

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

Economic activity remained subdued in the euro area in the last quarter of 2002 and early estimates point to a stabilisation in the first quarter of the current year. International organizations are forecasting a gradual but only modest recovery in the course of 2003. In Belgium, GDP growth was higher than in the main neighbouring countries in the last quarter of 2002. This should also be the case in the first quarter of 2003. The FPB leading indicator for Belgium confirms the scenario of a recovery during the course of 2003. Annual GDP growth should nevertheless be only slightly above 1% this year.

Various risks could jeopardise the recovery in the euro zone: the continuing depreciation of the USD, and a slower recovery of confidence due to the situation in the labour market and/or the stock market.

The medium-term outlook for Belgium is pointing towards a GDP growth rate of 2.4% during the 2004-08 period, which is slightly higher than potential (2.1%). This favourable development is due to both net exports and domestic demand. Private consumption should become more dynamic during the 2004-2008 period, particularly thanks to the increase in households' disposable income (especially due to tax reform). Investment growth should attain 3% during the 2004-08 period, mainly reflecting the increase in business investment. Average export growth should be 5.3% during the same period and the contribution of net exports to GDP growth should be 0.3%. Thanks to limited wage and import cost increases and a negative output gap in the first years of the projection, the inflation rate will remain below 2% in the medium term.

The development of employment should reflect the favourable macroeconomic context, the limited increases in wage costs and various policy measures. After stagnating in 2003, about 32,000 jobs should be created every year during the 2004-2008 period (as compared with 43,000 jobs created on average during 1996-2002). Industrial employment should fall by 38,000 persons during the 2003-2008 period and the number of jobs created in market services should exceed 200,000. The unemployment rate (including long term unemployment of older workers) is still increasing in 2003 (from 13.3% to 14.0%), but will subsequently fall to 12.9% in 2008. The proportion of active job seekers within broad unemployment will increase, due to recent policy measures aimed at limiting early retirement.

The public accounts are expected to show a clear deterioration, with a net public administrations borrowing requirement appearing in 2003. Equilibrium is not expected to be reached until the end of the period covered by the forecast.

STU 2-03 was finalised on May 28th 2003.

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.

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Table of Contents

Special Topic	3
• Estimating potential growth in Belgium	
Economic Forecasts	5
• Economic forecasts 2003-2008	
Summary of Economic Forecasts	7
• Economic forecasts for Belgium by the Federal Planning Bureau	
• Economic forecasts for Belgium by different institutions	
Recent Economic Developments	8
• General economic activity	
• Private consumption	
• Business investment	
• Housing investment	
• Stock building	
• Foreign Trade	
• Labour market	
• Prices	
• Interest rates	
• Exchange rates	
• Tax indicators	
Recent publications	19
• A step towards Sustainable Development? Second Federal Report	
• The 1995 Belgian Input-Output Tables	
• Economic effects of various ways of increasing energy taxation in Belgium	
• A quarterly model for the Belgian economy	
• Electricity demand in Belgium by 2010: comparative analysis of model projections	
• ICT Diffusion and Firm-level Performance : Case Studies for Belgium.	
Economic Policy Measures	23
• Recent history of major economic policy measures	
Abbreviations	24

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Estimating potential growth in Belgium

Although widely used in the policy arena, especially in EU macroeconomic surveillance procedures, potential output is, by definition, unobservable. Many different approaches and techniques have therefore been proposed, and these provide estimates which may vary significantly from each other. Here we comment briefly on the advantages and disadvantages of these various approaches and present the reference method for the estimation of output gaps adopted last year by the ECOFIN Council. We apply this methodology to the economic forecasts 2003-2008 released by the FPB.

The EU reference method for computing potential growth

The estimate of potential output is used as a synthetic indicator of the aggregate supply capacity of an economy. It therefore makes possible to assess the scope for non-inflationary growth. Given the importance of this concept and the fact that potential output is unobservable in practice, the computation of potential growth has led to intensive and contentious debates in academic and policy-making circles.

These debates led to a recent change in the method employed by the European Commission to estimate potential growth in the annual assessment of the stability and convergence programmes of the member states¹. In the past, a purely statistical approach based on the Hodrick-Prescott (HP) filter has been used to evaluate the cyclical position of the economy. Last year a new method based on a production function was developed by the services of the European Commission².

Unlike statistical methods, an economic approach makes it possible to identify how the various factor inputs (capital stock, labour supply etc.) and technical progress contribute towards potential growth. This breakdown in determinants highlights the constraints that weigh on the economic system and the role of economic policy and structural reforms in strengthening growth. Another advantage of this kind of approach is that it establishes a clear link between the concept of potential growth and the NAIRU, i.e. the unemployment rate compatible with steady inflation. Indeed, the computation of potential growth is based on an estimation of the non-inflationary utilisation rate of input factors, particularly for labour. Finally, the production function method offers the possibility of building different growth scenarios for the future based on hypotheses for

the evolution of various demographic, institutional and technological factors.

Although the use of a production function as a tool to estimate potential growth meets most of the objections that are levelled against statistical methods, it still has one major drawback: the results obtained are not independent of the modelling and estimation strategy that is used. Furthermore, the results are sensitive to the assumptions made in constructing the data, for instance to build series for capital stock or total factor productivity.

Considering the fact that the primary use of the methodology is an operational one, i.e. as a surveillance tool in the assessment of stability programmes³, the approach adopted by the European Commission had to respect some basic principles in order to guarantee full transparency and equal treatment of all member states. The methodology therefore assumes a fairly simple production function: a Cobb-Douglas technology with two factor inputs (labour and capital) and constant returns to scale. In the case of capital, an exhaustive concept is used which includes private and public spending. Labour is measured by the number of employees. Estimation of the NAIRU is based on the Kalman filter, a method that relies on both structural econometric foundations and statistical techniques to extract unobserved components. More precisely, the economic information contained in a Phillips curve linking changes in wage inflation to cyclical unemployment is used to identify the cyclical component. In addition, the sample mean of this 'unemployment gap' is limited to zero. Total factor productivity, which summarizes the overall progress in factor input efficiency, is measured as the HP filtered Solow residuals⁴. Indeed, as the Commission uses no correction for the degree of utilisation of factor inputs (labour, for instance, is measured as a head count and not in terms of hours worked), the Solow residuals are filtered to remove cyclical movements generated by the evolution in utilization rates.

Estimates for the Belgian economy

In this section we present the results obtained by applying the EC methodology to Belgian data. For the period up to 2002, we use FPB data which differ somewhat from the harmonized European Commission data. For the forecast period, the European Commission uses univariate statistical methods to extrapolate exogenous varia-

1. European Commission, "Economic Forecasts, Autumn 2002", European Economy n° 5, November 2002.

2. Denis C., Mc Morrow K. and Röger W., "Production function approach to calculating growth and output gaps", European Economy, Economic Paper n° 176, September 2002.

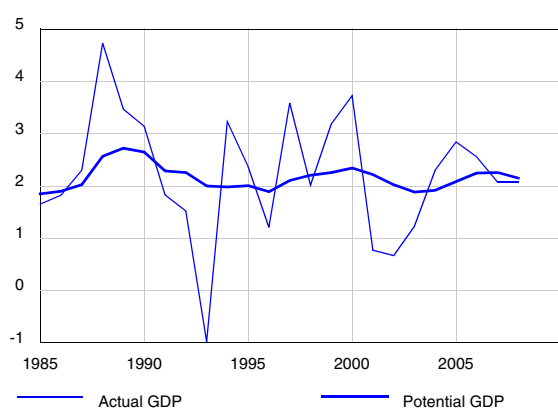
3. Potential output estimates are required to calculate cyclically adjusted government balances.

4. These residuals are obtained by regressing output on factor inputs and thus represent the part not explained by the quantity of production factors used.

bles but here the inputs are provided by the FPB medium-term economic outlook of May 2003 (a summary of which is given on p. 5-6 of this publication).

The first graph shows that potential growth was above 2.5% at the end of the eighties before declining during the first half of the nineties. Potential growth gradually recovered towards the end of the millennium before decreasing again until 2003. Although much smoother than actual growth, potential growth still shows some cyclicity. This is due to the fact that in periods of upswings the investment to output ratio increases, which implies faster capital accumulation and thus higher potential growth. The opposite phenomenon occurs in periods of downturns. On a yearly average, potential output grew by 2.2% between 1985 and 2002.

Graph 1 - Actual and potential GDP growth (annual % change)



As was mentioned earlier in the text, the main benefit of a methodology based on a production function is that it provides a breakdown of potential growth according to its different determinants. The contribution of labour as a production factor will be determined by the evolution of working age population, the participation rate and the NAIRU. The contribution of capital will depend on the investment to output ratio and the depreciation rate. The contribution of total factor productivity measures the global improvement in productivity linked to technical progress. The computation of these contributions for the Belgian economy is presented in the table below for the periods 1998-2002 and 2003-2008.

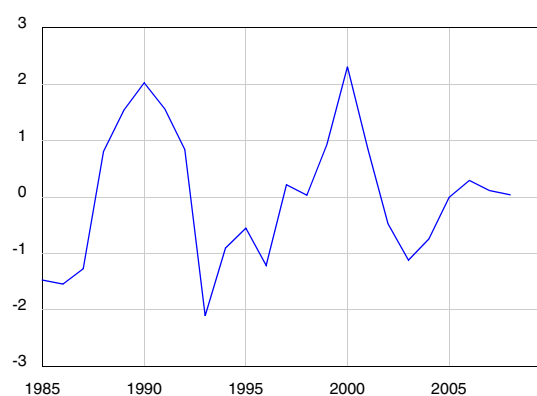
Table 1 - Potential growth and contributions

	1998-2002	2003-2008
Potential growth	2.3	2.1
Contributions		
Labour	0.6	0.5
Capital	0.8	0.5
Total factor productivity	0.9	1.0

Over the forecast period covered by the medium-term economic outlook, potential growth should reach 2.1% on average. Labour and capital should contribute somewhat more than 0.5 percentage points each, while the contribution of total factor productivity should be slightly above 1 percentage point. Note that potential growth is weaker than in the previous sub-period; this is mainly due to higher investment to GDP ratios in the years 1999-2001 and increasing depreciation rates during the forecast period. These higher depreciation rates, however, imply that the mean age of capital stock is declining, which has a positive impact on total factor productivity. The contribution of labour should be somewhat lower as the further increase in the working age population is more than offset by the slower progress in the participation rate.

The last graph shows the evolution of the output gap (i.e. the difference between actual and potential GDP, expressed as a percentage of the latter) since the middle of the eighties. The output gap gives an indication of the position of the economy in the business cycle. A positive gap indicates that the economy is above its potential level and that tensions may appear, in particular on prices and wages. In years when the gap is negative, the opposite is true: the economy is performing below its potential. Two peaks clearly emerge in 1990 and 2000 and the recession in 1993 constitutes the trough between them.

Graph 2 - Output gap (% of potential GDP)



According to economic forecasts, the trough in the current cycle should be reached this year and the output gap should be closing during the coming two years. As usual during an upswing, GDP should overshoot its potential level before converging towards it again by the end of the projection period.

The FPB medium-term economic outlook for April 2003 covers the period from 2003 to 2008. Detailed analyses of macroeconomic, sectoral and labour market developments are presented. There is also detailed comment on the public finance results of the federal government, regions and communities, local authorities and social security departments. A special chapter is devoted to the evolution of energy consumption and greenhouse gas emissions. The baseline is an unchanged policy scenario, notably with regard to fiscal and social policies and institutional arrangements. Based on this scenario, the financing capacity of the general Government is slightly negative from 2003 to 2006. A balance should be reached at the end of the projection period. This result means that the objective of a balanced budget in 2003 and a financing capacity of 0.5% of GDP in 2005 (as set out in the Stability Program) will not be reached without additional measures.

Based on forecasts from international organizations, the outlook for Europe suggests that, after growth of only 1.0% in 2003, the rate of European GDP expansion (eurozone) will reach 2.3% in 2004, peak at 2.5% in 2005 and then stabilize at a rhythm close to its potential (2.1% per year during the period 2006-2008). Inflation, after accelerating in 2000-2002, should remain below 2%, notably thanks to wage increases below productivity gains. A rise in nominal interest rates is also considered, due to stronger economic growth. This increase would be limited, however, because of the reduction of public deficits in the euro area and inflation remaining under control.

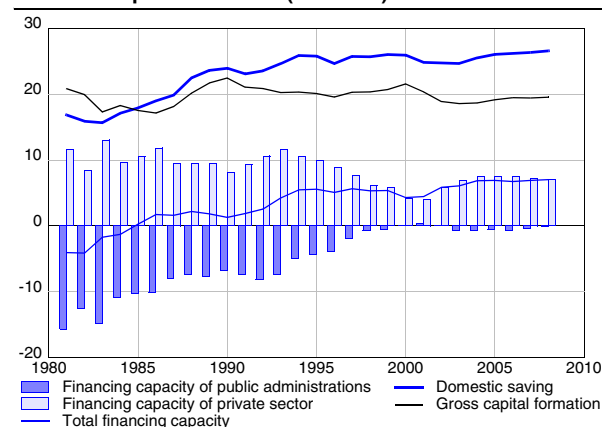
After a poor economic performance during the period 2001-2003, Belgian GDP growth should reach an average of 2.4% for the period 2004-2008. This favourable development is due to net exports and domestic demand.

After very moderate growth in 2003, private consumption should become more dynamic during the 2004-2008 period, particularly thanks to a favourable development in households' disposable income (stimulated in particular by major fiscal reforms). Gross fixed capital formation should also recover: after a limited growth in 2003, the rate of expansion of investments should attain 3% for the period 2004-2008, mainly reflecting the increase in business investment.

Growth in exports is expected to be low in 2003 (2.7%), due to the unfavourable international context. Subsequently, export growth should attain 5.3% on average and the contribution of net exports to GDP growth should be equal to 0.3% of GDP. The external surplus should reach 7% of GDP in 2008 (partly due to the recovery of the terms of trade). The level of the external sur-

plus also reflects abundant domestic savings, against the background of a public financing capacity near to equilibrium.

Graph 1 - Financing capacities, domestic saving and capital formation (% of GDP)



Limited wage increases (compatible with productivity gains) and a moderate increase of imported costs are the main factors driving an inflation rate that will remain below 2% in the medium term. Moreover, a negative output gap in the first years of the projection will help to keep inflation low.

Employment figures should show a gradual improvement: after a small decrease in 2003, about 32,000 jobs should be created every year during the 2004-2008 period (as compared with 43,000 jobs created on average during the 1996-2002 period). This result can be explained by the following factors:

- the favourable macroeconomic context, with GDP growth recovering from 1.2% in 2003 to 2.3% in 2004 and 2.4% on average thereafter;
- limited increases in labour costs (introduced as a hypothesis within the framework of the 1996 law on the promotion of employment and on the safeguarding of competitiveness) should be backed by measures aiming at bringing about an expansion of the labour force and by the fiscal reform; non wage costs should not fall any further, due to increases in the second pillar pension scheme and due to unchanged cuts in employers' contributions.
- the various measures taken in favour of employment (mainly activation and insertion programs) and working time reduction.

The decline in industrial employment should continue, with the number of jobs lost in manufacturing industry reaching 38,000 during the 2003-2008 period. At the same time the number of jobs created in market services should exceed 200,000, bringing the share of employment in market services to more than 58% of total em-

ployment (43% in 1980 and 50% in 1990).

The population of working age will increase considerably (by 162,500 persons) during the 2003-2008 period, mainly because the sparsely populated generations that were born during the second world war will be leaving the population of working age. The overall participation rate is favourably influenced by the increase in female participation rates, but suffers from adverse demographic changes (increasing share of older age groups) within the population of working age.

Given the strong increase in the population of working age, the renewed net job creation from 2004 onwards only brings about modest increases in the employment rate. The employment rate drops for two consecutive years in 2002 and 2003, before gradually rising from 61.6% in 2003 to 62.7% in 2008. The employment rate in the older age groups (50 and above) has been growing and will continue to grow above average. In combination with the demographic changes in favour of this age group, this will lead to a marked increase in the proportion of persons aged 50-64 in the working population who are aged 15-64 (from 18.6% in 02 to 21.5% in 08).

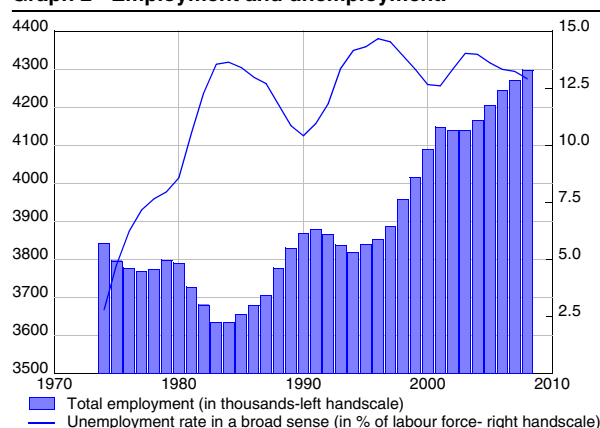
Given the considerable increase in the labour force, net job creation will only just be sufficient to gradually force unemployment in absolute terms back to its 2002 level. The unemployment rate should still increase in 2003 (from 13.3% to 14.0%), but should then drop to 12.9% in 2008. Due to the implementation of recent policy measures (aimed at discouraging the access to early retirement schemes for people on unemployment benefits), the proportion of active job seekers within unemployment in a broad sense will increase.

In comparison with the April 2002 forecast, there should be a marked deterioration in the public accounts. A net financing requirement of public administrations should

appear in 2003, fluctuating around -0.7% of GDP in the 2004-2006 period. Equilibrium is only expected to be restored at the end of the projection period.

The aim of a balanced budget in 2003 and of a financing capacity equal to 0.5% of GDP in 2005 (mentioned in the Stability Program) is not expected to be reached, without additional measures. Nevertheless, the total public debt to GDP ratio should continue to fall, going down by about 19 percentage points between 2002 and 2008.

Graph 2 - Employment and unemployment.



The reappearance of a public deficit will be accounted for by the slowdown of activity and increased public expenditure in the short run and by declining receipts until 2006. Federal authorities and social security though benefiting from the reduction in interest charges, are responsible for the reappearance of a global deficit (because of the reduction in the primary surplus until 2004). Federal authorities should reach equilibrium once again in 2008. Communities, Regions and Local authorities should maintain a positive financing capacity throughout the whole forecasting period.

"Perspectives économiques 2003-2008", BFP, avril 2003.

"Economische vooruitzichten 2003-2008", FPB, april 2003.

Table 1 - Key figures for the medium term economic outlook (period averages- changes in volume unless otherwise stated)

	1991-1995	1996-2002	2003-2008
Potential export market	5.8	5.9	5.6
Private consumption	1.7	1.9	1.9
Public consumption	1.5	1.9	1.6
Gross fixed capital formation	-0.4	2.5	2.6
Stock building (contribution to GDP growth)	0.1	-0.1	0.0
Final internal demand	1.2	1.9	2.1
Exports	4.0	4.0	4.9
Imports	3.6	3.8	4.9
Net exports (contribution to GDP growth)	0.4	0.3	0.3
GDP	1.6	2.2	2.2
Private consumption prices	2.3	1.8	1.5
Real disposable income households	2.1	1.1	2.1
Domestic Employment (annual changes in '000)	-5.7	42.9	26.5
Unemployment, FPB definition (end of period)			
thousands	649.1	643.8	644.8
% of active population	14.3	13.3	12.9
Current account balance (% of GDP, end of period)	5.7	5.9	7.0
General Government financing capacity (% of GDP, end of period)	-4.3	0.0	0.0

Economic forecasts for Belgium by the Federal Planning Bureau

Changes in volume (unless otherwise specified) [1]				
	2001	2002	2003	2004
Private consumption	0.9	0.6	1.0	1.7
Public consumption	2.2	1.8	1.9	1.6
Gross fixed capital formation	0.5	-2.7	0.8	2.9
Final national demand	0.5	0.3	1.3	1.9
Exports of goods and services	1.1	-1.0	2.7	5.6
Imports of goods and services	0.8	-1.5	2.9	5.4
Net-exports (contribution to growth)	0.3	0.3	0.0	0.5
Gross Domestic Product	0.8	0.7	1.2	2.3
p.m. Gross Domestic Product - in current prices (bn euro)	254.28	261.82	270.28	281.56
National consumer price index	2.5	1.6	1.5	1.4
Consumer prices: health index	2.7	1.8	1.4	1.5
Real disposable income households	0.5	1.5	1.7	2.0
Household savings ratio (as % of disposable income)	14.9	15.6	16.1	16.4
Domestic employment (change in '000, yearly average)	58.6	-9.0	-1.1	26.3
Unemployment (Eurostat standardised rate, yearly average) [2]	6.7	7.3	7.8	7.9
Current account balance (BoP definition, as % of GDP)	4.0	4.7	4.9	5.7
Short term interbank interest rate (3 m.)	4.2	3.3	2.4	2.7
Long term interest rate (10 y.)	5.1	5.0	4.3	4.4

[1] Forecasts finalised in early April, before publication of National Accounts 2002

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

Economic forecasts for Belgium by different institutions

	GDP-growth		Inflation		Government balance		Date of update
	2003	2004	2003	2004	2003	2004	
Federal Planning Bureau	1.2	2.3	1.5	1.4	-0.7	-0.7	4/03
National Bank of Belgium	2/03
European Commission	1.2	2.3	1.4	1.3	-0.2	-0.1	3/03
OECD	1.3	2.3	1.4	1.2	0.0	0.2	4/03
IMF	1.1	2.2	1.2	1.2	0.0	0.0	4/03
BBL	1.0	2.2	1.5	1.8	-0.3	0.3	5/03
Fortis Bank	1.2	2.0	1.9	1.9	-0.1	0.0	5/03
Dexia	1.0	2.0	1.5	1.5	.	.	5/03
KBC Bank	1.3	2.4	1.3	1.4	-0.2	0.2	3/03
Morgan Stanley	0.9	2.3	1.6	1.5	-0.6	-0.3	5/03
Petercam	0.75	1.5	0.75	0.7	-0.5	-0.5	5/03
IRES	0.9	.	2.0	.	-0.2	.	3/03
DULBEA	1.0	2.0	1.5	1.5	-0.5	-0.25	4/03
Consensus Belgian Prime News	1.3	2.3	1.5	1.6	-0.1	0.3	3/03
Consensus Economics	1.1	1.8	1.5	1.7	.	.	5/03
Consensus The Economist	1.1	2.1	1.4	1.4	.	.	5/03
Consensus Wirtschaftsinstitute	1.0	2.4	1.6	1.4	-0.5	-0.3	4/03
Averages							
All institutions	1.1	2.1	1.5	1.4	-0.3	-0.1	
International public institutions	1.2	2.3	1.3	1.2	-0.1	0.0	
Credit institutions	1.1	2.1	1.4	1.5	-0.3	0.0	

Collaborating institutions for The Economist: ABN Amro, Deutsche Bank, EIU, Goldman Sachs, HSBC Securities, KBC Bank, Merrill Lynch, J.P. Morgan Chase, Morgan Stanley, Nordea, Decision Economics, BNP Paribas, Royal Bank of Canada, Schroder Salomon Smith Barney, Scotiabank, UBS Warburg.

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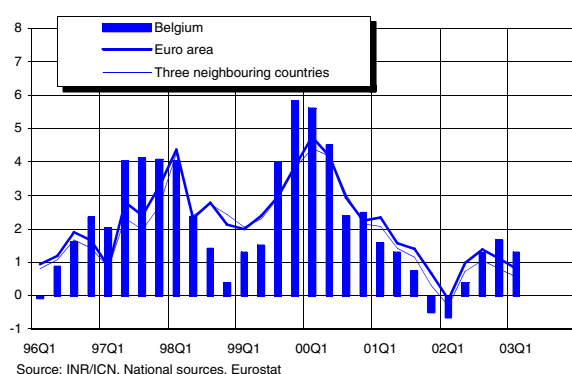
General economic activity

Table 1 - GDP growth rates, in %

			YoY growth rates, in %					QoQ growth rates, in %				
	01	02	02Q1	02Q2	02Q3	02Q4	03Q1	02Q1	02Q2	02Q3	02Q4	03Q1
Germany	0.6	0.2	-1.2	0.4	1.0	0.5	0.5	0.3	0.2	0.3	0.0	-0.2
France	2.1	1.2	0.8	1.4	1.3	1.5	1.0	0.7	0.5	0.3	-0.1	0.3
Netherlands	1.3	0.2	-0.1	0.2	0.7	0.1	-0.3	0.1	0.3	0.1	-0.2	-0.3
Belgium	0.8	0.7	-0.7	0.4	1.3	1.7	1.3	0.5	0.4	0.5	0.3	0.2
Euro area	1.5	0.8	-0.1	1.0	1.4	1.1	0.8	0.4	0.4	0.3	0.1	0.0
United States	0.3	2.4	1.4	2.2	3.3	2.9	2.1	1.2	0.3	1.0	0.3	0.5
Japan	0.4	0.2	-3.0	-0.3	1.7	2.3	2.7	0.0	1.3	0.8	0.5	0.0

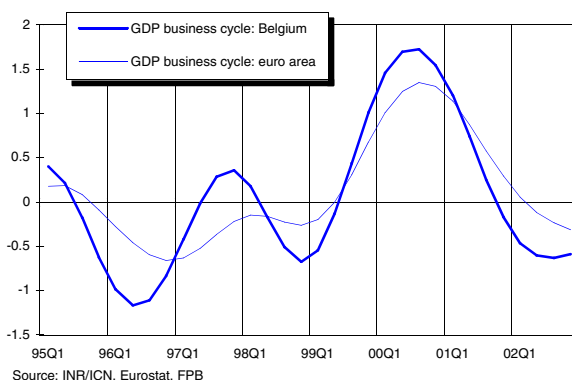
Source: INR/ICN, National sources, Eurostat

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



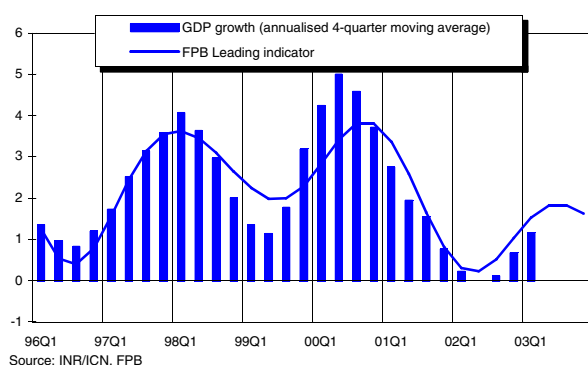
Source: INR/ICN, National sources, Eurostat

Graph 2 - GDP business cycle



Source: INR/ICN, Eurostat, FPB

Graph 3 - GDP growth and leading indicator



Source: INR/ICN, FPB

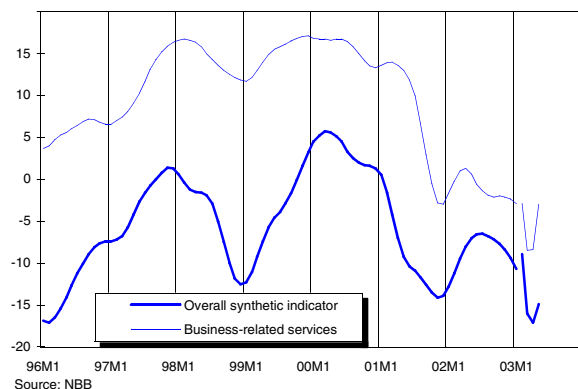
Economic activity in the US remained moderate in the first quarter of 2003 and well below expectations. Despite sluggish US consumer confidence, however, consumer demand compensated for the unexpected fall in business investment. Net exports contributed positively to GDP growth due to the sharp decline in US imports which partly explain the estimated fall in world trade volumes during the same period. After the strong, but short-lived, rebound recorded during the second quarter of 2002, the Japanese economy is again decelerating since activity is impeded by a slackening domestic demand and the appreciation of the Japanese yen against the US dollar.

In the euro area, economic activity remained subdued in the last quarter of 2002 and early estimates point to a stabilisation in the first quarter of the current year. This disappointing result should nevertheless be analysed in the context of the high level of uncertainties, associated with geopolitical tensions, that prevailed during this period, and also of declining activity in the Netherlands, Italy and Germany. In Belgium there was higher quarterly GDP growth than in its main neighbouring countries in the last quarter of 2002, but, as in the average of the euro area, Belgian activity will probably stagnate in the first quarter of 2003.

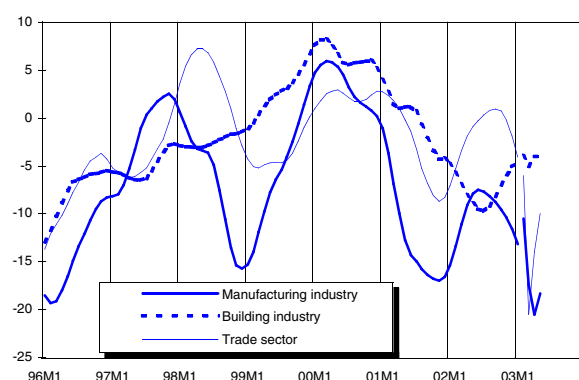
Analysing the business cycle and leading indicators appear to be particular difficult at the turn of the year. On the one hand, the business survey indicator of the National Bank of Belgium, which has an average lead of two quarters with respect to the euro area business cycle, points to a further deterioration in the first quarter of 2003. On the other hand, the Belgian business cycle, which used to be considered as a leading indicator for the euro area economy by one quarter, is suggesting that a turning point in the current downwards cycle may have been reached in the last quarter of 2002.

The FFB leading indicator for Belgium indicates that, after the sharp slowdown throughout 2001 and the first half of 2002, Belgian GDP should see a gradual but only modest recovery in the course of 2003.

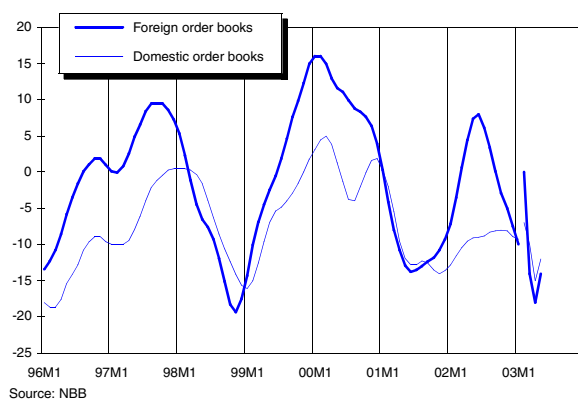
Graph 4 - Business cycle: global evolution



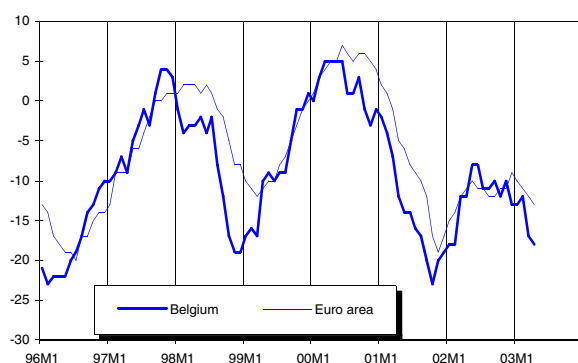
Graph 5 - Business cycle: sectoral evolution



Graph 6 - Manufacturing industry: order books



Graph 7 - Industrial confidence: international comparison



The smoothed overall business indicator for the Belgian economy has been following a downward trend since mid-2002. So far, 2003 has brought no change for the better: after a slight improvement in February, the overall indicator fell sharply in March, mainly reflecting mounting tensions and uncertainty in the weeks prior to the start of the military intervention in Iraq. This resulted in the third consecutive quarter with a deterioration in the global business climate, after a short pick-up during the first half of 2002. Despite a somewhat clearer geopolitical context, the overall indicator continued its fall in April and the improvement noted in May was only slight.

Given the special circumstances, it should not be surprising that the deterioration of the overall business climate in March was reflected in all business sectors considered (manufacturing industry, building industry, trade and business related services). In April, business confidence was eroded further only in manufacturing industry, due to falls in both foreign and domestic order books. It became clear that the rise in February of the foreign order books indicator, which has been very volatile recently, was not a forerunner of a fundamental improvement. Despite the rise in May, most manufacturing industry indicators were still below their low levels seen in March. The fall in industrial confidence during the last few months was more pronounced in Belgium as compared with the euro area, largely due to the open character of the Belgian economy and its limited size.

The picture of the trade sector is less negative than of the manufacturing industry and somewhat more mixed. Unlike manufacturing industry, confidence in the trade sector had already recovered in April and rose further in May. This did not, however, fully compensate for the sharp fall registered in March. The smoothed trade sector indicator remained on an upward path for the majority of 2002 and began to decrease only in October, i.e. three months later than in manufacturing industry.

The building industry shows another different, slightly positive, picture. An upturn in the smoothed building industry indicator was seen from August 2002 onwards, at a time when the rest of the economy began its downturn. Despite temporary falls in January (weather conditions) and March (Iraq war), the fundamental trend in the building sector is still slightly upwards.

In line with the global business cycle, the weakening of the indicator for the business-related services sector (which is not included in the overall synthetic indicator) broadly continued during the first few months of this year. The improvement in May was somewhat more pronounced than in the other business sectors.

Private consumption

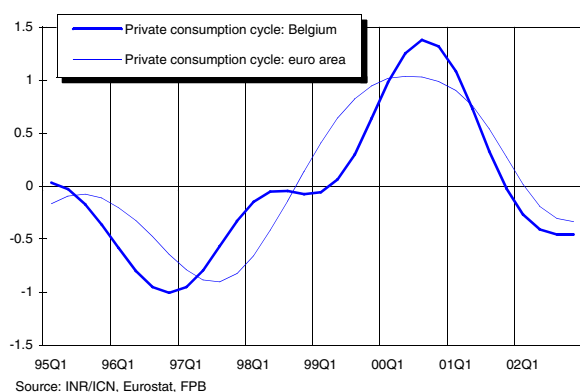
Table 2 - Private consumption indicators

	01	02	02Q2	02Q3	02Q4	03Q1	02M11	02M12	03M1	03M2	03M3	03M4
New car registrations [1]	-5.1	-4.3	-3.6	-10.6	-14.0	-12.1	-18.0	-14.4	-10.2	-17.3	-9.0	-16.5
Consumer confidence indicator [2]	0.6	-2.7	-1.3	-2.7	-3.7	-14.3	-2.0	-7.0	-11.0	-14.0	-18.0	-11.0

[1] Change (%) compared to same period previous year; [2] Qualitative data

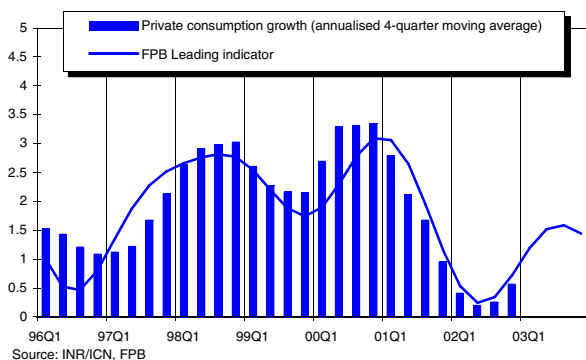
Source: Eurostat, Febiac, FPB

Graph 8 - Private consumption cycle



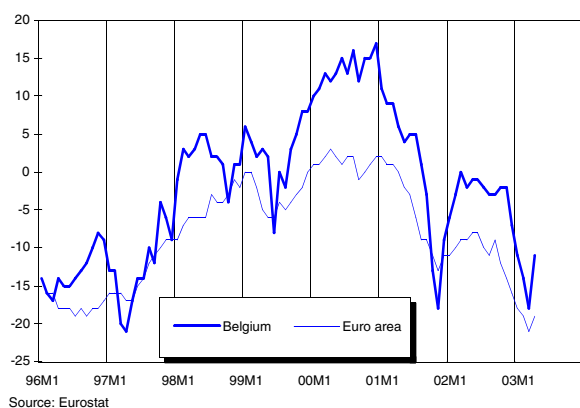
Source: INR/ICN, Eurostat, FPB

Graph 9 - Private consumption growth and leading indicator



Source: INR/ICN, FPB

Graph 10 - Consumer confidence: international comparison



Source: Eurostat

The bottoming out of the Belgian private consumption cycle that began in the third quarter of 2002 was confirmed in 2002Q4. This means that after stabilising in the fourth quarter of last year, private consumption is expected to rise again. The euro area consumption cycle continued its downward trend, although it should be noted that the bottom of the cycle seems to be near.

Belgian private consumption increased by 0.6% in 2002. This seems to be quite a poor performance, but this growth rate was negatively influenced by 0.5 percentage points by a reclassification of public radio and television broadcasting companies that caused some shifts in the national accounts. Positive factors behind the performance of private consumption were the sustained growth in disposable income, supported among other things by the reductions in personal income tax rates. The main factor dampening private consumption growth was the rise in the savings rate caused by falling consumer confidence and the rise in unemployment.

Indicators of consumption such as consumer confidence and the NBB indicator for the trade sector deteriorated markedly during the first three months of the year due to uncertainty surrounding the military conflict in Iraq. They improved somewhat in April, but they are still at very low levels, reflecting the fact that consumers are tending to save a larger proportion of their income. In May, the rise in the consumer confidence index of April was confirmed due to more optimistic expectations regarding the future economic situation. This development will certainly underpin private consumer spending, but it does not assure a strong rebound. The FPB's leading indicator for private consumption confirms this picture, since it shows that growth rates should improve during 2003, but not as quickly as in previous upturns, considering that the indicator shows some hesitation from 2003Q3 onwards.

Our latest forecasts are more or less in line with the signals from the indicators as private consumption growth should rise to 1.0% this year. In fact, real disposable income will benefit from further personal income tax rate reductions, while the savings rate should dampen consumption growth somewhat as it is expected to rise further.

Business investment

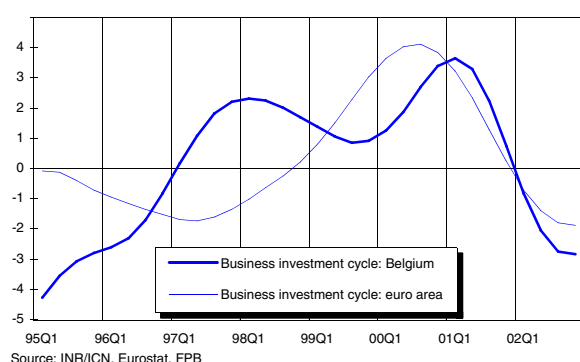
Table 3 - Business investment indicators

	01	02	03	02Q2	02Q3	02Q4	03Q1	02M10	02M11	02M12	03M1	03M2
Investment (VAT) [1]												
Industrial companies	-1.0	-5.4	.	-7.3	-11.4	7.8	.	16.6	-0.2	7.6	-14.7	4.8
Non-industrial companies	5.0	-3.2	.	-6.6	-5.4	0.9	.	-1.1	3.5	0.0	-10.2	-4.7
Total companies	2.9	-3.7	.	-6.6	-7.5	3.8	.	5.7	2.6	3.6	-11.8	-1.4
Investment survey [1]	-1.0	-14.0	6.5									
Capacity utilisation rate (s.a.) (%)	80.7	79.9	.	80.4	79.9	79.5	78.6					

[1] Change (%) compared to same period previous year

Source: NIS/INS, NBB, FPB

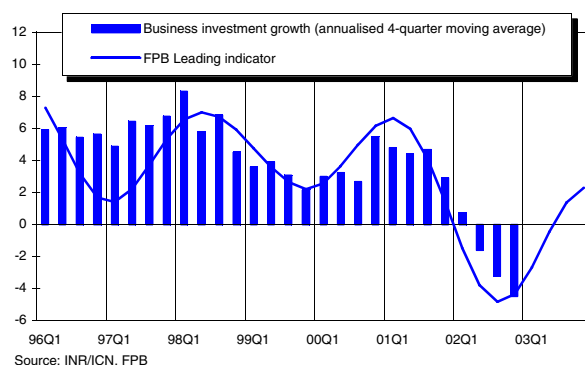
Graph 11 - Business investment cycle



Both in the euro area and in Belgium, investment cycles are approaching their lows. This bottoming out is also visible in the qoq growth rates that were heavily negative in 2002Q2, but turned positive again by the end of last year. Contrary to what has been observed during the last few years, it seems that the Belgian and euro area investment cycles are now moving more in line with each other.

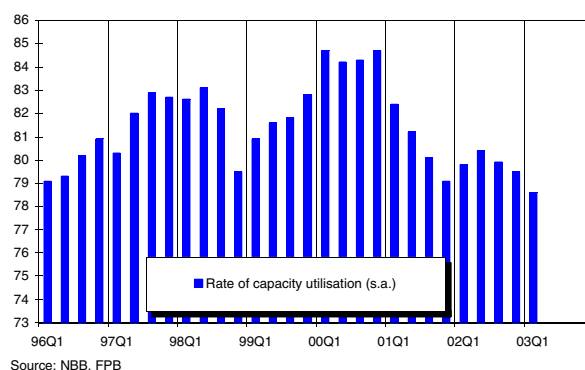
Belgian business investment growth declined sharply during the last two years, which was mainly the result of meagre demand prospects and worsening business sector profitability. 2002 in particular, which was also characterised by an unfavourable starting point, was a bad year for business investment with a strongly negative growth rate (-4.0%). Consequently, the investment rate at constant prices (real business investment as a percentage of GDP) declined from 14.5% in 2001 to 13.8% last year. Although this is a serious fall, the investment rate is still higher than it was during the downturn of 1993.

Graph 12 - Business investment growth and leading indicator



The FPB leading indicator suggests that business investment growth is on a rising path during the course of 2003 that should result in a positive growth rate over the year as a whole. Indicators supporting this development are VAT-based statistics showing an increase in investment expenditures in 2002Q4, after several quarters of declining figures. Other indicators, such as the capacity utilisation rate in manufacturing industry and the demand prospects for investment goods that come from the NBB business survey, improved during the first half of 2002 but were subsequently influenced on the downside, among other things by rising uncertainty about demand prospects.

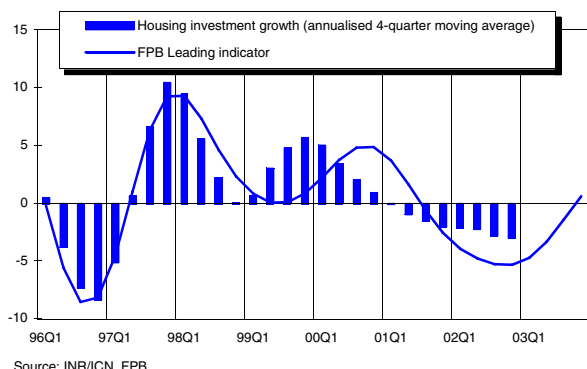
Graph 13 - Capacity utilisation in manufacturing industry



The mixed picture surrounding the development of business investment is confirmed in our latest forecasts that foresee a growth rate of 0.8% for 2003. Particularly at the beginning of this year, investment growth will be held back by the low rate of capacity utilisation and the climate of uncertainty, while these factors should gradually unwind later on.

Housing investment

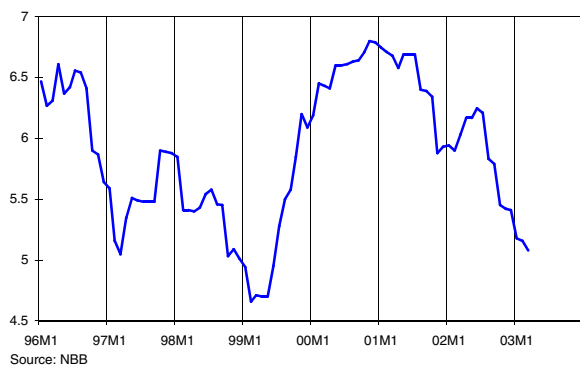
Graph 14 - Housing investment growth and leading indicator



According to the latest quarterly national accounts, housing investment growth (annualised 4-quarter moving average) became negative in the first quarter of 2001 and fell back further until the fourth quarter of 2002. As a result, housing investment decreased by 3% last year, after a fall of 2% in 2001.

The deteriorating climate in the housing construction sector over the past two years can also be seen in the development of the related FPB leading indicator, which is based on quarterly surveys of architects, monthly business surveys in the house-building industry and mortgage applications submitted (for building and conversion projects). This leading indicator points to a change for the better in the near future.

Graph 15 - Mortgage rate (%)

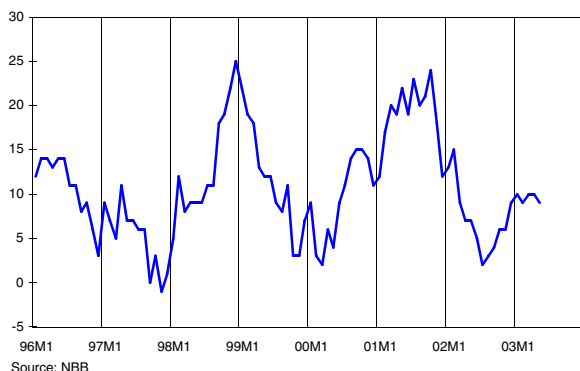


The results of surveys of architects, which usually have a one-year lead, were edging up during the course of last year, which should support building activity during the coming quarters. The same is true for indicators taken from the monthly business surveys in the house-building industry, which have a shorter lead and reached a turning point by the end of last year. Mortgage rates have been following a marked falling trend since the beginning of 2001, bringing them to a level that is only 40 base points above the low reached at the beginning of 1999. In parallel with this, mortgage applications, which lead building activity by almost one year, have been on an upward path for the last two years.

According to all this, the annual growth rate in housing investment should again become positive this year and remain so next year. It is expected to be limited, however, by the continuing gloom in the labour market.

Stock building

Graph 16 - Appreciation of stocks



According to the latest quarterly national accounts, stock building acted pro-cyclically in 2001 – indeed the slowdown in the business cycle was partly fed by substantial destocking by firms -, whereas in the course of 2002, contra-cyclical behaviour can be noted. In fact, the improvement in the business cycle during the first half of last year involved substantial destocking and a falling number of entrepreneurs who considered their stocks to be excessive. Lower than expected growth during the second part of 2002 led to rebuilding of stocks. This rebuilding was largely unintentional, as can be seen from the turnaround in opinion on stocks in the second half of 2002, given in graph 16. This contra-cyclical behaviour of stock building should not be seen as surprising in the context of the recent brief and highly unexpected swings in the business cycle.

Foreign Trade

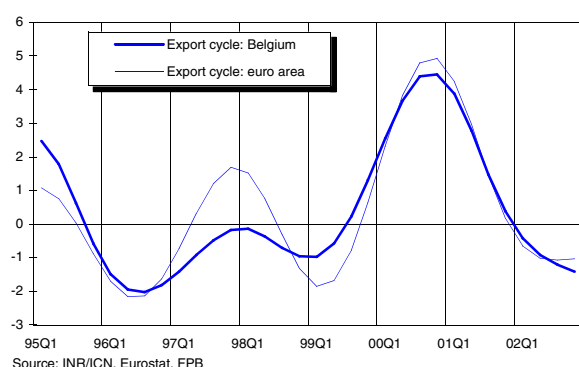
Table 4 - Belgium - Trade statistics (goods, intra/extrastat)

	01	02	02Q1	02Q2	02Q3	02Q4	02M9	02M10	02M11	02M12	03M1	03M2
Exports - value [1]	4.2	6.4	1.6	6.7	10.2	7.7	15.5	11.8	4.5	6.4	0.7	0.4
Imports - value [1]	3.8	4.6	-0.6	2.5	8.7	8.5	13.4	12.6	5.5	7.3	-1.9	2.1
Exports - volume [1]	2.0	7.5	2.1	9.0	11.6	7.8	15.9	11.3	4.3	7.6	-1.9	-1.1
Imports - volume [1]	1.5	7.1	1.2	7.1	12.6	8.3	15.0	12.0	6.6	6.4	-3.2	0.4
Exports - price [1]	2.2	-1.0	-0.5	-2.0	-1.2	-0.2	-0.3	0.4	0.2	-1.1	2.7	1.4
Imports - price [1]	2.4	-2.4	-1.9	-4.2	-3.5	0.2	-1.4	0.5	-0.9	0.9	1.4	1.6

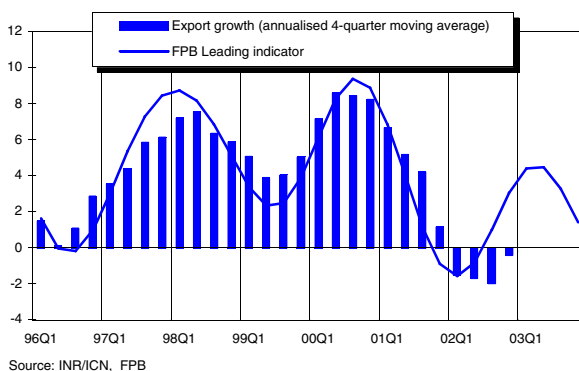
[1] Change (%) compared to same period previous year

Source: INR/ICN, FPB

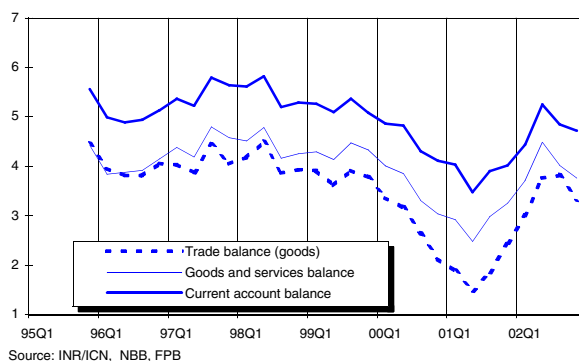
Graph 17 - Export cycle



Graph 18 - Export growth and leading indicator



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



After a tentative recovery in the first half of 2002, world trade weakened in the second half of last year, reflecting the global economic slowdown. Rising uncertainties and falling confidence in industrial countries could even have led to a decline in world trade in the first months of 2003. The steep downward trend in both the Belgian and the euro area export cycles reflects this deterioration in world demand. Both cycles are now actually at around the levels reached in the aftermath of the Asian crisis in 1998-99. Although there does seem to be some slight improvement in the euro area cycle, the Belgian export cycle is still on a downward trend, which could be partly explained by its dependency on German and Dutch imports.

Most leading indicators of Belgian exports, such as the OECD leading indicators for our three main trading partners, as well as foreign orders in Belgian manufacturing industry, point to a deterioration from mid-2002 onwards. The leading character of these indicators confirms that the minor turning-point seen in Belgian exports should be only short lived and, that after a real negative growth rate last year, Belgian exports should only register a modest growth in 2003. The appreciation of the euro exchange rate will also contribute towards this modest recovery.

Trade statistics also confirm that the recovery in yoy real export growth rates recorded since the beginning of 2002 has stopped in the end of 2002. Moreover, the first figures available for the first quarter of 2003 indicate a decline in export volume. It should also be stressed that since the beginning of the year these data are no longer subject to the bias resulting from the new activity in the pharmaceutical sector from December 2001.

Until mid-2002, the Belgian current account surplus expressed as a percentage of GDP increased sharply as a result of sluggish domestic demand and an improvement in terms of trade. Since then, higher oil prices and depressed exports have somewhat dampened this evolution.

Labour market

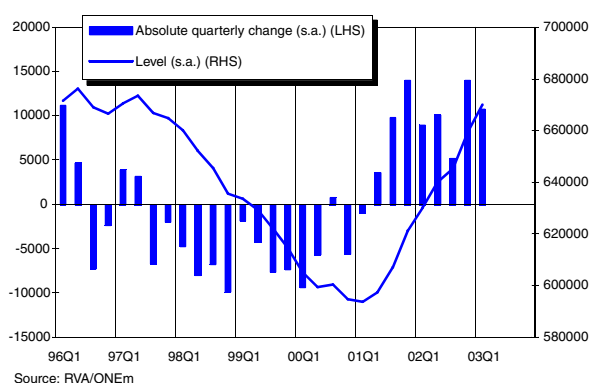
Table 5 - Labour market indicators

	01	02	02Q2	02Q3	02Q4	03Q1	02M11	02M12	03M1	03M2	03M3	03M4
Unemployment [1][2]	604.7	643.8	640.1	645.3	659.3	670.1	660.5	665.3	667.3	670.5	672.4	681.0
Unemployment rate [2][3]	12.6	13.3	13.2	13.4	13.6	13.8	13.6	13.7	13.8	13.8	13.8	14.0
Unemployment rate-Eurostat [3][4]	6.7	7.3	7.3	7.3	7.5	7.7	7.5	7.6	7.7	7.7	7.8	.

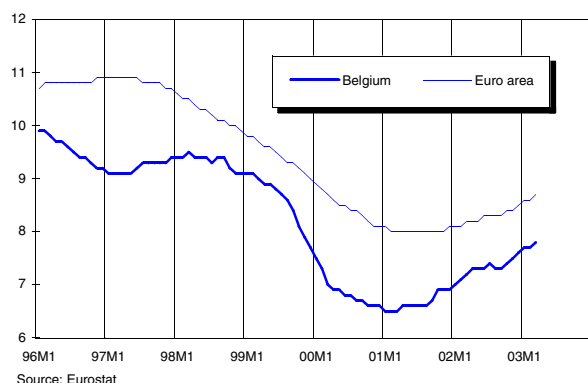
[1] Level in thousands, s.a.; [2] Broad administrative definition; [3] In % of labour force, s.a.

[4] Recent figures are based on administrative data and may be subject to revision

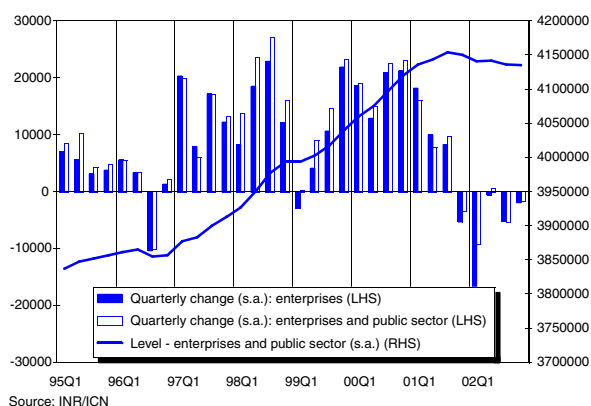
Graph 20 - Evolution of unemployment (incl. older)



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



Graph 22 - Evolution of domestic employment



Our revised concept of 'broad administrative unemployment' uses two different administrative data sources. Firstly it covers all job seekers - whether receiving unemployment benefit or not - registered by the regional job intermediation agencies (figures extracted from monthly attendance records). Historical time series have been roughly corrected for administrative changes in the way job seekers are registered. Second, the concept also includes people on unemployment benefits aged 50 or over who are no longer required to search actively for a job (figures are extracted from monthly payments records as from now). The Eurostat concept of 'harmonised unemployment' is based on labour force survey data and rests on the interpretation of interviewees' subjective responses to a set of questions. It excludes non job seekers and imposes strict criteria for active job search. Its level is therefore far lower than the measure of 'broad administrative unemployment'. Since administrative data becomes available with a shorter time-lag than survey data, however, the recent evolution in harmonised unemployment tracks the recent evolution of job seekers registered with the authorities.

The broad administrative unemployment rate increased from 12.6% to 13.3% in 2002. Broad unemployment soared in seasonally adjusted terms by a further 11,000 persons during the first quarter of 2003, in line with the average quarterly increases that have been observed throughout 2002 and pushing the seasonally adjusted unemployment rate up to 14.0% in April. On the basis of complete national accounts, with employment data for all quarters of 2002, domestic employment decreased by 0.2% on average (8,300 persons) last year. With the population of working age still growing considerably during 2002 (by 0.5% or 31,500 persons), the employment rate fell from 62.2% to 58.8%. This has ended an eight year spell of consecutive increases in the employment rate (1994-2001).

In view of the observed evolution of unemployment and given the expected evolution of labour supply, it may be conjectured that domestic employment remained more or less stable during the first quarter of 2003.

Prices

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

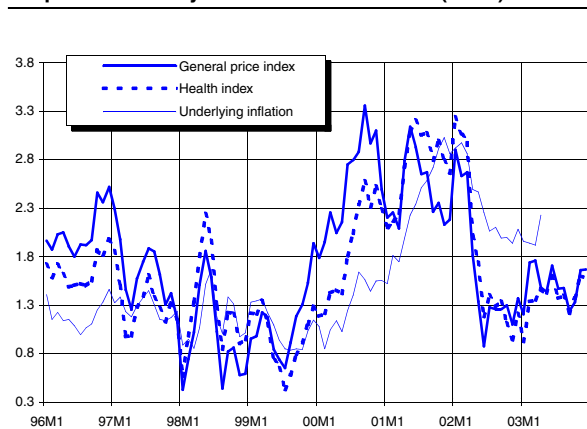
	01	02	02Q2	02Q3	02Q4	03Q1	02M11	02M12	03M1	03M2	03M3	03M4
Consumer prices: all items	2.47	1.64	1.34	1.26	1.26	1.57	1.10	1.37	1.21	1.74	1.76	1.48
Food prices	4.23	2.20	1.72	1.12	0.98	0.96	1.01	1.06	0.09	1.45	1.36	1.81
Non food prices	1.71	0.60	0.03	0.35	1.21	2.27	0.98	1.36	1.76	2.50	2.54	0.67
Services	2.46	2.66	2.85	2.51	1.29	0.85	1.08	1.39	1.00	0.74	0.80	2.30
Rent	1.91	2.46	2.43	2.58	2.53	2.34	2.56	2.55	2.42	2.30	2.30	2.28
Health index	2.74	1.78	1.64	1.34	1.09	1.20	0.94	1.21	0.92	1.34	1.35	1.47
Brent oil price in USD (level)	24.4	25.0	25.0	27.0	26.8	31.4	24.2	28.7	31.1	32.7	30.3	24.9

Source: FPS Economy, Datastream

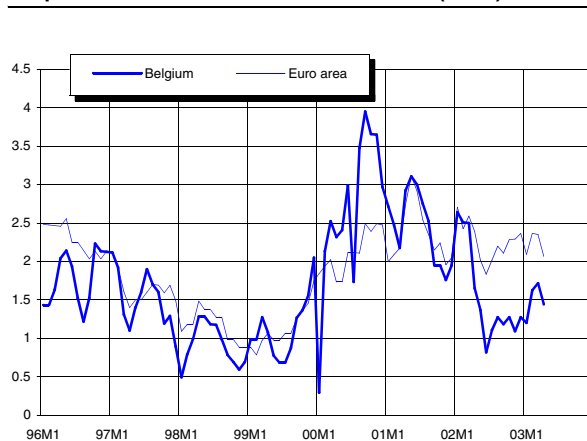
Table 7 - Monthly inflation forecasts

	02M1	02M2	02M3	02M4	02M5	02M6	02M7	02M8	02M9	02M10	02M11	02M12
Consumer prices: all items	110.22	110.40	110.69	110.72	110.89	110.58	110.94	110.91	111.22	111.09	111.00	111.06
Consumer prices: health index	109.93	110.09	110.33	110.11	110.35	110.09	110.44	110.39	110.62	110.43	110.46	110.55
Moving average health index	109.45	109.67	109.90	110.12	110.22	110.22	110.25	110.32	110.39	110.47	110.48	110.52
	03M1	03M2	03M3	03M4	03M5	03M6	03M7	03M8	03M9	03M10	03M11	03M12
Consumer prices: all items	111.55	112.32	112.64	112.36	112.48	112.47	112.57	112.55	112.60	112.57	112.84	112.91
Consumer prices: health index	110.94	111.56	111.82	111.73	111.92	111.85	111.95	111.93	111.96	111.94	112.23	112.30
Moving average health index	110.60	110.88	111.22	111.51	111.76	111.83	111.86	111.91	111.92	111.95	112.02	112.11

Source: Observations (up to 03M4): FPS Economy; forecasts: FPB

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

Source: FPS Economy, from 03M5 on: forecasts FPB

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

Source: Eurostat

Consumer price inflation, as measured by the yoy change in the national CPI, was almost stable at around 1.3% during the last six months of last year, but picked up again to 1.57% during the first quarter of this year (with a peak of 1.76% in March). This increase almost entirely reflects the surge in oil prices (the Brent oil price rose from 27 USD in the last half of 2002 to more than 31 USD in the first quarter of 2003) that occurred in the run-up to military action in Iraq. In April, the impact of lower fuel prices was partially offset by higher underlying inflation and the fading out of the (downward) effect of the abolition of television licence fees in Brussels and Flanders. Underlying inflation hardly fell at all since mid-2002, despite the continuing appreciation of the euro and the deepening of the (negative) output gap. Based on leading indicators, we consider the jump in underlying inflation last April as temporary and expect a deceleration in underlying inflation during the remaining months of this year.

The inflation gap between Belgium and the euro area narrowed somewhat during the first few months of this year, due to higher oil prices in the first quarter and the fading of the effect of the abolition of television licence fees from April onwards.

All in all, average CPI inflation should be 1.5% this year and 1.4% in 2004, after 1.6% last year. According to our monthly forecasts for the 'health index', the pivotal index for public wages and social benefits (currently 111.64) should next be crossed in May 2003.

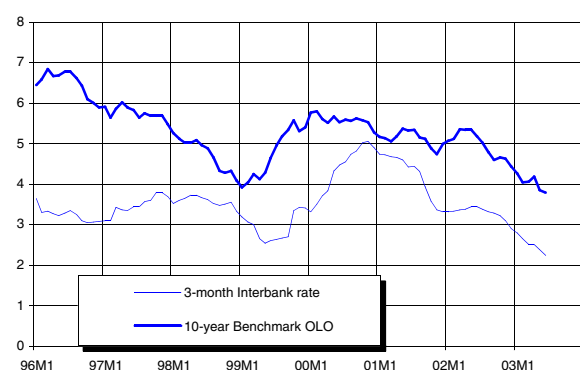
Interest rates

Table 8 - Interest rates

	01	02	02Q2	02Q3	02Q4	03Q1	02M11	02M12	03M1	03M2	03M3	03M4
Short-term money market rates (3 months)												
Belgium	4.23	3.29	3.42	3.33	3.08	2.66	3.10	2.91	2.81	2.66	2.51	2.51
Euro area (Euribor)	4.26	3.32	3.45	3.36	3.11	2.68	3.12	2.94	2.84	2.69	2.53	2.54
United States	3.69	1.73	1.83	1.76	1.49	1.26	1.39	1.34	1.29	1.27	1.23	1.25
Japan	0.12	0.02	0.03	0.02	0.01	-0.01	0.03	-0.03	-0.02	-0.02	-0.01	0.00
Long-term government bond rates (10 years)												
Belgium	5.12	4.97	5.29	4.81	4.58	4.13	4.64	4.45	4.27	4.04	4.07	4.18
Germany	4.79	4.81	5.16	4.73	4.43	4.07	4.49	4.51	4.22	4.09	3.91	4.02
Euro area	4.99	4.90	5.23	4.73	4.53	4.11	4.59	4.41	4.24	4.03	4.07	4.20
United States	5.01	4.59	5.08	4.23	3.99	3.90	4.03	4.02	4.02	3.88	3.80	3.94
Japan	1.32	1.24	1.35	1.20	0.98	0.79	0.96	0.93	0.84	0.82	0.71	0.65

Source: NBB, ECB

Graph 25 - Interest rate levels in Belgium, %

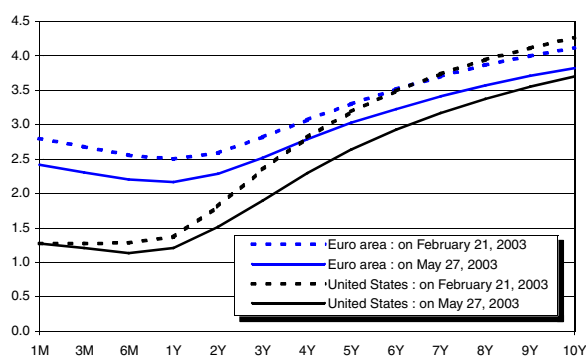


Source: NBB

The weakness of economic activity in the euro area at the beginning of the year and the dampening impact of the appreciation of the euro on domestic prices, persuaded the ECB to reduce its main refinancing rate from 2.75% to 2.5% on 6 March 2003. The virtually uninterrupted decline in short-term money market rates then almost came to a halt. Since the financial markets do have doubts about the capacity of the European economy to rebound rapidly, they are still expecting a further easing in the coming months.

During the first quarter of 2003, the Federal Reserve held its fed funds rate steady at 1.25%. Contrary to the situation prevailing some months ago, uncertainty over the timing and strength of the US economic recovery led financial markets to expect a further, albeit slight, interest rate cut in the near future.

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



Source: Datastream, data based on interest rate swaps

Due to the reallocation of capital flows to less risky bond markets and to downward revisions of short-term prospects, long-term government bond rates declined further in the first quarter of 2003 both in the US and in the euro area. The trough was reached in March since bond yields rose somewhat in both areas during April, reflecting the end of the war in Iraq and the associated decrease in uncertainty that led to a reversal of the "flight to safety" shifts in portfolios. Long-term interest rates however renewed their downward trend in May. It should also be stressed that the spread between corporate and government bond yields declined in the few last months, reflecting an improvement in the assessment of credit risks.

As a result of all these developments, the yield curve became slightly less steep in the US, as compared with the situation that prevailed three months ago, and shifted lower in the euro area.

Exchange rates

Table 9 - Bilateral exchange rates

	01	02	02Q2	02Q3	02Q4	03Q1	02M11	02M12	03M1	03M2	03M3	03M4
BEF per USD	45.05	42.67	43.85	41.00	40.29	37.58	40.26	39.53	37.99	37.43	37.32	37.15
USD per EUR	0.895	0.945	0.920	0.984	1.001	1.074	1.002	1.020	1.062	1.078	1.081	1.086
UKP per EUR	0.622	0.629	0.629	0.635	0.637	0.670	0.637	0.643	0.657	0.670	0.683	0.690
JPY per EUR	108.73	118.12	116.52	117.36	122.50	127.69	121.71	124.22	126.12	128.73	128.23	130.21

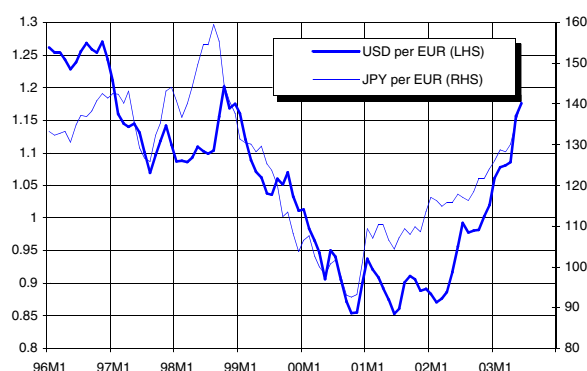
Table 10 - Nominal effective exchange rates (1990=100)

	01	02	02Q2	02Q3	02Q4	03Q1	02M11	02M12	03M1	03M2	03M3	03M4
Euro	79.7	82.1	81.1	83.4	84.5	88.5	84.5	85.4	87.4	88.7	89.4	90.0
Growth rate [1]	1.8	3.0	2.1	2.8	1.4	4.7	0.9	1.1	2.3	1.4	0.8	0.7
US dollar	121.2	119.9	121.3	116.1	116.5	111.8	116.1	115.4	112.4	111.8	111.3	111.4
Growth rate [1]	6.8	-1.1	-3.7	-4.3	0.3	-4.0	-1.5	-0.6	-2.6	-0.6	-0.4	0.0
Japanese yen	147.9	140.2	139.8	144.0	139.7	139.7	140.6	139.1	140.1	138.8	140.0	138.3
Growth rate [1]	-8.2	-5.2	1.8	3.0	-3.0	0.0	0.9	-1.1	0.8	-0.9	0.9	-1.2

[1] Change (%) compared to previous period

Source: BIS, NBB

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

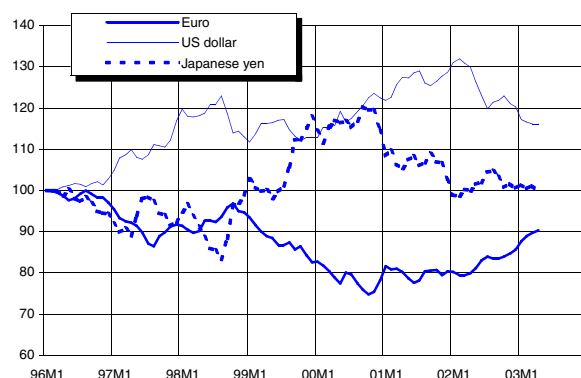


Source: NBB, before 1999M1: ECU instead of EUR

The appreciation of the euro against the US dollar has continued during the first months of 2003, although initially at a lower rate than in previous months, reflecting strong hesitations in relation to geopolitical uncertainties. Nevertheless, since the end of the war in Iraq, the exchange rate of the euro has sharply rebounded against the dollar since European capital flows to the US (mainly foreign direct investment and portfolio investment) declined despite the fact that macroeconomic data for the euro area were as much, if not more, mixed than for the US. This move mainly reflects renewed concerns about the widening US current account deficit and the deterioration in the US fiscal position.

During the same period, the euro also appreciated against the Japanese yen and the sterling, this time reflecting the pessimism of the markets on the short-term outlook for the Japanese economy and the slowing pace of UK economic activity.

Graph 28 - Nominal effective exchange rates (Jan. 96=100)



Source: NBB, BIS

As a consequence, the nominal effective exchange rate of the euro went up by more than 5% in the first four months of this year and certainly continued on this upward path in May. The nominal effective exchange rate of the euro is coming close to its level that prevailed when the monetary union was launched. During the same period, the nominal effective exchange rate of the US dollar declined by more than 2% and the nominal effective exchange rate of the Japanese yen fell by almost 1%.

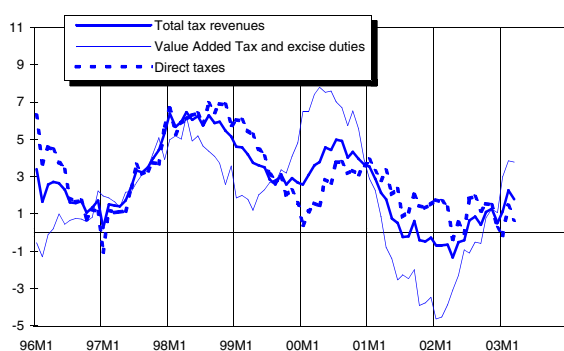
Tax indicators

Table 11 - Tax revenues (1)

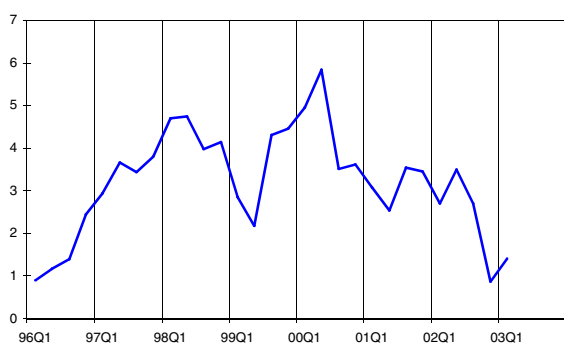
	01	02	02Q2	02Q3	02Q4	03Q1	02M10	02M11	02M12	03M1	03M2	03M3
Total [2], of which:	2.2	2.2	2.5	5.9	0.5	4.9	2.2	3.2	-2.1	5.4	18.5	-7.5
Direct taxes, of which:	4.1	1.8	0.5	8.0	-1.4	2.7	0.8	0.3	-4.0	0.4	26.1	-14.1
Withholding earned income tax (PAYE)	6.0	2.5	7.5	1.8	-1.5	2.9	-0.4	-1.8	-2.0	-0.7	5.9	5.0
Prepayments	-0.3	-6.4	-9.3	-1.7	-9.5	.	-2.7	.	-14.0	.	.	.
Value Added Tax and excise duties	-1.0	2.7	6.5	3.9	3.0	8.6	4.1	6.8	0.0	12.3	12.6	1.1

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

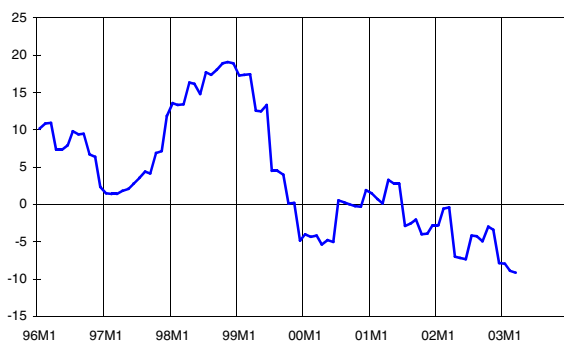
Graph 29 - Real tax revenues (3)



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

Total tax revenues were about 4.9% higher in the first quarter of 2003 as compared with the same period in 2002. At the beginning of 2002, however, tax revenues were low due to the deceleration in economic activity. More significantly, the growth rate during the first quarter of 2003 was higher than the annual growth rate in 2002 (2.2%). This is compatible with the profile of the global business cycle (as shown, for instance, in graph 3). Until now, tax indicators are not yet providing clear signs of an upturn in economic activity which is expected in the second half of 2003.

The positive yoy growth rate for total tax receipts in the first quarter of this year mainly resulted from an increase in indirect tax revenues (value added tax and excise duties). Based on the 12-month moving average, the real growth rate in indirect taxes reveals a change of trend at the beginning of 2002 and becomes positive from the final months of 2002 onwards. The recovery of the cyclical component of VAT is only slight, however, in line with the evolution of indicators for the consumption cycle.

PAYE revenue (mainly on wages) decelerates significantly in real terms from mid-2002 onwards, on a yoy four-quarter moving average basis. This evolution reflects the fall in employment and additional reductions in the rates of withholding earned income tax, in the context of the fiscal reforms decided upon in 2001.

Advance payments are traditionally very low during the first three months of the year and the figure for the first quarter is therefore not very important (and therefore not reported in the table). Provisional figures for April (first due date for advance payments) show an increase in prepayments by corporate businesses, as compared with April 2002.

A step towards Sustainable Development? Second Federal Report

The publication of the second Federal Report implements the Belgian Act of 5 May 1997 on the Coordination of Federal Sustainable Development Policy. This Act institutes a strategic process of reporting, planning, implementation and monitoring in order to introduce policies at the federal level contributing to the goals of sustainable development. This report assesses the existing situation in Belgium and the policy on sustainable development that has been pursued so far. It also describes a number of relevant future scenarios.

The second *Federal Report on Sustainable Development* asks the same question as the first report published in 1999: "Is Belgium following a path towards sustainable development?". The report answers that question for the period from 1998 to 2001. The answer is presented in a very concrete way, which is the main merit of this report. It is based on ten questions or development issues:

- Production strategies of enterprises
- Ethical financing of enterprises
- Social economy
- Use of information and communication technologies
- Fishing and biological diversity at sea
- Use of genetically modified plants
- Energy production and consumption
- Mobility and transport of persons
- Health at work
- Tobacco consumption

The report shows that a sustainable development approach is necessary in order to answer these questions, where several scientific disciplines (natural sciences, sociology, economics, etc.) intervene simultaneously. This enables decision-makers - both from the civil society and from politics - to work out solutions.

According to the three missions set out in the legislation, the second federal report has three parts.

The first part examines the current Belgian situation in relation to international developments. A list of 66 indicators concerning the ten questions are presented in several identically structured information sheets. They clarify certain situations and trends that are important both for Belgium and for the rest of the world.

The second part applies three types of evaluation to federal sustainable development policy with a different but complementary focus. The first is a broad policy evaluation of the federal government's annual policy statements. The second type of evaluation only applies to objectives for the ten sustainable development issues. The third is based on "case studies" of specific policy decisions concerning these issues. The main theme in this

part is the use of a set of five sustainable development principles which serve as evaluation criteria i.e. responsibility, double equity, integration, precaution and participation.

The third part sets out three projections for the future. Together they constitute a prospective framework for analysis of and reflection on policies. They reflect three different views of the kind of measures that are needed to point society towards sustainable development. The report then applies these three views to the ten chosen issues. It therefore illustrates the possible development paths for the entire societal system.

The aim of this report is to contribute towards the learning process for the elaboration of the federal strategy for sustainable development. The first federal report had identified shortcomings in the decision-making process regarding the consideration of a set of five key sustainable development principles. To a large extent these conclusions still stand. The results of the analysis of the federal decision-making processes indicate that an improvement of this process is required in order to address the challenges of sustainable development more effectively. The federal departments need to improve the way they prepare their policy decisions. Without a proper match between decisions and means to implement them, the administration will fall short of fulfilling its sustainable development objectives. The Government and the Parliament should always take this into consideration when they take decisions. Since 1992, however, some important progress has been seen in terms of a change in mentality and changes in the institutions.

The report and its executive summary are reference documents for the debates concerning sustainable development between the government and civil society. They are intended for the political authorities (government, parliament, political parties, etc), civil society (major social groups, advisory councils, etc), public services and the media. The content of the report, however, is also aimed at a wider audience.

The report comes with a presentation folder, a CD-ROM (containing key reference documents on sustainable development in English, French and Dutch) and an executive summary. These four documents exist in French and in Dutch and the executive summary is also available in English and German.

"A step towards sustainable development? Second federal report on sustainable development".

Task Force Sustainable Development, FPB, 2003.

The 1995 Belgian Input-Output Tables

This publication by the INR/ICN presents the Belgian 1995 IO tables and the issues involved in its compilation. A Working Paper focuses on the use tables for imported goods and trade margins.

The year 1995 marks a new start for the compilation of the Belgian IO tables. On the one hand, the implementation of the new European System of national and regional Accounts, the so-called ESA95, has led to the elaboration of a new methodology and the use of new data sources. On the other hand, as a result of the reform of the Belgian statistical apparatus in 1994, three institutions are now involved in the construction of the national accounts under the supervision of the INR/ICN. The NIS/INS is responsible for collecting the data. The NBB draws up the national accounts, including the supply and use tables. The FPB constructs the 5-yearly IO tables.

In this new scheme the FPB constructed three input-output tables for 1995, transmitted to Eurostat in February 2003, i.e.: (P60xP60)

- a symmetrical IO table at basic prices
- a symmetrical IO table of domestic output at basic prices
- a symmetrical IO table of imports at basic prices

In order to elaborate those IO tables, the ESA95 prescribes the use of supply and use tables (SUT) as a starting-point. Belgium adopted this approach, which required close co-operation between the two institutions (NBB and FPB) involved.

SUT are tables that cross industries and products, and are therefore closely related to industrial statistics. In Belgium, the statistical unit is the enterprise. On the basis of their main activity, those enterprises are brought together in industries, using the NACE-BEL nomenclature. Products are classified according to the statistical Classification of Products by Activity (CPA).

The *use table* gives a detailed view of the intermediate use of products by the various industries and their use per category of final demand. It also presents a detailed survey of the components of the industries' value added. The *supply table* details the supply of each product, making a distinction between output and imports. It shows which industries produce which products, thus making it possible to trace secondary activities.

The *IO table* is a more theoretical construction, since it is assumed that each industry produces only one product or group of products. In other words it is a use table in which the industries have been "purged" of all secondary activities from the supply table. This homogeniza-

tion was done mainly on the basis of information from the Structural Business Statistics survey and in accordance with the methodology proposed by the ESA95. As soon as the homogenization of industries is finished, the supply and use tables can be put together to form one table, which is called the symmetric IO table.

While the main objective of SUT's is to guarantee the coherence between the three approaches used in national accountancy, the main purpose of the IO tables is their usefulness in economic modelling. Their structure makes it possible to make (direct or indirect) impact studies, which is impossible with SUT's.

The compilation of an IO table typically involves issues like the "valuation" problem and the compilation of a use table of imports. The valuation problem arises from a pricing difference between the supply table, which is valued at basic prices, and the use table, which is valued at purchaser prices. Basic prices are those received by producers for goods and services. Purchaser prices are those paid by the users of products. Besides the basic price, the purchaser price includes trade and transport margins, value added tax and other taxes minus subsidies on goods and services.

The FPB solved the valuation problem by computing a use table in basic prices, which implies computing a use side table of trade and transport margins, and one of taxes and subsidies. These intermediate tables may be of interest to economic modellers, which is why they are also published on our website.

The data and hypotheses used in the compilation of trade margins and that of the use table of imported goods are described in the Working Paper cited below. This paper introduces the methodological novelty of integrating the compilation of both tables and systematically exploiting the fact that large parts of intermediate consumption and investments as well as exports bear no trade margins.

Detailed tables can be downloaded from the FPB-site.

"Tableaux Entrées-Sorties de la Belgique pour 1995 / Input-Output-tabellen van België voor 1995", A. Gilot, L. Avonds, V. Deguel, C. Hambye, B. Van den Cruyce, J. Wera, INR/ICN, February 2003.

"The Use Tables for Imported Goods and for Trade margins-An Integrated approach to the Compilation of the Belgian 1995 Tables", B. Van den Cruyce, Working Paper 04-03, February 2003.

Economic effects of various ways of increasing energy taxation in Belgium

This working paper presents the results of a study concerning the impact on the economy and on CO₂ emissions of energy taxation in Belgium.

Four groups of scenarios have been considered. The first group harmonizes (increases) energy taxes up to the average tax level in our 3 neighbouring countries. In the second scenario, energy taxes are adjusted in order to equal the price of each energy product to the corresponding average in our 3 neighbouring countries. In the third scenario the European directive regarding energy taxation is applied. A last scenario is a trebling of the actual energy tax level (for households).

The levies can be charged on all agents, or a tax exemption can be granted to energy-intensive industries. The new tax revenue is always fully returned to companies and households pro-rata on the basis of the additional energy taxes that these would pay. Two forms of redistribution have been examined: a reduction in social security contributions and in direct taxation. The simulations were run on the Hermes model. The base simulation corresponds to the medium-term forecast for 2002-2007 issued in April 2002, extended to cover the period from 2008 to 2010. The impact on GDP appears to be rather small, regardless of the form of tax shifting. Indeed, the adverse effect on domestic demand is largely

compensated by the fall in import requirements. CO₂ emissions are reduced by a maximum of 3 to 3.5% in relation to the baseline level in 2010 (first tax scenario, which generates the highest additional tax revenue of EUR 1.67 billion in 2005). This makes levies on energy consumption a useful tool in an overall package of measures aimed at cutting CO₂ emissions.

The results in relation to the other macro-economic indicators, such as employment, consumer prices and government finances depend on the kind of redistribution that is chosen. Unlike direct tax cuts, a reduction in social security contributions leads to a net increase in employment. The impact of social security contributions on production costs also tempers the inflationary impact of the new energy taxation. The slightly positive impact on government finances (at least in the case of redistribution by means of social security contributions) can be largely attributed to the job creation. Finally, a tax exemption for energy intensive companies can be useful in order to prevent negative investment decisions.

“De economische effecten van diverse modaliteiten van energieheffingen in België”, “Effets économiques de diverses modalités d’accroissement des taxes sur l’énergie en Belgique”, F. Bossier, F. Vanhorebeek, Working Paper 5-03, February 2003.

A quarterly model for the Belgian economy

This working paper presents the specifications and estimation results of the new quarterly model for the Belgian economy MODTRIM II. We also examine the simultaneous responses of the complete model to exogenous shocks through technical simulations and scenario analyses.

Since 1994 the FPB has been using the annual version of the econometric model MODTRIM as a central tool to produce its short-term macroeconomic forecasts. With the publication in 1998 of official quarterly accounts by the INR/ICN, it was decided to start building a quarterly version of the model. The choice to develop a quarterly model seemed very well suited to business cycle analysis and short-term forecasting mainly for three reasons. Firstly, working with a quarterly instead of a yearly model makes it possible to integrate explicitly all the quarterly information available. Secondly, using quarterly data means that carry-over effects are taken into account much more precisely. Thirdly, specific dynamics in economic relationships within a single year can be captured more accurately.

When building the quarterly model, the opportunity was taken to reassess all behavioural equations of the annual version. The main long-run characteristics are based on economic theory. In order to ensure a certain degree of theoretical consistency as well as a good statistical fit, the modelling strategy relies to a large extent on error correction mechanisms.

The size and the aggregation level of the model are mainly determined by two factors. On the one hand, the model has to be able to forecast all variables needed by the Government and Federal Agencies to allow them to prepare their budgets. On the other hand, we are constrained by the more limited availability of quarterly data in comparison to annual data. In all, the model contains about 20 true behavioural equations, around 180 *ad hoc* equations and about the same number of identities.

“MODTRIM II: A quarterly model for the Belgian economy”, B. Hertveldt, I. Lebrun, Working Paper 6-03, May 2003.

Electricity demand in Belgium by 2010: comparative analysis of model projections

The FPB carried out this study in 2001 in the framework of the elaboration of the first indicative programme for electricity generation by the federal Commission for the Regulation of Electricity and Gas (CREG). A programme proposal, covering the period from 2002 to 2011, was submitted to the Ministry of Energy at the beginning of 2003.

The objective of the study was threefold: firstly, to provide an analysis of existing projections of electricity demand, comparing the methodologies, main assumptions and results of the various studies; secondly, to compare the trends in key industrial sectors with the perspective of industrial federations; and thirdly, in the light of that analysis to provide reference trends for total electricity demand in Belgium over the next ten years.

The various studies considered in the analysis made use of different models (i.e. PRIMES, HERMES, MARKAL and EPM) and sometimes assumed different trends for the main drivers of electricity demand, such as GDP, sectoral value added, international energy prices, and the electricity intensity of the economy. At the same time, however, they all considered baseline projections and alternative projections with lower growth rates for electricity

demand as resulting from the implementation of policy measures to reduce greenhouse gases emissions.

In most cases the electricity demand projections were found to be acceptable at the time when contacts were made with industrial federations, namely in the first half of 2001. Since then it is worth pointing out that the industrial perspectives have changed, sometimes significantly, due to the slowing down of the economy. These recent trends should not, however, modify the main conclusion of the study.

The main conclusion of the study is that, despite differences in methodologies and in assumptions, it is possible to bring out two contrasting trends for the evolution of electricity demand by 2010: the first translates into an average growth rate of electricity demand of around 2% per year and the other into an increase of around 1.2% per year mainly reflecting the impact of policies and measures aiming at reducing the demand for electricity in the perspective of the Kyoto Protocol.

“La demande d’électricité en Belgique à l’horizon 2010-Analyse comparative de projections réalisées entre 1999 et 2001”, I. Callens, D. Gusbin, Working Paper 07-03, May 2003.

ICT Diffusion and Firm-level Performance : Case Studies for Belgium.

This paper is part of the research project on the diffusion of Information and Communication Technologies (ICT) in the Belgian economy. One objective is to assess whether economies like Belgium, which are not strong producers of ICT goods and services, can nevertheless enjoy a rise in productivity and stronger growth due to the use of those technologies.

At the sector level, Kegels, Van Overbeke and Van Zandweghe observe that some intensive users of ICT display a low increase in productivity (STU, 3-02, p. 19). According to the most common explanation in the literature, ICT investment does not per se lead to growth in productivity, but organisational changes are needed.

This paper aims at studying the links between ICT use and firm performance by means of an economic and technological questionnaire addressed to a sample of more than 220 Belgian firms from four sectors, specifically two intangible ones, banking and transport, and two industrial sectors, machinery and printing-editing.

Half of the firms reported that the adoption of ICT has primarily impacted their internal organisation.

The distinction between tangible and intangible, with respect to ICT diffusion, is not very clear in the sample. True, the intangible service sectors (banking and transport) use ICT network technologies more intensively, but machinery, as a physical and tangible sector, is the most intensive user of CAD/CAM and of the so-called Enterprise Resource Planning, e.g. the German software SAP.

Process innovation has been studied through the interaction between ICT use and 12 different business functions, ranging from design to marketing. Rates of diffusion along the value chain have been computed for eight ICT technologies. The results suggest that process innovation due to ICT is likely in the sample.

The interviewed firms report that ICT use has a positive impact on sales and product innovation (new products and customisation). There are also indications of switching costs and lock-in in the sample: ICT use has increased the importance of retained customers and of repeat suppliers, because it is more costly for a customer to switch to another supplier.

“ICT diffusion and firm-level performance : case studies for Belgium”, Ch. Huveneers, Working Paper 8-03, May 2003.

Recent history of major economic policy measures

- May 2003**
- During the past four months, several measures were introduced in the field of e-government. Most important among these are: the decision to start up a crossroads bank for enterprises which will centralise and simplify interaction with government; the introduction of a new interactive internet portal for the Government of Flanders; the implementation of the EU directive organising the legal statute of e-business services; the introduction of the electronic identity card; the implementation of a Walloon database on local taxes and the introduction of personal tax returns via the internet.
- Measures were also taken during the past four months to encourage further diffusion of ICT in small enterprises. For example the Walloon government issued a decree providing financial support to cover part of the initial set-up cost of ICT in SMEs.
- March 2003**
- Fully in accordance with EU legislation, an important step was taken towards the opening up of the railway market. All international freight traffic on the so-called trans-European rail freight freeways (TERFF) was liberalised. For Belgium, this means almost the whole railway network. At the same time two independent regulators started their operations. One is involved with capacity management while the other acts as an arbitrator.
- The energy market regulator (CREG) determined the tariffs for access to the electricity transmission network in the liberalised market for the period from 1 April to 30 June 2003. These tariffs are lower than those that were previously in force.
- In the airline sector, the European Commission has approved an alliance between British Airways and SN Brussels Airlines. This cooperative agreement gives SN's passengers access to BA's long haul network.
- The ECB decides to lower its main refinancing rate by 25 base points, from 2.75% to 2.5%.
- January 2003**
- Fully in accordance with EU legislation, a next step in the opening up of the postal market was set. The thresholds for free entry allowance are lowered from 350 grams to 100 grams, and from five times the standard tariff to three times the standard tariff.
- December 2002**
- The EU Council adopted a Regulation implementing the "Kimberley Process" certification scheme by setting up a system of certification and import and export controls for rough diamonds in the Community. The Kimberley Process certification scheme is aimed at breaking the link between the diamond trade and the financing of armed conflicts.
- The Walloon decree relative to the organization of the gas market was adopted on 19 December 2002.
- The Copenhagen European Council on December 13 marked the conclusion of accession negotiations with ten new member states. Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, the Slovak Republic and Slovenia are scheduled to join on 1 May 2004.
- The ECB decides to lower its main refinancing rate by 50 base points, from 3.25% to 2.75%.
- A bill that would give the regulator for telecommunications and postal services markets (BIPT) a position more independent from government was approved by parliament.
- November 2002**
- The European Energy Council approved the draft of a new directive concerning the common rules for the internal gas and electricity markets, on 25 November 2002. According to the new text, all non-domestic customers will be eligible from July 2004 on, and domestic customers no later than July 2007.
- September 2002**
- The federal Council of Ministers has appointed Elia System Operator as Transmission System Operator in Belgium for a period of 20 years.
- August 2002**
- A WTO arbitration decision in the EU-US dispute concerning the US Foreign Sales Corporation (FSC) tax law has authorised the EU to impose sanctions amounting to US \$4,043 million by increasing customs duties on certain selected products up to 100%.
- Further to an impact assessment study, the Federal Minister for the Environment has not granted the environmental permit for a second offshore wind farm project launched by C-Power, although the State Secretary for Energy and Sustainable Development granted the land concession for this project on 26 February 2002.
- July 2002**
- The Directive 2002/58/EC on privacy and electronic communication harmonises the stipulations in the member states which are required to ensure an equivalent level of protection of the right to privacy with respect to the processing of personal data in the electronic communication sector.
- A construction permit was granted to Electrabel to build the first onshore wind farm in Wallonia (Bütgenbach). Four wind turbines with a total capacity of 8 MW will produce some 16 GWh from 2003 onwards.
- June 2002**
- The Belgian government has adopted the law on the phasing-out of nuclear power generation. Parliament still has to approve the text. The debates in Parliament are due to take place in the autumn of 2002.
- The Federal Minister for the Environment has issued the construction and operating permits for the first offshore wind farm in the North Sea. The so-called Synergy project, launched by Electrabel and Jan De Nul, consists of 50 wind turbines of 2 MW each, located some 15 km from the coast (near Knokke). Power generation amounting to some 300 GWh per year is expected to start in 2004. The Secretary of State for Energy and Sustainable Development granted the land concession for this project on 27 March 2002.

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
DULBEA	Département d'Economie Appliquée de l'Université Libre de Bruxelles
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
NIS/INS	Nationaal Instituut voor de Statistiek / Institut National de Statistique
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

BEF	Belgian franc
BoP	Balance of Payments
CPI	Consumer Price Index
ECU	European Currency Unit
EMU	Economic and Monetary Union
EUR	Euro
JPY	Japanese yen
LHS	Left-hand scale
OLO	Obligations linéaires / Lineaire obligaties
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)