

# 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

*Belgian exports will be hit this year by the deceleration in world economic growth, which was already reflected by the net slowdown in world import demand at the end of last year. Even when taking into account the expected recovery in world trade from the second half of 2001 onwards, growth in Belgian export markets should significantly ease back. Moreover, the appreciation of the euro will reduce the price competitiveness of Belgian exports and would lead to loss of market share. As a result, the positive contribution towards real economic growth from external trade will decline.*

*Nevertheless, domestic demand should remain robust in 2001. Business investment should benefit from a rise in firms' profitability due to the gain from the terms of trade (because of lower oil prices and the appreciation of the BEF). Private consumption will be sustained by substantial growth in household's real disposable income as the expected deceleration in inflation will allow to regain part of the loss of purchasing power in 2000. Furthermore, households' disposable income will also be supported by some personal tax cuts. Although the deterioration in the business cycle will lower the pace of employment growth, the higher labour-intensiveness, that has been observed during the last three years, will still give rise to a favorable employment outcome.*

*All in all, Belgian GDP is expected to decelerate from 3.9% in 2000 to 2.8% this year and to be less export-led than last year.*

*Taking into account the 2001 Budget and the macro-economic outlook presented above, and including the expected revenues from the UMTS licences (0.2% of GDP), the general government budget balance is expected to move from equilibrium in 2000 to a small surplus in 2001 (about 0.7% of GDP).*

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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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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>).

## Boost for Belgian foreign direct investment (FDI) due to mergers and acquisitions

Inward and outward FDI have increased dramatically worldwide since the early 1990s. A number of major international mergers and acquisitions explain this pattern.

Foreign direct investment (FDI) is defined as an investment designed to produce management control of a resident entity (foreign affiliate) in one economy by an (parent) enterprise resident in another economy. FDI is a long-term financial commitment reflecting an investor's 'lasting interest' in a foreign entity. An equity capital stake of at least 10% is normally considered a threshold for the investor's lasting interest. Also, it comprises all other financial transactions between the parent enterprise and the foreign affiliate such as loans. It becomes a portfolio investment when less than 10% is invested in equity capital.

FDI<sup>1</sup> can be decomposed as follows:

- equity capital: participations by new shareholders; creation (new branches) and extension (capital increase) of companies by existing shareholders; real estate
- loans: financial loans to affiliated companies, including short term loans; other financial transactions.

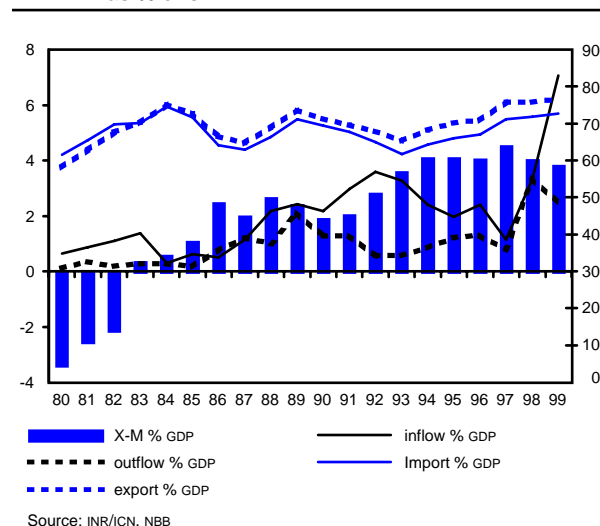
This decomposition is valid for incoming as well as for outgoing flows, which are further decomposed into investments and disinvestments.

The capital account records the net flow of capital (payments) between Belgium and other countries, involving FDI, portfolio investment and purchases and sales of bonds and commercial credit. For the past 10 years, the BLEU has always recorded a capital account deficit (or net capital outflow). This is largely due to portfolio investments. Direct investments, on the other hand, resulted always in net capital inflow, except for 1998 and, to a some smaller extent, to 1995. For the first time in a number of years, direct investments of the BLEU in foreign countries exceeded foreign investments into the BLEU in 1998.

Since 1986, the growth rate of investment flows to and from Belgium have increased more than the growth rate of GDP or foreign trade (see graph 1). This can be explained by the globalisation of the economy in general and the European single market in particular. A general rise in share prices also inflated the amounts involved in mergers and acquisitions (M&A's).

Total direct investments in the world accounted for 982 billion USD in 1999, which was an increase of 44% compared to 1998, while world trade grew by "only" 4%. UNCTAD expects growth rates of FDI to be reduced in 2001 and 2002.

**Graph 1 - FDI (equity capital) and foreign trade of Belgium as % of GDP**



### FDI flows

According to UNCTAD, FDI flows in the BLEU (inflows and outflows in USD) are among the 10 highest in the world.

**Table 1 - FDI: Equity and loans in 1999.**

	INFLOWS		OUTFLOWS	
	USD billions	% of GDP	USD billions	% of GDP
USA	275.5	3.0	150.9	1.6
United Kingdom	82.2	5.7	199.3	13.8
Sweden	60.0	25.1	19.5	8.2
France	39.1	2.7	108.0	7.5
Netherlands	33.8	8.5	45.9	11.6
Germany	26.8	1.3	50.6	2.4
BLEU <sup>a</sup>	117.5	43.8	116.0	43.3
Belgium <sup>a</sup>	18.4	7.4	17.3	6.9
id excl. coordination centres <sup>a</sup>	13.7	5.5	12.5	5.0
Spain	9.4	1.6	35.4	5.9
Denmark	7.5	4.3	8.2	4.7
World <sup>b</sup>	982.0	-	800.0	-

Source: UNCTAD, NBB

a. recent figures

b. The data for global FDI inflows and outflows do not match due to data inconsistencies

The international comparisons (see table 1) are based on net-investments<sup>2</sup> in capital as well as in loans. But these figures have to be treated with care. For example, if

1. The detailed figures for the BLEU as well as for Belgium are extracted from the Balance of Payments constructed by the NBB.

2. Net-investments equal investments minus disinvestments. A disinvestment takes place when a company sells its shares in a foreign company or when a foreign company pays back a loan.

Belgium is considered (without Luxemburg), investment figures are considerably lower, especially for 1998 and 1999. Furthermore, so-called 'coordination centres' distort Belgian figures. Coordination centres are set-up in Belgium by multinational companies partly because of tax reasons (similar systems also exist in other countries). The coordination centres deal with large FDI flows that do not lead to real investments in Belgium. FDI inflows are affected through capital as well as loans to coordination centres. FDI outflows are only influenced through loans because capital exports are not allowed.

Belgium's ranking has improved since 1995, following the important growth of FDI to and from Belgium. As a proportion of GDP, Belgium stands forth internationally in terms of its inflows in 1999. Without coordination centres Belgium moves to sixth place. In terms of outflows, Belgium is sixth place with coordination centres and seventh place without coordination centres.

#### FDI per sector

Many different branches of the economy have been affected by inflows and outflows of FDI. Table 2 gives an overview of gross investment in equity capital by sector.

**Table 2 - FDI flows for Belgium by sector: equity capital for 1999 in billions of BEF<sup>1</sup>, excl. loans**

	Inflow	Outflow	Net In-Out	
			1995	1999
Coordination centers	158	0	66	131
Financial intermediation	166	292	-39	-89
Real estate, renting and business activities	65	80	-2	-30
Transport, storage and communications	32	27	7	12
Trade	15	14	1	37
Coke, petroleum and nuclear fuel	283	87	14	353
Other manufacturing	39	66	-23	6
Other services	21	4	21	21
Other <sup>a</sup>	0	25	13	-12
Total	780	595	57	428

Source: NBB

a. Agriculture, mining and construction

Table 2 illustrates the large FDI flows for "Coke, petroleum and nuclear products" in Belgium for 1999. This figure is partly the result of an important acquisition in the petroleum sector (Petrofina). The sub sector "Financial intermediation" has also seen a strong increase in FDI and M&A in the banking sector explain this. The coordination centres were the most important sector of investment in 1995 and remained an important sector in 1999. The "Real estate, renting and business activities"

1. Real estate is not included in these FDI-figures

sector has increased in importance, which is due to the performance of the sub sector "Other business services" (entailing consultancy, selection and *temping agencies*). Incoming investments in the telecom-sector have also increased.

In terms of outgoing investment, all sectors highlighted above - with the exception of the coordination centres - have experienced strong growth.

Looking at the difference between FDI inflow and outflow (which is a component of the capital account), there is a noticeable increase in capital outflow for the "Financial intermediation" sector (e.g. the acquisition of Dexia France by Dexia Belgium, and the acquisition of CSOB bank by KBC). A similar outflow can be observed for "Other business services" (e.g. the acquisition of "Content Beheer" by Creyf's Interim).

#### FDI by country of origin or destination

At an international level, M&A activity helps to distinguish the source of FDI by country. France (e.g. the petroleum sector), the Netherlands (e.g. the finance sector) and Singapore (e.g. the telecommunications sector) are the most important investors in Belgium (see Table 3). The EU accounted for more than 88% of investment in 1999, while in 1995 it accounted for only 77% of Belgian inflows. In 1999, only 71% of Belgian outflows were to EU countries, while 9.6% of outflows (3.2% in 1995) were directed to the candidates countries for EU enlargement<sup>2</sup>. The Czech Republic (45.1 billion BEF) and Poland (11.9 billion BEF) attracted most of these investment flows. Hungary attracted most of these flows in 1995.

**Table 3 - FDI flows for Belgium: equity capital in 1999, billions of BEF.**

	gross Inflows	gross out flows
France	505.3	316.3
Netherlands	134.4	32.1
European Union	709.7	442.1
United States	20.6	87.4
Japan	3.0	1.0
EU enlargement	-	59.3
Asia (excl Japan)	39.5	3.3
Total	803.2	618.3

Source: NBB

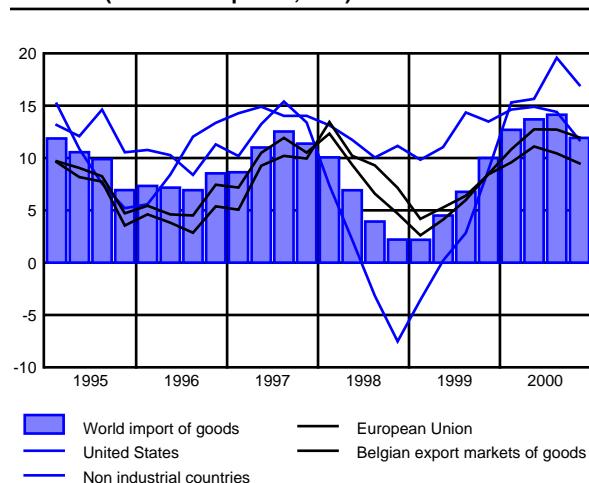
2. These countries are Poland, Czech republic, Hungary, Romania, Slovakia, Bulgaria, Estonia, Latvia, Lithuania, Cyprus, Malta, Slovenia

### Belgian exports hit by strong deceleration in world growth and trade in 2001

In 2000 the world's economy experienced its strongest performance since the end of the 80s (with the exception of 1994), with a real growth rate estimated at about 4.7%. During the course of the second half of last year, however, global cyclical momentum began to edge lower due to the impact of the steep rise in oil prices and to the more restrictive stance in monetary policy. During the last few months signs of a deeper US economic slowdown than had been expected, have adversely affected the outlook for the world's economic environment and increased uncertainties on world economic prospects for this year.

The weakening in the US and the world economy is already reflected by the net deceleration in the qoq growth rate for world imports of goods in the last quarter of 2000 (estimated to be less than 1% after more than 3% growth in the three preceding quarters), which correspondingly, although to a lesser extent, depressed growth in our export markets. Initial estimates for the first quarter of the current year confirm this downward trend in world trade. This cooling-off is giving rise to a lower carry-over of external demand for this year than was seen at the beginning of 2000.

**Graph 1 - World trade**  
(in constant prices, t/t-4)



On the other hand, Belgian export markets could recover their strength in the second half of 2001, given expectations that the US economy will avoid the recession and pick up again in the second half of the current year and that the European economy should only be moderately affected by the slowdown in the US (as long as domestic demand continues to be supported by sound fundamentals and strong private confidence). For the whole of 2001, growth in Belgian export markets is then ex-

pected to ease back from 10.3% in 2000 to 6.2%.

The European financial environment has also changed dramatically in recent months. Indeed, inflationary pressures in the euro area have lessened during the course of last year thanks to the decline in oil prices, the deceleration in activity and the effective appreciation of the euro that took place once the economic slowdown in the US appeared to be severe. Since financial markets are expecting a quasi stabilisation of the euro exchange rate vis-à-vis the US dollar in 2001, the effective BEF exchange rate should increase by 1.2% this year, having fallen by 3.5% last year.

This appreciation will reduce the price competitiveness of Belgian exports, which, combined with their unexpectedly strong reaction to the weakening in international trade in the second half of last year (according to the quarterly national accounts), will lead - unlike last year - to a loss of market share, given that Belgium's yoy export growth is expected to be half what it was last year (5.5% as compared with 10.6%). The positive contribution towards real economic growth from external trade will then decline from 1% in 2000 to 0.4% this year.

### Nevertheless, domestic demand should remain strong

In spite of weaker international trade and exports, domestic demand should remain robust in 2001. Domestic demand should grow by 2.5% this year, which is somewhat lower than the average over the last three years (3%). This difference is almost entirely due to the expected fall in public investment in 2001, which is normal in a year after local elections. Private consumption growth should almost equal the average for the last three years, while business investment should do even better.

### Business investment should benefit from a rise in profitability

The degree of capacity utilisation in manufacturing industry rose to 84.5% on average in 2000 as compared with 81.9% one year earlier. This should lead to a recovery in industrial investment this year after moderate growth in 2000. More generally, business investment in 2001 should benefit from the favourable development of profitability. Whereas companies' profits in 2000 increased mainly as a result of higher volumes, while profit margins hardly rose at all, the opposite should be true in 2001: volumes should increase less than last year while profit margins should rise significantly. The Belgian economy should in fact gain from the terms of trade as the increase in import prices as expressed in BEF

will be far lower than in 2000 (both because of lower oil prices and the appreciation of the BEF) and as Belgian exporters may try to recover their profit margins. All in all, the capital share (i.e., the share of the remuneration of the production factor capital in total value added, which is a macroeconomic indicator of business profitability) should climb to the highest level since 1989.

Private consumption sustained by substantial growth in disposable income

Despite strong economic growth in 2000, the growth in real disposable household income has remained rather limited (only 2.3%). In order to meet their consumption (real growth of 2.9%), households have reduced their propensity to save. The household savings rate fell from 16.3% in 1999 to 15.7% in 2000.

In 2001 the real disposable income of households should increase significantly. Last year, households lost some purchasing power as salaries and social benefits were adjusted to price changes by only 1.5% on average, while CPI inflation amounted to over 2.5%. This difference was due to the application of the 'health index' (which included only part of the rise in the price of energy products) and the delay in the indexation mechanism (which hollows out purchasing power in periods of rising inflation, as was the case in 2000). In 2001 the opposite should occur: indexation should be close to 2% on average, while headline inflation should fall to 1.5%. Part of the loss of purchasing power in 2000 should therefore be regained this year. Furthermore, households' disposable income will also be supported this year by some personal tax cuts. Other measures (e.g. the revaluation of wages in the scope of the police reform, some supplementary social benefits...) should also contribute positively towards the growth of disposable income in 2001.

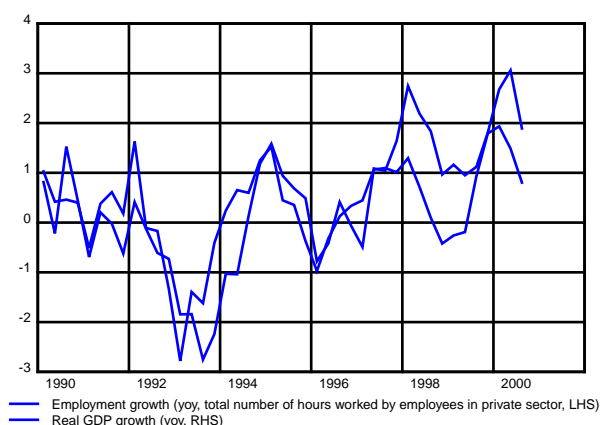
All in all, private consumption should be triggered this year by the strong increase in disposable income. The growth in private consumption, however, should be only 2.6% in real terms, compared to 3.5% for real disposable income, implying a rise in the savings rate. This rise in households' propensity to save should not be seen as manifesting a decline in consumer confidence, which shows, despite some volatility over the past months, no clear signs of deterioration. It should rather be interpreted as a normalisation after a partly unintentional fall in the savings rate caused by the inflation surprise of last year.

Employment growth continues, but at a lower pace

The graph below compares the growth of employment (volume of hours worked) with real GDP growth since the nineties on a quarterly basis. Over the whole period,

cyclical movements in economic activity are well reflected in the development of employment. It seems however, that during the last three years, job creation shifted to a higher growth path. This rise in the 'labour-intensiveness of economic growth' could be due to several factors, the most important of which are wage moderation, cuts in social security contributions and special programmes aimed at promoting employment. Taking into account the deterioration in the business cycle and the higher labour-intensiveness that has been observed, the volume of private employment is expected to continue to grow in 2001, at a rate of 1.5% on average (compared with 2.5% last year). It is evident that the favourable outlook for domestic demand (and more particularly for private consumption) set out above is conditional, among other things, upon the employment outcome, not only because of its direct effect on disposable income, but also indirectly, via its impact on consumer confidence.

Graph 2 - Employment and economic growth



Uncertainties remain for 2001

The main uncertainties underlying these forecasts concern the supposed quick recovery of consumer and investor confidence in the US and the capacity of the US Federal Reserve to avoid a recession and/or a further downturn in financial markets which could (through the effects of contagion in other regions), further cut back world economic growth and import demand this year.

Moreover, given the significant imbalances that characterise the US economy (current account, private indebtedness,...), a more pronounced slow-down in activity could result in a fast decline in the US dollar exchange rate and simultaneously boost the effective appreciation of the euro, further reducing Europe's competitiveness.

“Budget Economique 2001”, ICN, février 2001.  
 “Economische Begroting 2001”, INR, februari 2001.

## Economic Forecasts by the Federal Planning Bureau

Changes in volume (unless otherwise specified) (data in ESA-95)

	1998	1999	2000	2001
Private consumption	3.3	1.9	2.9	2.6
Public consumption	1.4	3.4	2.1	1.4
Gross fixed capital formation	4.6	4.8	4.2	3.4
Final national demand	3.9	2.1	3.0	2.5
Exports of goods and services	4.4	5.2	10.6	5.5
Imports of goods and services	6.5	4.5	9.9	5.3
Net-exports (contribution to growth)	-1.2	0.7	1.0	0.4
Gross Domestic Product	2.4	2.7	3.9	2.8
p.m. Gross Domestic Product - in current prices (bn BEF)	9082	9423	9913	10422
National consumer price index	1.0	1.1	2.5	1.5
Consumer prices: health index	1.3	0.9	1.9	1.7
Real disposable income households	2.6	1.6	2.3	3.5
Household savings ratio (as % of disposable income)	16.5	16.3	15.7	16.4
Domestic employment (change in '000, situation on June 30th)	44.4	46.1	69.0	47.3
Unemployment (Eurostat standardised rate, yearly average)	9.5	9.1	8.5	8.3
Current account balance (as % of GDP)	4.1	3.9	4.3	5.1
Short term interbank interest rate (3 m.)	3.6	2.9	4.4	4.5
Long term interest rate (10 y.)	4.8	4.8	5.6	5.0

## Economic forecasts for Belgium by different institutions

	GDP-growth		Inflation		Government balance		Date of update
	2000	2001	2000	2001	2000	2001	
Federal Planning Bureau	3.9	2.8	2.5	1.5	0.0	0.7	2/01
INR/ICN	3.9	2.8	2.5	1.5	.	.	2/01
National Bank of Belgium	3.9	.	2.6	.	0.0	.	2/01
European Commission	3.9	3.3	2.7	2.0	0.0	0.7	11/00
OECD	3.8	3.1	2.6	1.9	-0.1	0.3	11/00
IMF	3.9	3.0	2.2	1.4	-0.1	0.5	9/00
Artesia Bank	3.7	2.9	2.7	2.0	0.1	0.1	11/00
BBL	3.8	2.6	2.6	1.9	.	.	2/01
Fortis Bank	3.8	2.8	2.6	2.0	-0.1	0.2	1/01
Dexia	3.8	2.9	2.6	1.8	0.4	0.3	2/01
KBC Bank	3.8	3.0	2.5	1.6	0.3	0.5	1/01
Petercam	4.0	2.7	2.5	1.8	0.0	0.4	2/01
Morgan Stanley Dean Witter	3.8	2.4	2.6	2.1	-0.1	0.2	12/00
IRES	3.8	2.7	2.6	1.8	0.2	0.4	1/01
DULBEA	4.0	3.0	2.3	2.0	0.0	0.5	10/00
<b>Averages</b>							
All institutions	3.9	2.9	2.5	1.8	0.0	0.4	
International public institutions	3.9	3.1	2.5	1.8	-0.1	0.5	
Credit institutions	3.8	2.8	2.6	1.9	0.1	0.3	
Consensus The Economist	3.9	2.7	2.6	2.1			2/01

Collaborating institutions for The Economist: ABN Amro, Deutsche Bank, EIU, Goldman Sachs, HSBC Securities, KBC Bank, Merrill Lynch, J.P. Morgan, Morgan Stanley Dean Witter, Nordbanken, Primark Decision Economics, Royal Bank of Canada, Salomon Smith Barney, Scotiabank, Shinsei Bank, Warburg Dillon Read

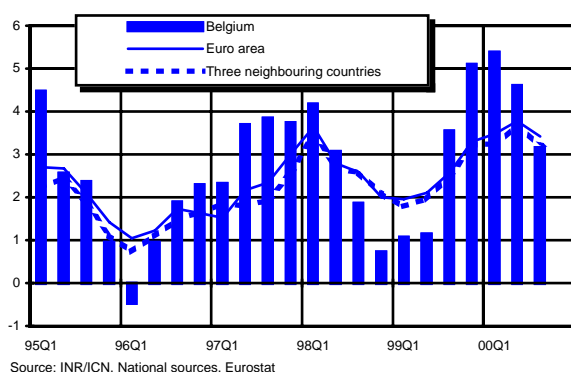
## General economic activity

**Table 1 - GDP: change compared to the same period in the previous year, in %**

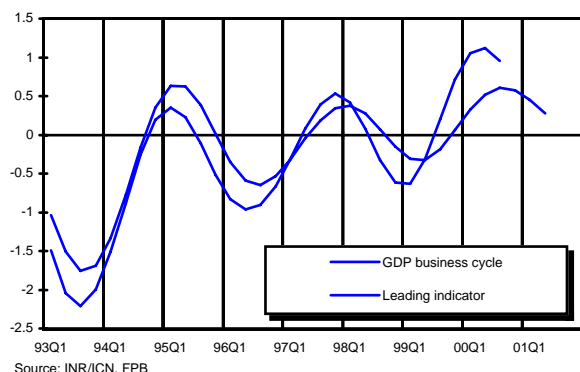
	97	98	99	98Q3	98Q4	99Q1	99Q2	99Q3	99Q4	00Q1	00Q2	00Q3
Germany	1.5	1.8	1.4	1.6	0.9	0.6	1.0	1.6	2.4	2.5	3.7	3.4
France	1.9	3.2	3.0	3.3	2.8	2.7	2.6	3.0	3.5	3.5	3.4	3.0
Netherlands	3.8	4.1	3.9	3.7	3.8	3.2	3.4	3.9	4.9	4.9	4.1	3.3
Belgium	3.4	2.4	2.7	1.9	0.7	1.1	1.2	3.5	5.1	5.4	4.6	3.2

Source: INR/ICN, National sources, Eurostat

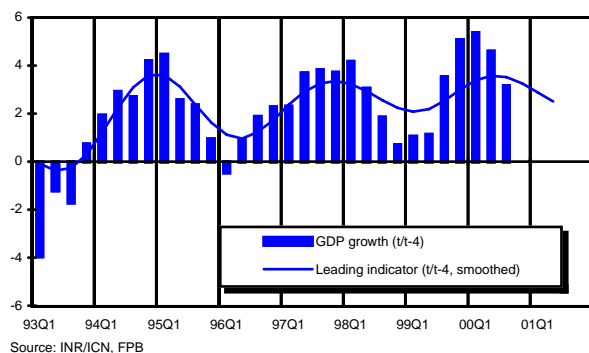
**Graph 1 - GDP-growth (t/t-4), in %**



**Graph 2 - GDP business cycle and leading indicator**



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



The peak in economic activity in the euro area, and in our three main neighbouring countries, was reached in the second quarter of 2000, as reflected by the deceleration in GDP growth (both yoy and qoq) in the third quarter of 2000 for both areas. In Belgium, although this turning point in GDP growth began to appear in the previous quarter, the economic slow-down was going on during the third quarter of last year and was even more pronounced than in the whole euro area. For the first time for four consecutive quarters, Belgian GDP yoy growth fell even slightly lower than in the euro area.

Indeed, Belgium's export volumes recorded a significant cooling-off since the second quarter of 2000 which had no equivalent in the other European countries, where exports were still accelerating in the third quarter of 2000. During the same period, however, private consumption eased downwards in most European economies, such as in Germany, France, Netherlands and also in Belgium. This deceleration can, to some extent, be attributed to the impact of higher oil prices on household purchasing power.

The slowing pace in European activity can also be seen in industrial production, where a top was reached in 2000 Q2, as confirmed by business and consumer surveys which reached their highest levels mid-2000, before decreasing slightly from these record levels in the rest of the year. Most of the leading indicators for the euro area (notably for Germany) are now pointing towards a new deceleration of activity during the last quarter of 2000 to less than 3% as the US cyclical downturn is dampening the European international environment.

The FPB's leading indicator of Belgian economic activity overall hints that the present gradual weakening in cyclical momentum should be observed until halfway through this year. Smoothed yoy growth rates derived from this indicator suggest that the expansion in Belgium could be about 2.5% on average during the 2000Q4-2001Q2 period. This quarterly pattern does not contradict our forecast of 2.8% GDP growth for this year which implies a cyclical upturn in the second half of 2001 induced by the expected take-off in world demand.



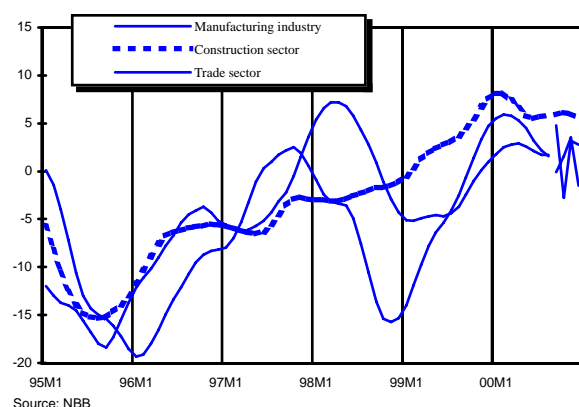
**Table 2 - Monthly business surveys [1]**

	99	00	00Q1	00Q2	00Q3	00Q4	00M7	00M8	00M9	00M10	00M11	00M12
Synthetic indicator	-2.9	3.8	6.0	4.6	2.8	1.9	1.9	5.0	1.5	1.6	3.8	0.2
Manufacturing industry	-4.1	3.5	6.2	4.4	2.2	1.2	1.1	5.6	-0.1	1.6	3.5	-1.5
Construction sector	2.9	6.5	8.9	4.9	6.1	5.9	5.7	6.7	5.9	6.1	6.0	5.6
Trade sector	-3.0	2.7	2.4	4.9	2.3	1.1	2.0	0.2	4.8	-2.8	3.2	2.8

[1] Qualitative data

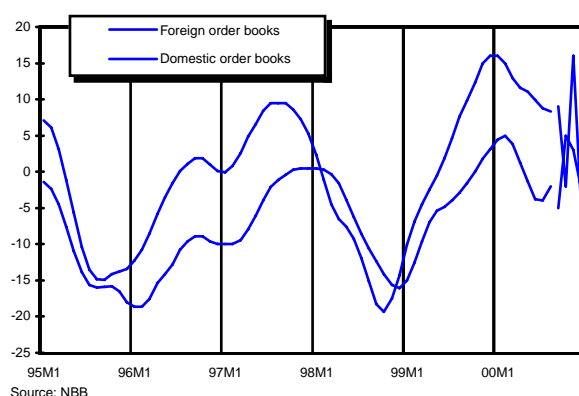
Source: NBB, FPB

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



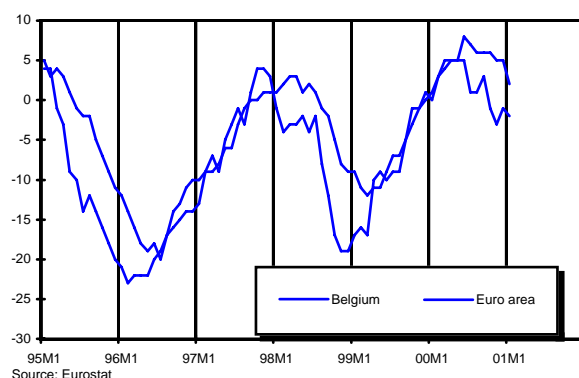
The downturn in the NBB's global synthetic indicator throughout last year also reflects the cyclical weakening of the Belgian economy. This indicator actually recorded its lowest level of the year in December 2000, compensating for the recovery during the previous month. This decline has almost entirely been caused by the domestic sector most exposed to the inflection point in international developments: manufacturing industry, while the construction and trade sectors appear to have remained more stable during the two last months of 2000. In the construction sector, activity was still increasing while order books moved in the opposite direction. In the trade sector, sales were slightly on a downward trend while forecast demand showed an upward trend.

**Graph 5 - Manufacturing industry: order books**



During the November-December period, the survey in manufacturing industry indicated that this sector experienced a decrease in demand as well as in the pace of production and in domestic order books. December was also marked by a very sharp fall in foreign order books, which were probably depressed by the cooling off in Belgian export markets.

**Graph 6 - Industrial confidence: international comparison**



Industrial confidence in our main trading partners (taken from the EC.) reached its highest level in June 2000, before falling to only slightly below this top level, mainly as a result of lower observed production trends and order books. During the second half of 2000, all components of this survey of European entrepreneurs' expectations remained rather stable, with the exception of a slight accumulation in inventories of finished products which dampened the aggregate indicator. In Belgium, the turning-point in industrial confidence in the middle of the year has been more consistent than in the euro area, but since then, despite lower production expectations, the trend was about the same as in our trading partners.

In January 2001, however, the industrial confidence indicator decreased again and more significantly in the euro area, than in Belgium, due to less optimistic production expectations and weaker order books. Nevertheless, as in Belgium, industrial capacity utilisation levels remain well above their long term averages.

## Private consumption

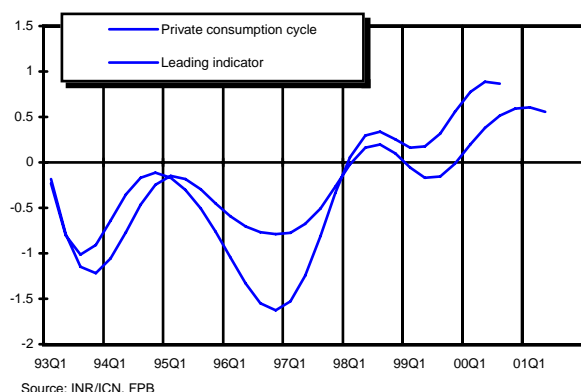
**Table 3 - Private consumption indicators**

	99	00	00Q1	00Q2	00Q3	00Q4	00M8	00M9	00M10	00M11	00M12	01M1
Turnover (VAT) - retail trade [1]	3.5	.	9.5	8.7	6.6	.	9.9	7.7	9.6	11.2	.	.
New car registrations [1]	8.3	5.2	12.6	8.3	-4.7	-0.7	0.4	-9.0	4.9	0.0	-11.2	-0.7
Consumer confidence indicator [2]	-1.9	9.3	4.0	9.0	11.0	13.0	14.0	10.0	10.0	13.0	16.0	14.0

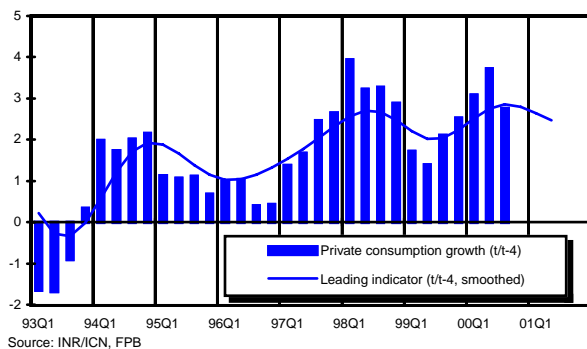
[1] Change (%) compared to same period previous year; [2] Qualitative data

Source: NIS/INS, Eurostat, Febiac, FPB

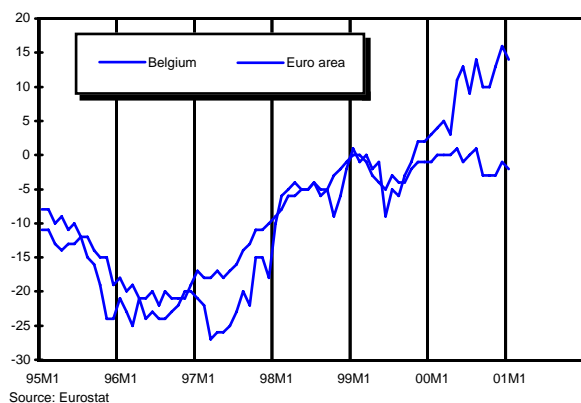
**Graph 7 - Private consumption cycle and leading indicator**



**Graph 8 - Private consumption growth and leading indicator**



**Graph 9 - Consumer confidence: international comparison**



As expected, private consumption spending lost some momentum in the third quarter of last year with a yoy growth rate returning to 2.8% after more than 3% during the first half of 2000. According to the FPB's leading indicator, the cycle of private consumer spending did indeed reach a peak during the second half.

This slowdown is also reflected in the quarterly pattern of new car registrations. Indeed a decrease in new car sales was recorded in the third and also, although to a lesser extent, in the fourth quarter of 2000, compared to 1999. This development, however, is partly due to the biannual Motor Show in early 2000, which boosted the sales figures for the first semester of 2000 and lowered sales in the second semester. More significant was the very modest increase in new car sales compared to the second half of 1998 (the previous year with a motor Show: only +1.5%). In January 2001, the reduction by 0.7% and 2.4% respectively, in comparison to the same month in 1999 and 1998, also confirms the moderation in this demand component.

Nevertheless, the slowdown in private spendings should remain modest. The yoy nominal growth of turnover in the retail trade sector has accelerated in the September-November period, and according to the FPB's leading indicator the cyclical weakening in private spending expected in the coming quarters could be only limited.

At the beginning of the current year, Belgian consumer confidence is still at a historical high level, as is the case for the whole euro area. This current record level of confidence in both Belgium and the euro area is highly correlated to the improvement in the labour market situation throughout the year 2000.

Smoothed year on year growth rates derived from the FPB's leading indicator suggest that private consumption growth could still decelerate slightly during the last quarter of 2000 and be around 2.5% on average during the first half of 2001. This pattern is still in line with our assumed average real growth rate of 2.6% for the whole of the current year which is explained by a strong increase in household purchasing power.

## Business investment

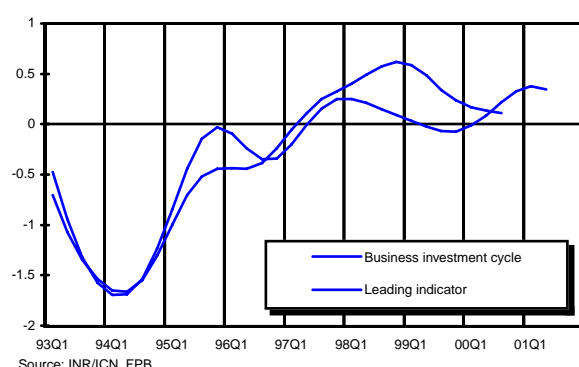
**Table 4 - Business investment indicators**

	99	00	01	00Q1	00Q2	00Q3	00Q4	00M7	00M8	00M9	00M10	00M11
Investment (VAT) [1]												
Industrial companies	4.6	.	.	4.1	4.4	-0.4	.	3.6	-6.1	1.8	0.1	6.2
Non-industrial companies	8.7	.	.	15.4	5.5	1.9	.	1.1	3.3	1.5	11.9	23.4
Total companies	7.2	.	.	11.2	5.1	1.1	.	2.0	-0.4	1.7	7.6	16.7
Investment survey [1]	2.3	-0.8	22.4									
Capacity utilisation rate (s.a.) (%)	81.9	84.5	.	84.7	84.2	84.3	84.7					

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

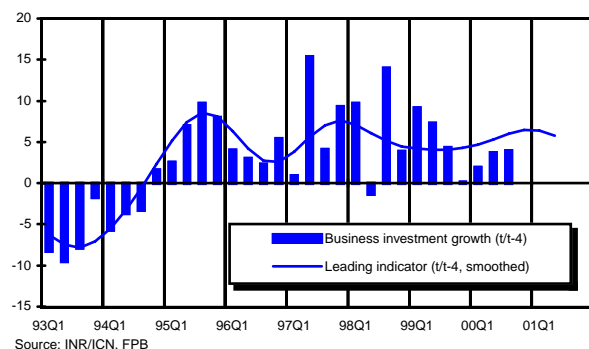
Source: NIS/INS, NBB, FPB

**Graph 10 - Business investment cycle and leading indicator**



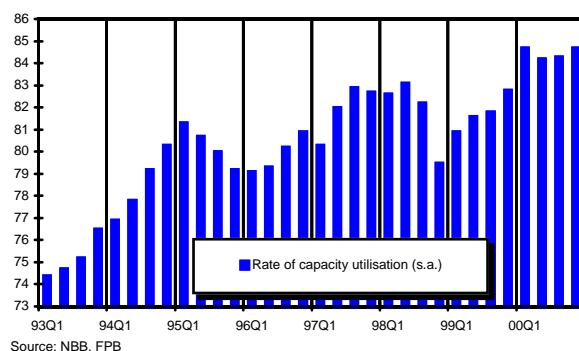
According to the quarterly national accounts, the yoy increase in business investment was rather robust in the third quarter of 2000 (+4%), hiding the underlying deceleration in terms of qoq growth. Indeed, analysis of the business cycle of this component of demand reveals a gradual return to its trend after two consecutive years of very strong momentum. According to the nominal growth rates taken from VAT statistics, the yoy increase in business investment has recorded a sharp downturn in the second and third quarter of 2000, while a significant rebound was seen in the October-December period.

**Graph 11 - Business investment growth and leading indicator**



During the same period, the spread between non-industrial and industrial companies, revealed by the VAT statistics, widened sharply at the expense of the latter, probably reflecting the squeeze in demand facing the industrial sector due to a less favourable external environment.

**Graph 12 - Capacity utilisation in manufacturing industry**

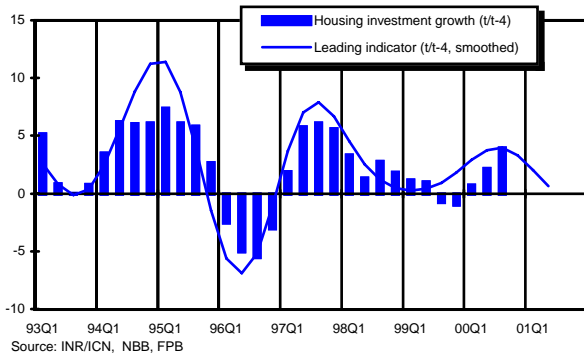


As the degree of capacity utilisation in manufacturing industry remains on an upward trend, picking up to an historic high of 84.7% in the last quarter of 2000, we would expect the weakness of industrial investments to be only short-lived. According to the November 2000 survey, it has been announced that investment projects in manufacturing industry will increase by more than 23% in nominal terms in 2001, a rate which has never been observed since the beginning of this survey in 1985. However, if this result confirms the expected revival in industrial investment this year, notably for the purposes of extension, its scale must nevertheless be put into perspective as the November 1999 survey indicated non-realised 18% investment growth for the year 2000.

These indicators, combined with an expected continuation of the underlying trend in non-industrial investment growth, points to a promising investment picture in 2001 which is confirmed by the leading business investment indicator. Smoothed average growth rates derived from this indicator point to an increase of about 5% yoy in total business investment for the first half of 2001, a pattern that reinforces our forecast of an annual increase in business investment above 5% this year.

## Housing investment

**Graph 13 - Housing investment growth and leading indicator**



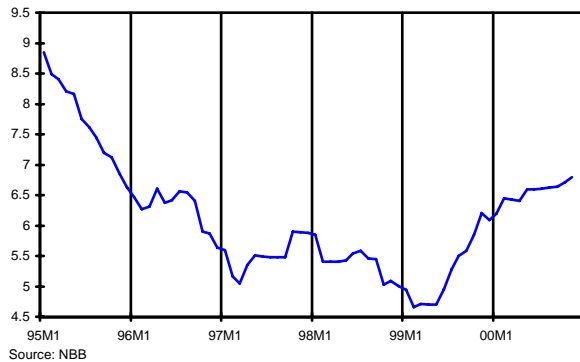
Benefiting from the so called “statistical base effect”, the yoy growth rate in residential investment accelerated strongly during the third quarter of 2000 (due to the very low level of this demand component in the corresponding quarter of 1999). More significantly is the recovery in housing investment in terms of quarterly increases (more than 1% for each of the three first quarters of last year). According to the FPB’s leading indicator, however, the top of this recovery cycle may have been reached, and some slackening can be expected in subsequent quarters.

Following the increase in long-term interest rates, mortgage interest rates have been rising during the year 2000, contributing to the decline in the number of mortgage demand as well as in the number of building projects started and building permits granted last year.

Surveys among architects showed an increase in the number of confirmed projects in residential buildings throughout the year 1999 while the opposite was observed in the three first quarters of last year, before picking up in the last quarter. Due to the delay of four quarters in transmission to residential investments, this means that a positive turning-point can only be expected at the end of 2001.

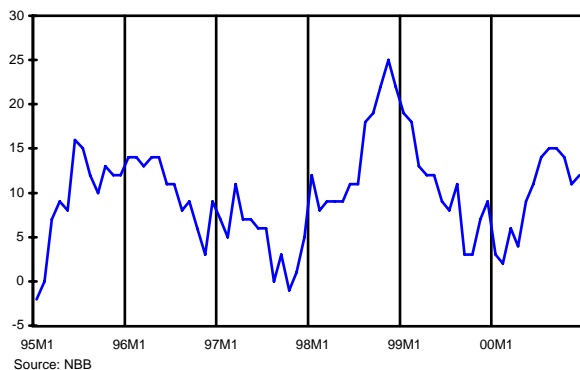
Nevertheless, due to the upward pattern in 2000, which has resulted in an annual increase of nearly 3% after virtually zero growth in 1999, the carry-over effect of residential investment growth could already be about 1.3% at the beginning of the current year.

**Graph 14 - Mortgage rate (in%)**



## Stockbuilding

**Graph 15 - Appreciation of stocks**



For the whole of the year 2000, stockbuilding should not have contributed to real economic growth, as the positive contribution recorded in the first half of 2000 should have been offset by the decrease in the second semester, when the economic downturn led to the reduction of stocks.

This latest development can be linked to the decline that has been seen in the number of entrepreneurs who consider in the latest months their stocks to be excessive when demand was decelerating.

## Foreign Trade

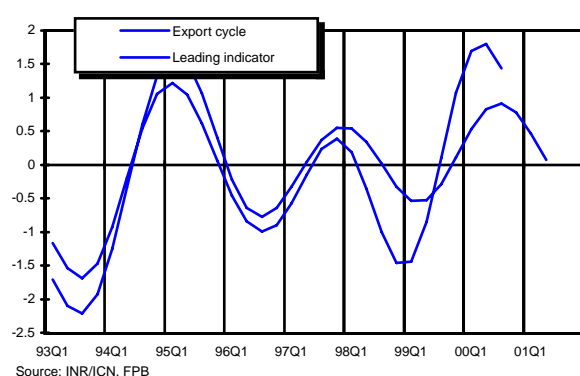
**Table 5 - Belgium - Trade statistics (goods, intra/extrastat)**

	98	99	99Q4	00Q1	00Q2	00Q3	00M6	00M7	00M8	00M9	00M10	00M11
Exports - value [1]	5.7	4.5	14.0	22.9	21.4	17.0	10.7	16.1	19.5	15.9	18.2	16.9
Imports - value [1]	6.2	4.5	15.5	24.2	21.4	20.6	12.4	20.6	26.9	15.4	14.8	20.0
Exports - volume [1]	5.8	5.0	8.7	13.0	10.6	5.9	0.8	7.3	7.9	3.1	5.1	6.0
Imports - volume [1]	8.3	3.2	6.9	11.2	8.2	6.5	-0.2	9.1	10.4	1.1	1.5	4.2
Exports - price [1]	-0.1	-0.6	4.9	8.7	9.8	10.4	9.7	8.2	10.7	12.3	12.4	10.3
Imports - price [1]	-1.9	1.2	8.0	11.7	12.2	13.2	12.6	10.5	14.9	14.2	13.2	15.1

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

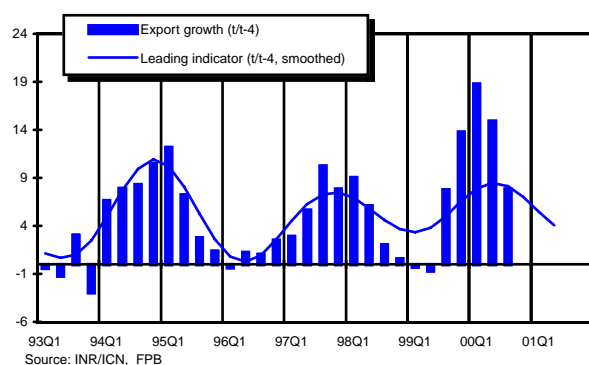
Source: INR/ICN, FPB

**Graph 16 - Export cycle and leading indicator**



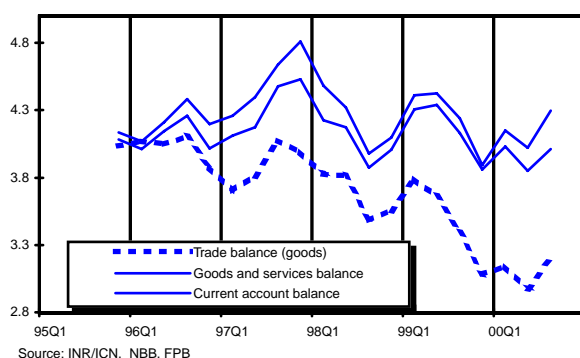
For the last three years, Belgian exports have been showing a striking quarterly pattern. Both the downward trend from 1998 to mid-1999 and the upward trend between mid-1999 and mid-2000 in Belgian exports were clearly more pronounced than suggested by the exports leading indicator (see graph 16) or Belgium's export markets.

**Graph 17 - Export growth and leading indicator**



During the course of 2000, economic growth and import demand became less dynamic in the US, and to a lesser extent in Europe. By the end of 2000 this turning-point became also clear in the non-OECD area. First estimates for the first quarter of this year confirm this downward trend in world trade. Short-term indicators suggest that Belgian exports once again reacted unexpectedly strongly to this weakening in international trade. Since the summer of 2000, industrial confidence in Belgium has clearly begun to weaken. This turning-point in industrial confidence was first seen in indicators on foreign order books, that already began on their downward trend from the first months of 2000 onwards. Quarterly national accounts (up to the third quarter of 2000) show negative qoq growth rates for Belgian exports in the second and third quarters of last year. The most recent trade statistics, however, suggest that Belgian exports already resumed their upward path in the last quarter of 2000, which can be considered as a forerunner for the gradual recovery in exports that is expected for this year.

**Graph 18 - Belgium foreign balances (4 quarters cumul,% of GDP)**



The trade balance (goods) and the balance for goods and services should have stabilised in 2000 close to the level seen in 1999 (3.1% and 3.9% of GDP respectively). This stabilisation was the result of the increase in the volume of net exports that counteracted losses due to the terms of trade. The latter resulted from the rise in oil prices and the effective depreciation of the euro. Unlike the stabilisation in the goods and services balance, the total current account balance showed a net improvement last year (from 3.9% of GDP in 1999, to an estimated 4.3% of GDP in 2000), stemming from increasing income from capital investment abroad.

Labour market

Table 6 - Labour market indicators

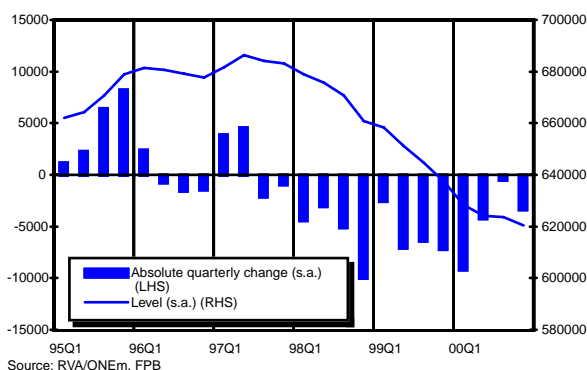
	99	00	00Q1	00Q2	00Q3	00Q4	00M8	00M9	00M10	00M11	00M12	01M1
Unemployment (excl. older) [1]	507.6	474.4	478.6	445.9	503.4	469.8	520.6	501.5	485.0	464.2	460.2	467.0
Unemployment (incl. older) [1]	647.8	624.1	623.9	594.5	654.3	623.9	671.3	653.3	638.1	618.4	615.2	623.0
Unemployment rate-FMTA/MfET[2]	11.6	10.9	43.9	40.9	46.2	43.1	11.9	11.5	11.1	10.7	10.6	10.7
Unemployment rate-Eurostat [3]	9.1	8.5	8.7	8.5	8.5	8.4	8.6	8.5	8.5	8.4	8.3	8.2

[1] Level in thousands; [2] In % of labour force of June 1998, not seasonally adjusted

[3] Seasonally adjusted, in % of labour force (Eurostat standard); recent figures of unemployment rate are based on administrative data and can be revised

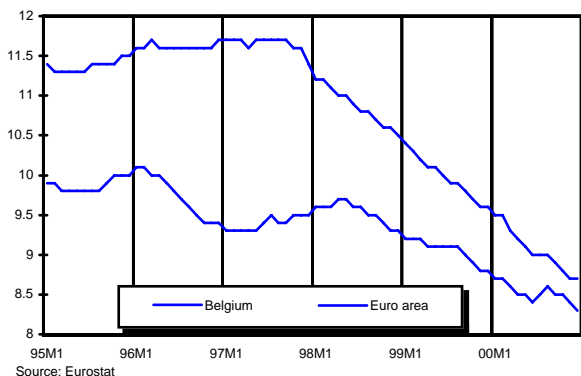
Source: RVA/ONEm, FMTA/MfET, Eurostat, FPB

Graph 19 - Evolution of unemployment (incl. older)



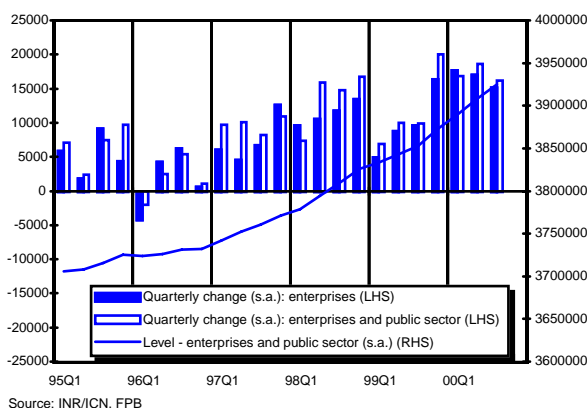
Source: RVA/ONEm, FPB

Graph 20 - Harmonised unemployment rates (% of labour force)



Source: Eurostat

Graph 21 - Evolution of domestic employment



Source: INR/ICN, FPB

Revised figures for domestic employment covering the second quarter and tentative figures for the third quarter from the quarterly national accounts (graph 21) indicate that job growth has remained vigorous throughout 2000. According to these figures private sector employment increased by 17000 and 15000 respectively, in seasonally adjusted terms, during these two quarters. Moreover, the combined evidence from social security records and from surveys suggests that labour volume may have risen at the same or even at a slightly higher rate than a head count of employment during 2000. Nevertheless, the trend towards more part-time jobs apparently has not been curbed, as evidenced for example by the huge increase in the number of employees that temporarily switch from full-time to part-time by means of the subsidised system of “partial career breaks”. It seems, however, that during the past year this negative impact on average hours worked per person has been offset by cyclical (overtime) as well as more structural factors, as a number of part-timers move to higher contractual working hours, thus removing part of the slack from the labour market that stems from rationing on hours worked.

On a seasonally adjusted basis, unemployment (broad definition; including “older unemployed” people) declined significantly less during these two quarters (respectively by 4000 and 500) than what might have been expected in view of the considerable increase in employment. This confirms that the labour force has been growing at a faster pace than before. Three contributing factors can be singled out. First, the higher official retirement age for women as of January 2000. Second, an inverse discouraged worker effect, which has boosted participation rates in the younger age classes. Third, the arrival in the (measured) labour force - as of the second quarter of 2000 - of people who have submitted a request to the Belgian authorities to have their status “regularised”. This is most clearly seen in the considerable increase in the number of registered job seekers who are not eligible for unemployment benefits: their number stood 7000 persons higher in December 2000 than in December 1999.

Prices

**Table 7 - Inflation rates: change compared to the same period in the previous year, in%**

	99	00	00Q1	00Q2	00Q3	00Q4	00M8	00M9	00M10	00M11	00M12	01M1
Consumer prices: all items	1.12	2.55	2.00	2.32	3.01	2.85	2.88	3.36	2.97	3.10	2.49	2.20
Food prices	0.20	0.86	-0.89	0.17	2.23	1.98	2.46	2.28	1.59	2.39	1.97	2.48
Non food prices	1.24	3.87	3.62	3.63	4.02	4.19	3.47	4.92	4.65	4.60	3.31	2.48
Services	1.57	2.01	1.89	2.14	2.31	1.69	2.55	2.08	1.69	1.62	1.77	1.66
Rent	1.43	1.45	1.30	1.38	1.53	1.61	1.49	1.62	1.54	1.61	1.68	1.72
Health index	0.94	1.88	1.27	1.56	2.32	2.37	2.33	2.58	2.31	2.52	2.29	2.10
Brent oil price in USD (level)	17.8	28.4	26.8	26.7	30.4	29.4	30.1	32.8	30.9	32.5	25.0	25.5

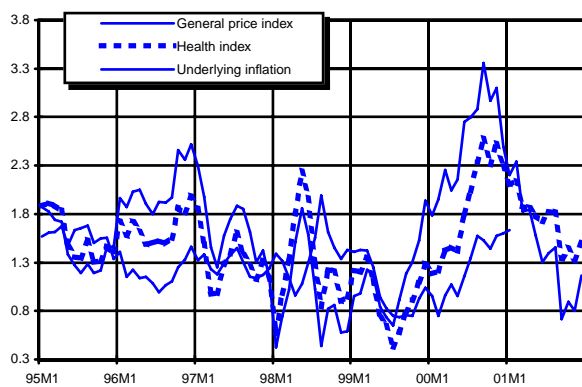
Source: MEZ/MAE

**Table 8 - Monthly inflation forecasts**

	00M1	00M2	00M3	00M4	00M5	00M6	00M7	00M8	00M9	00M10	00M11	00M12
Consumer prices: all items	104.80	105.20	105.60	105.80	106.10	106.50	106.71	106.68	107.41	107.15	107.50	107.22
Consumer prices: health index	104.29	104.56	104.79	105.08	105.21	105.43	105.69	105.74	106.20	106.04	106.45	106.40
Moving average health index	103.95	104.18	104.42	104.68	104.91	105.13	105.35	105.52	105.77	105.92	106.11	106.27
	01M1	01M2	01M3	01M4	01M5	01M6	01M7	01M8	01M9	01M10	01M11	01M12
Consumer prices: all items	107.11	107.66	107.53	107.75	107.78	107.89	108.20	108.23	108.18	108.11	108.36	108.47
Consumer prices: health index	106.48	106.79	106.76	107.03	107.09	107.25	107.62	107.66	107.63	107.57	107.86	108.00
Moving average health index	106.34	106.53	106.61	106.77	106.92	107.03	107.25	107.41	107.54	107.62	107.68	107.77

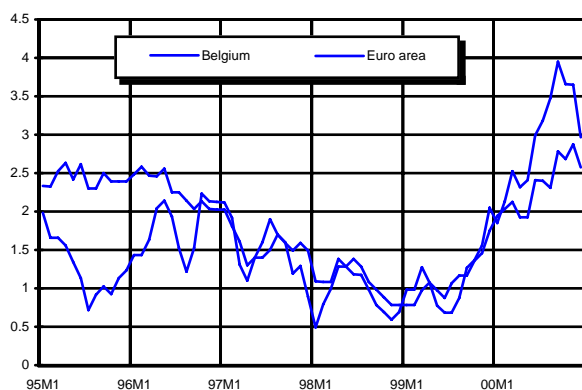
Source: Observations (up to 01M1): MEZ/MAE; forecasts: FPB

**Graph 22 - Monthly inflation evolution in% (t/t-12)**



Source: MEZ/MAE, from 01M2 on: forecasts FPB

**Graph 23 - Harmonised inflation rates in% (t/t-12)**



Source: Eurostat

Headline inflation, as measured by the yoy change in the national CPI, reached a maximum of 3.4% in September 2000. Since then it has followed a clear downward trend, falling to 2.2% in January this year. This fall in CPI inflation was completely due to energy prices. Oil prices expressed in USD fell by 22%, and by 27.5% in BEF. As a result, the (direct) contribution of energy prices towards domestic consumer inflation fell to 0.63%-point in January 2001, as compared to 1.86%-point in September 2000, and 1.42%-point on average in 2000. As some energy products (but not all), are excluded from the “health price index”, the fall in the latter was less dramatic: from 2.6% in September 2000 to 2.1% in January 2001.

Energy products have a bigger share of the consumer basket in Belgium than in the rest of the euro zone. Accordingly, the harmonised inflation rate was higher in Belgium than in the rest of the euro zone during the whole of 2000. Due to the normalisation of oil prices, this difference has almost disappeared now.

Underlying inflation (excluding, among other things, all energy products) reached an average of 1.25% in 2000, but followed an upward trend in the course of the year (from 0.9% in the first quarter to almost 1.6% in the last quarter of the year).

According to our monthly forecasts for the “health index”, the pivotal index for public wages and social benefits (currently 107.30) should next be reached in August 2001.

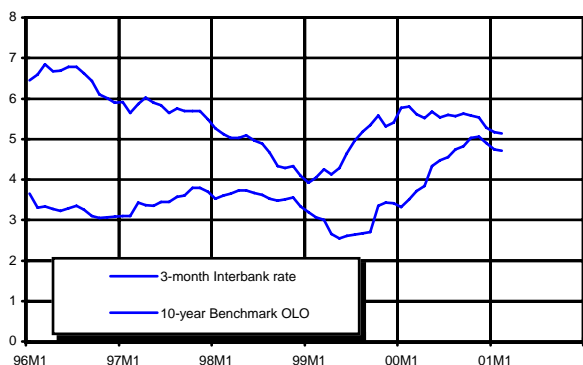
Interest rates

Table 9 - Interest rates

	99	00	00Q1	00Q2	00Q3	00Q4	00M8	00M9	00M10	00M11	00M12	01M1
<b>Short-term money market rates (3 months)</b>												
Belgium	2.94	4.36	3.52	4.22	4.71	4.99	4.75	4.83	5.02	5.06	4.89	4.74
Euro area (Euribor)	2.96	4.39	3.54	4.26	4.74	5.02	4.78	4.85	5.04	5.09	4.93	4.77
United States	5.33	6.46	6.03	6.57	6.63	6.59	6.61	6.60	6.67	6.65	6.45	5.62
Japan	0.13	0.25	0.11	0.09	0.27	0.55	0.27	0.38	0.50	0.52	0.63	0.46
<b>Long-term government bond rates (10 years)</b>												
Belgium	4.76	5.59	5.73	5.58	5.59	5.46	5.56	5.62	5.58	5.53	5.28	5.16
Germany	4.50	5.26	5.46	5.25	5.24	5.09	5.20	5.26	5.22	5.16	4.90	4.80
Euro area	4.63	5.43	5.60	5.42	5.43	5.28	5.39	5.45	5.40	5.35	5.08	4.98
United States	5.63	6.03	6.50	6.17	5.89	5.55	5.84	5.78	5.73	5.70	5.22	5.15
Japan	1.76	1.77	1.77	1.71	1.86	1.72	1.83	1.97	1.81	1.74	1.61	1.50

Source: NBB, ECB

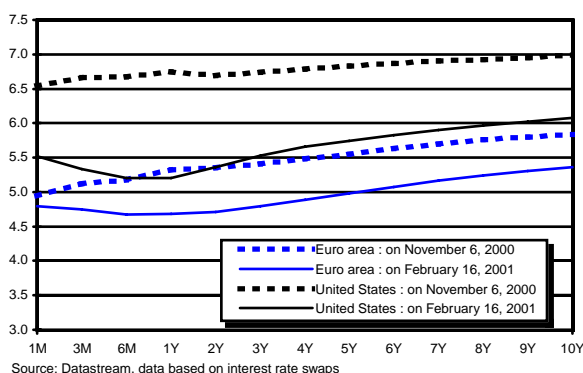
Graph 24 - Interest rate levels in Belgium, in%



Source: NBB

During the last two months of the previous year, the global economic environment changed drastically. The days of seemingly unbounded growth rates are over and signals that the possibility of a recession in the US should not be ignored became stronger. Lower oil prices and inflationary pressures, financial market expectations of less US tight monetary policy have resulted in a decrease of both the 3-month interbank interest rate. At the same time, the downturn in financial markets and an expected slowdown in the demand for capital as in medium term inflation rates have led to a reduction in the 10-year benchmark OLO. In the first days of January 2001, the FED unexpectedly decided to decrease the federal funds rate by 50 base points from 6.5% to 6%. The second reduction by 50 base points at the end of the same month was, unlike the first one, largely anticipated by the markets.

Graph 25 - Yield curves for the euro area and the US



Source: Datastream, data based on interest rate swaps

So far the ECB has not followed the FED in decreasing its benchmark rate. First of all, the economic slowdown in the EU is far less pronounced than in the US. Secondly, the EU growth rate of the monetary aggregate (M3) - though decreasing - is still above the benchmark value of 4.5%. Thirdly, according to the ECB itself, the risks of inflationary pressures are not over as second-round effects of the oil price increase and wage-negotiations are still to come in the coming months.

As a result of these developments, the yield curve in the US decreased for all maturities. The shift is more pronounced for maturities between three and six months as financial markets are still expecting a further loosening in the monetary policy in the coming months. A similar, but smaller shift, appeared in the yield curve for Europe. As a consequence, the spread for all maturities between the US and the EU has been reduced during between November and February 2000.



## Exchange rates

**Table 10 - Bilateral exchange rates**

	99	00	00Q1	00Q2	00Q3	00Q4	00M8	00M9	00M10	00M11	00M12	01M1
BEF per USD	37.82	43.65	40.87	43.18	44.55	46.37	44.59	46.28	47.22	47.15	44.81	43.03
USD per EUR	1.067	0.924	0.987	0.934	0.905	0.870	0.905	0.872	0.854	0.855	0.900	0.938
UKP per EUR	0.659	0.609	0.614	0.609	0.612	0.601	0.607	0.607	0.589	0.600	0.615	0.634
JPY per EUR	121.38	99.58	105.60	99.61	97.47	95.63	97.74	93.03	92.64	93.23	101.01	109.41

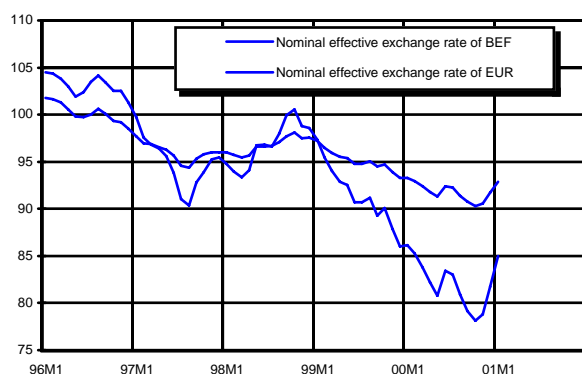
**Table 11 - Nominal effective exchange rates (Jan. 95 =100)**

	99	00	01	00Q1	00Q2	00Q3	00Q4	00M9	00M10	00M11	00M12	01M1
Effective exchange rate BEF	95.1	91.8		92.9	91.8	91.5	90.9	90.8	90.3	90.6	91.7	92.9
Growth rate [1]	-1.7	-3.5		-1.2	-1.1	-0.4	-0.7	-0.7	-0.5	0.3	1.3	1.3
Id. with constant rate till year end			1.2									
Effective exchange rate EUR	91.5	82.0		85.1	82.1	81.0	79.6	79.2	78.1	78.8	81.7	85.0
Growth rate [1]	-5.5	-10.4		-3.3	-3.5	-1.3	-1.8	-2.1	-1.3	0.9	3.7	4.0

[1] Change (%) compared to previous period

Source: NBB, BIS, FPB

**Graph 26 - Effective exchange rates (Jan. 95=100)**

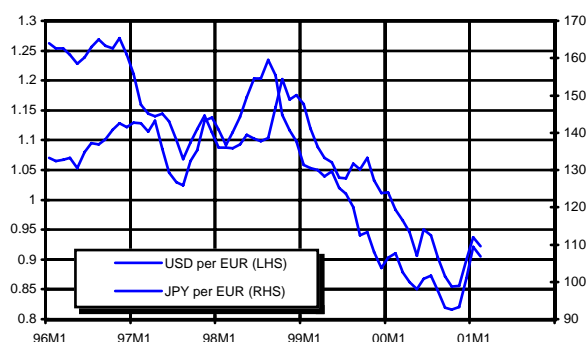


Source: NBB, BIS, FPB

During the year 2000, the nominal effective exchange rate of the euro depreciated continuously. Between January and October 2000 this depreciation amounted to 9.3%. The main cause for this decline was the rapid fall in the euro as expressed in US dollars, by almost 16%. The most important reasons for this strong depreciation of the euro were that both growth rates and interest rates were considerably higher in the US than in Europe. This resulted in important speculative capital flows towards the US.

From September to November, the ECB did try four times to counter this development by purchasing euros and selling dollars. However, the impact of these actions was limited and too small to have any permanent effect. It was only when the economic slowdown in the US became evident during the last months of 2000 and appeared to be more severe than expected that a sharp inversion point was reached. Between the beginning of November 2000 and the end of January 2001, the euro has appreciated by about 10% against the US dollar and 18% against the yen. The latter strong increase is also the result of persistent doubts about the Japanese recovery.

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



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

The decrease in the US dollar exchange rate relative to the euro seems to have been stabilised by the unusually strong reduction in the federal funds rate in January. This is interpreted as limiting the risks of a hard landing for the US economy. As a result, financial markets expect the appreciation in the nominal effective exchange rate of the euro to continue in 2001, though at a speed which should be below the one observed in the final months of 2000.

Tax indicators

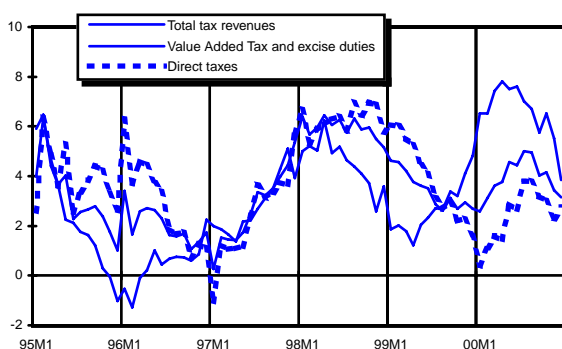
Table 12 - Tax revenues (1)

	99	00	00Q1	00Q2	00Q3	00Q4	00M7	00M8	00M9	00M10	00M11	00M12
Total [2], of which:	3.9	5.7	8.1	8.4	3.7	3.1	6.8	5.5	-3.4	6.4	-3.0	3.7
Direct taxes, of which:	2.7	5.3	5.6	8.0	5.3	2.3	8.9	5.9	-3.0	3.0	-6.4	5.9
Withholding earned income tax	6.3	5.5	12.7	0.0	13.3	-1.4	4.7	3.9	48.1	-13.6	6.3	5.2
Prepayments	-3.7	4.4	21.2	1.5	12.6	2.0	16.2	.	.	-1.0	.	5.1
Value Added Tax and excise duties	6.1	6.5	12.7	9.1	2.0	4.0	2.6	3.9	-1.4	13.0	0.0	0.2

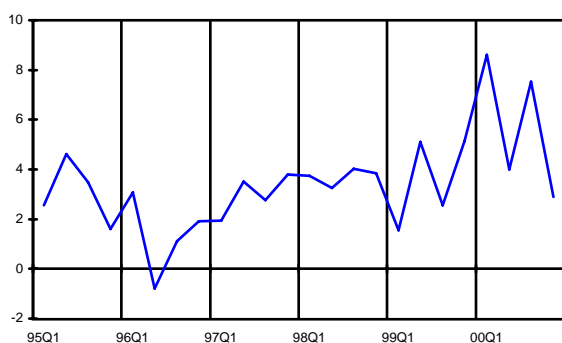
[1] Change (%) compared to same period previous year; [2] Total received by federal government, excl. of death-duties

Source: MvF/MdF, FPB

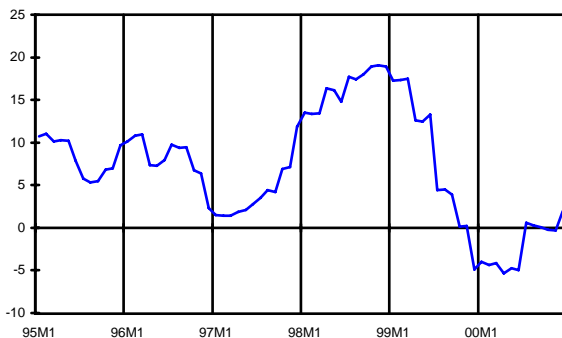
Graph 28 - Real tax revenues (3)



Graph 29 - Real withholding earned income tax (4)



Graph 30 - 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

The nominal growth rate of total taxation revenues in 2000 (+5.7%) remains markedly higher than in 1999 (+3.9%), despite a slight deceleration in economic activity from mid-2000 onwards. Total direct and indirect taxes both contribute to this result.

The nominal growth rate of indirect taxation revenues in 2000 (+6.1%) is higher than in 1999 (+4.6%), reflecting the global acceleration of consumption and housing investment and the rise in energy prices in 2000 as compared with 1999. However, indirect taxation revenues did decelerate from mid-2000 onwards, following high growth rates during the first and second quarters of 2000. This slowdown partly reflects the change in the leading indicators for the GDP business cycle and GDP growth. It is also partly due to the high levels seen during the corresponding months in 1999 (acceleration in economic activity from mid-1999 onwards) and to technical factors.

After a decline in 1999 (a negative nominal growth rate of 3.7% compared to 1998), prepayments recovered in 2000 (+4.4%), mainly in July and December (second and last quarter due dates for advanced payments) and from both companies and self-employed workers. Profit outlooks improved in 2000, while 1999 was negatively influenced by the dioxin crisis. Taxes on dividends showed a positive development on average in 2000, confirming quite high dividend pay-outs. Taxes on interest earnings have grown too, due to the increase in interest rates, particularly the short-term rates.

Despite the erratic monthly and quarterly profile of withholding earned income tax revenues, the weak growth rates seen in the second and last quarters of 2000 brought the annual nominal growth rate to 5.5% at the end of 2000, which is lower than in 1999 (6.3%).

## The NIME Model: Specification and Estimation of the Enterprise Sector

Since the early 1990s, the FPB made use of the HERMES-Link world model for its recurrent tasks, such as the medium term economic forecasts, and for its international research programmes. In 1999, the FPB launched a research programme in view of developing a new, easier to maintain, world model, capable of fulfilling the main tasks that were traditionally performed by the previous world model, and that would better reflect the new European economic and monetary framework. So far, the FPB's efforts have led to the construction of a first version of the New International Model for Europe (NIME). The different parts of NIME will be presented in several technical working papers. Working Paper 10-00, second in the series of papers on NIME, describes the enterprise sector of the model.

The current version of NIME divides the world into six separate blocks: a EU block consisting of the countries that joined EMU in January 1999 minus Belgium, a non-EMU European country block consisting of the EU countries that did not join EMU at that time, the United States, Japan, and the rest of the world. The model describing the Belgian economy would consist of one of the macroeconomic models currently in use at the FPB. These blocks are linked to each other through trade and financial flows.

The overall modelling strategy is threefold. First, in the short run, output adjusts to meet demand, while prices adjust only sluggishly. Second, in the absence of any new shock, the model converges to a steady state where unemployment and production are at their 'natural rate', expectations are realised fully, and where stock and flow variables are in equilibrium. Third, for each block of the NIME model, except for the 'rest of the world' block, a household sector, an enterprise sector, a government sector, and a monetary sector are specified.

The long run behavioural relationships of the household sector and the enterprise sector are derived from an explicit optimisation problem. However, in the short run, rigidities prevent immediate adjustment to these long run plans. Error correction mechanisms and partial adjustment schemes are used to capture these sluggish adjustment processes. The monetary sector sets interest

rates according to a Taylor rule, while fiscal policies are largely determined outside the model. The 'rest of the world' consists of a limited number of equations describing overall economic activity.

Working paper 10-00 describes the enterprise sector of the NIME model. The analysis starts from the following assumptions. First, for each country block we assume that there exists a representative agent capturing the behaviour of the entire enterprise sector. This agent maximises its profits by hiring production factors, and selling goods and services to final users. Second, the production factors are labour, capital, and imports, and production technology is described by a Cobb-Douglas production function with constant returns to scale. Third, a utility maximizing household sector supplies labour and bargains over the real wage rate with the enterprise sector. Fourth, the natural rate of unemployment and the steady state productivity growth rate of the production factors are exogenous.

In a first section of the paper, we derive a set of equilibrium factor demand equations and factor price equations from a maximization problem. In equilibrium, factor demand depends on total demand and relative factor prices. The real wage is an average of the reservation wage and labour productivity, while the real price of private capital goods is the discounted net value of the marginal productivity of capital goods.

In the empirical section of the paper, we first deal with the problem of the unobservable reservation wage, by assuming that the reservation wage is function of the labour wage and the past reservation wage. We also specify a short run price setting scheme, based on the assumption of the existence of menu costs and 'rule of thumb' behaviour. Next, we show estimation results for the factor prices. We then estimate an error correction mechanism for labour and import demand, and a partial adjustment mechanism for gross investment. Last, we show estimation results for final user prices.

*"The NIME model: Specification and Estimation of the Enterprise Sector", E. Meyermans, P. Van Brusselen, Working Paper 10-00, December 2000.*

## Simulations with the HERMES II model for Belgium

This working paper presents some simulation exercises in order to illustrate the properties of the HERMES II model (see also Working Paper 5-00). However, it is not our intention to assess actual economic policy measures

announced by the government or to make policy recommendations.

Twelve scenarios are examined. Nine scenarios assume

certain budgetary policy measures. For public expenditure, we simulate an increase in public investment, an increase in social transfers to households, and an increase in public consumption of goods and services. For public revenue, we simulate a reduction in VAT on private consumption, a reduction in employers' and employees' social security contributions, a reduction in personal income taxation and an excise tax increase on petrol and diesel. The remaining three scenarios focus on international shocks, namely an increase in world trade, an oil price increase, and an USD appreciation

All simulations cover a five-year period. The tables report the most important differences - macroeconomic, by branch and budgetary - between the different scenarios and the baseline case. The presentation is limited to the years  $t$  (first year) and  $t+4$  (considered as the medium-term).

An important remark should be made about wage de-

termination. The current model incorporates a wage norm over the whole simulation period, which is in accordance with the 1996 Act on Employment Promotion and on Preventative Safeguard of Competitiveness. This curbs wage and price rises relative to a model version with 'free' wage equations and therefore affects economic activity and unemployment results. It should be noted that this wage norm is imposed on the gross wages and not on the wage cost. This will avoid that, for example, the economic impact of a cut in employers' contributions will be weakened or offset by higher gross wages. We also test three scenarios without any wage norm, i.e. we model an increase in public investment, a reduction in VAT on private consumption, and a reduction in employers' social security contributions.

*"Simulations with the HERMES II model for Belgium", Working Paper 11-00, F. Bossier, F. Vanhorebeek, December 2000.*

## Fiscal reform of the personal income tax

This working paper presents the macroeconomic and budgetary effects, together with the impact on the tax burden, of a reduction in personal income taxation. In particular, the paper focuses on the potential effects on wage formation (tensions on the labour market, potential of wage moderation) and on the compatibility of the reform with the medium-term fiscal surplus target of the government. Finally, the effects of the reform in terms of the tax burden and the wage wedge are compared with the results from previous tax reforms.

At the end of 2000, the government announced a reform of personal income taxation, which is to take effect from the 2002 tax year. Once implemented in full, the reform would cost 1.3% of GDP or 157 billion francs for the 2005 tax year. Add to this result the impact of abolishing the so-called additional crisis surcharge (about 0.3% of GDP), then total tax reductions would be equivalent to 1.6% of GDP (192 billion francs for the 2005 fiscal year).

The increase in households' disposable income would generate positive macroeconomic effects: there would be greater consumption, production, investment and employment which would, in turn, reinforce the multiplier effect arising from the initial increase in income. However, the size of this multiplier effect would be small because there would also be an increase in savings, feedback effects on public finances and especially import leakages.

Various factors could have an influence on salary development, some of which could have opposing effects. On the one hand, fiscal reform may encourage professional

activity, reduce employment traps and stimulate labour supply. But on the other hand, the expansionary character of the tax reform could reinforce tensions in the labour market, which could produce greater salary increases. However, this effect could be nullified if social partners consider a part of the increase in net wages in the salary negotiation. So maintaining the wage restraint can be favoured by the fiscal reform.

Under this hypothesis, GDP would increase by 0.8% in the medium-term. And employment creation could reach 24,000 units over six years. The feedback effects on public finances would be positive but limited (in the medium-term they would be about 20% of the initial cost). Once implemented fully, the effects would limit the deterioration of the state budgetary position to 1.3% of GDP (from 2006 onwards) compared to 1.6% of GDP before taking those return effects into account. The cost of tax reductions would remain within the conservative budgetary margins calculated by the government until 2005. There would even be resources left over to finance other initiatives.

Compared to a scenario without fiscal reform, the fiscal burden on wages would be reduced by approximately 11% by the 2005 tax year. This decrease is not that strong (about 7%) if the tax years 2001 (before the reform) and 2005 (assuming the measures are implemented fully) are compared, because of the progressiveness of taxation and income growth.

Under the scenario, the wage wedge would decrease considerably in the medium-term. The proposed tax re-

ductions are combined with the social security reductions that have already been introduced.

Fiscal reforms aimed at reducing taxation have also been introduced or announced in other European countries. The Belgian economy stands to benefit because of the expansionary effects that these reforms will have via foreign trade. In international terms, tax reductions in trading-partner countries will reduce, or possibly nullify altogether, the relative reduction of the tax burden in

Belgium. Assuming a constant average tax burden in Belgium's three neighbouring countries (Germany, France and The Netherlands), the tax burden in Belgium would have come very close to it in the medium-term, and the wage-wedge would have been below the average of the three neighbouring countries.

*“La réforme de l'impôt des personnes physiques. Effets macroéconomiques, budgétaires et sur la pression fiscale”, Working Paper 01-01, M. Saintrain, January 2001.*

## Long-term energy projections for Belgium

This outlook aims to identify and discuss the main issues and uncertainties affecting Belgian energy demand and supply over the period to 2020. This provides useful information in the context of the implementation of the Belgian Electricity and Gas Liberalisation Laws.

The starting point of analysis is a reference projection which assumes the continuation of recent trends, the decommissioning of nuclear power plants after 40 years operation (as set out by the Belgian federal government agreements of July 7, 1999), and that no new policies are adopted to reduce carbon dioxide emissions. The outlook also addresses Belgium's commitment to reducing greenhouse gases as set out in the Kyoto Protocol. It is based on the PRIMES model, a partial equilibrium model of the European energy systems developed by the National University of Athens and funded by the European Commission.

The energy outlook assumes an economic growth rate of 2.6% p.a. between 2000 and 2005, and a growth rate of 1.75% p.a. between 2005 and 2020. The oil price is assumed to increase at a rate of 1.12% p.a. to reach 29.4 USD (in 1999 prices) in 2020; the contractual gas price remains indexed to oil prices and is assumed to increase by 1.35% p.a. over the same period; and coal prices are assumed to remain relatively stable.

Under the reference projection, gross inland energy consumption is expected to grow by 17% and CO<sub>2</sub> emissions by 21% between 1998 and 2020. By 2020 both oil and natural gas are the most important fuels because oil supports growing demand for transport and natural gas has many other applications (e.g. power generation). Under this scenario, there would be a 50% reduction in coal consumption and renewable energies would remain below 3% of gross inland consumption by 2020. Steady growth in demand for electrical services and mobility contribute most to the growth in energy-related CO<sub>2</sub> emissions. As a result, projections show that power generation and transport would account for more than half of total CO<sub>2</sub> emissions in 2020. Power generation will move towards greater use of natural gas in com-

bined-cycle power plants and this will be at the expense of coal-fired and nuclear power plants.

The future development of the Belgian energy system is subject to many uncertainties, three of which have been covered in this outlook: the future of nuclear power, energy prices and economic growth. The impact of rebuilding nuclear capacity to compensate for the decommissioning of existing power plants is discussed extensively in another publication<sup>1</sup>. Higher energy prices would lead to a moderate decline in final energy consumption but also an increase in electricity production. Overall CO<sub>2</sub> emissions are 10% higher by 2020 than in the reference projection, mainly because of a fuel switching effect in favour of coal. As would be expected, the impact of a higher economic growth rate would be to increase the energy needs and therefore CO<sub>2</sub> emissions (which would increase by 10%). Industry and transport are the sectors where the final energy demand increases the most.

The reference projection shows that substantial reductions in CO<sub>2</sub> emissions will be necessary in order to meet the Kyoto commitments. As a result, two scenarios aimed at reducing CO<sub>2</sub> emissions have been tested. The main conclusions are that reductions in energy consumption offer a greater potential than fuel substitution and that the most significant and cost-effective reductions in emissions would take place in the industry and the power generation sector. Estimates of the cost of emission reductions range from 0.55% of GDP in 2010 up to more than 1% of GDP by 2030. But the results must be treated with caution because this analysis does not address policies and measures required to achieve the identified reduction potentials nor does it take into account the flexible mechanisms proposed in the Kyoto Protocol.

*“Belgian Energy Outlook: exploratory scenarios for 2020”, Planning Paper 88, Ch. Courcelle, March 2001.*

1. Short Term Update 04-00, Special topic - Technological choices for electricity generation in Belgium.

## Other Recent Publications

[Economic Forecasts 2001](#), February 2001  
(available in Dutch and in French)

[Working Paper 08-00](#), October 2000, “The NIME Model - Specification and Estimation of the Demand Equations of the Household Sector”, E. Meyermans, P. Van Brusselen.

[Medium Term Economic Outlook 2000 - 2005](#), April 2000  
(available in Dutch and in French)

[Working Paper 09-00](#), November 2000, “Financiering van innovatie met risicokapitaal : Een actualisering vanuit de Belgische optiek van het EU-benchmarking pilootproject”, H. Van Seebroek.

## Research in progress

### [The Modtrim II model](#)

The ‘Short term forecasts and business cycle analysis’ team is building a quarterly model for the Belgian economy to replace its current annual model. The decision to construct a new model, which would among other things make use of the quarterly national accounts, was motivated by several reasons. Business cycle dynamics are better described with high frequency data, and recent short-term information can be integrated more easily into model-based forecasting exercises. A quarterly model also implies that carry-over effects are taken into account in a much more precise way than with annual data.

### [The NIME Model: Specification and Estimation of the Supply by the Private Sector](#)

Two earlier working papers described the household and enterprise sector of the NIME model, see WP08-00 and WP10-00. In the next paper, we specify the monetary and fiscal sector, and we examine the adjustment path of the model under alternative scenarios. The short run interest rates are set by the monetary authorities in function of the deviation of the policy variables from their target. These policy targets refer to inflation, economic activity, and the exchange rate. The contemporaneous long run interest rate is modelled as an average of the short run interest rate and the steady state interest rate, while the spot exchange rate is determined by the equilibrium exchange rate, the interest rate differential, and the inflation differential. Most of the fiscal variables are assumed to move in line with the business cycle or steady state growth. However, the public sector has an explicit target for its debt to GDP ratio, and it is the direct labour income tax rate that adjusts to reach this target.

### [Transition to a knowledge-based society](#)

The Lisbon Council stressed the profound transformation of the European economies following the technological changes in communication and information. A comprehensive and prospective analysis

of the impact of these changes in ICT will be carried out in the next few months. In the first stage, the importance of the ICT-sector, the diffusion of ICT changes in the Belgian economy and its determinants (e.g. regulatory mechanisms) will be analysed. Moreover, some estimates of the “digital divide” will be presented.

### [Benchmarking, framework conditions](#)

The study “Benchmarking the framework conditions: A systematic test for Belgium” is updated. The report compares Belgium’s competitiveness (and its underlying factors) with the neighbouring countries France, Germany and the Netherlands and the economic blocks of Japan, the United States and the European Union. A country’s competitiveness is broadly interpreted: not only economic growth and its determinants are included, social welfare issues like income distribution and the standard of living are also examined. In short, the report gives an overview of the most important framework conditions. The purpose of the study is to bring ten areas related to welfare creation together and present, in one document, a wide range of information rather than to provide an a deep analysis of each of the areas addressed.

### [Maltese](#)

The long-term sustainability of public pensions is a topical matter. We investigate the impact of ageing populations on public pension expenditure in particular, and on social security and public finances in general. This update of former long-term projections includes updated demographic projections, new medium-term macroeconomic developments and new budgetary prospects. A new methodology for computing the retirement rates is used. In addition, projections produced within the framework of an international exercise (European Commission, OECD) will be presented to allow for international comparability.

## Recent history of major economic policy measures

February 2001	Time to bid for a Belgian UMTS licence has come to an end. According to the Royal Decree (18 January 2001) providing for the terms, conditions and procedure for granting licences for the mobile telecommunication system of the third generation, contenders could submit their bids until 8 February 2001 at 5 p.m. While the law provided for 4 licences, the Belgian Telecommunication Regulatory Organism (IBPT) reported that only three companies have placed an offer: Belgacom-Proximus, France Telecom Mobistar and KPN-Orange.
February 2001	Euronext (the financial markets of Brussels, Paris and Amsterdam) becomes the sole partner of Amex (American Stock Exchange) for trade in so-called 'trackers', being index-funds.
January 2001	From January 2001 on, social benefits are adjusted (by 2%) for price changes one month after the month in which the smoothed (4-month moving average) 'health price index' reaches the pivotal index. For public wages, the indexation system remained unchanged, i.e. indexation by 2% two months after the month in which the smoothed (4-month moving average) 'health price index' reaches the pivotal index.
January 2001	As decided by the Council on basis of the conclusions of the 2000 Commission Convergence Report and the ECB report, Greece becomes the 12th Member of the euro zone. The conversion rate between the euro and the Greek drachma has been fixed on December 29 at 340.75 GRD per euro.
December 2000	Social partners reach a general inter professional agreement for the years 2001-2002. The agreement limits the maximum increase in nominal hourly labour costs to be negotiated at sectoral level. In principle, this should be 6.4% for the two years, extendable to 7% in well-performing sectors. Social partners also specify the outcomes of a collective agreement to be concluded with regard to the instalment of 'time credits', a generalised system of partial (one-fifth) career breaks and the introduction of flexible formulas of working time reduction at the end of the career.
December 2000	The government accepts the 'Stability Pact 2001-2005', which is essentially based upon the long-term program which was presented on 16 October 2000. Government budget will be in surplus from 2001 on and will increase up to 0.7 of GDP in 2005. This way, debt should reach 100% of GDP in 2003 and decrease to 88.7% GDP in 2005. These figures do not take the future revenues of the auction of the UMTS licences into account.
December 2000	The European Commission formally holds Belgium liable for not opening the electricity market to suppliers from other member states.
November 2000	The 15 member states of the European Union decide to harmonise the fiscal treatment of residents of other member countries. From 1 January 2003 on, member states can choose between letting fiscal authorities exchange information on interest payments made to residents of other member states, or implementing a levy on savings which are stilled within the Union but outside the own country.
November 2000	In the two first weeks of November, the ECB intervenes four consecutive times on foreign exchange markets by purchasing euros for dollars. These interventions were less coordinated than the joint intervention of September 2000.
October 2000	For the first time, the Federal Government presents a medium-term Budget. Most of the announced measures are spread over the period 2001-2006 and have little impact in 2001. The main policy measures are the following: <ol style="list-style-type: none"> <li>1. The organisation of a National Pensions Reserve Fund.</li> <li>2. The further elaboration of the Active Welfare State, which aims at an increase in the activity rate.</li> <li>3. The fiscal reform: a personal income tax reform would enter progressively in force from the fiscal year 2002 onwards. Its budget cost would reach 1.3% of GDP from 2006 onwards.</li> <li>4. The Community Pacification: a new consensus reconciles more fiscal autonomy for the regions with more financial support for the Communities.</li> <li>5. A solidary community with more social corrections, more financial support for health care.</li> <li>6. Better public services (e-government, an information society) and an integrated mobility policy.</li> <li>7. International Cooperation with more financial means.</li> </ol>
October 2000	The ECB raises its benchmark refinancing rate twice by 25 basis points to 4.75%, the sixth and seventh hike since November 1999 (totalling 225 basis points).
March 2000	The multi-annual plan in the sector of health care foresees the replacement of precarious jobs by regular contracts, a general wage increase and the possibility for older employees to reduce their working time.
February 2000	On 4 February 2000, the Belgian government adopts a Law related to the creation of a Federal Agency for Food Chain Security. In order to protect customer's health, the new Agency has to implement control measures for the quality of goods throughout the whole food chain.
January 2000	Established by the Laws of 29th April 1999 related to the organisation of the gas and the electricity markets, the Commission for Electricity and Gas Regulation (CREG) began its activities on January 10th 2000.
January 2000	The Law concerning the regularisation of certain categories of foreigners staying on the Belgian territory (MB January 10, 2000) was adopted on 22 December 1999.

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"
FMTA/MFET	Federaal Ministerie van Tewerkstelling en Arbeid / Ministère fédéral de l'Emploi et du Travail
FPB	Federal Planning Bureau
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
MEZ/MAE	Ministerie van Economische Zaken / Ministère des Affaires Economiques
MvF/MdF	Ministerie van Financiën / Ministère des Finances
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)