taxation of overtime work will be strengthened, via both an increase in wage subsidies and a specific decrease in personal income taxation. Other selected cuts in direct and indirect taxation have been decided upon to promote investment in social housing, housing investment in run-down buildings and energy-saving expenditure. Moreover, the level of taxation on professional income will be slightly reduced. As regards corporation tax, some elements of the tax system will be made more favourable to companies. On the other hand, selected taxes on products will be increased (taxes on packaging and on tobacco products). As was the case in previous years, the 2007 budget partly relies on non-structural corrective fiscal measures for about 0.4% of GDP (0.6% in 2006), notably new sales of real estate, the take-over of pension funds assets and liabilities and a new wave of securitisation of tax arrears, together with a reinforcement of the anti-fraud machinery (0.1% of GDP). The ECB raised its main refinancing rate by a quarter of a point to 3.25%

A more complete overview of "Recent history of major economic policy measures" is available on the FPB web site (http://www.plan.be)

Abbreviations for names of institutions used in this publication

BIS	Bank for International Settlements
CPB	Netherlands Bureau for Economic Policy Analysis
CRB/CCE	Centrale Raad voor het Bedrijfsleven / Conseil Central de l'Economie
DGSB	FPS Economy - Directorate-General Statistics Belgium
EC	European Commission
ECB	European Central Bank
EU	European Union
FEBIAC	Fédération Belge des Industries de l'Automobile et du Cycle "réunies"
FPB	Federal Planning Bureau
FPS Economy	Federal Public Service Economy, S.M.E.s, Self-employed and Energy
FPS Employment	Federal Public Service Employment, Labour and Social Dialogue
FPS Finance	Federal Public Service Finance
IMF	International Monetary Fund
INR/ICN	Instituut voor de Nationale Rekeningen / Institut des Comptes Nationaux
IRES	Université Catholique de Louvain - Institut de Recherches Economiques et Sociales
NBB	National Bank of Belgium
OECD	Organisation for Economic Cooperation and Development
RSZ/ONSS	Rijksdienst voor Sociale Zekerheid / Office national de la Sécurité Sociale
RVA/ONEM	Rijksdienst voor Arbeidsvoorziening / Office national de l'Emploi

Other Abbreviations

BoP	Balance of Payments
CPI	Consumer Price Index
EUR	Euro
GDP	Gross Domestic Product
JPY	Japanese yen
LHS	Left-hand scale
OLO	Linear obligations
qoq	Quarter-on-quarter, present quarter compared to previous quarter of s.a. series
RHS	Right-hand scale
s.a.	Seasonally adjusted
t/t-4	Present quarter compared to the corresponding quarter of the previous year
t/t-12	Present month compared to the corresponding month of the previous year
UKP	United Kingdom pound
USD	United States dollar
VAT	Value Added Tax
yoy	Year-on-year, i.e. t/t-4 (for quarters) or t/t-12 (for months)