

# Quarterly Newsletter of the Federal Planning Bureau

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*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

*The medium-term outlook for Belgium is pointing towards a GDP growth rate of 2.2% during the 2004-2009 period, which is slightly higher than potential (2.0%). This favourable development is due to both net exports and domestic demand. Private consumption should become more dynamic during the 2005-2009 period, particularly thanks to the increase in households' disposable income (especially due to tax reforms and increases in employment and social benefits). Investment growth should attain 2.9% during the 2004-2009 period, mainly reflecting the increase in business investment. After initially accelerating in 2004, average export growth should be 5.4% and the contribution of net exports to GDP growth should be 0.2%. Thanks to limited increases in wages and import costs and a negative output gap during the first few 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 net losses in 2002 and 2003 and the creation of almost 9,000 jobs in 2004, about 30,000 jobs should be created every year during the 2005-2009 period. Industrial employment should fall by 44,000 persons during the 2004-2009 period and the number of jobs created in market services should exceed 200,000. Nevertheless, given the increase in the labour force (mainly in the 50-64 age class) the number of unemployed will barely decrease at all. The unemployment rate (broad administrative statistics) is still increasing in 2004 (from 14.1% to 14.4%), but will subsequently fall to 13.5% in 2009.*

*The public accounts are expected to show a clear deterioration, with a net public sector borrowing requirement appearing in 2004 and widening to 1.4% in 2006 before gradually declining to 0.7% by the end of the projection period.*

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



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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>).

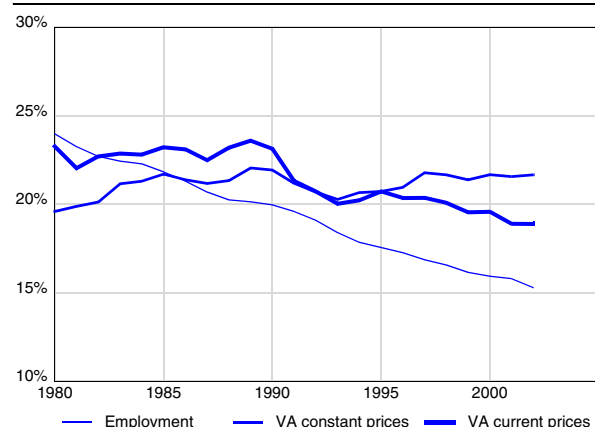
## What is the future for the industrial sector in Belgium?

The increase in international competition and the openness of European economies has gone hand in hand with a rapid and significant fall in industrial employment, a decrease that has not yet reached its end. If past trends were to continue, employment in the manufacturing sector would account for less than 5% by 2025. During each recession or period of lower economic growth such as the one we are currently experiencing, employment in manufacturing decreases but demonstrates no resilience when growth returns. Is international competition the cause of this deindustrialisation?

What is meant by deindustrialisation? It refers to a decline in the share of manufacturing employment and value added (see Graph 1). Moreover, for most countries, it also means a reduction in manufacturing employment in absolute terms. At the same time, however, it does not mean a fall in the volume of goods produced: on the contrary. These two facts can only be reconciled by a dramatic increase in productivity leading to a fall in the relative prices of manufactured goods as opposed to the growing demand for services.

This note describes the general trend as well as the main phenomena that are at play: a consumer preference for services when their purchasing power increases and an intense international competition leading to further productivity gains and specialisation.

**Graph 1 - The manufacturing sector<sup>1</sup> in Belgium, share of the total economy**



### Consumer preference

One of the main origins of the deindustrialization process has to be found in the choice of consumers who prefer to purchase a larger quantity of services rather than goods for each increase in their income. In all industrialised countries the consumption of services increases along with the standard of living of the population. The

origin of deindustrialisation is therefore primarily the inherent "tertiarisation" of the economy.

### Further specialisation through comparative advantages

The internationalisation of the economy is visible in a country such as Belgium through a constant increase in the share of exports and imports of goods, particularly of manufactured goods, as a proportion of GDP. The expansion of international trade has allowed exports to become one of the main driving forces of the economy.

Despite the growth in manufacturing production, fears of activities being relocated to low-wage countries are clearly present in peoples minds and enterprises include this possibility in their strategic plans. It is important to stress that Europe's degree of openness to external trade is relatively low. Therefore, competition from other countries, and especially from low-wage countries, has not been translated into the relocation of value added or income on a massive scale.

On the contrary, what is clearly happening is a specialisation of activities on the basis of comparative advantages. For Belgian enterprises, this specialisation means a constant search for productivity gains and a focus on certain parts of the value chain, leading to the intensified use of cheaper inputs from other sectors, particularly services, and from imports. With a huge foreign trade surplus and a large presence of multinational companies, more jobs are off-shored to Belgium than the other way round. This positive result cannot, however, hide the fact that some enterprises or sectors are losing out while others are gaining ground. Specialisation based on the comparative advantages of each country and each sector is restructuring industry, first within the internal market of the European Union and then on a global basis.

During the 1995-2002 period, some sectors experienced strong growth: the chemical industry and technological activities, which include metallic, mechanic, electrical and electronics manufacturing as well as transport manufacturing. Among these sectors, some sub-sectors even created jobs. Growth was, in fact, concentrated in a limited number of industrial sectors, which are also the largest industrial sectors. All other sectors lost jobs and often put in some very poor performances.

These observations lead to a general picture of Belgian industry as specialising in complex or high value added goods in a limited number of sectors while for the remaining sectors the trend towards deindustrialisation continues, albeit with some successes in a few niches.

1. Including extraction of non-energetic products and excluding coal, petroleum and nuclear industries.

## Seeking productivity gains

To remain competitive, industrial enterprises are achieving impressive productivity gains, leading to a trend in productivity growth of 1 to 2% above the national average. This productivity growth is the result of several factors: a high rate of investment per worker, technological progress and specialisation within the value chain itself.

The investment rate per worker has always been high in Belgian industry. The substitution of labour for capital has, for decades, been one of the forces driving productivity gains in manufacturing.

Specialisation in some industrial sectors such as pharmacy and communication equipment is a sign that efforts in the area of R&D expenditure are a key factor in their success. The performance in terms of patent applications is also impressive in pharmacy, biochemistry and transport manufacturing.

Another way to reduce costs and increase productivity consists in outsourcing parts of the value chain either by focusing on the core business and outsourcing other functions to other (goods or service) sectors, or by off-shoring, i.e. importing components from specialised firms producing parts on a larger scale and with lower wages. ICT plays a major role in the reorganisation of the production patterns by allowing the geographical splitting of the value chain. This evolution could be traced through the increase in production and employment in business service sectors such as consulting, software and computer services, accounting, or by the ratio between imported inputs and production. Data show an increase in the share of services, partly due to a transfer from manufacturing. The decline of employment in manufacturing between 1980 and 1995 amounted to 201,000 jobs, but this decline was only 150,000 if the jobs generated in other sectors are taken into consideration. Moreover, the figures also indicate that to produce one unit of final demand of a good, the economy needs more and more (domestic and imported) services.

This split of the value chain at both sectoral and geographical levels deeply changes the perspective on the future of Belgian industry. Goods supplied to final demand comprised 10% of goods and services in 1980 (8% of national value added). By the end of the nineties, they comprised more than 17%. The share of intermediate imports, on the other hand, is falling, from 46% in 1980 to 43% during the nineties.

The consequence of this increasing interdependency between sectors is that one job in a sector supplying manufactured goods to consumption or exports generates one job in other Belgian sectors (either industrial or services).

## Conclusion

One of the most striking results of internationalisation is the increase in the intensity and the extent of competition between enterprises and, in particular, between industrial firms. These competitive pressures lead to the transformation of the industrial pattern promoting specialisation in sectors where comparative advantages are developed. The strategy consists of increasing labour productivity, process innovations combined with ICT investments, outsourcing parts and sometimes very substantial parts of the value chain, and product innovations when quality may confer a competitive advantage. From this point of view, this development is far from being mainly a question of competition imposed by low wage countries. On the contrary, with the creation of the single European market, the opening up of Eastern European countries and the launch of the euro, international competition in Europe is a phenomenon that is firstly and foremostly European. These institutional changes were intended to result in higher living standards for the European population. In order to benefit from the positive economic consequences of these changes, the reallocation of resources inside European sectors has to take place.

One might, however, question the efficiency of this process of destructive creation for countries such as Belgium. On the one hand, the constant search for productivity gains in industry has led to higher wages in the whole economy and thereby to partly crowding-out the low-skilled workers, which accounts for the persistence of a relatively high level of unemployment. On the other hand, to deal with the job destruction in the industrial sector, the early retirement scheme has often been privileged. The people who left the labour market in this way, do not easily return, which has led to a contraction in the productive labour supply. This inefficiency of the reallocation of labour supply is partly at the origin of the fact that, compared to the United States, Belgium records a high level of productivity but also a low employment rate and thus a depressed production capacity. A direct consequence is that the average standard of living, measured by GDP per head, is 30% smaller in Belgium than in the United States.

*“L’industrie a-t-elle un avenir en Belgique?”  
H. Bogaert, A. Gilot, C. Kegels,  
Working Paper 10-04, April 2004*

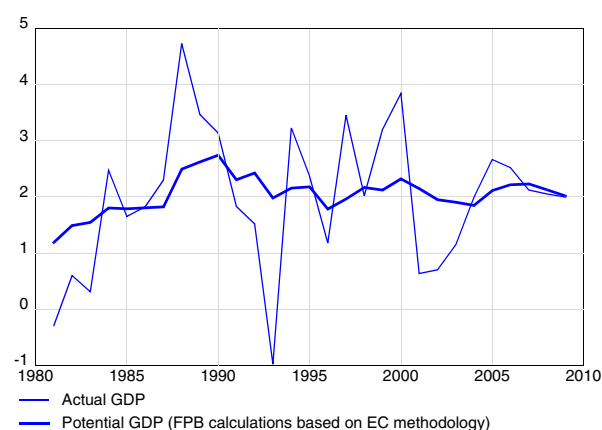
## Economic forecasts 2004-2009

The FPB medium-term economic outlook for April 2004 covers the period from 2004 to 2009 and presents detailed analyses of macroeconomic, sectoral and labour market developments. There is also detailed comment on the public finance performance 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, particularly with regard to fiscal and social policies and institutional arrangements, taking into account all currently known decisions. Based on this scenario, the general government financing capacity is expected to be negative from 2004 onwards; in fact the imbalance should persist until the end of the forecast period. As a result the objective of a balanced budget in 2004-2006 and a financing capacity of 0.3% of GDP in 2007 (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 initially accelerating in 2004, the rate of European GDP expansion (euro-zone) will reach 2.3% in 2005, peak at 2.5% in 2006 and then stabilize at a rhythm close to its potential (2.0% per year) during the 2007-2009 period. Inflation is still below 2%, thanks particularly to wage increases that have remained below productivity gains. A recovery in nominal interest rates is also being considered. This increase in interest rates would be consistent with inflation remaining under control.

After a poor economic performance during the 2001-2003 period, Belgian GDP growth should reach an average of 2.2% for the period from 2004 to 2009. This favourable development is due to both net exports and domestic demand.

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



After moderate growth in 2004, private consumption should subsequently become more dynamic, particularly thanks to a favourable development in household disposable income (stimulated especially by reductions in personal income tax and the rise in employment). Gross fixed capital formation should also recover: the rate of increase in investment should be 2.9% during the 2004-2009 period, mainly reflecting the increase in business investment.

After initially accelerating in 2004, growth in exports should be 5.4% on average and the contribution of net exports towards GDP growth is expected to be 0.2%. The external surplus should reach 4.4% of GDP in 2009 (partly thanks to the recovery of the terms of trade). The level of the external surplus also reflects the high level of domestic savings.

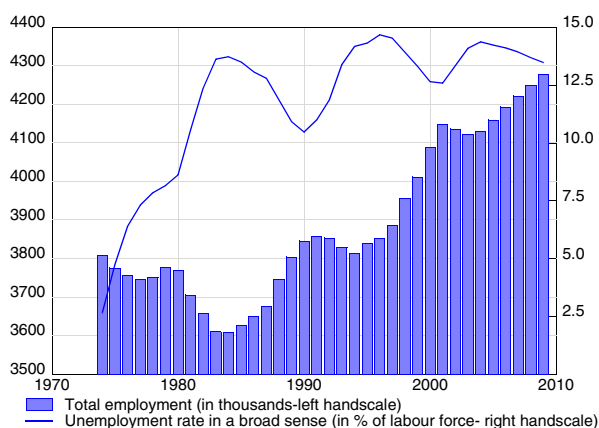
Limited wage increases (lower than productivity gains) and a moderate increase in imported costs are the main factors accounting for an inflation rate that will remain below 2% in the medium term. Moreover, a negative output gap during the first few years of the projection will help to keep inflation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

Employment figures are showing a gradual improvement: after net losses in 2002 and 2003 and nearly 9,000 jobs created in 2004, about 30,000 jobs should be created every year during the 2005-2009 period. This result can be explained by the following factors:

- the favourable macroeconomic context, with GDP growth recovering from 1.1% in 2003 to 2.0% in 2004 and an average of 2.3% thereafter;
- limited increases in wage 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 the fiscal reform. Moreover, during 2004 and 2005, additional cuts in social security contributions and wage subsidies more than compensate for the increases in parafiscal financing of the second pillar pension scheme and should also help to moderate wage claims.
- the various measures taken in favour of employment (mainly activation and insertion programs).

The decline in industrial employment is continuing, with a loss of 44,000 workers in manufacturing during the 2004-2009 period. At the same time the number of jobs created in market services will exceed 200,000, bringing the share of employment in market services to more than 59% of total employment (43% in 1980 and 50% in 1990).

Graph 2 - Employment and unemployment



The population of working age will rise significantly (by 150,000 persons, 0.4% per year on average) during the 2004-2009 period, primarily because the less populous generations that were born during the Second World War will be leaving the population of working age. The overall employment rate is influenced favourably by the increase in the rate of female participation in employment, but suffers from adverse demographic changes (the increasing share of older age groups) within the population of working age.

Given the strong increase in the population of working age, renewed net job creation from 2004 onwards will only lead to modest increases in the employment rate. The employment rate fell for two consecutive years in 2002 (to 61.8%) and 2003 (to 61.3%), it should remain stable in 2004 and will gradually rise to 62.3% in 2009. Employment rates in the older age classes (50 and above) have been growing and will continue to grow above average, but will remain substantially lower than the European recommendations in this connection. Nevertheless, this will mean a marked increase in the proportion of persons aged 50-64 in the total occupied population (from 19.3% in 2003 to 22.1% in 2009).

In view of the substantial rise in the labour force, net job creation is only just sufficient to gradually force down unemployment in absolute terms. The unemployment rate (broad administrative measure) is continuing to increase in 2004 (from 14.1% to 14.4%), but will fall to 13.5% in 2009. This level is still high, but it should be noted that the growing proportion of people on unemployment benefits who are aged 50 or more will lead to an even wider discrepancy between administrative measures of unemployment and survey measures that register active job seekers.

In comparison with our April 2003 projection, the evolution in the public accounts is deteriorating markedly. A net financing requirement of 0.3% of GDP appears in 2004, widening to 1.4% in 2006, before gradually falling to 0.7% by the end of the projection period.

The Stability Program objective of a net financing capacity of 0.3% of GDP in 2007 will not be attained without additional measures. Nevertheless, the total public debt to GDP ratio is still in decline, from 100.7% in 2003 to 83.8% in 2009.

The reappearance of public deficits is mainly due to new structural measures, leading to significant increases in social expenditure and income tax rebates between 2003 and 2006. The new deficits mainly stem from Entity I (federal government and social security). Entity II (Communities, Regions and local authorities) are expected to continue to report a positive financing capacity throughout the projection period.

The last chapter discussed the evolution of energy consumption and greenhouse gas emissions (GHG). Due to the progressive penetration of energy-efficient technologies and the reorganisation of the industrial sector, final energy consumption should grow moderately by 0.9% per year on average, whereas the energy-intensity of GDP should decrease yearly by 1.2% on average. Total GHG emissions (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFC, PFC, SF<sub>6</sub>) should be stable due to moderate energy consumption and the change in the energy consumption structure from solid and liquid fuels to gaseous fuels and electricity. There will still, however, be an increase in the emission level of 5.5% from 1990 to 2009. Further efforts should be made to reach the target defined by the Kyoto Protocol.

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

	1990 1996	1997 2003	2004 2009
Potential export market	5.4	5.9	6.2
Private consumption	1.8	2.0	2.0
Public consumption	1.4	2.1	1.9
Gross fixed capital formation	1.1	2.7	2.9
Stock building (contribution to GDP growth)	-0.1	0.0	0.0
Final domestic demand	1.5	2.2	2.2
Exports	3.9	4.2	5.3
Imports	3.6	4.3	5.4
Net exports (contribution to GDP growth)	0.3	0.1	0.2
GDP	1.8	2.1	2.2
Private consumption prices	2.3	1.8	1.6
Real disposable income households	2.0	1.5	1.9
Domestic Employment (annual changes in '000)	6.7	38.5	26.2
Unemployment, FPB definition <sup>a</sup>			
thousands	670.6	684.5	674.4
% of labour force	14.7	14.1	13.5
Current account balance (% of GDP) <sup>a</sup>	5.1	3.7	4.4
General Government financing capacity (% of GDP) <sup>a</sup>	-3.8	0.3	-0.7

a. end of period

"Perspectives économiques 2004-2009",  
"Economische vooruitzichten 2004-2009",  
FPB, April 2004.



## Economic forecasts for Belgium by the Federal Planning Bureau

Changes in volume (unless otherwise specified)				
	2002	2003 (est) [1]	2004	2005
Private consumption	0.4	1.7	1.6	2.3
Public consumption	1.9	2.4	1.3	1.9
Gross fixed capital formation	-2.5	1.7	3.2	4.3
Final national demand	0.8	2.3	1.9	2.6
Exports of goods and services	1.0	1.6	4.9	5.8
Imports of goods and services	1.2	3.1	4.9	5.9
Net-exports (contribution to growth)	0.0	-1.0	0.2	0.2
Gross Domestic Product	0.7	1.1	2.0	2.7
p.m. Gross Domestic Product - in current prices (bn euro)	260.01	268.15	278.27	291.13
National consumer price index	1.6	1.6	1.6	1.5
Consumer prices: health index	1.8	1.5	1.5	1.4
Real disposable income households	1.3	0.9	1.5	2.1
Household savings ratio (as % of disposable income)	16.2	15.5	15.4	15.4
Domestic employment (change in '000, yearly average)	-12.4	-15.3	8.7	29.9
Unemployment (Eurostat standardised rate, yearly average) [2]	7.3	8.1	8.3	8.2
Current account balance (BoP definition, as % of GDP)	5.3	3.1	3.4	3.7
Short term interbank interest rate (3 m.)	3.3	2.3	2.1	2.8
Long term interest rate (10 y.)	5.0	4.1	4.4	4.6

[1] Forecasts finalised in early April, before publication of National Accounts 2003

[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
	2004	2005	2004	2005	2004	2005	
Federal Planning Bureau	2.0	2.7	1.6	1.5	-0.3	-1.2	5/04
INR/ICN	2.0	.	1.5	.	.	.	2/04
National Bank of Belgium	.	.	.	.	.	.	.
European Commission	2.0	2.5	1.5	1.6	-0.5	-0.7	3/04
OECD	2.0	2.6	1.6	1.4	-0.2	-0.7	5/04
IMF	1.8	2.4	1.4	1.4	-0.1	-0.1	4/04
ING	2.5	2.4	1.5	1.6	0.0	0.0	4/04
Fortis Bank	2.0	2.7	1.6	1.6	0.0	0.5	4/04
Dexia	2.0	2.2	1.5	1.8	-0.4	-0.9	4/04
KBC Bank	2.1	2.6	1.4	1.6	-0.2	-0.4	3/04
Morgan Stanley	2.0	1.8	1.9	1.8	-0.5	-0.8	4/04
Petercam	2.0	1.75	1.2	1.5	-0.5	-1.0	5/04
IRES	2.7	.	1.6	.	-0.2	.	4/04
DULBEA	2.0	2.3	1.5	1.5	-0.6	-0.5	4/04
Consensus Belgian Prime News	2.1	2.3	1.5	1.6	-0.2	-0.2	3/04
Consensus Economics	1.8	2.3	1.6	1.7	.	.	4/04
Consensus The Economist	1.9	1.9	1.4	1.5	.	.	5/04
Consensus Wirtschaftsinstitute	1.9	1.9	1.4	1.5	.	.	4/04
<b>Averages</b>							
All institutions	2.0	2.3	1.5	1.6	-0.3	-0.5	
International public institutions	1.9	2.5	1.5	1.5	-0.3	-0.5	
Credit institutions	2.1	2.2	1.5	1.6	-0.3	-0.4	

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.

Wirtschaftsforschungsinstitute: DIW (Berlin), Ifo (München), HWWA (Hamburg), IfW (Kiel), IWH (Halle), RWI (Essen)

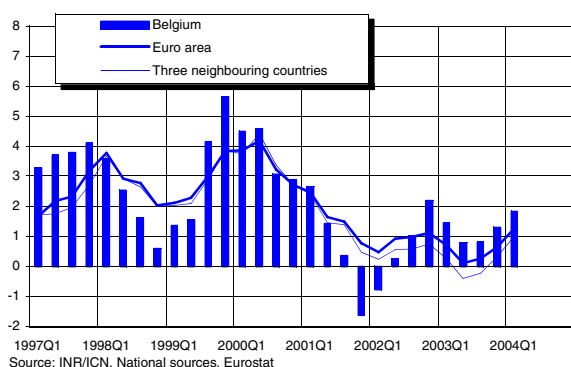
General economic activity

**Table 1 - GDP growth rates, in %**

	2002		2003		YoY growth rates, in %					QoQ growth rates, in %				
	2002	2003	2003Q1	2003Q2	2003Q3	2003Q4	2004Q1	2003Q1	2003Q2	2003Q3	2003Q4	2004Q1		
Germany	0.2	-0.1	0.1	-0.3	-0.3	0.1	0.7	-0.2	-0.2	0.2	0.3	0.4		
France	1.1	0.5	0.7	-0.2	0.3	1.0	1.6	0.2	-0.4	0.6	0.6	0.8		
Netherlands	0.2	-0.7	-0.2	-1.1	-1.2	-0.4	0.5	-0.4	-0.4	0.0	0.5	0.4		
Belgium	0.7	1.1	1.5	0.8	0.8	1.3	1.8	0.1	0.0	0.6	0.7	0.6		
Euro area	0.9	0.4	0.7	0.1	0.3	0.6	1.3	0.0	-0.1	0.4	0.4	0.6		
United States	2.2	3.1	2.1	2.4	3.6	4.3	4.9	0.5	0.8	2.0	1.0	1.0		
Japan	-0.4	2.7	2.7	2.4	2.0	3.6	.	0.5	0.9	0.6	1.6	.		

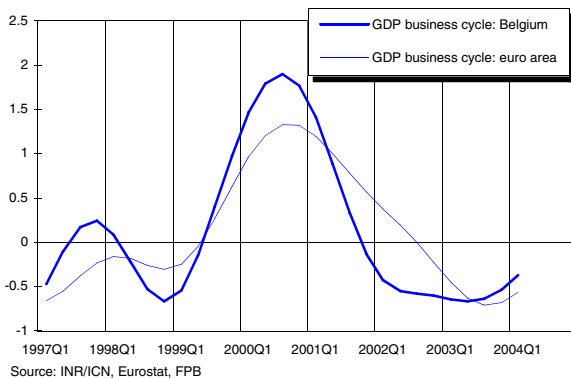
Source: INR/ICN, National sources, Eurostat

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



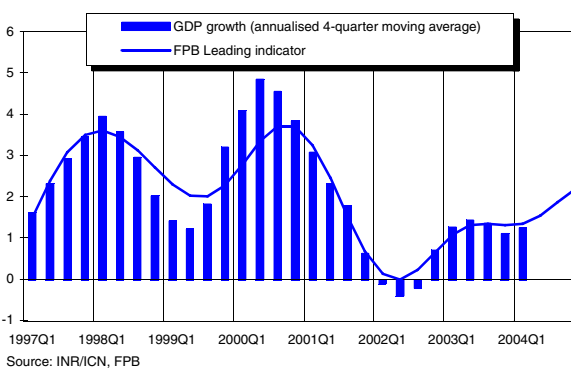
Source: INR/ICN, National sources, Eurostat

**Graph 2 - GDP business cycle**



Source: INR/ICN, Eurostat, FPB

**Graph 3 - GDP growth and leading indicator**



Source: INR/ICN, FPB

Global economic growth has continued to improve during the first months of this year. Economic activity in the US remained strong in 2004Q1, with an increase in real GDP running at a quarterly (non-annualized) rate of 1.0%, as in the preceding quarter. The major contributor to this performance was personal consumption expenditures, since US households' disposable income was stimulated by tax refunds as well as by the recovery in the labour market. The strength in private investment in equipment and software also contributed to the growth in the US real GDP.

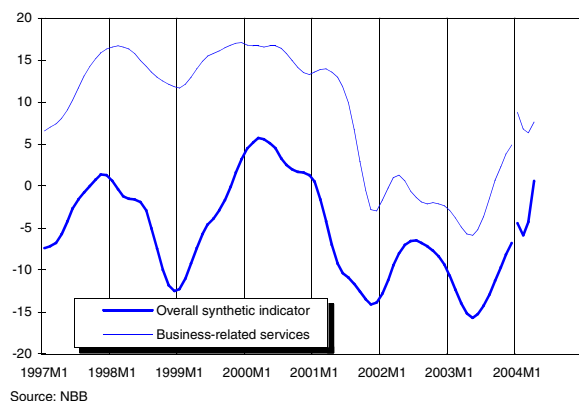
All indicators (hard as well as soft data) are pointing towards a further firming of the Japanese economic recovery in 2004Q1. Despite the appreciation of the yen, Japanese exports to China and emerging Asia remain robust to the extent that their dynamism is spilling over into the domestic economy and consequently the recovery of the industrial sector is swelling into the service sectors.

According to the Eurostat flash estimate, economic activity in the euro area increased by 0.6% in 2004Q1. The recovery in the euro area remains on track but is not gaining strength. Recent indicators have been relatively mixed although the economic sentiment has improved markedly in April. In Belgium, the recovery in economic activity has continued. Real GDP increased by 0.6% in 2004Q1, which is very similar to the qoq growth rates recorded during the second half of last year, while the yoy growth rate increased to nearly 2.0%. For the sixth quarter in a row, the Belgian economy outperformed the average GDP growth of its three main neighbouring countries.

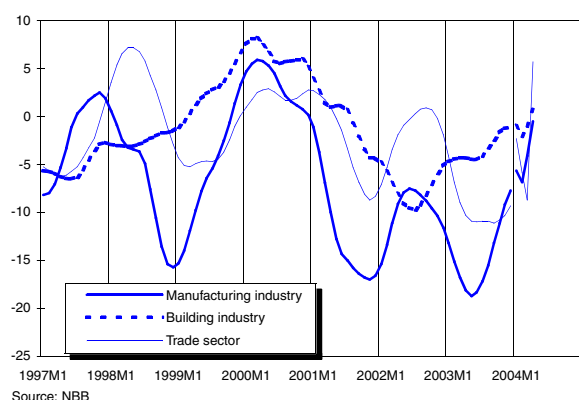
Looking at the cyclical components of Belgian and euro area GDP, it is now more clearly evident that, after a prolonged period of stagnation, the bottom of the Belgian cycle was reached at the middle of last year, while the turnaround in the euro area cycle has taken place one quarter later. In comparison with the previous cycles, the FPB's leading indicator for Belgium is pointing towards continuing moderate economic improvement so that GDP growth should reach around 2% in average this year.



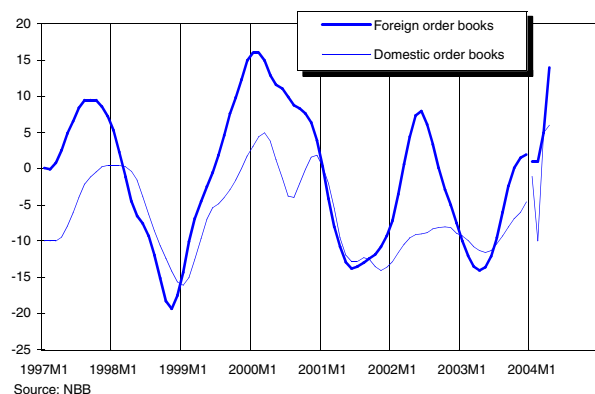
**Graph 4 - Business cycle: global evolution**



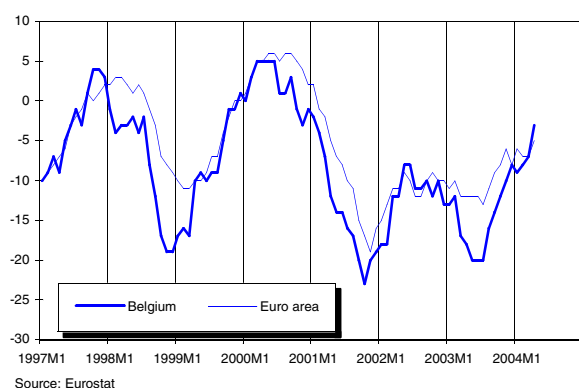
**Graph 5 - Business cycle: sectoral evolution**



**Graph 6 - Manufacturing industry: order books**



**Graph 7 - Industrial confidence: international comparison**



After a slight fall in February 2004, business confidence in Belgium picked up again in March and rose sharply in April, reaching its highest level in more than three years (see the overall synthetic indicator in Graph 4).

During the last two quarters of 2003, the recovery in the business cycle in Belgium was most marked in manufacturing industry and in the business-related services sector. Trade sector indicators, however, have been rather stable during most of the second half of 2003; an improvement was not seen until the very end of last year. The upturn in the trade sector clearly followed the manufacturing sector, albeit with a certain time-lag.

The improvement in business confidence so far seen in 2004 was more broadly based. The improved business climate was seen in each of the four sectors covered by the survey (manufacturing industry, the trade sector, the building industry and the business-related services sector). The results of the latter sector, however, are not included in the overall synthetic indicator.

The upturn in manufacturing industry mainly reflects the recovery in exports but domestic demand also contributed towards it. This is illustrated by the solid improvement in both foreign and domestic order books, as shown in Graph 6. Not only better filled order books, but also production expectations and the assessment of stocks of finished products are feeding the growing optimism among industrial entrepreneurs.

Trade sector indicators have been more volatile during the last few months, but rose markedly in January and April. Since the beginning of this year, survey results in the trade sector and in manufacturing industry are finally pointing towards more optimistic employment expectations.

During the past two years, the business cycle in the building industry has been somewhat at odds with the other branches of the economy. The upturn which has now lasted for more than one and a half years, is not expected to come to an end in the next few months.

The improvement of industrial confidence in Belgium during the first four months of this year was stronger than average in the euro area (Graph 7). The results of the quarterly survey in the manufacturing industry sector, which was carried out at the beginning of the second quarter, confirm this picture: as compared with the beginning of 2004, capacity utilisation rose slightly in Belgium, while it declined marginally in the euro area. Capacity utilisation rose in the majority of euro area member states, but fell in the three largest countries (Germany, France and Italy).

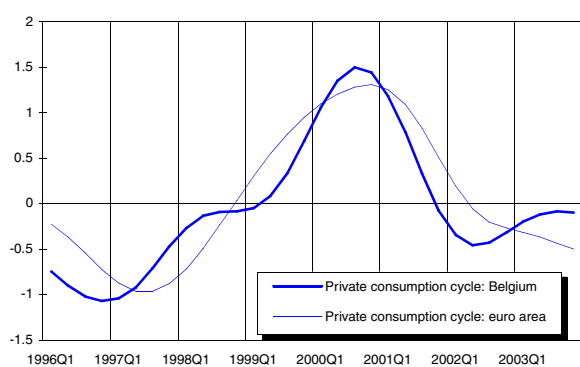
## Private consumption

**Table 2 - Private consumption indicators**

	2002	2003	2003Q2	2003Q3	2003Q4	2004Q1	2003M11	2003M12	2004M1	2004M2	2004M3	2004M4
Turnover (VAT) - retail trade [1]	2.3	6.1	3.4	3.7	9.3	.	8.9	4.3	13.2	4.7	.	.
New car registrations [1]	-4.3	-1.9	-7.8	5.9	18.6	11.2	10.1	44.7	-6.3	14.2	26.8	22.9
Consumer confidence indicator [2]	-2.7	-10.8	-11.0	-9.3	-8.3	-4.0	-5.0	-7.0	-5.0	-4.0	-3.0	-4.0

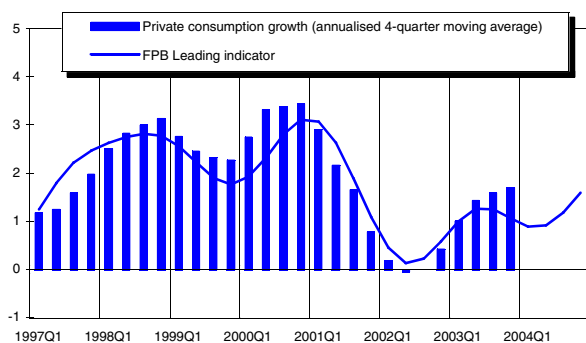
[1] Change (%) compared to same period previous year; [2] Qualitative data  
Source: NIS/INS, Eurostat, Febiac, FPB

**Graph 8 - Private consumption cycle**



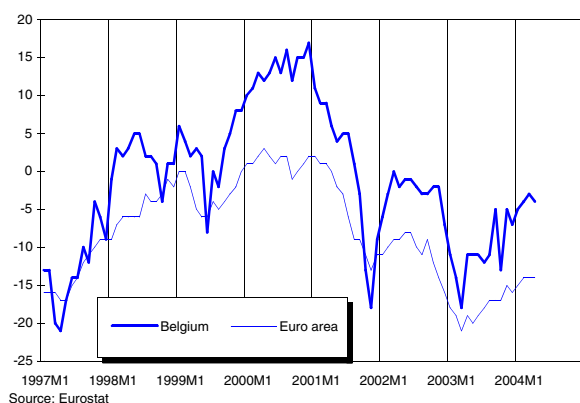
Source: INR/ICN, Eurostat, FPB

**Graph 9 - Private consumption growth and leading indicator**



Source: INR/ICN, FPB

**Graph 10 - Consumer confidence: international comparison**



Source: Eurostat

The divergence between the evolution of the Belgian and the euro area private consumption cycles is becoming more and more striking. Although the downward momentum of the euro area consumption cycle has slowed somewhat since mid-2002, the trough had not yet been reached in the last quarter of 2003. The Belgian consumption cycle, on the other hand, had already started to increase in the third quarter of 2002 and the levelling off seen at the end of last year should prove to be only a temporary phenomenon.

After two years of growth below 1%, Belgian private consumption increased by 1.7% in 2003, despite the absence of growth in the fourth quarter. This performance was mainly the result of a substantial decline of the savings rate, but was also underpinned by the reductions in personal income tax which stimulated households' disposable income growth.

During the first few months of this year, indicators of private consumption presented a somewhat mixed picture. On the one hand, consumer confidence increased at a very modest pace during the first quarter of 2004, but decreased somewhat in April, bringing it close to the level reached in November last year. The recent decline can be explained mainly by less optimistic expectations concerning the economic outlook and the development of unemployment. The NBB indicator for the trade sector and yoy growth rates of retail trade and car sales, on the other hand, has seen more substantial increases recently. Still it should be remembered that car sales were boosted by the biannual motor show held in Brussels in January. The FPB leading indicator, which summarises some of those indicators, is consistent with an average annual growth rate for private consumption in 2004 similar to that seen last year.

Graph 10 shows that euro area and Belgian consumer confidence are developing in a very similar way. Both indicators reached lows in March 2003 because of the military conflict in Iraq and have recovered since then. Notwithstanding the higher volatility of Belgian consumer confidence throughout 2003, it is clear that the upturn has been less pronounced in the euro area than in Belgium.

## Business investment

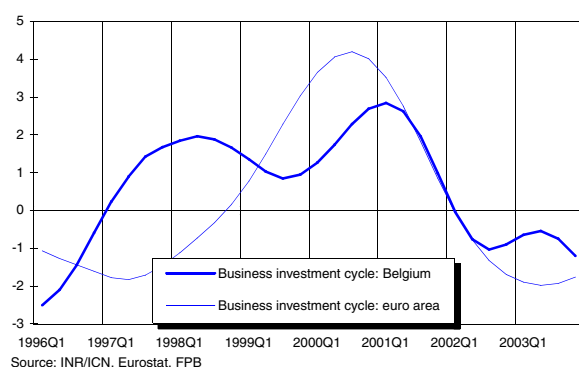
**Table 3 - Business investment indicators**

	2002	2003	2004	2003Q2	2003Q3	2003Q4	2004Q1	2003M10	2003M11	2003M12	2004M1	2004M2
Investment (VAT) [1]												
Industrial companies	-5.4	-5.3	.	0.0	5.1	-16.4	.	3.4	-21.2	-25.4	7.1	-16.0
Non-industrial companies	-3.2	-1.6	.	10.2	-3.8	-9.6	.	-12.4	-30.7	11.1	-0.5	25.0
Total companies	-3.7	-3.1	.	6.5	-0.6	-12.6	.	-6.8	-27.8	-5.1	1.7	8.7
Investment survey [1]	-13.0	-7.3	-4.6									
Capacity utilisation rate (s.a.) (%)	79.9	78.8	.	77.7	79.0	79.5	79.7					

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

Source: NIS/INS, NBB, FPB

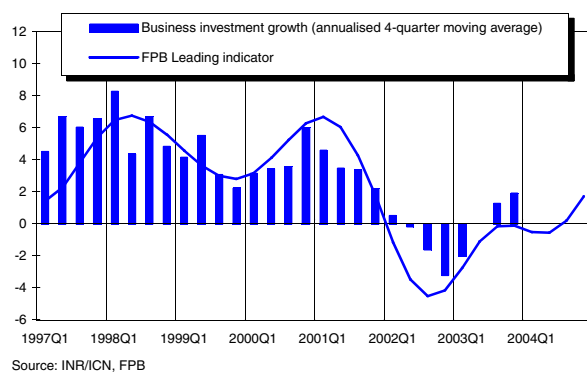
**Graph 11 - Business investment cycle**



The Belgian business investment cycle reached its trough in 2002Q3 and experienced a lukewarm recovery in the following three quarters. During the second half of 2003, however, a new decline in the cycle was seen. In the euro area, the investment cycle reached its trough around mid-2003 after almost three years of below trend growth.

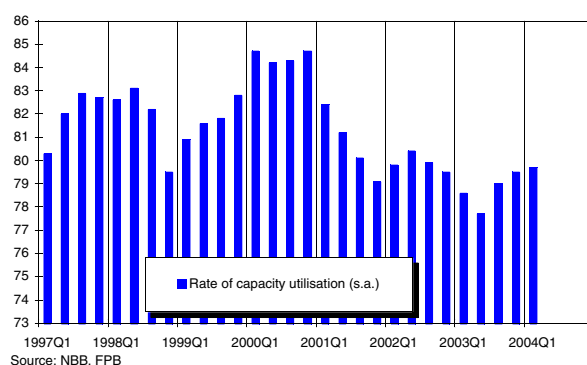
Business investment at constant prices rose by 1.9% in 2003. This performance was mainly due to remarkably strong growth rates during the first half of the year that were somewhat at odds with the business cycle stance. In fact there was little evidence in favour of a solid upturn at that time. The second half of 2003 was more disappointing, though. Despite favourable financing conditions, a rising capacity utilisation rate and the acceleration in economic growth, business investment saw a fall of 4.7% qoq during the third quarter which was not counterbalanced in the last quarter of 2003 (qoq growth rate of 1.4%). The investment rate at constant prices (real business investment as a percentage of GDP) amounted to 14.2% in 2003, 0.1 percentage point higher than the previous year.

**Graph 12 - Business investment growth and leading indicator**



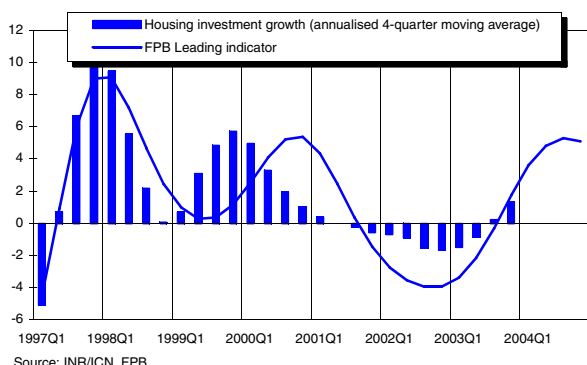
The FPB leading indicator suggests that business investment growth should remain quite subdued during the first half of 2004, while a more significant upturn can be expected during the second half of this year. So far this is confirmed by VAT-based investment statistics showing only moderate increases during the first months of 2004. Series coming from the NBB business survey, such as capacity utilisation and demand prospects for investment goods, are currently on a rising trend, which paints an optimistic picture for the coming quarters. It should be noted, however, that the expected upturn in business investment will not be the kind of boom seen in the late nineties. In fact, the latest NBB investment survey showed that entrepreneurs in the industrial sector are planning to invest 4.6% less this year than in 2003, although this figure is negatively influenced by peculiarities of the automobile sector.

**Graph 13 - Capacity utilisation in manufacturing industry**



## Housing investment

**Graph 14 - Housing investment growth and leading indicator**

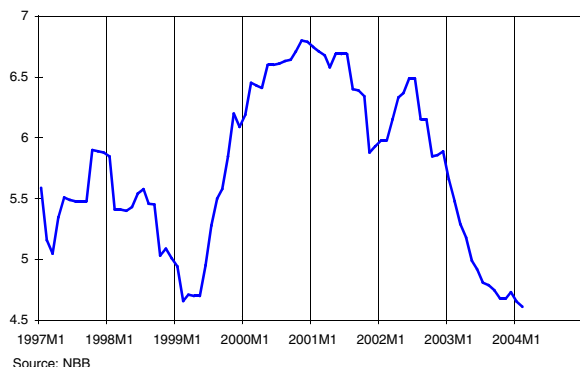


In 2001 and 2002, years that were characterised by gloomy and uncertain economic and employment prospects, quarterly housing investment growth rates fell substantially and actually resulted in negative average annual growth rates (respectively -0.6% and -1.7%). From the first quarter of last year onwards, qoq growth rates picked up markedly, resulting in an increase of 1.4% in 2003.

The upturn in housing investment is expected to continue throughout 2004. This is supported by the FPB's leading indicator, which is continuing to rise. The results of the survey among architects, which has a lead of about one year, began to rise at the beginning of 2001. Although they showed some hesitation in the first half of last year, the increase subsequently continued. Indicators taken from the NBB survey of the building industry, which have a shorter lead, have not stopped increasing and are thus also pointing to a further acceleration in housing investment growth.

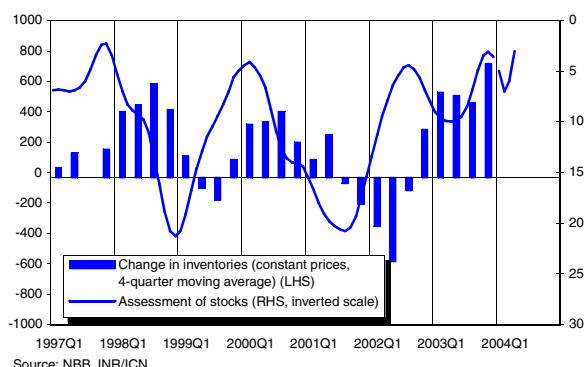
According to our latest projection, housing investment should be stronger this year than last year. Factors supporting this upturn are the mortgage rate, which reached a five year low at the beginning of 2004, and the acceleration of real disposable income growth.

**Graph 15 - Mortgage rate (%)**



## Stock building

**Graph 16 - Stock building indicators**



From mid-2002 onwards, the level of stocks progressively increased. Consequently, stocks have made a significant positive contribution towards GDP growth during the past two years (0.7% in both 2002 and 2003, up from -0.6% in 2001).

During the initial stage (up to mid-2003) increases in stocks went hand in hand with a growing number of entrepreneurs who considered their stocks to be excessive, suggesting that at least part of the rebuilding process was unintentional. From mid-2003 onwards, however, the number of entrepreneurs with an excessive level of stocks fell. At this stage, stock rebuilding can be considered as corresponding to expectations of a future increase in demand. Since the increase in stocks this year should be more or less in line with what was seen last year, changes in stocks should have a neutral impact on economic growth in 2004.

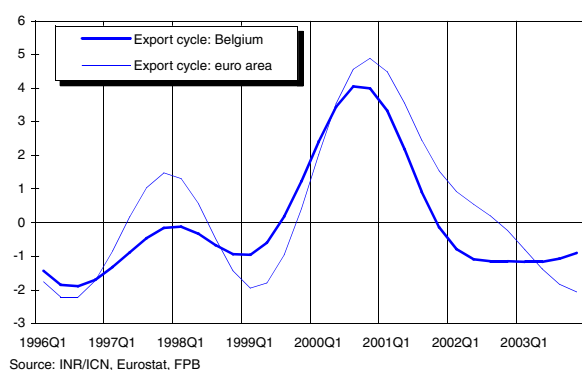
## Foreign Trade

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

	2002	2003	2003Q1	2003Q2	2003Q3	2003Q4	2003M8	2003M9	2003M10	2003M11	2003M12	2004M1
Exports - value [1]	0.2	1.3	2.4	-0.1	1.1	1.8	-1.3	4.9	-4.6	-1.2	13.0	-0.6
Imports - value [1]	-1.6	3.1	6.0	-0.9	2.7	4.8	2.0	2.7	4.5	2.4	7.6	-1.9
Exports - volume [1]	1.0	3.6	3.4	3.1	3.3	4.5	1.0	7.0	-1.2	0.2	16.2	2.2
Imports - volume [1]	0.5	5.7	5.8	2.7	5.9	8.2	4.1	6.7	9.2	3.9	11.4	1.8
Exports - price [1]	-0.9	-2.1	-0.9	-3.0	-2.1	-2.5	-2.2	-2.0	-3.5	-1.3	-2.7	-2.8
Imports - price [1]	-2.1	-2.4	0.2	-3.5	-3.0	-3.1	-2.1	-3.9	-4.4	-1.5	-3.5	-3.7

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

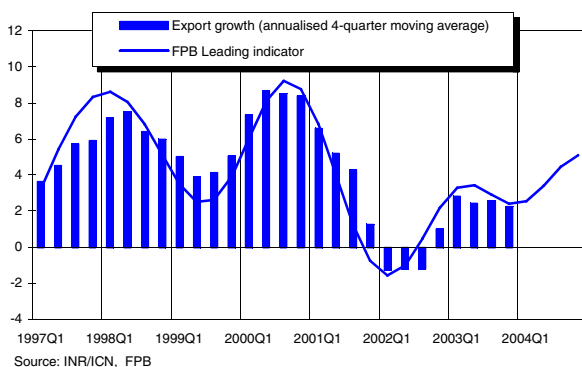
**Graph 17 - Export cycle**



The Belgian export cycle began to bottom out in the middle of 2002 and a period of stagnation then followed. Indeed the Belgian export cycle had registered only a slight improvement by the end of last year. In the euro area the turnaround in the export cycle has not yet taken place and the cyclical slowdown, although less steep than in the previous quarters, is still continuing.

The recent tentative turnaround in Belgian export cycle, coupled with the lack of a recovery in the euro area export cycle can both be seen at the light of the appreciation of the euro exchange rate which is hampering the positive impact of the robust recovery in world trade on euro area export performance.

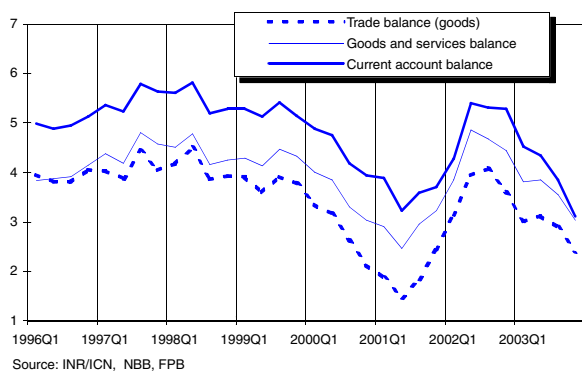
**Graph 18 - Export growth and leading indicator**



Several leading indicators for Belgian exports have, however, improved during the last few months, suggesting that exports should continue to develop favourably in the near future. This applies mainly to the leading indicators computed by the OECD for our three main trading partners (Germany, France and the Netherlands) and to the NBB survey results relating to export orders.

Trade statistics for goods have been completely adapted to a national concept which does not take into account activities involving the import and re-export of goods. These statistics are therefore more comparable to balance of payment statistics and national account data. These trade statistics confirm the acceleration in the volume of Belgian exports and imports in the last quarter of 2003, as well as the deflationary impact of the appreciation of the euro on trade prices from the second quarter of 2003 onwards.

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



Despite the improvement of terms of trade for the whole of 2003 (+0.3%), however, the Belgian current account surplus, expressed as a percentage of GDP, declined significantly last year, not only because of the setback in the goods and services balance but also because of the reduction in income from foreign investments as expressed in euros.

## Labour market

**Table 5 - Labour market indicators**

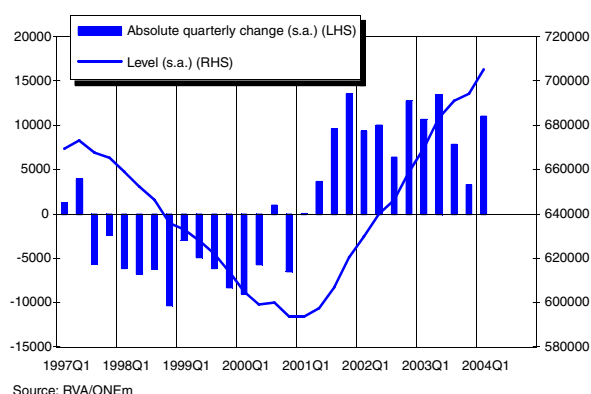
	2002	2003	2003Q2	2003Q3	2003Q4	2004Q1	2003M11	2003M12	2004M1	2004M2	2004M3	2004M4
Unemployment [1][2]	643.8	684.6	683.1	691.0	694.3	705.3	692.7	698.1	702.2	705.6	708.1	707.1
Unemployment rate [2][3]	13.3	14.1	14.1	14.2	14.3	14.5	14.2	14.4	14.4	14.5	14.5	14.5
Unemployment rate-Eurostat [3][4]	7.3	8.1	8.0	8.2	8.3	8.5	8.3	8.3	8.4	8.5	8.6	.

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

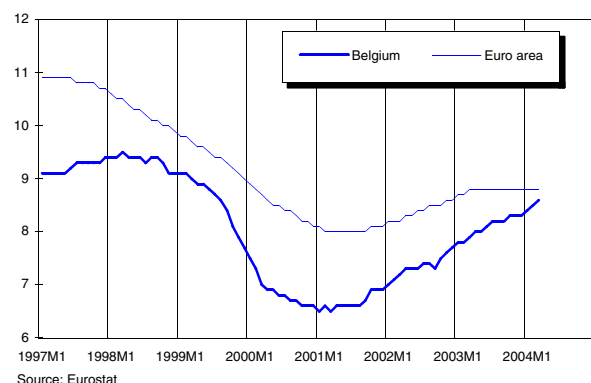
[4] Recent figures are based on administrative data and may be subject to revision

Source: RVA/ONEm, FPS Employment, Eurostat, FPB

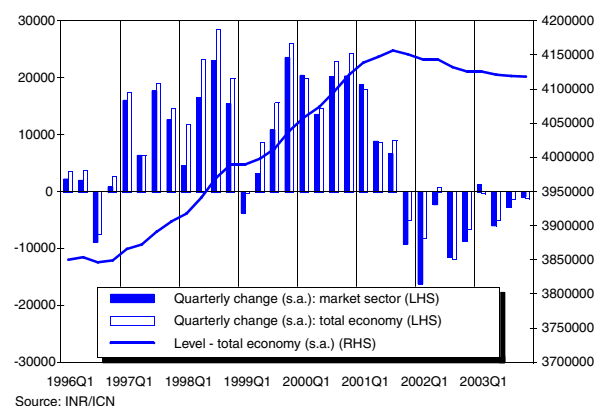
**Graph 20 - Evolution of unemployment (incl. older)**



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



**Graph 22 - Evolution of domestic employment**



It is still the case that administrative figures concerning the evolution of employment last year - and also those for the number of hours worked - are entirely lacking. This temporary absence of information has been caused by a revision of the data-collecting process by the social security authorities. Any inferences concerning the recent evolution of employment are therefore necessarily subject to a much greater degree of uncertainty than usual.

Estimates from the quarterly national accounts for the first two quarters of 2003 suggest that, on a quarter-to-quarter, seasonally adjusted basis, private sector employment remained more or less stable during the first quarter but fell again during the second quarter. Taking into account the observed evolution of unemployment during the second half of the year, it can be inferred that the rate at which jobs were lost slowed during the third and fourth quarters. Based on these assumptions, domestic employment would have shrunk by 0.4% last year and the overall employment rate would have dropped for the second year in succession (from 61.8% to 61.3%).

The renewed surge in broad administrative unemployment during the first quarter of 2004 (seasonally adjusted quarter-on-quarter increase of 11,000 persons) comes as something of a surprise and is not entirely in line with our present labour market scenario for the current year (gradual strengthening of quarterly employment growth and gradually diminishing quarterly increases in broad administrative unemployment). It must be noted, however, that the latest information available concerning unemployment (seasonally adjusted monthly decrease of 1,000 persons in April) does not confirm this tendency and even contradicts it.

Several consecutive years of slow growth have led to an increase in the number of new entrants into the subsidized early retirement scheme and consequently to downward pressure on the growth in the labour force. At around the turn of the year, the number of people in the scheme increased by a further 2,000 persons, but it has tended to level off since then.



Prices

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

	2002	2003	2003Q2	2003Q3	2003Q4	2004Q1	2003M11	2003M12	2004M1	2004M2	2004M3	2004M4
Consumer prices: all items	1.64	1.59	1.38	1.69	1.73	1.33	1.86	1.74	1.59	1.26	1.13	1.92
Food prices	2.20	2.04	1.94	3.02	2.24	1.88	2.26	2.16	2.14	1.80	1.71	2.05
Non food prices	0.60	1.18	0.60	0.96	0.91	0.26	1.16	1.02	0.67	0.06	0.05	1.75
Services	2.66	1.75	1.95	1.71	2.50	2.38	2.55	2.45	2.49	2.53	2.13	2.09
Rent	2.46	2.22	2.28	2.18	2.07	2.01	2.09	1.97	1.91	2.08	2.04	1.98
Health index	1.78	1.45	1.39	1.59	1.63	1.32	1.72	1.60	1.56	1.31	1.10	1.58
Brent oil price in USD (level)	25.0	28.8	26.1	28.4	29.4	31.9	28.8	29.8	31.1	30.9	33.8	33.4

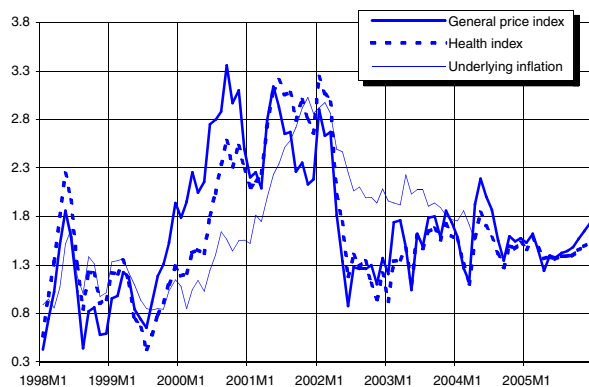
Source: FPS Economy, Datastream

**Table 7 - Monthly inflation forecasts**

	2004M1	2004M2	2004M3	2004M4	2004M5	2004M6	2004M7	2004M8	2004M9	2004M10	2004M11	2004M12
Consumer prices: all items	113.32	113.74	113.91	114.52	114.49	114.62	114.69	114.64	114.74	114.65	114.80	114.77
Consumer prices: health index	112.67	113.02	113.05	113.50	113.62	113.75	113.83	113.78	113.90	113.83	114.01	114.03
Moving average health index	112.38	112.59	112.77	113.06	113.30	113.48	113.68	113.75	113.82	113.84	113.88	113.94
	2005M1	2005M2	2005M3	2005M4	2005M5	2005M6	2005M7	2005M8	2005M9	2005M10	2005M11	2005M12
Consumer prices: all items	115.05	115.58	115.55	115.94	116.09	116.20	116.32	116.29	116.44	116.45	116.69	116.75
Consumer prices: health index	114.32	114.79	114.71	115.05	115.19	115.29	115.41	115.36	115.49	115.48	115.71	115.77
Moving average health index	114.05	114.29	114.46	114.72	114.94	115.06	115.24	115.31	115.39	115.44	115.51	115.61

Source: Observations (up to 04M4): FPS Economy; forecasts: FPB

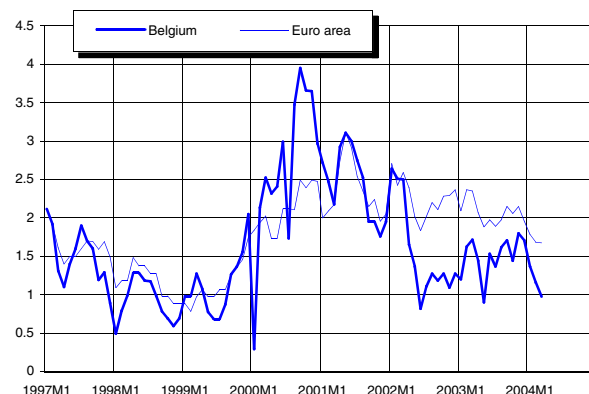
**Graph 23 - Monthly inflation evolution in% (t/t-12)**



Source: FPS Economy, from 04M5 on: forecasts FPB

In the first quarter of 2004, the Brent oil price, expressed in euro, was 13% lower than a year earlier, while in April it was 21% above its last year's level. This high yoy growth resulted both from the rise in the Brent price this year and the dramatic fall after the first phase of military action in Iraq last year. Mainly as a consequence of this upsurge in the yoy growth in world oil prices, headline inflation, as measured by the yoy growth rate of NICP, climbed from 1.3% in the first quarter of 2004 to 1.9% in April. If the Brent price remains at its current level, NICP inflation should actually rise above 2% during the next two months, gradually cooling down from July onwards.

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



Source: Eurostat

Underlying inflation, on the other hand, has continued to fall. In April it was 1.6%, down from 1.8% in the first quarter and 2% on average in 2003. This suggests that low non-energy import prices (due to the past appreciation of the euro) are still being passed on to consumer prices. For the remainder of the year, underlying inflation is expected to stabilize at around 1.5%.

All in all, average NICP inflation should be 1.6% this year, the same as the figure seen in 2003. According to our monthly forecasts for the 'health index', the pivotal index for public wages and social benefits (currently 113.87) should be exceeded in November 2004. The next pivotal index threshold (116.15) should not be crossed during 2005.

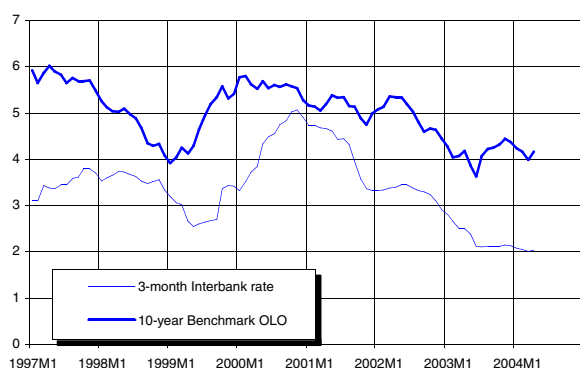
Interest rates

Table 8 - Interest rates

	2002	2003	2003Q2	2003Q3	2003Q4	2004Q1	2003M11	2003M12	2004M1	2004M2	2004M3	2004M4
<b>Short-term money market rates (3 months)</b>												
Belgium	3.29	2.31	2.34	2.11	2.13	2.04	2.14	2.13	2.07	2.04	2.00	2.03
Euro area (Euribor)	3.32	2.33	2.36	2.14	2.15	2.06	2.16	2.15	2.09	2.07	2.03	2.05
United States	1.73	1.15	1.17	1.07	1.10	1.05	1.11	1.10	1.06	1.05	1.05	1.08
Japan	0.02	-0.03	-0.01	-0.05	-0.06	-0.04	-0.06	-0.07	-0.05	-0.04	-0.04	-0.04
<b>Long-term government bond rates (10 years)</b>												
Belgium	4.97	4.14	3.89	4.18	4.37	4.13	4.44	4.37	4.24	4.17	3.98	4.16
Germany	4.81	4.09	3.97	4.06	4.26	4.18	4.34	4.45	4.26	4.22	4.05	3.92
Euro area	4.90	4.13	3.93	4.15	4.34	4.12	4.41	4.34	4.22	4.16	3.97	4.15
United States	4.59	3.99	3.60	4.19	4.27	4.00	4.28	4.26	4.13	4.06	3.82	4.32
Japan	1.24	0.99	0.59	1.23	1.36	1.30	1.38	1.32	1.33	1.24	1.32	1.51

Source: NBB, ECB

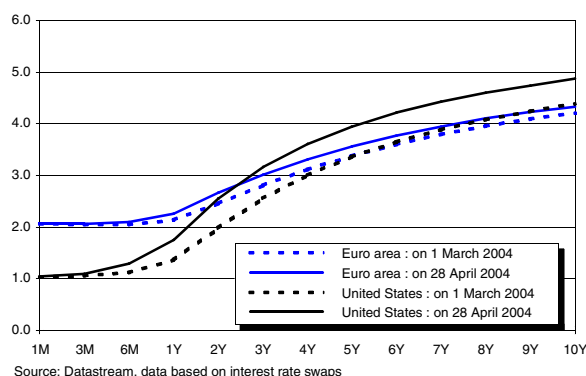
Graph 25 - Interest rate levels in Belgium, %



Source: NBB

Despite the robust expansion of US economic activity in 2004Q1, the Federal Reserve has so far decided to leave its main refinancing rate unchanged at the level it reached nearly one year ago (1%). Indeed the Fed still considers that strong productivity gains should be able to restrain inflationary pressures in the near future. In the euro area, on the other hand, pressures have increased for the European Central Bank to loosen its monetary policy since recent economic indicators prove that the economic recovery is still hesitant and since the upturn in the labour market has not yet materialised. As a result, short-term interest rates on the secondary markets in the US and the euro area remained relatively flat during the two latest months.

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



Source: Datastream, data based on interest rate swaps

Contrary to their downward trend registered in 2004Q1, US long-term interest rates rose rapidly in April 2004 (by around 50 basis points). Euro long-term interest rates once again moved in tandem with US government bonds. Government bond rates in the euro area, however, have risen less than in the US, so that in April, US long-term interest rates exceeded euro long-term rates for the first time since the beginning of 2002 (with the sole exception of August 2003).

As a result, between the beginning of March 2004 and the end of April, the US bond yield curve became far steeper, especially for maturities between 6 months and 2 years, reflecting growing optimism in financial markets about future economic activity and increasing probability of a strengthening of monetary policy. This was not the case in the euro area, where the yield curve only became slightly steeper in 2-year forward rates.

## Exchange rates

**Table 9 - Bilateral exchange rates**

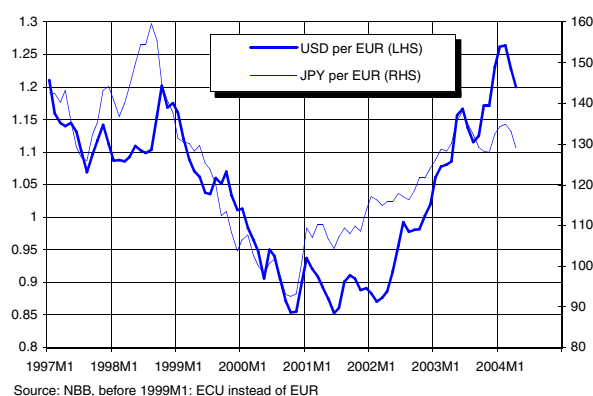
	2002	2003	2003Q2	2003Q3	2003Q4	2004Q1	2003M11	2003M12	2004M1	2004M2	2004M3	2004M4
BEF per USD	42.67	35.64	35.49	35.82	33.87	32.25	34.43	32.79	31.96	31.92	32.88	33.63
USD per EUR	0.945	1.132	1.137	1.126	1.191	1.251	1.172	1.230	1.262	1.264	1.227	1.199
UKP per EUR	0.629	0.692	0.702	0.699	0.698	0.680	0.693	0.702	0.693	0.677	0.672	0.665
JPY per EUR	118.12	131.03	134.67	132.21	129.54	134.05	127.88	132.54	134.22	134.79	133.13	129.06

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

	2002	2003	2003Q2	2003Q3	2003Q4	2004Q1	2003M11	2003M12	2004M1	2004M2	2004M3	2004M4
Euro	82.1	91.5	92.5	91.8	93.3	95.2	92.4	95.0	95.9	95.6	94.1	92.4
Growth rate [1]	3.0	11.4	4.5	-0.8	1.6	2.1	-0.1	2.8	1.0	-0.3	-1.6	-1.8
US dollar	119.9	107.5	108.1	107.7	102.2	99.6	102.9	100.7	98.9	99.1	100.7	101.4
Growth rate [1]	-1.1	-10.4	-3.4	-0.4	-5.1	-2.6	-0.3	-2.1	-1.8	0.2	1.7	0.6
Japanese yen	140.2	140.1	137.0	138.3	145.3	144.1	145.7	144.9	144.9	144.0	143.3	145.4
Growth rate [1]	-5.2	-0.1	-1.9	0.9	5.1	-0.9	0.3	-0.6	0.0	-0.6	-0.5	1.5

[1] Change (%) compared to previous period  
Source: BIS, NBB

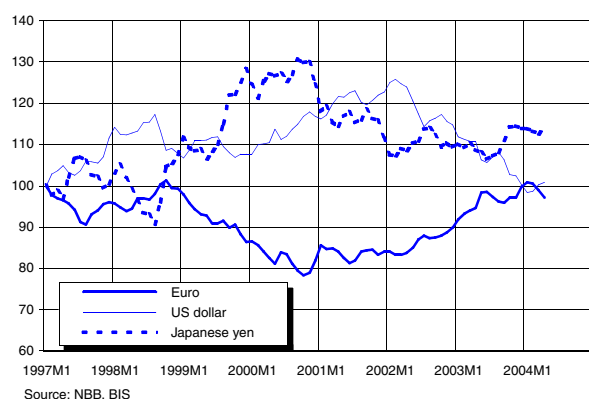
**Graph 27 - Euro-dollar and euro-yen bilateral exchange rates**



In March-April 2004, the US dollar has appreciated by 5% against the euro. This upward move was driven by signals of sustained growth in the US, while the recovery was only modest in the euro area, and also by net portfolio capital inflows into the US. The improvement in the US labour market in March - which removes one of the major obstacles to a tightening of monetary policy - combined with the fact that deflation is no longer considered to be a threat to the US economy, also contributed to the strength of the US dollar exchange rate.

In the light of positive economic news, investors have re-considered their views concerning the health of the Japanese economy, so that Japanese equity markets recently outperformed the US markets and large investment inflows led to upward pressure on the Japanese yen. The appreciation of the yen against the dollar and the euro in April should also be linked to the reduction of the volume of interventions by the Japanese authorities.

**Graph 28 - Nominal effective exchange rates (Jan. 97=100)**



As a result of these developments, the nominal effective euro exchange rate was still 2.1% higher in 2004Q1 than in the preceding quarter, but depreciated during the February-April period. This recent decline in the nominal effective euro exchange rate was a combination of its setback against the US dollar, the JPY and the UK sterling. In April 2004, the nominal effective euro exchange rate was only 1% above its average level in 2003.

**Tax indicators**

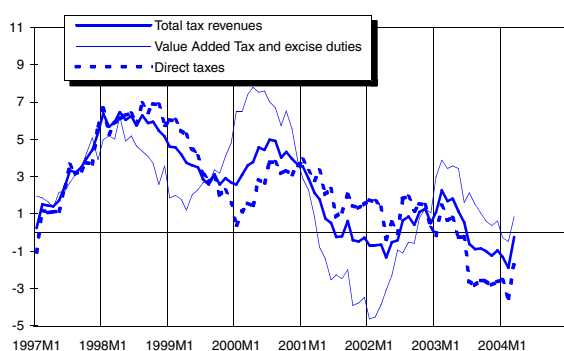
**Table 11 - Tax revenues (1)**

	2002	2003	2003Q2	2003Q3	2003Q4	2004Q1	2003M10	2003M11	2003M12	2004M1	2004M2	2004M3
Total [2], of which:	2.2	0.6	-1.5	0.1	0.7	7.6	0.9	0.4	0.6	0.9	6.3	18.8
Direct taxes, of which:	1.8	-1.1	-2.5	-2.4	-1.2	7.6	1.3	-3.3	-2.2	1.7	4.6	20.9
Withholding earned income tax (PAYE)	2.5	0.5	-2.0	0.2	1.5	3.9	2.3	2.0	0.4	3.2	6.8	1.7
Prepayments	-6.4	-0.8	3.2	-7.7	-1.8	.	-0.6	.	-3.1	.	.	.
Value Added Tax and excise duties	2.7	2.2	-0.7	2.0	1.9	7.7	-0.4	4.0	2.2	0.4	8.0	17.0

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

Source: FPS Finance, FPB

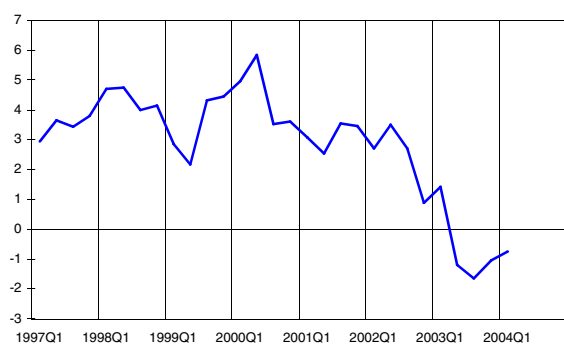
**Graph 29 - Real tax revenues (3)**



Total tax revenues were about 7.6% higher in the first quarter of 2004 as compared with the same period in 2003. At the beginning of 2003, however, tax revenues were still low due to the position in the business cycle. The high growth rate of tax revenues in the first quarter resulted from both direct and indirect taxes.

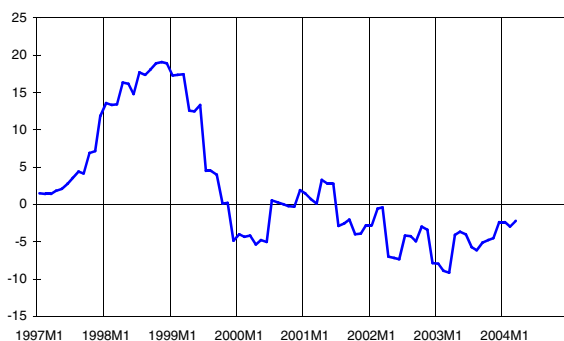
On top of the cyclical upturn, other factors also played a part in the upsurge of indirect taxes. The acceleration in the monthly growth rates in February and March 2004 was partly due to exceptional operations temporarily boosting VAT income. Moreover, increases in tax rates on fuel for transport and heating that were decided last summer in the context of the 'Kyoto package', together with increases in the price of tobacco products, led to rising revenues from excise duties.

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



Direct taxes in the first quarter of 2004 are being positively influenced by delayed repayments related to assessments for previous periods. On a yoy 4-quarter moving average basis, growth in real PAYE revenue (mainly on wages) was still negative. This reflects the fall in employment in 2003 and the effect of additional reductions in the rates of withholding earned income tax at the beginning of 2004 (final impact on PAYE revenue of fiscal reforms passed in 2001).

**Graph 31 - Real prepayments (3)**



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 consequently 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 to April 2003. Prepayments by self-employed people, on the other hand, are being negatively affected by the personal income tax reform.

[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

## Belgian energy outlook to 2030

This Planning Paper addresses changes in energy and environmental patterns in Belgium over the next thirty years. Starting from a set of well-founded assumptions about demography, economic activity and international fuel prices, the report describes in detail the evolution of the Belgian energy system, including energy demand and supply, acid pollutant emissions and energy-related carbon dioxide emissions. Moreover, the study highlights issues such as the energy mix for electricity production, the development of transport, the Kyoto Protocol and the evolution beyond the first commitment period and the security of energy supply. The objective of the study is to provide a quantitative insight into the energy and environmental challenges (only considering CO<sub>2</sub> and acid pollutant emissions) facing Belgium in the future and to evaluate the impact of some policy options.

The report begins with a detailed description of the Reference scenario, which provides a coherent picture of the evolution of the Belgian energy system over the next thirty years and constitutes a benchmark for the assessment of alternatives. This picture takes into account the situation seen at present as well as the policy measures that were decided on 31<sup>st</sup> December 2001. According to this scenario, gross inland energy consumption (GIC) should increase at about 0.2% per year between 2000 and 2030. This evolution constitutes a slowdown in comparison with past trends. Indeed, the average annual increase in GIC was 1.1% between 1970 and 2000. Economic and demographic growth will lead to higher energy consumption, while structural changes in the manufacturing industry and the further development of the tertiary sector will slow the increase. Moreover, technological progress and the steady rise in energy prices will also contribute to this slowdown.

Natural gas consumption should increase significantly, reaching 40% of the total energy demand in 2030 (as compared with 23% in 2000); power generation accounts for the bulk of this increase. The share of oil should remain stable at 40%. The decline of coal is forecast to continue until 2020 (5% as compared with 14% in 2000), followed by a recovery to 16% of total GIC in 2030. The latter development will be caused by the decommissioning of nuclear power plants and the increase in the gas price, making gas-fired power plants less competitive than coal-fired plants. The share of renewable energies should triple but still account for no more than 4% in 2030 (as compared with 1.3% in 2000).

According to the Reference scenario, energy-related CO<sub>2</sub> emissions would almost stabilise between 2000 and 2015, but then increase significantly between 2015 and 2030 (+38% in 2030 compared to 1990), despite a note-

worthy slowdown in energy consumption from 2020 onwards. This increase is mainly due to the transport and power generation sectors. The decommissioning of nuclear power stations between 2015 and 2030 will lead to the use of energy sources that are more CO<sub>2</sub> intensive.

As well as describing a Reference scenario, the study presents an evaluation of the energy and environmental impact of three policy alternatives and assesses the sensitivity of the reference trend to the price of gas. The impacts are quantified against the Reference scenario.

In the transport sector, a package of measures has been designed to tackle the problem of the steady growth in energy consumption in this sector. These measures focus on the development of public transport, rail and inland waterway transport, a better occupancy rate for private cars and a better load factor for trucks. The impact of these measures would be a decrease in the energy consumption for transport of some 10%. This energy cut would translate into a reduction of total CO<sub>2</sub> emissions by 4% and 2% in 2010 and 2030 respectively.

The achievement of the regional objectives in the areas of cogeneration and renewable energy in electricity production would have a significant impact on the structure of the power sector. For instance, the use of renewable energies would be three times as high as in the Reference scenario and represent 9% of electricity supplies in 2030, at the expense of natural gas and coal. The impact on gross inland consumption would be a decrease by respectively 1% and 3.2% in 2010 and 2030. Total CO<sub>2</sub> emissions would also go down, with the fall estimated to be around 2.7% in 2010 and 6.6% in 2030.

A change of the present Belgian policy on nuclear power, translating into a possible extension of the lifetime of existing nuclear power plants, either combined with new nuclear investments or otherwise, would lead to a significant decrease in CO<sub>2</sub> emissions of between 25% and 15% in 2030.

Greater pressure on natural gas prices (+32% in 2030), resulting for instance from higher production and transport costs for gas supplies from Russia and a higher demand for gas in Asia would benefit coal and renewable energies but would also result in an increase in CO<sub>2</sub> emissions by 6% in 2030. The structure of the power production park would be largely modified in favour of coal and, to a lesser extent, renewable energies.

*"Energievooruitzichten voor België tegen 2030", "Perspectives énergétiques pour la Belgique à l'horizon 2030", D. Gusbin, B. Hoornaert, Planning Paper 95, January 2004.*

## Projections of GHG emissions by 2010 for Belgium

This Working Paper describes the latest updated projections for greenhouse gas (GHG) emissions for Belgium during the 2001-2010 period<sup>1</sup>. This projection was made using the HERMES macrosectoral model of the FPB.

The UNFCCC<sup>2</sup> revised guidelines require the presentation of at least three different scenarios:

- projections 'without measures', starting between 1990 and 1995;
- projections 'with measures' (implemented measures and measures under implementation);
- projections including 'additional measures'.

This report is an update of the second scenario ('with measures'). New forecasts 'with additional measures' will be developed in the course of 2004 in conjunction with the evaluation and expected adaptation of national climate policies.

The medium-term forecasts for GHG emissions were made using the HERMES model, on the basis of an updated macroeconomic scenario: this new scenario takes account of both the changes in the world economic climate (particularly the slackening economic growth) since 2000 and the new measures introduced since then.

Regarding CO<sub>2</sub> emissions, the FPB uses a top-down method based on the energy balance sheets published by EUROSTAT. These balance sheets are, in turn, derived largely from the energy balance sheets of the Federal Public Service Economy. A number of differences exist between the balances calculated at federal and/or European level and the balances computed by the Regions, due to different evaluations of the consumption of various

energy products. This explains discrepancies between the official emission inventories (based on regional data) and the inventories calculated from the outcome of the model. Work is currently underway to align the energy balance sheets of the regions with those of the federal government.

GHG emissions are calculated in a scenario of unchanging policy. This principle was, however, abandoned in the case of calculating methane (CH<sub>4</sub>) produced by agriculture and waste, assessing the nitrous oxide (N<sub>2</sub>O) from agriculture and calculating fluorine gas emissions. In addition, it was assumed that current emission factors would remain unchanged until 2010. Improved energy efficiency was, however, taken into account.

Overall, the emissions of six GHGs, expressed as CO<sub>2</sub> equivalents (notably CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFC, PFC and SF<sub>6</sub>), are expected to stabilize during the projection period. This stabilization is due to the economic slowdown during 2001-2003, as well as the slight increase in energy consumption and the structural switch from solid and liquid fuels to gas and electricity. Nevertheless, additional efforts are required to meet the GHG reduction target agreed in the context of the Kyoto Protocol. Compliance with these commitments would require a 13% reduction in emissions as compared with the level reached in 2010.

*"Projection des émissions de GES à l'horizon 2010 pour la Belgique: une actualisation", "Vooruitzichten tot 2010 voor de uitstoot van broeikasgassen in België: een actualisering", F. Bossier, I. Bracke, F. Vanhorebeek, Working Paper 9-04, February 2004.*

## The macro-economic effects of labour market reforms in the EU

In this paper the NIME model is used to assess the medium-term macro-economic effects for the European Union of a 1 percentage point cut in the social security contribution rate and a 1 percentage point increase in the labour participation rate. In the case of a cut in the social security contribution rate, we consider two ways to finance the reduction in revenues, i.e., an across-the-board cut in public primary expenditure and an increase in indirect taxes. In the long run, the proposed measures clearly increase employment and potential output, thereby raising the standard of living of EU citizens and increasing the sustainability of the social protection system. Various rigidities, however, prevent

an immediate adjustment towards the new equilibrium, so that economic activity may be less buoyant in the medium-term. This paper describes these medium-term effects.

First we examine the variant in which the cut in the social security contribution rate is financed by an across-the-board cut in public primary expenditure. In the long run, the natural rate of unemployment falls unambiguously by about 0.4 percentage points in the euro area. In the medium term, however, several forces pull in different directions so that the medium-term outlook is less clear-cut. During the first year, real GDP and the

1. This is an update of the medium-term projections presented in "Projections of GHG emissions and the total effect of policies and measures. Report by Belgium under council decision 1999/296/EC", December 2001

2. United Nations Framework Convention on Climate Change



GDP deflator of the euro area are almost unaffected. Subsequently a fall in interest rates, the expectation of higher future income and the fall in producer wages facilitate adjustment, and real GDP begins to increase, reaching 0.29% above the baseline after five years and 0.39% after ten years, while the GDP deflator falls gradually from 0.17% below the baseline after five years to 0.25% after ten years. Total employment in the euro area falls below the baseline during the first three years, due to the loss of employment in the public sector and the slow response of private sector employment. From the fourth year onwards, however, growth in private sector employment is strong enough to compensate for the fall in public sector employment and total employment is 0.4% above the baseline after ten years.

Next we consider the variant in which the loss in revenues is financed by an increase in the indirect tax rate. In this variant, total employment in the euro area rises by 0.02% in the first year and then remains above the baseline. Due to the smaller fall in the overall tax burden,

however, the natural unemployment rate falls by only 0.1 percentage points in the euro area.

Finally we discuss the simulation results for the variant in which the labour participation rate in the European Union is increased by 1 percentage point. This shock increases potential output in the long run. Due to various rigidities, however, total employment increases only gradually and after five years more than half of the additional labour supply has been absorbed. Real GDP in the euro area increases by 0.50% during the first year, while the GDP deflator falls by 0.05%. In subsequent years real GDP increases further, reaching 0.91% above the baseline after five years and 1.11% after ten years, while the GDP deflator falls to 0.37% below the baseline after ten years.

*"The macro-economic effects of labour market reforms in the European Union. Some selected simulations with the NIME model."*

*E. Meyermans, Working Paper 12-04, April 2004.*

## Modelling the development of VAT receipts

This paper describes the modelling of VAT receipts in Modtrim II, the quarterly macroeconomic model for the Belgian economy. First, the characteristics of the Belgian VAT system are summarized. Following on from this, the development of the implicit VAT rate and its determinants are covered, with a special focus on the cyclical behaviour of VAT receipts. The VAT model takes the form of an error correction mechanism consisting of a long-term and a short-term equation. The forecasting quality of this equation has been assessed on the basis of out of sample simulations. Finally the response of VAT receipts to both domestic and external demand shocks was examined using the complete Modtrim model.

The tax base of VAT can be approached in terms of household consumption, purchases of goods and services by public administration, housing investment and public investment. This means that in the absence of changes in legal tax rates, VAT receipts grow at the same pace as their tax base, implying a constant implicit rate. This long-term relationship is confirmed by empirical data, showing that over the past two decades both the implicit and the (weighted) legal tax rate in Belgium have been trending upwards in a similar way.

From a short-term point of view, VAT receipts can deviate from their long-term path mainly due to seasonal effects or specific collection rules, in particular through the system of refunds. These are typically claimed by export firms, which pay VAT on intermediary inputs but do not receive VAT on their sales. As a result, these firms regularly claim repayments of VAT in their monthly declara-

tions. Not surprisingly, refunds seem to be closely linked to exports, with a certain time lag.

The above mentioned factors have been formalised in an error correction model, which was estimated for the 1980-2002 period based on quarterly data (seasonally adjusted and corrected for working day effects). The dependent variable is the qoq growth of net VAT receipts (gross receipts minus refunds). The short-term equation integrates some additional variables (for instance an autoregressive term reflecting the jagged profile of quarterly VAT growth). All coefficients have the expected sign and the overall fit of the equation is satisfactory.

The forecasting quality of the VAT model has been assessed on the basis of out of sample simulations with a horizon of four quarters, for the years from 1999 to 2002. Differences between observed and simulated values were at an acceptable level, given that this period was characterised by large swings in VAT growth.

A full model simulation using Modtrim illustrates the different behaviour of VAT receipts in response to a domestic shock (affecting private consumption) and an external demand shock. In the case of an external shock, VAT receipts overshoot in the short-term and gradually fall back to their long-term value afterwards. In the case of a domestic shock, there is a gradual catching-up towards the long-term value, without any initial overshooting. This simulation also makes it clear that two shocks with identical medium-term impacts on real GDP, can have a very different medium-term impact on VAT

receipts, based on the composition of GDP (the impact is much larger in the case of a domestic shock). This should be borne in mind when using simple rule-of-thumb relationships between GDP and general government balances.

*“Modélisation trimestrielle des recettes de TVA dans Modtrim II”, “Modelling op kwartaalbasis van de BTW-ontvangsten in Modtrim II”, B. Hertveldt, I. Lebrun, M. Saintrain, Working Paper 14-04, April 2004.*

## R&D and innovation in Belgium: sectoral diagnosis

Innovation and technical progress are essential factors determining long-term growth in productivity and thereby promoting economic growth. These factors depend directly on research and development (R&D). For this reason, the EU, at the Barcelona European Council in March 2002, adopted the objective of increasing investments in R&D in order to reach an intensity of R&D equivalent to 3% of GDP in 2010, with two-thirds of this financed by the private sector. Within this framework, the objective of this paper is to compare the performance of Belgium in terms of R&D and innovation with the other Member States of the EU and with the US.

This comparison has been made on the basis of various themes: expenditure on R&D, personnel working in R&D and human resources in science and technology, participation in lifelong learning and continuing vocational training, scientific and technological productivity of R&D, innovation and government budget appropriations in the area of R&D. The diagnostic process is carried out for each country at the national level, and for Belgium at the sectoral level. This exercise makes it possible to have an insight into the structure and evolution of R&D expenditure in Belgium, as compared with the other countries, and to determine the position of Belgium regarding the European objective.

In short, the paper shows, in particular, that R&D expenditure in Belgium (2.17 % of GDP in 2001) was slightly higher than the European average (1.98 %), due to a strong increase during the past few years. The subdivision of R&D expenditure by sector of performance reveals that, in Belgium, enterprises carry out more R&D than on average in the EU, while government carries out a significantly lower share than the European average.

The subdivision of R&D expenditure by source of funds shows that, in Belgium, R&D expenditure (as a percent-

age of the total or of GDP) is financed far more by enterprises and by foreign countries than the average for the EU. On the other hand, the government finances a much smaller share of R&D expenditure (as a percentage of the total or of GDP) than the European average.

As for R&D expenditure, the proportion of the active population working in the field of R&D is higher than the European average. An analysis of the educational level of human resources shows that Belgium has a large number of skilled people (post-secondary education), but that these people do not seem to be sufficiently focused on the field of science and technology.

Lifelong learning can help human resources to assimilate new technologies. In Belgium, the labour force participating in any form of education or training (8.5% of the 25-64 year old age group in 2003) is below the European average (9.7%). An improvement is necessary since a European target has been set in this field for 2010 (12.5%).

The sectoral analysis reveals that, in Belgium, the chemical industry and specifically the pharmaceutical products industry is very active in R&D (R&D expenditure, personnel and researchers are highest). The "Television, radio and communications equipment manufacturing" sector is also very active.

The scientific and technical productivity of R&D in Belgium, measured by patent applications at the European Patent Office and at the US Patent and Trademark Office, is around the European average. As for R&D expenditure, the number of patents filed is particularly high in chemistry.

*“La R&D et l’innovation en Belgique : diagnostic sectoriel”, B. Biatour, Working Paper 15-04, May 2004.*

## Other Recent Publications

Working Paper 11-04, April 2004

“Personal income tax reform in Belgium: the short-, medium- and long-run impact on wages, employment and value added re-examined by LABMOD, P. Stockman

Working Paper 13-04, April 2004

“10 jaar Economische Begroting. Een terugblik op de kwaliteit van de vooruitzichten”, L. Dobbelaere, B. Hertveldt

## Recent history of major economic policy measures

- May 2004** There were two small but significant commercial developments in telecommunication. In mobile communications, a first commercial UMTS service was introduced, albeit on a limited scale. For the time being, this service will be available to professional customers and in the six largest cities only. In the area of broadband connections, Belgacom has followed Telenet in launching an offer for a light Internet service at a price of less than 30 euros per month and with a limit on the connection speed and download capacity.
- April 2004** Two small but noticeable measures relating to renewable energy were taken: one was positive and the other was negative. The positive measure is the provision of a license to build a windmill site in the North Sea. From 2007 onwards this site may produce electricity for 400,000 households. The negative one is the decision by the Government of Flanders to suspend the exemption from network access fees for renewable electricity. It was warned by the European Commission because the exemption did not apply to imported electricity.
- March 2004** The telecommunications incumbent Belgacom has been floated on the Brussels stock exchange. The equity involved was already held by a private investment consortium. The federal government remains the majority shareholder (51.6%).
- The federal government has made significant progress in the development and financing of two important railway investment projects for the coming decade. One project is the creation of a high-capacity commuter network around Brussels (RER/GEN), while the other is the building of direct connections to the national airport from cities other than Brussels.
- Social policy measures are announced, mainly consisting in adjustments to the welfare system affecting certain benefits: in particular, a 2% increase for older pensioners and people with long-term disabilities (wage-earners scheme) in 2005, 2006 and 2007, and increases and wage indexation of ceilings in disability insurance.
- February 2004** The federal Council of Ministers speeds up the transposition of European directives into Belgian law. The transposition of at least half of 59 directives falling within the competence of the federal government is scheduled to take place before the end of March. The remainder will follow soon afterwards.
- January 2004** A number of measures and general orientations are announced by the federal government, aimed primarily at promoting economic growth and employment in the long term. The measures refer notably to encouraging research and development, improving controls of the willingness to work among unemployed people, better social protection for self-employed (higher minimum pension, extension of the public health insurance scheme to cover "small risks" etc.), and stronger tax incentives for the use of restaurant services in Belgium.
- To avoid any detrimental effect on the competitiveness of Belgian industry, the government has decided to put a limit on the charges paid by industry for the transport of electricity.
- The new European rules that extend the minimum rate system to energy taxes for coal, gas and electricity, which had previously only been applied to mineral oils, were transposed into Belgian law. The directive (ref. 2003/96/CE) is part of a set of new rules designed to harmonise tax regimes within the internal market.
- Some significant measures were taken to shift traffic from road to rail. For passenger traffic, commuters are offered free season tickets. Public employees will be the first to benefit and employees of private companies will follow in 2005. The costs will be covered by employers and the federal government. For freight traffic, domestic container services will be subsidised.
- In view of the non-transposition of six European directives on telecommunications into Belgian law, the market regulator BIPT had to publish new rules designed to govern the market in a way that complies with the European directives. These new rules mainly relate to the replacement of the existing authorisation procedure by a simpler procedure of notification for new operators of fixed or mobile telephony or telecommunication networks.
- December 2003** It is decided to split up the national railway company (NMBS/SNCB). A holding structure will be created, with two major companies within it: a network management and a train operating company.
- As a significant step towards administrative simplification, a collaboration agreement is concluded between the federal government, the regional governments and the various communities. This agreement addresses the way the different levels of administration work together, to reduce administrative burdens.
- November 2003** The new Stability Program confirms the budgetary targets set by the Belgian authorities: the budget (for public administrations as a whole) should be in balance next year and in surplus in 2007 (0.3% of GDP).

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)