

Quarterly Newsletter of the Federal Planning Bureau

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

HEADLINES BELGIAN ECONOMY

Since our July forecasts, a number of new developments inside and outside Belgium have occurred. Taking those elements into account, a rapid and tentative updating of our forecasts for 1999-2000 has been made.

The first element concerns the good news stemming from the quarterly national accounts of a higher than expected GDP growth in the second quarter of 1999. As a result, over the first half of 1999, Belgian GDP growth reached 1.7% (yoy). The FPB GDP-leading indicator points to a further cyclical upturn in the second half of the year. It is also worth stressing that according to the information available today (in terms of value added, trade and unemployment), the impact of the dioxin crisis is still in line with the assumptions made in our July forecasts.

All in all, GDP growth in 1999 has been revised upward from 1.7% to 1.9%.

As prospects for the world economy are looking brighter now than four months ago and the 2000 Federal Budget is on an expansionary track, GDP growth in 2000 has been revised upward from 2.5% to 3.0%. Both developments are complementary - in the sense that the former primarily triggers exports, whereas the latter in the short-term mainly boosts private consumption- although the impact of the more favourable international environment on GDP growth is more important than the revision coming from the Budget 2000.

The acceleration of Belgian export markets in 2000 should indeed be stronger than previously expected due to higher import growth experienced by our European trading partners as well as in the rest of the world, resulting in stronger export growth than estimated earlier.

Compared to our July forecasts, the budgetary impulse for 2000 taken into account in these new forecasts is more than BEF 30 billion. At this stage, the simulation results in this field must be interpreted with caution. The most important effect of the measures should be seen in the area of private consumption, resulting from an increase in employment (reductions in social contributions) and accordingly in households' real disposable income (reinforced by tax cuts and higher pensions).

STU 4-99 was finalised on November 9, 1999.

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



Table of Contents

Special Topic.....	3
• The dioxin crisis: an applied input-output analysis	
Economic Forecasts.....	5
• Economic forecasts	
Summary of Economic Forecasts	7
• Economic Forecasts by the Federal Planning Bureau	
• Economic forecasts for Belgium by different institutions	
Recent Economic Developments	8
• General economic activity	
• Private consumption	
• Business investment	
• Housing investment	
• Stockbuilding	
• Foreign Trade	
• Labour market	
• Prices	
• Interest rates	
• Exchange rates	
• Tax indicators	
Recent Publications	19
• SPOT: A General Equilibrium Model of the Belgian Economy	
• The macroeconomic and budgetary impact of a general social contribution	
• Survival and growth of Belgian firms with collective layoffs: The impact of relocation, size, age, capital intensity and multinational group membership	
• Benchmarking in a Nutshell. History, Definitions, European and Belgian Initiatives	
News	22
• Other Recent Publications	
• Research in progress	
Economic Policy Measures	23
• Recent history of major economic policy measures	
Abbreviations	24

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The dioxin crisis: an applied input-output analysis

At the outbreak of the dioxin crisis, the FPB was asked to evaluate the overall impact of the crisis on the economy and in particular the effect on the Belgian agriculture and food industry. The effects of the dioxin crisis on GDP and foreign trade were then measured, using an input-output analysis completed by a macroeconomic simulation. Given the numerous uncertainties prevailing at that time, the analysis had to be based on many hypotheses. The statistical data on production and foreign trade available today can now be used to verify these hypotheses and the forecasts for the months of June and July 1999.

The economic impact of the dioxin crisis: forecast¹

Last June, the Belgian agriculture and food industry was affected by a major crisis. The use of animal feed, possibly produced with contaminated fat, penetrated the whole food chain. Emergency measures taken by the Federal Government and imposed by the European Commission and the fall in foreign and domestic consumer confidence together created a situation commonly referred to as the “dioxin crisis”.

In order to evaluate the impact of the dioxin crisis on the Belgian economy, an input-output analysis was conducted allowing us to measure the effect of the changing behaviour of Belgian and foreign consumers on the foreign trade and value added of Belgian agricultural and food products.

The starting point of an input-output analysis is the final demand. The effect of final demand on production and value added is calculated by means of the tables of intermediate consumption. The tables describe those intermediate goods and services (both domestically produced and imported), which are used by the industries to realise their production. There are some facts that cannot be taken into account by using this model: the destruction of existing stocks, the effect of price changes on foreign trade, and the rise of other activities caused by the dioxin crisis (e.g. laboratory tests). The input-output analysis is completed by using a macro-sectoral econometric model, to estimate the subsequent effects caused by the change in incomes.

In this estimation the dioxin crisis is simulated by means of the most recent national accounts for Belgium (1997)² and the most recent input-output table (1990)³.

Only the final demand for goods directly affected by the dioxin crisis was calculated. The study commenced by identifying the suspected products. The exports of those products possibly contaminated were evaluated using the list of suspected agricultural and food products (including dairy produce) published by the Belgian government on June 8th. They represented 4.3% of total Belgian exports of goods. Private consumption of those products was estimated at the most disaggregated level available, distinguishing 54 products.

The effect of the crisis was subsequently calculated on an annual basis, assuming that domestically produced exports of the possibly contaminated agricultural and food products were reduced by 100%, as a consequence of the dioxin crisis. Additional hypotheses were also assumed on the private consumption of each product directly concerned by the crisis, either reducing total private consumption or substituting (partially or totally) imports for domestic production. Eventually, substitutions among food products were assumed, increasing the private consumption of some food products not at risk, such as fish or lamb.

A major hypothesis had to be made regarding the duration of the crisis. It was assumed that the crisis would affect the behaviour of Belgian households for 2 weeks and that exports would be affected over a few months with the effect declining in intensity, in total equivalent approximately to the full effect of one month. Under these assumptions, it was estimated that the dioxin crisis would reduce in 1999 the total final demand for domestic products by BEF 24.6 billion; 4.6 billion related to private consumption, and 20 billion related to exports. However, private consumption of imported products would increase by BEF 3.2 billion. The effect of a change in final demand could therefore be estimated, although estimation of the final demand for all products of the input-output table was not carried out for the hypothetical situation of no dioxin crisis.

The final demand for goods generates a multiplier effect on the output of all the industries directly and indirectly involved in the production of those goods, through their intermediate deliveries. The multiplier effect of a change in final demand is calculated by using the matrices of intermediate consumption of domestic and imported inputs from the input-output table for 1990. These figures have been updated by means of 1997 price indices, taking only the price-effect into account and not the technological changes.

1. Avonds L., Bossier F., Floridor J., Gilot A., Hambye C., Rase D., “Impact économique de la crise de la dioxine”, Working Paper 4-99, FPB, July 1999.
2. INR/ICN, “Nationale rekeningen 1997, Deel II, Gedetailleerde rekeningen en tabellen”, “Comptes Nationaux 1997, Partie II, Comptes et tableaux détaillés”, NBB-BNB, 1998.

3. INR/ICN, “De input-outputtabel van 1990. Een analyse van de economische structuur van België”, “Tableau entrées-sorties 1990. Une analyse des structures économiques”, FPB, May 1999.

The total effect of the dioxin crisis on the production of the various industries is obtained by combining the updated table of intermediate consumption of domestic inputs with the change in final demand for domestic products. The same estimation procedure is used in order to measure the effects of the crisis on primary inputs (value added and intermediate imports), which are calculated in a secondary stage. The effect on the value added of each industry is estimated by using the

input-output table ratio between value-added and the production of each industry, and comparing this with the value added of each branch (grosso modo the contribution of each branch to GDP) derived from national accounts. The change in intermediate imports is obtained by combining the change in the production of each branch with the updated table of intermediate consumption of imported inputs.

Table 1 - Estimated change in final demand due to the dioxin crisis (billion of BEF - 1997)

Nace/Clio	Domestic private consumption	Imported private consumption	Exports	Total	Final demand of domestic products
01.0 Agriculture	0.1	0.5	-0.6	0.0	-0.5
31.0 Meat industry	-2.8	1.8	-8.8	-9.7	-11.5
33.0 Milk industry	-0.7	0.7	-5.0	-5.0	-5.7
35.0 Other food industries	-1.0	0.2	-5.5	-6.3	-6.5
Others	-0.2	0.0	-0.2	-0.4	-0.4
Total	-4.6	3.2	-20.0	-21.4	-24.7

Source: INR/ICN, FPB

The input-output analysis allows us to evaluate the direct and indirect impact of the dioxin crisis on GDP and foreign trade without taking into account the feedback effects of income loss. Under this scenario, the change in final demand resulting from the crisis would reduce GDP by 0.18%, or BEF 14.5 billion in 1999. The most affected industries would be the milk industry, followed by the meat industry, agriculture and other food

industries. Almost all the reduction of GDP (90%) would be driven by a foreign trade deficit (BEF -13.1 billion). This deficit would be the strongest in the meat industry, the milk industry and other food industries. The fall in exports that would be experienced by the food industries would be partially compensated by a reduction in their intermediate imports, thus limiting the negative effect on net exports.

Table 2 - Total impact of the dioxin crisis on (billion of BEF - 1997)

Nace/Clio	Value added	Part of the value added affected	Final imports	Intermediate imports	Exports	Foreign trade (Export-Import)
01.0 Agriculture	-3.5	-3.63%	0.5	-2.1	-0.6	1.0
31.0 Meat industry	-2.3	-5.71%	1.8	-0.3	-8.8	-10.3
33.0 Milk industry	-0.4	-8.79%	0.7	-0.9	-5.0	-4.8
35.0 Other food industries	-2.6	-1.85%	0.2	-1.9	-5.5	-3.7
Others	-5.8	-0.07%	0.0	-4.9	-0.2	4.7
Total	-14.5	-0.18%	3.2	-10.2	-20.0	-13.1

Source: FPB

The impact caused by the income loss was estimated by the macro-sectoral econometric model and was equal to an additional negative effect on GDP of -0.03% in 1999 and -0.04% in 2000. Thus, the total effect of the dioxin crisis on GDP is estimated as -0.21% for 1999 and -0.04% for 2000.

Verifying the accuracy of the forecasts

The input-output analysis allowed us to estimate the impact of the dioxin crisis on GDP, on the sole basis of hypotheses relating to the change in final demand for exports and consumption. It was estimated that this crisis would reduce the value added of the food industry (exclusive of agriculture) by BEF 3.9 billion for the months of June and July 1999 combined. The value

added calculated using the national accounts data and the monthly production indices for the same months, provide very similar figures with a negative effect on value added of BEF 3.6 billion.

Trade figures for the first two months following the crisis show that the exports of those products directly affected by the crisis have fallen by less (BEF -12 billion) than expected (BEF -14.9 billion). The trade figures also confirm that the impact of this crisis on exports was smaller in July than in June. We expect that the hypothesis for August is probably too optimistic, since the European Commission announced in August that all Belgian exports of products containing at least 2% of animal fat would require certification and this has revived the impact of the crisis on exports. Overall, during the period June-August, the effect on exports should turn out to be very close to that hypothesised.

Economic forecasts

Making economic forecasts for Belgium is currently subject to some difficulties. The first one concerns the transition of the national accounts from ESA79 to ESA95 (in progress in all EU countries). The present context of partial and short-period availability of new national account series makes any model approach in ESA95 at best speculative and probably premature. Therefore, economic forecasts in this STU are still in ESA79. From next year, forecasts will be reported in ESA95. The second difficulty is that the Belgian Federal Budget 2000 contains a number of measures that still need to be clarified in the areas of timing and concrete implementation. At this stage, all exercises attempting to assess the macroeconomic and budgetary impact of the Budget 2000 are therefore inevitably rudimentary. Finally, some international institutions (particularly the EC and the OECD) are currently preparing a revision of their economic outlook for the coming years. Although provisional figures are already available, the final results of these forecasting exercises have not yet been published.

Since our July forecasts, a number of new developments inside and outside Belgium have occurred. Taking those elements into account, our forecasts for 1999-2000 have been revised. It should be emphasized that, given the current uncertainties mentioned above, those new forecasts should be considered as a rapid and tentative updating of our July forecasts.

GDP growth in 1999 revised upward

The upward revision of GDP growth in 1999 (from 1.7% to 1.9%) is largely based on the good news stemming from quarterly national accounts, currently available for the first two quarters of the year. Over the first half of 1999, GDP growth was at 1.7% (yoy). In particular in the second quarter, growth was higher than expected. The FPB GDP-leading indicator points to a further cyclical upturn in the second half. The upward revision is mainly due to better prospects of business investment and net exports.

Estimated impact of the dioxin crisis on GDP growth in 1999 confirmed

The first FPB analyses carried out immediately after the emergence of the dioxin crisis last May, concluded that the impact of this crisis on GDP growth in 1999 should be about 0.2%, the main effect coming from a fall in exports and, to a lesser extent, consumption. The medium-term impact of the dioxin crisis, e.g. stemming from lasting effects on the brand image of Belgian export products in general, should be limited. The consequences of the dioxin crisis on the labour market were expected to be

very moderate in 1999, assuming that the fall in employment in terms of working hours should almost completely be absorbed by an increase in temporary unemployment.

According to the information available today, the impact of the dioxin crisis is still in line with our assumptions. For a more detailed analysis, we refer to the "Special Topic" in this issue (p. 3-4). All in all, over the period from June to August, the direct effect on exports should turn out to be very close to our hypothesis. As regards data on unemployment, the conclusions are similar. As expected, according to the currently available unemployment data, the impact is only visible on temporary unemployment, while full unemployment has not yet significantly increased.

GDP growth in 2000 also revised upward

As prospects for the world economy are looking brighter now than four months ago and the 2000 Federal Budget is on an expansionary track, GDP growth in 2000 has been revised upward from 2.5% to 3.0%. Both developments are complementary, in the sense that the former primarily triggers exports, whereas the latter in the short term mainly boosts private consumption. The impact of the more favourable international environment on GDP growth is more important than the revision coming from the Budget 2000.

Prospects for the world economy are looking brighter now than four months ago

In recent months, a further improvement in the world economic outlook has taken place. In East Asia, the recovery in emerging markets came earlier and was stronger than anticipated. Despite a slowdown in the second quarter of 1999, the US economy remains on track and should accelerate in the rest of the year, while inflation has remained moderate up to now. The Japanese economy has registered positive growth during the two first quarters of the year, although domestic demand was still rather weak.

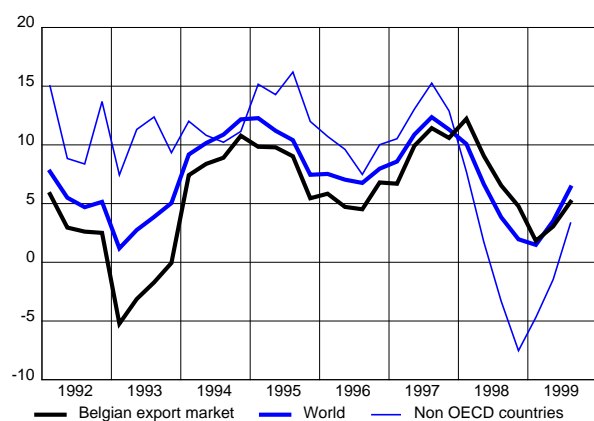
This autumn, these developments led the main international organizations (IMF and, on the basis of provisional figures, both the OECD and the EC) to revise upwards their world output and trade growth forecasts for 1999 and 2000 in comparison with their spring forecasts. One of the main revisions concerns the United States. The IMF, OECD and EC are now expecting the US economy to grow at about 3.75% in 1999 and between 2.6 and 2.9% in 2000.

Activity in Europe was moderate during the first half of 1999, but, as expected, recent surveys point to a clear acceleration in the second part of the current year, confirming the scenario of a short-lived slowdown since mid-1998.

Higher growth in Belgian export markets in 2000

As can be seen from graph 1, a clear recovery in world trade growth has been observed during the second and third quarter of 1999. A large part of this can be attributed to a recovery in non-OECD countries (which represent about 30% of world imports) and mainly in Asian countries. The corresponding improvement in Belgian export markets is slightly less pronounced, because of the relatively small share of non OECD countries (e.g. Asian countries) in Belgian exports.

Graph 1 - World imports in volume terms



Source: CPB, FPB

Calculated on the basis of the provisional autumn forecasts of the EC, the acceleration of Belgian export markets in 2000 should be stronger than previously expected, due to higher import growth experienced by our European trading partners as well as in the rest of the world.

Tightening of the monetary and financial conditions

Since the summer, the main development on the financial markets has been the further increase in European and US bond yields. Various factors explain this upwards trend, including the reallocation of international capital flows, inflationary fears in the US labour market and accelerating world growth. The sharp rise in oil prices also put considerable pressure on long-term interest rates by exacerbating inflationary fears. The reduction in the US and European bond yield differential since last summer can be attributed in a first wave to the weakness of the euro and in a second wave to the improvement in European activity and outlook.

Regarding monetary policy, the ECB has raised its refinancing rate by 50 basis points on November 4 (from 2.5

to 3%), in the face of inflationary pressure in some countries, the overall cyclical upturn in Europe and strong growth in private credit. The ECB has in fact adopted a forward-looking stance by insuring itself against a relatively small risk of a more significant rise in inflation. This move was largely anticipated by the markets.

The 2000 Federal Budget on an expansionary track

The 2000 Federal Budget is somewhat expansionary, mainly because of important cuts in social contributions and taxes, and to a lesser extent also due to increases in some categories of expenditure. The multi-annual programme of reductions in social security contributions is being accelerated and several measures imply a reduction in personal taxes. The VAT rate on certain labour-intensive services is being reduced. On the expenditure side, measures are being taken in the field of low pensions, public health insurance and the modernization of public services. For a detailed description of the Budget 2000, we refer to the section "Recent history of major economic policy measures" (p. 23).

When assessing the macroeconomic impact of the Budget 2000, a number of points need to be borne in mind. Some of the measures incorporated in the Budget 2000 had already been decided by the previous government and were consequently already taken into account in our July forecasts. This is the case, for example, for one-third of the additional reductions in social security contributions and for the restoration of the price-linking of tax brackets for personal taxation. The increase in the maximum real growth rate for outlays in the field of public health insurance is largely the *de jure* confirmation of a *de facto* situation. Given the current indistinctness of a number of measures, no additional public expenditures for the modernization of the public apparatus have been taken into account. At this stage, all simulation results in this field must be interpreted with caution. Compared to our July forecasts, the budgetary impulse for 2000 taken into account in these new forecasts is more than BEF 30 billion.

All in all, this budgetary impulse should have a slight positive impact on economic growth in 2000. The most important effect of the measures should be seen in the area of private consumption, resulting from an increase in employment (reductions in social contributions) and accordingly in households' real disposable income (reinforced by tax cuts and higher pensions). To a lesser extent, investment should also rise, mainly as a result of the improved profitability of the business sector and the measures taken in the field of housing renovation. Finally, exports should also be positively affected (via improved competitiveness as a result of reductions in social contributions), but this is subject to a certain delay (most of the effect is postponed to 2001).

Economic Forecasts by the Federal Planning Bureau

Changes in volume (unless otherwise specified) (data in ESA79)

	1997	1998 (est)	1999	2000
Private consumption	2.1	3.4	1.9	2.4
Public consumption	0.8	1.4	2.3	1.7
Gross fixed capital formation	5.4	3.9	4.4	0.6
Final national demand	2.2	4.6	1.9	1.9
Exports of goods and services	7.1	3.1	1.5	5.6
Imports of goods and services	6.3	5.4	1.5	4.3
Net-exports (contribution to growth)	0.9	-1.6	0.1	1.2
Gross Domestic Product	3.0	2.8	1.9	3.0
p.m. Gross Domestic Product - in current prices (bn BEF)	8675	9020	9271	9608
Traditional consumer price index	1.6	1.0	1.1	1.2
Consumer prices: health index	1.3	1.3	0.9	1.1
Real disposable income households	1.1	2.4	1.6	2.3
Household savings ratio (as % of disposable income)	15.2	14.4	14.1	14.1
Domestic employment (change in '000, situation on June 30th)	22.1	53.5	40.8	53.7
Unemployment (Eurostat standardised rate, yearly average)[1]	9.4	9.5	9.2	8.7
Current account balance (as % of GDP)	4.9	4.0	3.9	4.5
Short term interest rate (3 m.)	3.5	3.6	2.8	3.0
Long term interest rate (10 y.)	5.8	4.8	4.7	5.4

[1] Other unemployment definitions can be found on page 14 (table 6)

Economic forecasts for Belgium by different institutions

	GDP-growth		Inflation		Government balance		Date of update
	1999	2000	1999	2000	1999	2000	
Federal Planning Bureau	1.9	3.0	1.1	1.2	.	.	11/99
INR/ICN	1.7	2.5	1.2	1.3	.	.	7/99
National Bank of Belgium	1.6	.	.	.	-1.0	.	8/99
European Commission	1.9	2.5	1.0	1.3	-0.9	-0.6	3/99
OECD	1.9	2.2	1.3	1.4	-1.0	-0.8	5/99
IMF	1.4	2.5	1.1	1.2	.	.	9/99
Artesia Bank	2.0	2.3	1.0	1.3	-1.0	-0.8	6/99
BBL	2.0	3.1	1.1	1.3	-1.2	-1.1	10/99
Fortis Bank	2.2	3.2	1.0	1.5	-1.1	-0.8	10/99
Gemeentekrediet/Crédit Communal	1.7	2.8	1.1	1.6	-1.2	-1.3	10/99
KBC Bank	2.0	3.1	1.0	1.4	-1.2	-0.8	10/99
Petercam	2.0	3.3	1.4	1.5	-1.0	-0.6	11/99
J.P. Morgan	1.6	3.6	.	.	-1.0	-0.6	10/99
Morgan Stanley Dean Witter	1.7	2.9	1.0	1.2	-1.0	-0.8	9/99
IRES	1.7	2.8	1.0	1.4	-1.0	.	10/99
DULBEA	2.0	2.8	1.0	1.25	-1.0	-0.9	11/99
Averages							
All institutions	1.8	2.8	1.1	1.3	-1.0	-0.8	
International public institutions	1.7	2.4	1.1	1.3	-1.0	-0.7	
Credit institutions	1.9	3.0	1.1	1.4	-1.1	-0.9	
Consensus The Economist	1.7	2.7	1.1	1.4			11/99

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

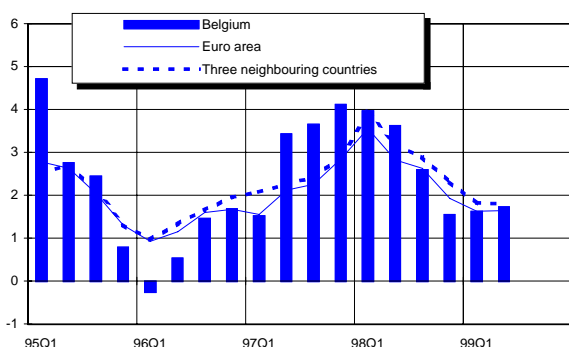
General economic activity

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

	96	97	98	97Q2	97Q3	97Q4	98Q1	98Q2	98Q3	98Q4	99Q1	99Q2
Germany	0.8	1.5	1.9	1.6	1.5	1.4	3.0	1.8	1.8	1.2	0.6	0.6
France	1.2	2.0	3.4	1.7	2.0	3.0	3.5	3.7	3.4	2.9	2.4	2.1
Netherlands	4.2	5.8	5.6	5.5	6.0	6.9	7.5	5.9	4.9	4.2	4.2	4.5
Belgium	0.9	3.2	2.9	3.4	3.7	4.1	4.0	3.6	2.6	1.6	1.6	1.7

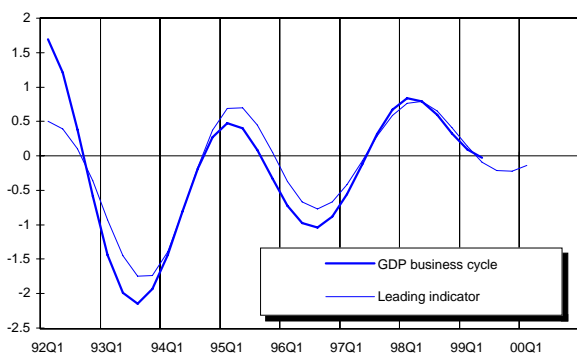
Source: INR/ICN, National sources, Eurostat

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



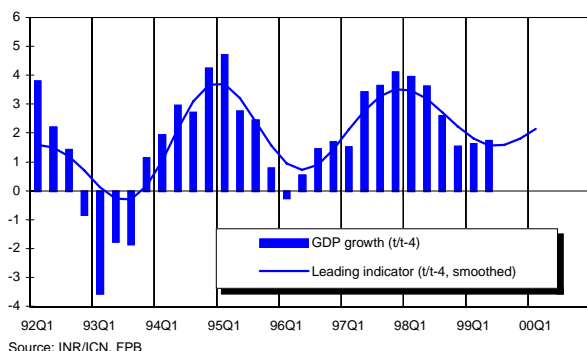
Source: INR/ICN, National sources

Graph 2 - GDP business cycle and leading indicator



Source: INR/ICN, FPB

Graph 3 - GDP growth and leading indicator



Source: INR/ICN, FPB

During the first half of 1999, Belgian GDP growth reached about 1.7% (yoy), a rate similar to what was seen in the euro area as well as for the average of our three main trading partners.

However, after a pronounced slowdown at the end of 1998, the Belgian GDP quarterly pattern (qoq) indicates a net acceleration in the rate of growth in the second quarter of 1999 (1.6%), while in the euro area as a whole, GDP growth remained nearly the same as in the first quarter of the current year (about 0.5%). The composition of growth is also different as the contribution (qoq) from net exports in the euro area was still negative in the second quarter of 1999, while in Belgium the contribution of external trade was largely positive as imports declined more rapidly than exports.

GDP growth (yoy) was stronger than anticipated in the Netherlands and, to a lesser extent, in France as activity in both countries has benefited from still-buoyant household consumption and an increase in exports. On the other hand, although German exports were also recovering, the activity still suffered from the lack of dynamism in private consumption and household investment in the wake of rising unemployment.

The contraction in industrial activity came to an end in the euro area, as in Belgium, at the beginning of the second quarter of 1999 and a further improvement in overall economic activity should be observed in the second half of the current year.

On basis of the FPB leading indicator, we can expect a real turning-point in Belgian GDP before the end of 1999. The dioxin crisis, which can be considered as an accidental event, does not seem to have markedly influenced this upturn pattern of the business cycle.

Smoothed GDP growth rates (yoy) derived from this leading indicator, suggest that a modest upturn in GDP growth is likely to materialise in the fourth quarter of the current year and that growth rates above 2% could be registered from the first quarter of 2000 onwards. This confirms our scenario of a short lived slowdown.

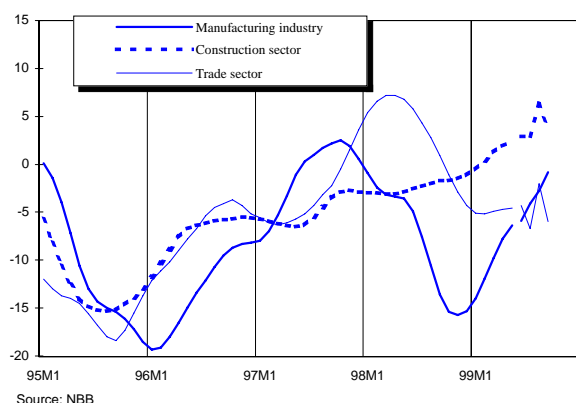
Table 2 - Monthly business surveys [1]

	97	98	98Q4	99Q1	99Q2	99Q3	99M4	99M5	99M6	99M7	99M8	99M9
Synthetic indicator	-1.6	-6.1	-13.4	-8.9	-5.0	-1.9	-4.9	-5.7	-4.3	-3.4	-1.3	-0.9
Manufacturing industry	-0.3	-8.8	-17.8	-12.0	-6.5	-2.6	-7.1	-6.5	-5.9	-4.1	-2.8	-0.8
Construction sector	-5.1	-2.5	-1.5	-0.7	2.1	4.3	1.4	2.1	2.9	2.9	6.3	3.6
Trade sector	-4.0	3.0	-5.0	-3.0	-4.9	-4.9	-0.8	-9.7	-4.3	-6.7	-2.0	-6.0

[1] Qualitative data

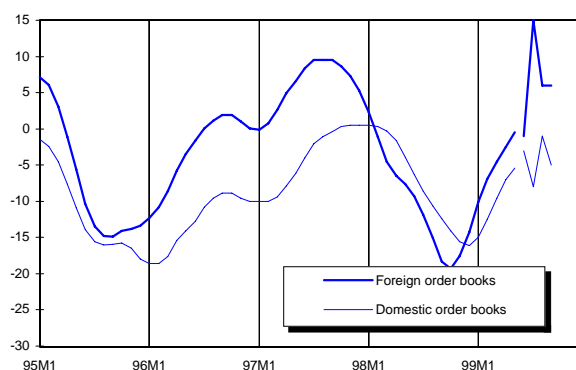
Source: NBB, FPB

Graph 4 - Business cycle: sectoral evolution



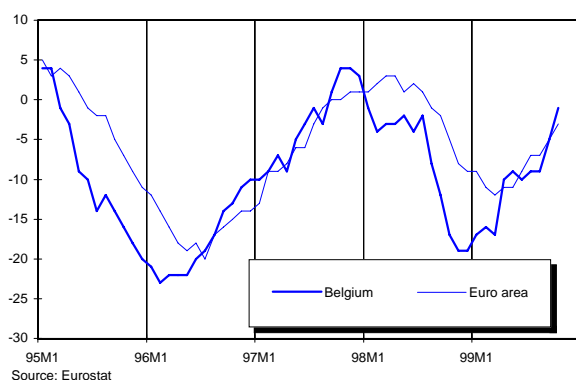
Source: NBB

Graph 5 - Manufacturing industry: order books



Source: NBB

Graph 6 - Industrial confidence: international comparison



Source: Eurostat

Over the last four months, the NBB survey indicators show an uninterrupted improvement in the overall synthetic indicator, as opposed to the expected deterioration that could have been caused by the impact of the dioxin crisis in the industry and distribution sectors. In the food industry, it is also noticeable that the NBB indicator has returned to its pre-crisis level.

Sectoral analysis reveals that during the third quarter of the year, the improvement has once again been more pronounced in the manufacturing industry, largely because of the improvement in foreign order books and in stocks appreciation. During the same period, the upward trend followed by the indicator in the construction sector (residential and non residential) has been going on. At the opposite end of the scale, the trade sector has not yet recovered from the decline registered in the second quarter 1999, reflecting the slowdown in consumer spending.

Industrial confidence in the euro area began to recover at the end of the first quarter of 1999. Rising foreign order books and production expectations, as well as improving stocks appreciation are in line with the turnaround registered in production growth (yoy) since the end of the first quarter of 1999.

It is worth to notice that the current upturn in the euro area industrial confidence occurred later than in Belgium. The same is observed for the decline in 1998 and the upturn in 1996. On the basis of these observations, various studies consider the Belgian industrial confidence as a leading indicator for turning-points in industrial confidence in the euro area. However, during the period from 1996 to 1999, this theory can only hardly be confirmed by the statistical causality¹ between the industrial confidence indicators for Belgium and the euro area. Moreover, on a longer period of time (1985-1999), there is no unidirectional statistical causality between both indicators.

1. On the basis of the Granger causality test.

Private consumption

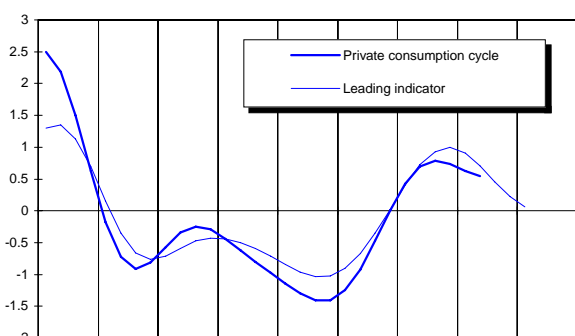
Table 3 - Private consumption indicators

	97	98	98Q4	99Q1	99Q2	99Q3	99M5	99M6	99M7	99M8	99M9	99M10
Turnover (VAT) - retail trade [1]	3.5	5.9	5.4	5.1	-0.9	.	3.6	-5.3	-6.3	.	.	.
New car registrations [1]	-0.3	14.1	17.1	15.7	6.2	6.6	4.9	15.7	5.1	5.8	8.9	-3.1
Consumer confidence indicator [2]	-21.7	-5.6	-5.7	0.0	-4.0	-4.7	-1.0	-9.0	-5.0	-6.0	-3.0	-1.0

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

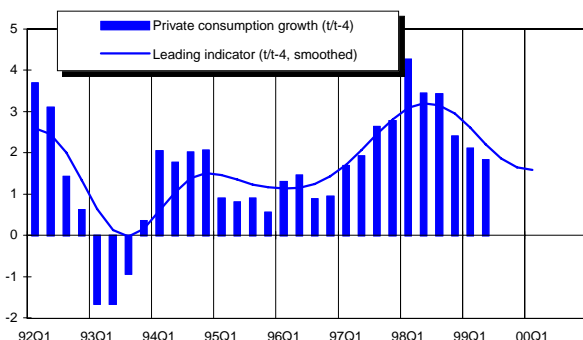
Source: NIS/INS, Eurostat, Febiac, FPB

Graph 7 - Private consumption cycle and leading indicator



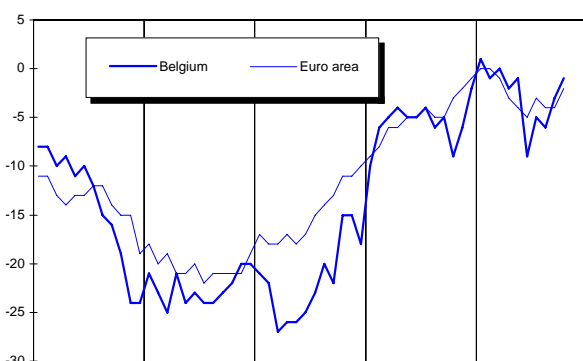
Source: INR/ICN, FPB

Graph 8 - Private consumption growth and leading indicator



Source: INR/ICN, FPB

Graph 9 - Consumer confidence: international comparison



Source: Eurostat

In 1998 real growth in private consumption was over 3% on an annual basis, for the first time in the 1990s. This remarkable buoyancy in private consumption was fuelled by a rise in employment and real disposable income and by a falling savings ratio, the latter reflecting a higher propensity to spend after several years of relatively moderate consumption growth.

From the third quarter of 1998 onwards, the consumption cycle lost some of its momentum. This slackening in the dynamic of consumption was a return to its long-term path. Consequently, the year-on-year private consumption growth rate fell back from about 4% in the first half of 1998 to about 2% in the first two quarters of 1999. In line with its leading indicator, private consumption growth should remain around 2%, at least for the remaining quarters of this year.

Consumer confidence has, on average, been high during the past two years. The sharp decrease in Belgian consumer confidence in June 1999 was probably due to the outbreak of the dioxin crisis. Since then, Belgian consumer confidence has made up its deficit against consumer confidence in the euro area. The fact that consumer confidence remains at a high level overall underpins the expectation that private consumption should not fall far below its trend growth rate.

The year-on-year growth rate of new car registrations fell from more than 15% over the last three quarters of 1998 and the first quarter of 1999 to about 6% in the second and third quarters of 1999. During the first ten months of 1999 the number of new cars purchased was more than 8% above the figure in the corresponding period of 1998. Such a high growth rate is unusual in a year without a Motor Show. It can, however, be explained by the secondary Motor Show for special leisure vehicles which took place at the beginning of 1999 and the high level of consumer confidence.

Business investment

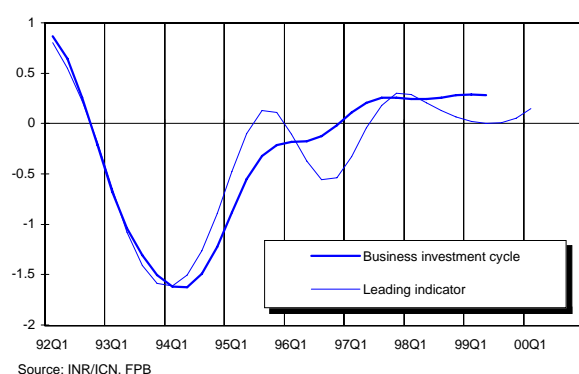
Table 4 - Business investment indicators

	97	98	99	98Q4	99Q1	99Q2	99Q3	99M3	99M4	99M5	99M6	99M7
Investment (VAT) [1]												
Industrial companies	1.7	3.0	.	-3.3	11.5	-2.3	.	15.0	5.0	-8.7	-2.6	2.5
Non-industrial companies	11.2	6.2	.	8.3	10.3	16.7	.	16.9	11.0	12.3	25.7	15.5
Total companies	7.4	5.0	.	3.8	10.7	9.4	.	16.0	9.3	4.0	14.4	10.9
Investment survey [1]	5.6	9.4	2.6									
Capacity utilisation rate (s.a.) (%)	82.0	81.8	.	79.5	80.9	81.6	81.8					

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

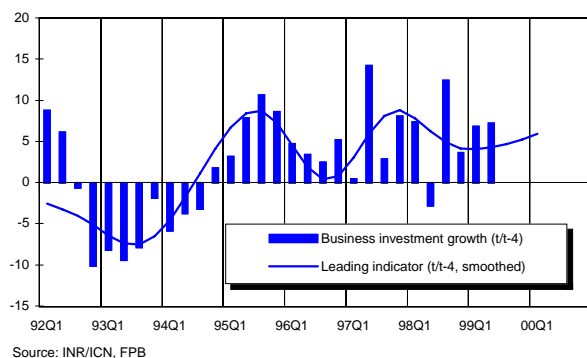
Source: NIS/INS, NBB, FPB

Graph 10 - Business investment cycle and leading indicator



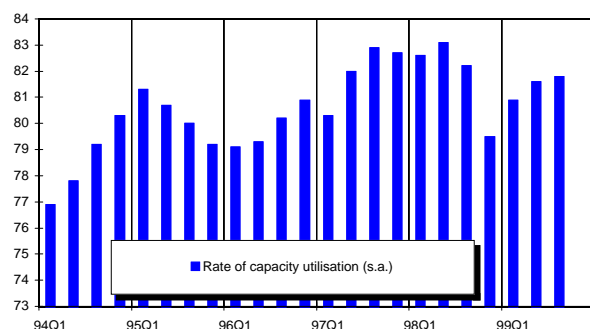
Graph 10 illustrates the business investment cycle derived from quarterly national accounts against its leading indicator. From 1996 onwards the relation between the two series has been disturbed. The leading indicator gives a more pronounced business investment cycle, which follows the overall GDP cycle with a time-lag of two to three quarters. In national account investment series, those cyclical movements have been partly offset by exceptional acquisitions of public buildings (e.g. in 1996) and more recently by the development of investments in non-industrial companies (e.g. the public transport and telecommunications sectors). Those investments result from a decision-making process which is less closely linked to traditional factors determining business investment.

Graph 11 - Business investment growth and leading indicator



The quarterly national accounts show rather high growth rates for business investment (about 7% year-on-year) for the first two quarters of 1999. For the second quarter, this strong performance can almost completely be attributed to investment by non-industrial companies.

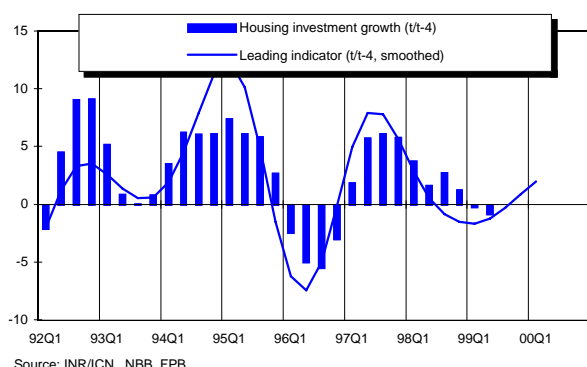
Graph 12 - Capacity utilisation in manufacturing industry



The slackening in the overall business cycle in the course of 1998 and the (partly related) deterioration in company profitability should give rise to weaker investment performance in the second half of 1999. The same conclusion can be drawn from the business investment leading indicator in graph 10, which for most of 1998 and 1999 gives a flat or even slightly declining trend. The less optimistic investment performance expected for 1999 is, as far as industrial companies are concerned, also confirmed by the results of the NBB investment survey dating from May. This survey points to a growth in 1999 of investment in the manufacturing industry by less than 3% in current prices. As the degree of capacity utilisation in manufacturing industry is once again on an upward trend (picking up from 79.5% in the last quarter of 1998 to 81.8% in the third quarter of 1999 on a seasonally adjusted basis), the weakness in industrial investments should only be short-lived.

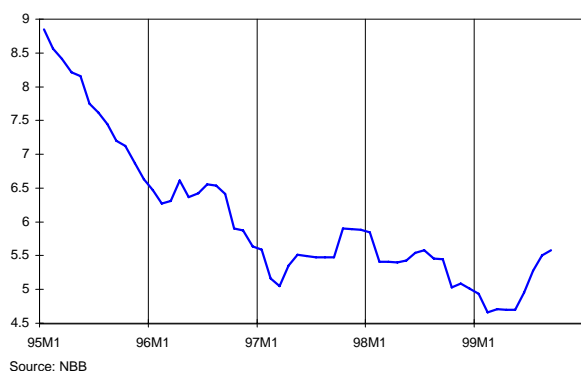
Housing investment

Graph 13 - Housing investment growth and leading indicator



Year-on-year growth in housing investment has been negative during the first part of 1999. However, the leading indicator for housing investment (which takes into account both NBB surveys in the construction sector as well as architect surveys of building plans) indicates that the slowdown in this sector could come to an end in the third quarter of the year. Household investment (in terms of smoothed series) could then return to positive growth figures from the last quarter of 1999 onwards. This result remains in line with our forecast of a slightly negative growth rate for 1999 as a whole.

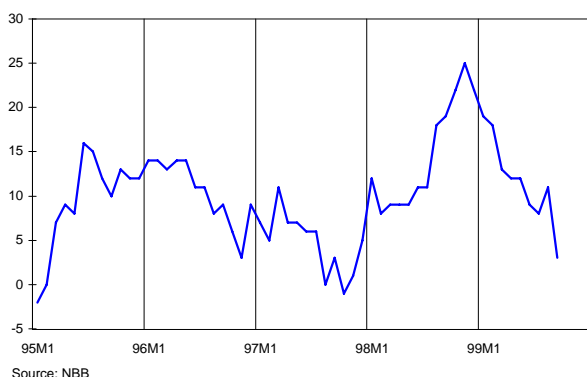
Graph 14 - Mortgage rate (in %)



Despite the improvement in the labour market and household confidence, some factors could negatively influence activity in the residential sector. Among these factors, one might mention the sharp upward trend in mortgage interest rates since the end of the first quarter of 1999, as well as rising prices in the construction sector from the end of last year onwards. The reduction in the VAT rate from 21% to 6% on housing renovation (for buildings aged 5-15 years) should only have a moderate impact on household investment in 2000, given the limited estimated ex-ante cost and the fact that, on basis of the national accounts, small renovations are not taking part of residential investment.

Stockbuilding

Graph 15 - Appreciation of stocks



According to the quarterly national accounts, the contribution (yoy) of stockbuilding towards Belgian economic growth has been significantly negative during the first half of 1999. This negative contribution was, however, smaller in the second quarter of the year than in the first. On basis of the surveys carried out during the third quarter of the year, the number of entrepreneurs in the manufacturing industry, who consider their stocks to be too high in relation to expected demand, has declined further. We can then expect a further reduction in the negative contribution of stockbuilding to economic growth during the same quarter. For the rest of the year however, the question remains when companies' adjustments in stocks levels will come to an end.

Foreign Trade

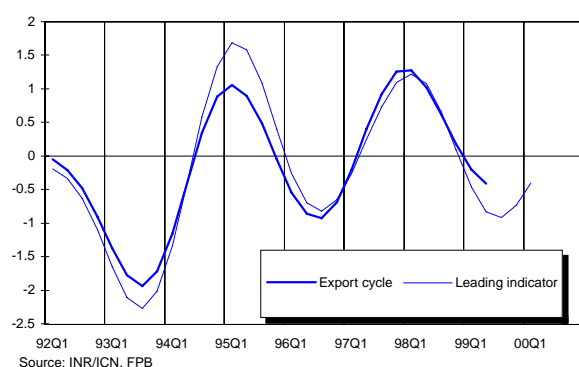
Table 5 - Belgium - Trade statistics (goods, intra/extrastat)

	97	98	98Q3	98Q4	99Q1	99Q2	99M3	99M4	99M5	99M6	99M7	99M8
Exports - value [1]	13.1	5.7	3.2	0.7	-1.9	-3.5	3.6	-4.7	-3.4	-2.4	-0.4	6.1
Imports - value [1]	10.9	6.2	7.6	0.7	-3.0	-4.8	1.0	-7.9	-1.8	-4.6	-5.9	0.8
Exports - volume [1]	7.4	5.8	5.1	4.4	3.2	-1.1	8.2	-0.8	-1.0	-1.4	-1.5	5.0
Imports - volume [1]	4.5	8.3	11.7	5.9	1.4	-3.7	3.9	-5.7	-1.4	-3.9	-8.6	-1.4
Exports - price [1]	5.3	-0.1	-1.7	-3.6	-5.0	-2.5	-4.3	-4.0	-2.4	-0.9	1.1	1.0
Imports - price [1]	6.1	-1.9	-3.7	-4.9	-4.5	-1.2	-2.8	-2.3	-0.4	-0.8	3.0	2.2

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

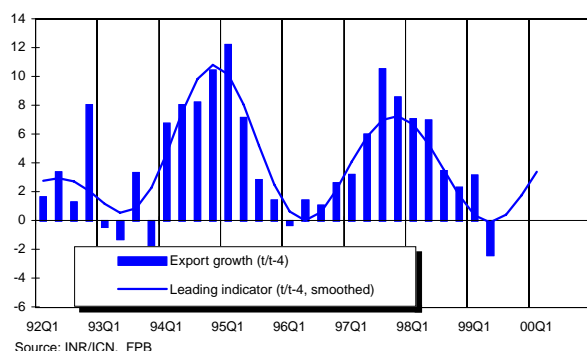
Source: INR/ICN, FPB

Graph 16 - Export cycle and leading indicator



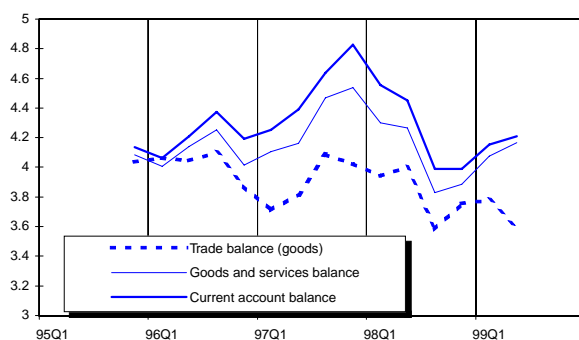
Source: INR/ICN, FPB

Graph 17 - Export growth and leading indicator



Source: INR/ICN, FPB

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



Source: INR/ICN, NBB, FPB

According to trade statistics¹, growth in exports of goods in volume terms has been negative during the second quarter of the current year in comparison with the same period in 1998. The dioxin crisis has partly, although not exclusively, contributed to this negative result.

The FPB composite indicator for exports of goods and services (which takes into account, among other things, foreign order books in the manufacturing industry), suggests that the real turning-point in export volumes should only occur in the last quarter of 1999. The change in this leading indicator points out that smoothed exports growth could pick up slightly during the third quarter of this year and that a rapid acceleration cannot be expected before the beginning of the year 2000.

The negative growth in exports of goods in volume terms registered in the second quarter of 1999 led to a further decline in value terms, as export prices have been decreasing since mid-1998. Nevertheless, this decreasing trend in export prices has been less extensive during the past few months and a small increase has taken place in July and August.

The same holds for import prices as a result of the sharp increase in energy prices from July onwards, as well as the improvement in the prices of other raw materials. The depreciation of the Belgian franc in nominal effective terms also contributed to a further deterioration in the terms of trade from the second quarter onwards.

The strong decline in imports of goods in volume terms in the second quarter of 1999 and the first two months of the third quarter, has led to a further improvement in the current account balance.

1. Note that there have been important upward revisions for exports and imports volumes in the first quarter 1999.

Labour market

Table 6 - Labour market indicators

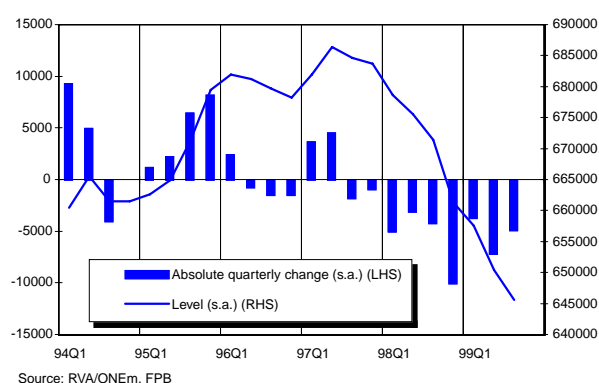
	97	98	98Q4	99Q1	99Q2	99Q3	99M5	99M6	99M7	99M8	99M9	99M10
Unemployment (excl. older) [1]	570.0	541.0	528.9	515.2	481.1	535.6	479.0	475.1	523.7	551.5	531.6	511.0
Unemployment (incl. older) [1]	683.9	671.5	664.7	653.9	620.5	675.7	617.4	614.4	663.3	691.2	672.6	653.3
Unemployment rate-FMTA/MfET[2]	13.1	12.4	12.2	11.9	11.1	12.3	11.0	10.9	12.0	12.7	12.2	11.8
Unemployment rate-Eurostat [3]	9.4	9.5	9.2	9.1	9.0	9.0	9.0	9.0	9.0	9.2	8.9	8.9

[1] Level in thousands; [2] In % of labour force of June 1997, 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

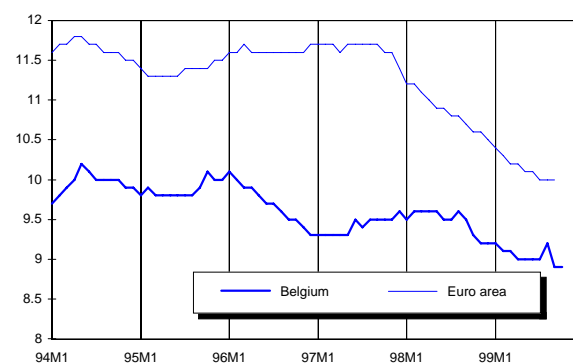
Source: RVA/ONEm, FMTA/MfET, Eurostat, FPB

Graph 19 - Evolution of unemployment (incl. older)



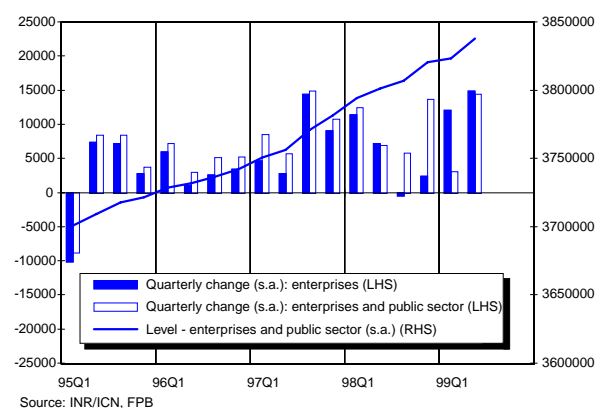
Source: RVA/ONEm, FPB

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



Source: Eurostat

Graph 21 - Evolution of domestic employment



Source: INR/ICN, FPB

The quarterly employment statistics produced by the INR/ICN (graph 21) indicate that private sector job growth (in seasonally adjusted terms) has increased with renewed vigour during the first half of 1999, following a temporary pause in the second half of 1998 that was related to the slowdown of activity. Private sector employment thus seems to have shadowed the cyclical evolution of activity with a surprisingly short time lag over the recent period.

On the one hand, the interim staff sector seems to be increasing its attenuating role as far as the productivity cycle is concerned: RSZ/ONSS estimates suggest that the temporary slowdown of activity has been absorbed to a large extent by changes in interim employment. On the other hand, the rapid recovery in private sector employment growth during the course of the current year may have been related to a clear perception of the temporary nature of the slowdown.

The INR/ICN figures further suggest that the development in public sector employment over the past year has been more erratic, thereby to a large extent blurring the impact of the cycle on overall employment growth and on unemployment. Unemployment (broad register-based definition, i.e. including “older” people receiving unemployment benefits who are no longer required to actively search for a job) has fallen by a further 4,500 persons in the third quarter of 1999 and has been declining uninterruptedly since the third quarter of 1997, despite the temporary slowdown in activity.

From the second quarter of 1999 onwards, and for the first time since 1996, the increase in the number of “older” unemployed people seems to have been halted, implying that the drop in official unemployment figures (which exclude the “older” unemployed) is coming closer into line with the decrease in terms of the broader definition. The official unemployment rate averaged 12.3% during the third quarter of 1999, down from 13.1% during the third quarter of 1998. The recent evolution of unemployment confirms the impression that, all in all, the so-called ‘dioxin crisis’ only has had a minor impact on the labour market.

Prices

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

	97	98	98Q4	99Q1	99Q2	99Q3	99M5	99M6	99M7	99M8	99M9	99M10
Consumer prices: all items	1.63	0.95	0.68	1.05	0.92	0.92	0.84	0.74	0.65	0.91	1.19	1.30
Food prices	2.20	1.83	0.27	1.52	0.26	-0.79	0.28	-0.13	-1.20	-0.82	-0.35	0.29
Non food prices	1.50	-0.45	-0.50	0.41	0.78	1.42	0.56	0.58	1.09	1.50	1.68	1.77
Services	1.48	2.34	2.50	1.58	1.53	1.34	1.59	1.51	1.22	1.25	1.56	1.36
Rent	1.69	1.15	1.09	1.43	1.49	1.45	1.49	1.48	1.48	1.45	1.43	1.38
Health index	1.32	1.27	1.02	1.26	0.83	0.60	0.73	0.65	0.43	0.57	0.80	0.91
Brent oil price in USD (level)	19.3	13.4	11.8	11.5	15.8	20.7	15.8	16.3	18.8	20.5	22.8	22.3

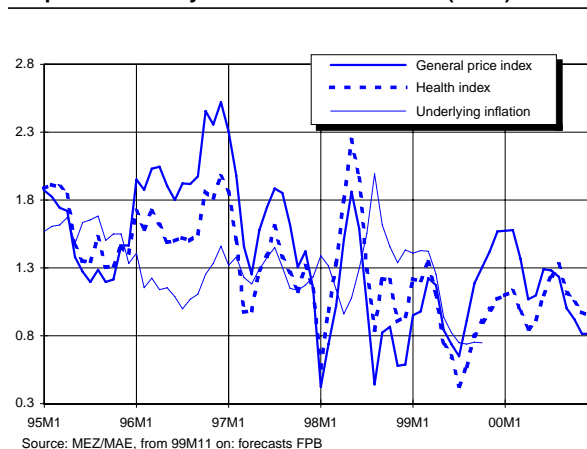
Source: MEZ/MAE

Table 8 - Monthly inflation forecasts

	99M1	99M2	99M3	99M4	99M5	99M6	99M7	99M8	99M9	99M10	99M11	99M12
Consumer prices: all items	102.96	103.19	103.27	103.68	103.86	103.65	103.81	103.69	103.92	104.06	104.16	104.23
Consumer prices: health index	103.07	103.31	103.32	103.57	103.74	103.56	103.58	103.33	103.53	103.65	103.72	103.81
Moving average health index	102.80	102.95	103.10	103.32	103.49	103.55	103.61	103.55	103.50	103.52	103.56	103.68
	00M1	00M2	00M3	00M4	00M5	00M6	00M7	00M8	00M9	00M10	00M11	00M12
Consumer prices: all items	104.58	104.82	104.68	104.79	105.00	104.99	105.14	104.97	104.96	105.02	105.01	105.08
Consumer prices: health index	104.20	104.48	104.33	104.45	104.69	104.70	104.87	104.70	104.68	104.73	104.73	104.79
Moving average health index	103.85	104.05	104.21	104.37	104.49	104.54	104.68	104.74	104.74	104.75	104.71	104.73

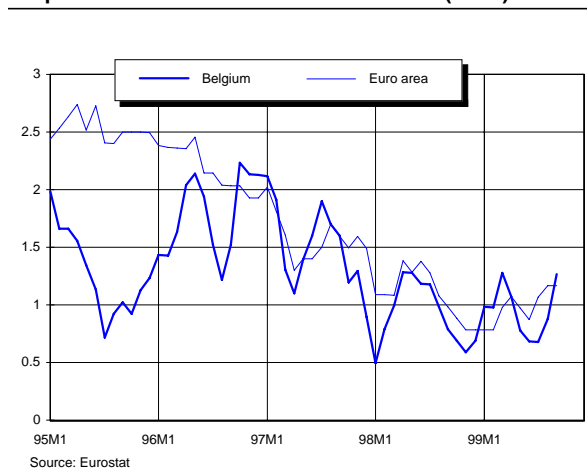
Source: Observations (up to 99M10): MEZ/MAE; forecasts: FPB

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



Over the last four months, inflation, as measured by the yoy change in the overall CPI, has been on an upward path. In October inflation was at 1.3%, against only 0.65% in July. The doubling of inflation between July and October was caused by the continuing rise in energy prices and the disappearance of the offsetting (downward) impact of low fresh food prices. In contrast with the rebound in overall inflation, the underlying inflation (excluding components which often have an erratic price pattern, such as energy products, fresh food products and indirect taxes) has remained strikingly stable for the last four months at about 0.75%.

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



As stated above, more than half of the increase in overall inflation was caused by changes in energy prices. The Brent oil price, which had climbed from USD 10 per barrel in the early months of 1999 to almost USD 19 in July, continued its rise and reached a level of more than USD 22 per barrel in October. The (mechanically calculated) contribution of energy products to domestic inflation rose from about 0.2% percentage point in July to almost 0.6% percentage point in October. The change in fresh food prices, which had offset the impact of higher energy prices during the summer (the contribution to domestic inflation of fresh food products was -0.3% percentage point in July), returned to a zero contribution in October.

According to our monthly forecasts for the “health index”, the pivotal index for the public sector (currently 105.20) should next be reached at the beginning of 2001.

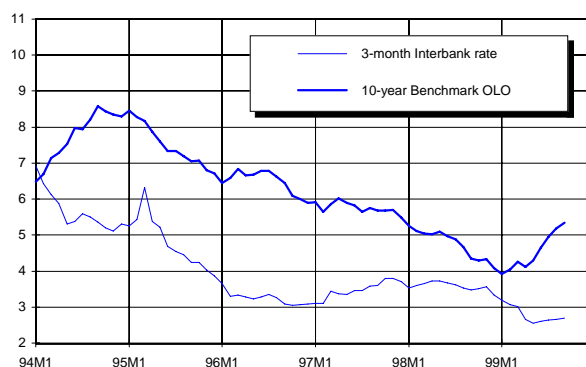
Interest rates

Table 9 - Interest rates

	97	98	98Q4	99Q1	99Q2	99Q3	99M5	99M6	99M7	99M8	99M9	99M10
Short-term rates (3 months)												
Belgium	3.48	3.58	3.47	3.09	2.60	2.67	2.55	2.60	2.65	2.66	2.70	3.36
Euro area (Euribor)	.	.	.	3.09	2.63	2.70	2.58	2.63	2.68	2.70	2.73	3.38
United States	5.74	5.56	5.28	5.00	5.07	5.44	5.02	5.18	5.31	5.45	5.57	6.18
Japan	0.57	0.60	0.43	0.36	0.12	0.10	0.11	0.10	0.11	0.09	0.10	0.25
Long-term rates (10 years)												
Belgium	5.76	4.76	4.24	4.07	4.35	5.16	4.29	4.64	4.96	5.18	5.35	5.58
Germany	5.65	4.57	4.00	3.86	4.08	4.87	4.04	4.34	4.67	4.89	5.05	5.31
Euro area	5.97	4.71	4.15	3.97	4.22	5.01	4.18	4.49	4.81	5.02	5.19	5.44
United States	6.35	5.26	4.67	4.98	5.55	5.87	5.58	5.89	5.78	5.93	5.90	6.10
Japan	2.30	1.46	1.05	1.90	1.55	1.82	1.37	1.66	1.73	1.89	1.83	1.68

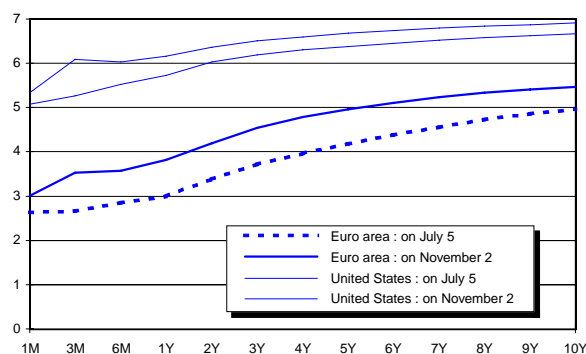
Source: NBB, ECB

Graph 24 - Interest rate levels in Belgium, in %



Source: NBB

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



Source: Datastream, data based on interest rate swaps

In August the Federal Reserve (FED) increased, for the second time, its official short-term interest rates by 25 basis points in order to prevent inflationary pressure that could come from the US labour market. However, US short-term rates on the money markets still went up, reflecting not only market expectations of a further interest rate rise over the coming weeks, but also fears of liquidity problems that could emerge at the beginning of the year 2000 (linked to the “Y2K bug”). The same story holds for the three-month Euribor in October. In view of strong monetary and private sector credit growth and economic improvement in the euro area, financial markets anticipated the rise in the ECB refinancing rate. As a matter of fact, on November 4, the ECB increased its refinancing rate from 2.5% to 3%.

Since the summer, the main development on the financial markets has been the further increase in European and US 10-year bond yields. A number of factors account for this upward trend, among which the reallocation of international capital flows, inflationary fears in the US labour market and accelerating world growth. The sharp rise in oil prices also put strong pressure on long-term interest rates by exacerbating inflationary fears. The reduction in the differential between US and European bond yields since last summer (from 140 basis points in June to about 70 basis points in October) can be attributed in a first wave to some weakness in the euro and in a second wave to the improvement in European activity and outlook.

These developments have led to a further upward shift in the euro area yield curve (and in a less extensive way in the US) for nearly all maturities higher than three months. In Belgium, the spread against German long-term interest rates has remained unchanged (30 basis points) since the widening observed last June.

Exchange rates

Table 10 - Bilateral exchange rates

	97	98	98Q4	99Q1	99Q2	99Q3	99M5	99M6	99M7	99M8	99M9	99M10
BEF per USD	35.78	36.31	34.32	35.95	38.17	38.46	37.97	38.88	38.94	38.04	38.39	37.71
USD per EUR	.	.	.	1.12	1.06	1.05	1.06	1.04	1.04	1.06	1.05	1.07
UKP per EUR	.	.	.	0.69	0.66	0.66	0.66	0.65	0.66	0.66	0.65	0.65
JPY per EUR	.	.	.	130.68	127.70	118.76	129.61	125.28	123.72	120.12	112.45	113.42

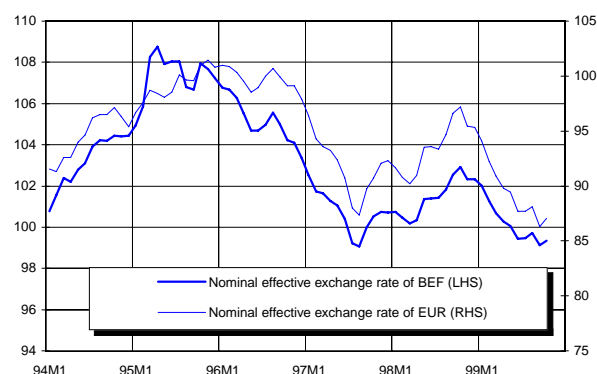
Table 11 - Nominal effective exchange rates (Jan. 92 =100)

	97	98	99	98Q4	99Q1	99Q2	99Q3	99M6	99M7	99M8	99M9	99M10
Effective exchange rate BEF	100.7	101.5		102.5	101.3	99.9	99.4	99.4	99.5	99.7	99.1	99.3
Growth rate [1]	-4.2	0.7		0.6	-1.2	-1.4	-0.5	-0.6	0.0	0.2	-0.6	0.2
Id. with constant rate till year end			-1.5									
Effective exchange rate EUR	91.7	93.6		96.0	92.4	89.0	87.4	87.7	87.7	88.1	86.3	87.1
Growth rate [1]	-8.0	2.1		1.2	-3.7	-3.7	-1.8	-2.0	0.0	0.5	-2.0	0.9

[1] Change (%) compared to previous period

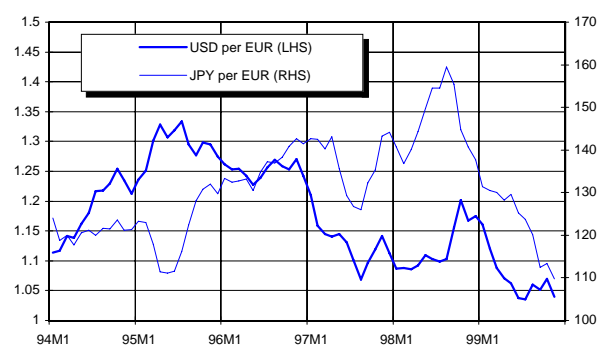
Source: NBB, BIS, FPB

Graph 26 - Effective exchange rates (Jan. 92=100)



Source: NBB, BIS, FPB

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



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

Since the launch of EMU, the nominal effective exchange rate of the euro (vis-à-vis the currencies of the euro area's 13 major trading partners) has depreciated by about 8%. However, most of this depreciation took place during the two first quarters of the year. The weakness of the nominal effective exchange rate of the euro seen in September is, to a large extent, explained by the strengthening of the Japanese yen. The latest move was brought about by the improved economic situation and outlook in Japan as well as by the lack of robust intervention from the monetary authorities to prevent an excessive appreciation of the yen.

During the third quarter of 1999, the euro exchange rate stabilised against the US dollar before recovering from the end of September onwards, as more and more signs pointed towards a recovery in the euro area. The euro also benefited from the fall in the differential between US and euro area bond yields as well as from a downward trend in the US equity markets and finally from the financial markets' expectation of a tightening of the ECB monetary policy.

On the other hand the rising US trade and current account deficit, faced with the widening Japanese current account surplus is one of the main factors behind the downward pressure on the US dollar against the yen.

Over the last quarters, the depreciation in the nominal effective BEF exchange rate has been less extensive than it was for the euro, due to the fact that most of our trading partners are Member States in the euro area. On the assumption that currently observed rates could be extrapolated for the rest of the year, the nominal effective BEF should depreciate by 1.5% in 1999.

Tax indicators

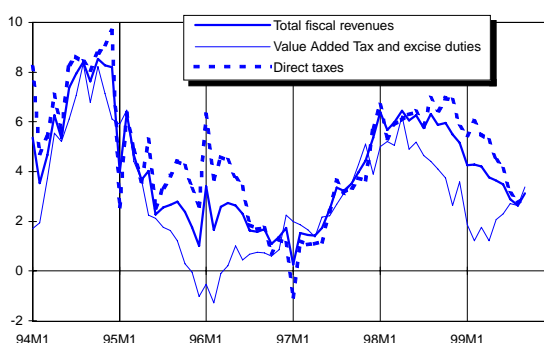
Table 12 - Fiscal revenues (1)

	97	98	98Q4	99Q1	99Q2	99Q3	99M4	99M5	99M6	99M7	99M8	99M9
Total, of which:	7.0	6.2	5.7	2.6	4.1	3.4	4.8	0.4	5.8	-0.1	4.4	9.1
Direct taxes, of which:	7.4	6.8	6.9	4.8	2.9	0.8	5.1	-6.0	5.4	-2.5	4.4	5.3
Withholding earned income tax	5.5	4.9	4.3	-2.6	15.6	-3.8	28.4	-9.3	25.7	49.7	-29.0	-27.0
Advance payments	13.5	20.2	22.2	-2.2	2.9	-15.4	2.5	.	.	-16.6	.	.
Value Added Tax and excise duties	5.6	4.6	3.4	-0.9	6.9	7.0	5.6	9.0	7.0	6.0	5.3	10.9

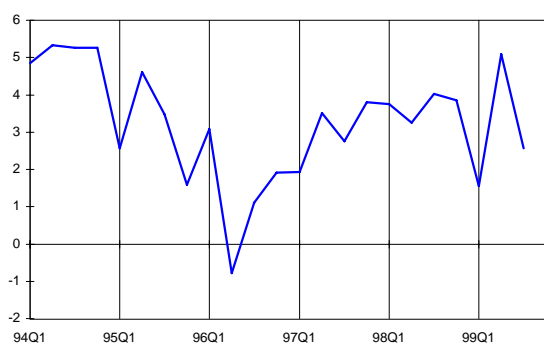
[1] Change (%) compared to same period previous year

Source: MvF/MdF, FPB

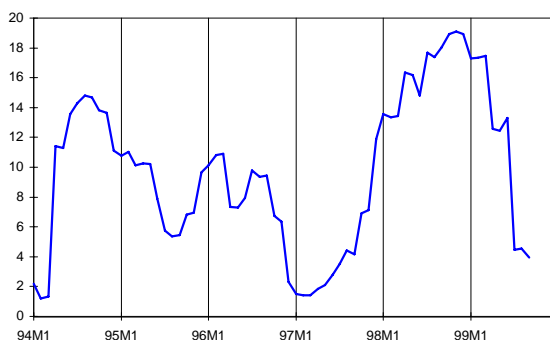
Graph 28 - Real fiscal revenues (2)



Graph 29 - Real withholding earned income tax (3)



Graph 30 - Real advance payments (2)



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

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

During the first nine months of 1999, total tax revenues in nominal terms were 3.5% higher than in the corresponding period in 1998. This growth rate is markedly lower than annual growth rates during the previous two years (7.0% in 1997 and 6.2% in 1998), reflecting to a large extent the slowdown in economic activity.

The deceleration in the growth rate of total taxes is mainly due to a slowdown in direct taxation revenues, which account for almost 60% of total tax receipts, whereas value added tax and excise duty (representing 35% of total taxes) grew by 4.6% over the first nine months, the same growth rate as in the whole of 1998.

Within direct taxes, the most striking feature is the weak performance of advance payments (a share of more than 13% of total tax receipts), whereas the slowdown in withholding earned income taxes (share of 40%) is less marked (growth rate of 3.2% during the first nine months of 1999, compared to annual growth rates of 5.5% in 1997 and 4.9% in 1998).

Advance payments actually show a negative growth rate of -3.6% over the first nine months (moreover, the estimated growth rate for the whole of 1999 should not be better), after highly positive growth rates of 13.5% in 1997 and 20.2% in 1998. The year-on-year growth rate in advance payments was still positive (2.5%) in April (first due date). In July (second due date) advance payments were 16.6% lower than in the corresponding month of 1998. Almost half of this fall can be explained by an exceptional payment in 1998 (by the NBB), the remaining part is largely due to the deterioration in profit perspectives immediately following the emergence of the dioxin crisis. Provisional figures for October (third due date) show a year-on-year growth rate of almost -4%, both negative for companies and self-employed people.

SPOT: A General Equilibrium Model of the Belgian Economy

This Working Paper presents the specifications and the methodology used to develop the macro-sectoral general equilibrium model SPOT (Sustainable Policy Tool).

This model was devised and developed at the Federal Planning Bureau (FPB) to broaden the experience of the Bureau in the field of modelling. As a complement to macroeconomic models (of which the FPB has a wide experience), the FPB wanted to develop an applied general equilibrium model in order to analyse the long-term and structural effects of certain policy measures.

Thus SPOT is above all an exploratory model. The intention is not to replace the traditional models by general equilibrium models. Applied general equilibrium models raise interpretation problems when using the results in the area of assistance with decision-making and the development and use of these models is labour-intensive.

The current version of the model, which is presented in this working paper, is mainly aimed at evaluating two types of policies: fiscal and non-fiscal energy policies to reduce the emissions of greenhouse gases and policies to reduce employers' social contributions in order to

encourage employment. In this model, the energy supply and demand movements are therefore presented in detail. The model also gives a good description of the whole tax system and contains a segmented labour market. In this sense the model is innovative. The model can evolve over time. The methodology used to develop the model is based on a set of programmes that can be run under the IODE software developed by the FPB's IT unit. These programmes can be organised differently depending on the structure of the required model. The exploratory character of the model is also justified on this level since its theoretical structures can be modified at any time depending on the programme of work.

This working paper sets out, in its first part, the theoretical specifications of the model. In its second part the development of databases and the calibration methodology are presented in detail. Among other things, the source and value of the elasticities used are mentioned. The third part analyses some of the model's properties on the basis of simulations of economic policies and of external shocks.

“SPOT: Un modèle d'équilibre général appliqué de l'économie belge”, Th. Bréchet, Working Paper 05-99, August 1999.

The macroeconomic and budgetary impact of a general social contribution

This Working Paper describes the macroeconomic and budgetary impact of a rescheduling of the fiscal and parafiscal burden by replacing a number of fiscal and parafiscal levies by a general social contribution (GSC). This rescheduling, aimed at extending the financing of social security, helps to achieve an improved balance between the fiscal burden on labour and that on capital. Part of the burden on labour income would shift to other income categories.

The GSC is levied as a fixed rate applied to a very wide tax base. The following income categories are submitted:

- gross wage income;
- gross income from self-employment before deducting personal labour costs;
- gross replacement income and family allowances;
- household financial income currently subject to withholding tax, and income from deposit accounts;

- gross household income from rent, or indexed cadastral income before fixed rebate with the exception of the cadastral income of the home;
- various other types of household income, mainly alimony;
- corporation tax base plus the investment rebate, exempt dividend, earlier losses and redemptions.

A 400,000 BEF tax rebate applies to each household's total professional and replacement income. It is indexed at the nominal growth rate of those incomes. The GSC is not deductible from personal income tax or corporation tax.

At the same time the abolition of a number of other taxes is announced: the additional crisis levy on personal income tax and corporation tax, the special social security contribution, the solidarity tax on pensions and the increase in social contributions for the self-employed.

The GSC rate is fixed at 2.18 per cent. At this rate, the yield of GSC on household income excluding financial income will equal the amount of the taxes abolished - in 2000 and ex ante. The net yield of this measure amounts - in 2000 and ex-ante - to BEF 33 billion: 9.4 billion coming from the introduction of the GSC on financial income and 23.6 billion due to higher taxes on corporate revenue (i.e. 33.8 billion of GSC, but at the same time an amount of 10.1 billion of additional crisis taxation is being abolished).

Several scenarios in terms of using this net yield have

been examined to assess their macroeconomic and budgetary impact: a smaller public deficit, higher GSC exemptions, a reduction in employers' social contributions, a reduction in employees' social contributions and a decrease in the normal VAT rate.

“Effets macroéconomiques et budgétaires de l’instauration d’une cotisation sociale généralisée”. “Macro-economische en budgettaire effecten van de invoering van een algemene sociale bijdrage”, F. Bossier, M. Englert, F. Vanhorebeek, Working Paper 06-99, August 1999. The Working .

Survival and employment growth of Belgian firms with collective layoffs: The impact of relocation, size, age, capital intensity and multinational group membership

This Working Paper forms part of the SSTC program on “relocation, innovation and employment”. It studies the impact of collective layoffs with and without relocation on employment growth and survival of industrial firms in Belgium. A relocation is a transfer of (a part of) the activities abroad that is organised by the Belgian firm or its parent company. It also studies the effect of size, age and capital intensity and a variable indicating that a firm makes part of a multinational group on its employment growth and the probability of its survival.

In Belgium, firms with at least 20 workers that downsize their workforce by at least 10% are obliged to report this to the regional employment offices (VDAB, ONEM, ORBEM). Information about companies and the number of workers concerned was reported to the Federal Planning Bureau from 1990 onwards. Data on relocation came from a survey organised in collaboration with the 3 national labour unions.

A major problem, when estimating the impact of any variable on the growth of firms, is that when computing a growth rate, only surviving firms can be used. We have therefore used Heckman's two step estimation procedure. This method consists of first estimating (with a probit model) the probability that a firm will survive, and then using the residuals in this regression to correct for the selection bias in the growth regression, which is performed only on the subset of surviving firms. The setting up and choice of these methods was done in collaboration with Dr. Shadman-Mehta Fate-meh (UCL).

On average, a collective layoff leads to a reduction of the number of workers by 1/3. This average includes the cases where a collective layoff directly leads to the cessation of all activities. On the firm level, no difference was found in the effects on employment between collective layoffs with and without relocation. Relocation is responsible for a relatively large share of the job loss due

to collective layoffs, because it is more frequent in large firms. Large firms are also affected more frequently by collective layoffs in general. Once it occurs, though, a collective layoff has a higher impact on the employment of a small firm than on that of a large one.

Among industrial firms, multinationals had a higher incidence of collective layoffs, and collective layoffs with relocation. However, compared with other firms with collective layoffs, they had significantly higher employment growth rates. One explanation is that these firms are less reluctant to take recourse to collective layoffs (with or without relocation), for reasons of rationalisation, labour saving or globalisation. Hence, for smaller and uninationals firms, a collective layoff is more often a sign of severe financial and/or managerial problems.

Our estimates for industrial firms with collective layoffs confirm the results of empirical studies in other countries and for other groups of firms, finding that a firm's size, age and capital intensity have a positive impact on the probability of its survival. At the same time size and age are negatively correlated with average employment growth. This result is found even after controlling for the sample selection problem mentioned before, when using a quadratic specification.

The results provide no convincing evidence that capital-intensive firms have higher growth rates than others. However, an increase in the capital intensity within the same firm was found to have a positive effect on growth. This attracts the attention to the importance of (recent) investment as a determinant (or at least an indicator) of future growth.

“Survival and employment growth of Belgian firms with collective layoffs. The impact of relocation, size, age, capital intensity and multinational group membership”. B. Van den Cruyce, Working Paper 08-99, November 1999.

This Working Paper provides an overview of the many European initiatives which are being taken to foster the development of benchmarking and of the Belgian response to the different projects that are launched.

Benchmarking is a tool aimed at improving competitiveness. In the Anglo-Saxon and Scandinavian countries it is already an instrument commonly used by enterprises and institutions to improve their performance. The European Commission and Council are convinced that the use of this instrument will remediate the gap between the EU and the US and Japan with regard to productivity, job creation and technological development.

Benchmarking is a technique that goes further than competitiveness analysis. The latter examines differences in performance based on indicators, without giving insight in the reasons of those differences. This is precisely the purpose of benchmarking: after comparing indicators, the method is intended to offer an understanding of the underlying reasons and its final objective is to distil from these "good or best practices" and what can be learned from those centres of excellence.

Benchmarking can take place on a company level, on a sectoral level and also at the level of framework conditions. Framework conditions relate to those core determinants that are external to the framework in which people and enterprises work. As a consequence framework conditions are related to factors such as wage-cost, taxes, infrastructure, financing, regulations, etc...and hence form part of governmental policy.

In 1997 the Industry Council asked the Commission and the Member States to launch pilot projects for framework conditions. Four projects were implemented and the results put on the European Benchmarking web site: logistics, skills, information and communication technology and organisational change (ICTO) and financing of innovation. Belgium only participated in the last one. Today there are already four new projects which have been launched and Belgium will participate in half of these.

The Working Paper also provides an overview of the many European initiatives regarding benchmarking on a sectoral and enterprise level. It is obvious that European decision-makers foster the use of the benchmarking technique to improve the competitiveness of enterprises - especially the SMES amongst them - and of public services. In 1998 a High Level Group was created with seven external members - but no-one from Belgium - to assist the Commission in establishing and reporting on priorities and indicating new research themes. Three more initiatives are worth mentioning: first, the link that will be created in future between benchmarking and the annual competitiveness report. Second, the creation of National Focal Points bringing together all parties interested in benchmarking on a national level to act as co-ordination points between European and national initiatives and as a dissemination point for information of the European Benchmarking Network. Third, the creation of a Benchmarking Competitiveness Committee, operating under the authority of the Directors General for Industry, as a channel for ensuring that benchmarking is properly focused on Europe's competitive priorities and on improving the business environment. Such National Focal Points already exist in nine Member States, and its creation in Belgium is under way.

It is obvious that Belgium has administrative difficulties in following and implementing the European benchmarking initiatives, especially those related to framework conditions; we are taking part in only a small number of projects and there seems to be a certain deficiency in the transmission of information between all those who may potentially be interested. It is to be hoped that the rapid establishment of the National Focal Point will fill this gap.

"Benchmarking in a Nutshell. Historiek, begrippen, Europese en Belgische initiatieven". "L'étalonnage des performances compétitives en bref. Historique, concepts, initiatives européennes et belges" - H. Van Sebreeck, Working Paper 07-99, November 1999.

Other Recent Publications

[Working Paper 02-99](#), June 1999, "Le système d'indicateurs avancés du BfP - un nouvel outil pour l'analyse conjoncturelle", Igor Lebrun.

[Working Paper 03-99](#), April 1999, "Evolution de l'Isoc et des précomptes mobiliers des ménages: aperçu statistique succinct".

[Working Paper 04-99](#), July 1999, "Impact économique de la crise de la dioxine", Luc Avonds, Francis Bossier, Jaak Floridor, Albert Gilot, Caroline Hambye, Delphine Rase.

[Federal Report Sustainable Development](#). "Sur la voie d'un développement durable?". "Op weg naar duurzame ontwikkeling?". Task Force Sustainable Development. Summary, July 1999. Full text, August 1999.

[Planning Paper 86](#), September 1999. Vieillesse démographique et financement de la sécurité sociale: un défi soutenable? (Actes du Colloque organisé par le Bureau fédéral du Plan, Bruxelles, les 2 et 3 décembre 1997). Vergrijzing en financiering van de sociale zekerheid: een haalbare uitdaging? (Handelingen van het door het Federaal Planbureau georganiseerde Colloquium, Brussel, 2 en 3 december 1997)

Research in progress

[The HERMES II.1 model for Belgium](#)

HERMES II.1 is the second official version of a macro-econometric model developed by the FPB. It is used for the FPB's medium term forecasts and simulation of economic policy alternatives and international shocks. Several adjustments and improvements to the model have been made in recent years in order to incorporate, among other things, the field of the environment (in order to analyse the evolution of CO₂ emissions per sector and per agent and to test the effect of measures aimed at reducing these emissions), the sectoral structure (a further desegregation of market services is made), and the allocation of private consumption. Finally, due to the conversion of the model into 1990 prices (allowed by the new input-output table for 1990), all regression estimates have been actualised systematically. The paper also presents some simulation exercises in order to illustrate the model's properties.

[Budgetary margins in the long term](#)

Recently, it has become clear that budgetary margins will arise following the tight controls on the Belgian public finances. This research attempts to see if there will be new margins remaining in the long term when the strains of an ageing population on the financing of social security will be considerable. Research into new indicators of financial sustainability will be addressed and the best way to use these budgetary margins will also be discussed.

[Trade and employment: a sectoral analysis](#)

The research investigates the relationship between the short and medium term evolution of trade flows and employment. Special attention is given to the effects of structural adjustments of firms. These struc-

tural adjustments are captured by data on collective layoffs, which, for the period 1990-1995, can be subdivided into layoffs with and without relocation. This research investigates the effect of relocation on import and export flows at the sectoral level, as well as the effects of increased imports and exports at the sectoral level on a firm's value added, its employment, and its probability of collective dismissal (without exit).

[Public enterprises in Belgium](#)

Currently going on in Belgium is a debate on the privatisation of public enterprises. We investigate the number of enterprises the government is still involved with and calculate the impact of the group for the Belgium economy. The performance of these enterprises is given together with an estimation of their total equity.

[Determinants of Belgium's export performance](#)

The financial crisis that started two years ago in the Asian NICs, the economic turmoil in Russia, and the contagion to other emerging countries have together had an important impact on the world economy. Trade flows in Belgium have also been affected. A general overview of the structural trade patterns of Belgium and its main trading partners in the period immediately preceding the crisis allows us to provide some insights into the specific issue of trade channel transmission.

Recent history of major economic policy measures

November 1999	The ECB increases its refinancing rate from 2.5% to 3%.
October 1999	<p>The Federal Government presents its 2000 Budget.</p> <ul style="list-style-type: none"> • An additional cut in social security contributions of BEF 50 billion is scheduled for 2000, one third of which had already been decided by the previous government. The main new measures include: the further enhancement of the 'Maribel' reductions of employers' social contributions (as from the second quarter of 2000 and for a total amount of BEF 24 billion); reductions of employers' social contributions linked to a new plan targeted at the recruitment of young people who have just graduated (BEF 4 billion); additional reductions of employees' social security contributions for low wage earners and related measures to tackle unemployment or "unemployment traps" (BEF 4 billion). The government will work out the details of the implementation of these measures in consultation with the social partners. • The price-linking of tax brackets for personal taxation is reintroduced. • The additional crisis contribution on personal taxes is gradually phased out (the abolition will be completed in 2003). • Fiscal rebates for children (both regimes with and without day-nursery) are increased. • The VAT rate is reduced from 21% to 6% on housing renovation (5-15 year-old buildings) and on repair works (bicycles, clothing, shoes). • The maximum real growth rate for health insurance outlays is raised from 1.5% to 2.5%. • Low pensions (included those of the self-employed) are raised from July 2000 onwards. • Additional resources are placed at the disposal of the modernization and higher efficiency of public services and sustainable development (e.g. investment in public transport, free public transport for civil servants and elderly people, investment in the judicial system, reorganization of the police force and a larger budget for development aid and debt restructuring).
September 1999	The Belgian Government adopts the draft of the so-called "Dioxin law", which realises the protocol concluded with the Belgian Association of Banks over the subsidization of loans to agricultural firms having suffered indirect damage from the dioxin crisis. The draft admits the principle of indemnisation for the damage sustained by agricultural firms.
August 1999	Following the European Commission, the Belgian Government imposes a mandatory official certificate for export on all the food products containing more than 2% fat from animal origin.
July 1999	The Belgian Government decides on accompanying fiscal measures for firms having suffered damage from the dioxin crisis.
June 1999	The Ministry of Public Health draws up a list of food products at risk. These products are removed from shop shelves. The European Commission imposes restrictions on the trade of chickens, eggs, pork, and beef, which might have been contaminated, and products derived from them, including dairy products.
June 1999	The cut in employers' social contributions will temporarily be reduced for firms that received Maribel bis and ter aid, which was condemned by the European Commission.
May 1999	Dioxin crisis: on 28 May, the Minister of Public Health advises that all chickens and eggs should be removed from the shelves.
May 1999	The Belgian Government presents its 1999 National Action Plan for Employment to the European Union (NAP). New measures, in comparison with the NAP 98, include a reduction in employees' contributions to social security targeted at low wage earners (scheduled to take effect from January 2000 onwards) and a voucher scheme to stimulate demand for certain labour-intensive services (painting and papering, already in place since April 1999, on an experimental basis, for a two-year period).
April 1999	The ECB reduces its refinancing rate to 2.50 %, which is 50 basic points lower than the rate prevailing since the starting of the EMU on 1 January 1999.
March 1999	As provided for in the 1998 Belgian Action Plan for Employment, the Maribel reductions of employers' social security contributions will be gradually enhanced, extended to white-collar workers and combined with the reduction for low wage earners. The transitional period towards the fully-fledged integrated scheme is expected to last 6 years, with annual increases of 16.5 billion BEF starting from the second quarter of 1999. As from the second quarter of 1999, the 'blue-collar intensity' of the firm will no longer be taken into account as criteria for granting these reductions.
March 1999	The Federal Government reviews its 1999 Budget. Measures for around BEF 10 billion are taken. The three main measures are the following: the price-linking of tax brackets for personal income tax, the reduction of social security contributions will take effect in April instead of July 1999, increase in social transfers to households.
December 1998	Social partners conclude an interprofessional agreement for the period 1999-2000, incorporating a maximum growth rate for nominal labour costs per hour of 5,9% over the period. New elements further include a shift towards a more macroeconomic oriented follow-up and control of the respect of this wage growth ceiling and a promise to step up training efforts so as to catch up with neighbouring countries in this respect.
December 1998	The Belgian Government presents its Stability Programme for 1999-2002. The deficit should reach 0.3% of GDP by 2002; the primary surplus should remain constant at 6% and the debt ratio should fall from 117.5% in 1998 to 106.8% in 2002. GDP growth was assumed to be 2.3% per year while real short-term interest rates should be 2.6% and real long-term rates 4.1%.

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)