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

During the past one and a half years, the world economy has been hit by a series of shocks, notably the large rise in oil prices, the abrupt slowing of growth in the United States (initiated by the bursting of the speculative bubble in the ICT sector) and the events of 11 September. This resulted in a synchronised slowdown in the three major economic regions (the United States, Japan and the European Union) and a pronounced downturn in world trade.

It is obvious that Belgium, being a 'small open economy', cannot escape the prevailing slowdown in the world economy. The forecasts for all components of final demand have therefore been revised downwards for both 2001 and 2002 as compared to our July projections. Under these circumstances GDP would not exceed a growth rate of 1.1% this year and 1.3% in real terms next year. These average annual growth rates are based on slightly negative growth figures (quarter-on-quarter) during the second half of this year, while positive and steadily increasing quarterly growth rates should be recorded in 2002 due to a recovery in exports.

Domestic demand should increase by only 1.1% both this year and next, while average growth over the last five years has amounted to 2.5%. Exports should suffer from slackening world demand in 2001, consequently growing by only 0.8%. In 2002 exports should accelerate and reach an average annual growth of 2.8%, which is much slower than in the second half of the 1990s.

The uncertainties surrounding these forecasts in the present political and economic situation should not be underestimated. The scenario on which the present forecasts are based assumes that the loss of consumer and business confidence will be of short duration, implying that the US economy will recover quickly next year. The consequences of the terrorist attacks of 11 September and the military response to those attacks may, however, have a more prolonged impact on investors' and consumers' confidence. As a final remark, it has to be underlined that the economic forecasts published in this STU were finalised before Sabena was declared bankrupt.

STU 4-01 was finalised on November 13th 2001.

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

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

Table of Contents

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ICT: passing fancy or radical innovation?

How has ICT influenced the path of economic growth? The purpose of this special topic is to provide the beginnings of an answer to this by analysing the economic performance of the United States and Europe during the 1990s.

The ICT industry has experienced tremendous growth during recent years, rapidly increasing production, creating large numbers of jobs and fostering expectations of sustained economic growth without recession. At the same time, the stock prices of dotcoms have skyrocketed, pushed by hopes of constantly growing profits. This irrational exuberance was transformed into a speculative technology-laden NASDAQ bubble. After many warnings, this bubble finally burst in April 2000. Since then, some economists seem to have thrown the baby out with the bathwater and no one dares to exhibit confidence in a high-tech future. There is nothing new in this succession of events than what was already noticed by Schumpeter in the 1940s. Indeed, each wave of innovation has tended to produce the same sequence of events. The first phase has been a heady upswing as successful participants established themselves as leaders. Then has come the second phase as the market matures and returns to investors decline with a dwindling number of opportunities. Finally, a short and sharp decline occurs when a whole new set of technologies begin jostling for the attention of investors. The starting point of the analysis is therefore to ascertain whether ICT could be considered as such a radical innovation and consequently whether, after corrections of financial excess and over-investment, it will result in long-term benefits for the global economy.

Part of the answer can be found by analysing the economic performance of the United States, the home of ICT, during the nineties in comparison with European performance. This decade has indeed been marked by two historical records for the American economy: the longest expansion phase since 1850 and the lowest unemployment rate for 30 years.

The following table illustrates American performance in terms of production and productivity growth. The comparison between periods has to be done carefully since the length of the first three periods is not the same as the length of the most recent one.

The revival of growth has occurred in two phases: a constant increase in the number of jobs on offer in a context of low productivity leading to full employment at the end of 1995, and then a boost in labour productivity growth starting in 1995 and seen more markedly since 1998. How have the production and spread of ICT influenced this performance and, in particular, how has the change in labour productivity growth been affected?

Table 1 - Evolution of Production and Productivity – United States (Annual average rate of growth)

	1870-1913	1913-1972	1972-1995	1995-1999	Difference between the last two periods
Output	4.4	3.1	2.8	4.9	+2.1
Hours worked	3.2	1.3	1.7	2.2	+0.5
Hourly productivity	1.2	1.8	1.1	2.7	+1.6

Source: Gordon, 2000.

During the 1990s ICT producer sectors incorporated rapid technological changes. The core of these innovations was the advance in materials science, leading to increases in the power of semiconductors, which in turn gave rise to rapidly declining chip prices. Cheaper semiconductors have allowed rapid advances to take place in the production of computers, software and telecommunications equipment, leading to steep price declines in these industries as well. This sharp fall in prices has stimulated extraordinary levels of investment in these goods, resulting in significant capital deepening in ICT user sectors. In turn, this capital deepening has led to acceleration in overall productivity growth, which in a context of full employment has allowed production capacities to increase. Finally, ICT investment may also permit user sectors to achieve technical progress and growth in their own total factor productivity (TFP), but the presence of this effect is still being debated by economists.

This scenario is a common feature of other major innovations such as the railways or electricity. First of all technological change increases productivity growth in the producer sector and secondly the decline in prices promotes rationalisations in user sectors. Finally, waves of reorganisation take place in user sectors. These efficiency gains have been the dominant effects in the long run.

The following table presents, the estimates made by the Council of Economic Advisers for the United States and by the European Commission for Europe. The direct and indirect impacts of ICT account for approximately half of the acceleration in American productivity growth between 1991 and 1995 and between 1995 and 1999. By contrast, ICT has had relatively a more limited impact in Europe (+0.3%) but in a context of declining productivity growth due to a decrease in the rhythm of capital deepening.

Table 2 - ICT impact on growth: acceleration 95-99/91-95

	United States	Europe
Labour productivity growth	+1.3%	-0.5%
Capital deepening	+0.5%	-0.5%
of which ICT	+0.5%	+0.2%
TFP	+0.7%	0.0%
of which ICT	+0.2%	+0.1%
Total ICT effect	+0.7%	+0.3%
Other effects	+0.5%	-0.8%

Source: Council of Economic Adiversers, 2001 and European Commission, 2001.

The pace of innovation was particularly fast in the ICT producer sector. In fact this speed was without historical equivalent in previous radical innovations. Three main reasons are generally put forward to account for this acceleration. ICT producer sectors have devoted a huge amount of resources to research and development during the 1990s. The innovating firms have struggled aggressively to build monopolies by imposing their products as standards. ICT products have very low levels of production costs. Once the high development costs have been covered, all additional units of production have a very low cost and thus, given the fierce competition pressures, are sold at a very low price. This is one important aspect of the network effect inherent in ICT.

Over the past four decades, the capacity of chips has doubled roughly every 18-24 months. It seems unlikely that this law, which has become known as Moore's law, will continue to hold in the long run, but other components of the ICT sector could experience major technological advances in the future, leading to new cuts in prices. Without going into too many technical details, we can think of other components of ICT, the communications subsector, and the potential progress required to create efficient networks at low cost.

In the American case and in contrast to the European situation, the decline in computer prices has gone hand in hand with labour force shortages to promote investment in ICT equipment. In fact, in nominal terms, American investment has paradoxically decreased as a percentage of GDP, which means that firms have devoted less money to investment but since the relative price of investment has been declining, in real terms, they have increased their investment. The consequence of this capital deepening has been an acceleration of labour productivity growth which, combined with full employment, has led to superior growth. It is evident that this investment wave will only be maintained if prices of ICT investment continue to go down.

The last route by which ICT could influence the productivity of user sectors is the growth of their TFP. This effect may be seen at different levels.

Thanks to ICT, the cost of producing and managing all the information needed to make economic decisions has been reduced. By this reduction of transaction costs, ICT user sectors are improving resource allocation and becoming more efficient. In the 1980s, investment was concentrated on computers, peripherals and software, in other words, on basic infrastructure. The 1990s witnessed the development of local networks allowing different units within the enterprise to exchange information and leading to a reorganisation of functions inside firms (outsourcing...). The current decade is being devoted to improvements in the ability of the enterprise to interact with its environment through investment in external networks and particularly in the Internet. The efficiency of exchanges with clients is increasing due to the use of electronic advertising and commerce, with providers through B2B, with other enterprises through the creation of common platforms and with public authorities through the development of e-gov.

However, the spread of ICT only makes a substantial contribution to productivity growth if the increasing use of computers and telecommunications equipment redesigns business processes and organisation. Learning effects, adaptation costs and market and behavioural rigidities could act as substantially brakes on these productivity gains. ICT products are also leading to the creation of new goods and services or new production processes in user sectors. This is for instance the case for self-banking activities or the sale of travel via the Internet. These innovations are taking place gradually, however, and at present they are only taking place in certain activities which are easy to computerise.

In both the cases mentioned, the acceleration of productivity growth will be non-permanent. Indeed, once the diffusion of ICT reaches its term, productivity will return to its underlying growth rate. Even if the productivity acceleration is transitory, however, it may still manifest itself over several years since the innovation has numerous potential applications and its diffusion is progressive.

Finally, the diffusion of ICT may lead to the acceleration of growth in the productivity of research activities in other sectors of the economy. One telling example is the decoding of the human genome, which has become feasible only thanks to the calculation power of computers. In this case, the effect of ICT on productivity could be much more radical and permanent if ICT were the origin of waves of innovations in other sectors.

In conclusion, while global demand for ICT products is falling sharply at present, reflecting in part a retreat from the unsustainable high level of last years, the diffusion of ICT is likely to continue to expand in the medium term, making substantial contributions to productivity growth. This will not, however, mean that the world no longer experiences economic cycles. Such cycles could even be reinforced as they seem to be inherent in technological revolutions as observed in the past.

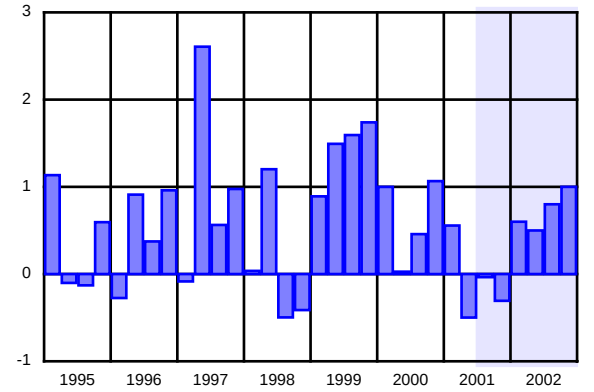
Economic forecasts 2001-2002

Economic growth in 2001 and 2002 significantly revised downwards

During the past one and a half years, economic activity in the European Union has been hit by a series of shocks, whose impact was initially underestimated. The large rise in oil prices gave rise to the first shock, which was heightened by the weakening of the euro. This was further emphasised by the exceptional increase in the prices of some foodstuffs. A second shock came with the abrupt slowing of growth in the United States, initiated by the bursting of the speculative bubble in the ICT sector and by high excess capacity in some sectors. The extent of the impact of this on the world economy and on the EU in particular was surprising. Finally, a number of sectors (aviation, insurance and tourism) have been severely hit by the tragedy of September 11. The terrorist attacks also provoked the collapse of financial markets (at least temporarily) and the hesitant recovery shown by some indicators came to nothing.

The resulting synchronised slowdown in the three major economic regions (the United States, Japan and the European Union), is having a major impact. As such, world trade should grow by only about 1% this year, while in 2000 the figure was almost 12%. If recent events do not permanently affect consumer and business confidence (see the section on uncertainties below), world trade should grow modestly in 2002 and reach 3%, stimulated by economic recovery in the United States. That recovery should crystallise from the second quarter of 2002 onwards due to the delayed effect of the easing of monetary policy by the FED and the considerable fiscal stimuli provided by the American federal government.

Graph 1 - Quarterly development of GDP qoq growth rates



It is obvious that Belgium, being a 'small open economy', cannot escape the prevailing slowdown in the world economy. The forecasts for all components of final demand have therefore been revised downwards for both 2001 and 2002. Under these circumstances GDP would not exceed a growth rate of 1.1% this year and 1.3% in real terms next year. These average annual growth rates are based on slightly negative growth figures (quarter-on-quarter) during the second half of this year, while positive and steadily increasing quarterly growth rates should be recorded in 2002 due to a recovery in exports.

Reflecting the increasing climate of uncertainty, which weighs on consumer confidence, private consumption, expressed in volume terms, should grow less rapidly than households' real disposable income. This is true in 2001 (1.7%) and 2003 (1.3%). As such, the savings ratio should increase from 14.7% in 2000 to 15.4% in 2002. The relatively steady increase in households' purchasing power (1.9% in 2001 and 2.1% in 2002) can, in spite of the major economic slowdown, be accounted for by the wage increases stipulated within the framework of the central agreements for 2001-2002 and by a number of factors that are specific to each year. In 2001 job creation (see the next section) should continue to boost disposable income. Next year disposable income should be stimulated by the following three factors: wage and social benefit indexation rates in excess of inflation, measured on the basis of the national index of consumer prices, the further abolition of the additional crisis tax and the tax reduction within the framework of personal income tax reform.

Due to the significant setback in demand and the deteriorating climate of confidence, business investment should increase only moderately in 2001 (0.7%). In 2002 investments should, however, grow progressively in the wake of the recovery in demand and should be stimulated by low real interest rates. Moreover, Belgium seems to have been less affected than other EU countries (Sweden and Finland) by the phenomenon of over-investment in the information and communication technology sector. Under these circumstances and in spite of the negative carry-over effect, business investment should reach a growth rate of 1.3% in 2002. That result is enhanced by the sale of government buildings, as stipulated in the 2002 federal budget. These sales are subtracted from government investment and considered as business investment. This statistic phenomenon also explains why government investment falls sharply in 2002 (-11.6%).

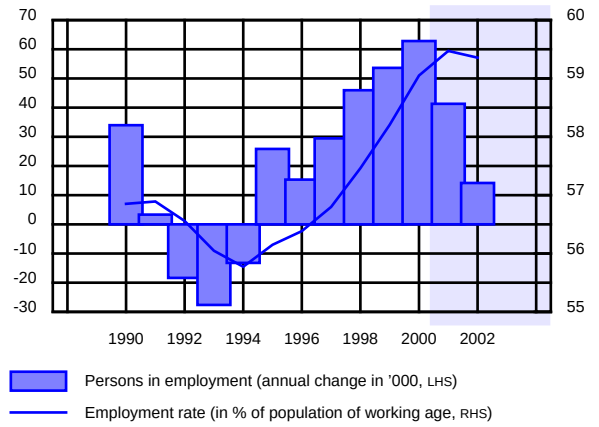
All in all, domestic demand should increase by only 1.1%, while average growth over the last five years has amounted to 2.5%. Exports should suffer from slackening world demand in 2001, consequently growing by only 0.8%. In 2002 exports should accelerate and reach

an average annual growth of 2.8%, which is much slower than in the second half of the 1990s. The weak domestic demand should, however, ensure that net exports make a positive contribution to economic growth in 2002 (0.3%), having made no contribution at all this year. Combined with an improvement of the terms of trade by 0.4%, the current account balance should reach 4.7% of GDP in 2002, i.e. the highest level since 1997.

In spite of the slowdown, employment creation remains positive

Changes in economic activity are always reflected later in employment, creating a cyclical profile in productivity growth. Measured on the basis of year-on-year quarterly GDP growth, economic growth slowed down from mid-2000. The effects on employment, however, only emerged during the second quarter of 2001. As a result, total domestic employment should still increase by 40,000 units (yearly average) in 2001 (growth of 1%) of which about 36, 000 jobs should be created in the private sector.

Graph 2 - Employment and employment rate yearly averages



In 2002 the opposite will take place: employment creation should emerge rather late, while economic recovery should begin earlier that year. An average of 13,000 jobs should be created each year, almost exclusively in the market sector. Macroeconomic labour productivity per capita should consequently grow much more in 2002 as compared to 2001 (1.0% instead of 0.1%).

Under these circumstances the employment rate (working labour force as a percentage of the working age population) should decrease slightly in 2002 to 59.4%, as compared with 59.5% this year. The number of people unemployed, as defined by the federal Ministry of Employment, should drop in yearly average terms by 4,000 units in 2001, but should increase by 13,000 units next year.

Inflation down in 2002

Since June 2001 monthly inflation, measured on the basis of the year-on-year growth in the national consumer price index, has been falling. That drop is mainly a result of the effective appreciation of the euro and the decline in oil prices. Food prices are still going up, however, softening the fall in inflation. The conversion of prices to euro is supposedly having a positive impact on the general level of prices.

Oil prices should remain at the same low level in 2002 (about 22 USD per barrel) because a major economic recovery is not expected during the next few quarters. Moreover, the OPEC has decided, since the attacks of 11 September, not to cut the crude oil supply drastically in order to prevent large price increases. The appreciation of the euro and the low price of oil and raw materials should contribute towards a slight improvement in the terms of trade in 2002 and should help to avoid imported inflation. The last factor that will strongly influence inflation in 2002 is the abolition of television tax in the Flemish Region. As a consequence of its abolition the consumer price index and the health index will decrease by about 0.5 percentage point.

Due to all these factors the consumer price index should rise by 2.5% in 2001 and by 1.3% in 2002. Since the health index cannot benefit from the lower petrol and diesel prices, that index will experience slightly more rapid growth, i.e. 2.7% in 2001 and 1.4% in 2002. Based on the anticipated monthly evolution of the health index, the pivotal index (currently 109.45) should be exceeded in May 2002.

Uncertainties about the forecasts for 2001-2002

The uncertainties surrounding these forecasts in the present political and economic situation should not be underestimated. The scenario on which the present forecasts are based assumes that the loss of consumer and business confidence will be of short duration, implying that the US economy will recover quickly next year. The consequences of the terrorist attacks of 11 September and the military response to those attacks may, however, have a permanent impact on investors' confidence and could be reflected in higher risk premiums and transportation costs. This would restrain the growth in world trade and foreign direct investment.

Economic Forecasts by the Federal Planning Bureau

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

	1999	2000	2001	2002
Private consumption	2.1	3.8	1.7	1.3
Public consumption	3.2	2.5	1.7	1.3
Gross fixed capital formation	3.3	2.6	0.1	0.3
Final national demand	2.2	3.8	1.1	1.1
Exports of goods and services	5.0	9.7	0.8	2.8
Imports of goods and services	4.1	9.7	0.8	2.5
Net-exports (contribution to growth)	0.9	0.5	0.0	0.3
Gross Domestic Product	3.0	4.0	1.1	1.3
p.m. Gross Domestic Product - in current prices (bn BEF)	9502	10018	10398	10778
National consumer price index	1.1	2.5	2.5	1.3
Consumer prices: health index	0.9	1.9	2.7	1.4
Real disposable income households	2.5	2.0	1.9	2.1
Household savings ratio (as % of disposable income)	16.1	14.7	14.8	15.4
Domestic employment (change in '000, situation on June 30th)	48.3	65.5	31.6	13.3
Unemployment (Eurostat standardised rate, yearly average) [1]	8.8	7.0	6.9	7.1
Current account balance (BoP definition, as % of GDP)	4.4	4.6	4.3	4.7
Short term interbank interest rate (3 m.)	2.9	4.4	4.3	3.3
Long term interest rate (10 y.)	4.8	5.6	5.2	4.9

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

Economic forecasts for Belgium by different institutions

	GDP-growth		Inflation		Government balance		Date of update
	2001	2002	2001	2002	2001	2002	
Federal Planning Bureau	1.1	1.3	2.5	1.3	.	.	10/01
INR/ICN	1.1	1.3	2.5	1.3	.	.	10/01
National Bank of Belgium	1.1	.	2.4	.	0.1	.	10/01
European Commission	3.0	3.1	1.7	1.5	0.6	0.7	4/01
OECD	2.8	2.7	1.7	1.7	0.7	0.7	4/01
IMF	1.7	2.0	.	.	0.1	0.0	9/01
BBL	1.4	1.8	2.4	1.7	-0.2	-0.5	10/01
Fortis Bank	1.0	0.7	2.4	1.2	-0.3	-0.7	10/01
Dexia	1.3	1.5	2.5	2.0	.	.	10/01
KBC Bank	1.3	1.7	2.6	1.7	-0.2	0.0	10/01
Morgan Stanley	1.5	1.4	2.5	1.6	0.0	0.0	10/01
Petercam	1.0	0.8	2.4	1.4	0.2	-1.0	10/01
IRES	1.6	1.8	2.4	1.5	-0.2	-0.4	10/01
DULBEA	1.3	0.8	2.5	1.5	-0.3	-0.5	10/01
Averages							
All institutions	1.5	1.6	2.3	1.5	0.0	-0.2	
International public institutions	2.5	2.6	1.7	1.6	0.5	0.5	
Credit institutions	1.3	1.3	2.5	1.6	-0.1	-0.4	
Consensus The Economist	1.4	1.4	2.5	1.6	.	.	11/01

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.

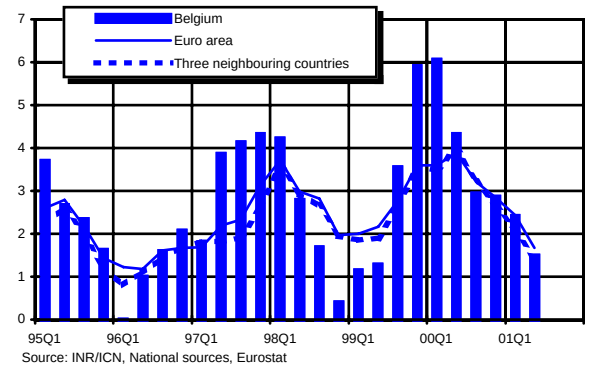
General economic activity

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

			YoY growth rates, in %					QoQ growth rates, in %				
	99	*00*	*00Q2*	*00Q3*	*00Q4*	*01Q1*	*01Q2*	*00Q2*	*00Q3*	*00Q4*	*01Q1*	*01Q2*
Germany	1.7	3.2	4.3	3.2	2.5	1.8	0.6	1.2	0.1	0.2	0.4	0.0
France	3.0	3.4	3.5	3.4	3.1	2.8	2.3	0.7	0.8	0.8	0.4	0.3
Netherlands	3.7	3.5	4.0	3.1	2.2	1.4	1.4	0.7	0.5	0.8	-0.2	0.4
Belgium	3.0	4.0	4.3	3.0	2.9	2.4	1.5	0.0	0.5	1.1	0.6	-0.5
Euro area	2.6	3.4	3.9	3.2	2.9	2.4	1.7	0.8	0.5	0.6	0.5	0.1
United States	4.1	4.1	5.2	4.4	2.8	2.5	1.2	1.4	0.3	0.5	0.3	0.1
Japan	0.8	1.5	0.9	0.3	2.5	-0.1	-0.7	0.1	-0.7	0.6	-0.2	-0.5

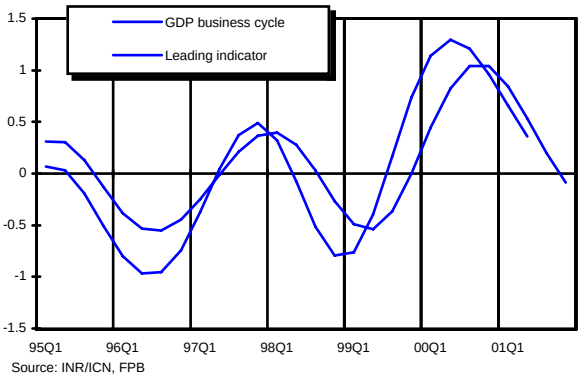
Source: INR/ICN, National sources, Eurostat

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



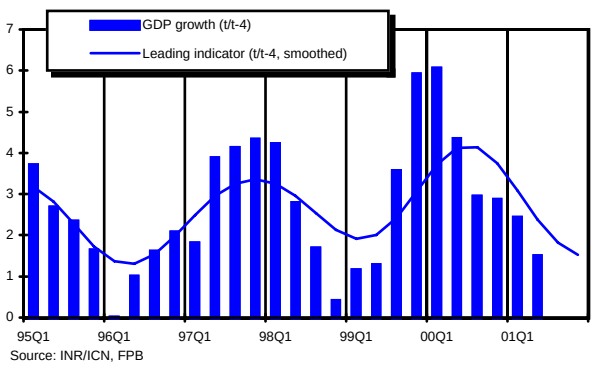
Source: INR/ICN, National sources, Eurostat

Graph 2 - GDP business cycle and leading indicator



Source: INR/ICN, FPB

Graph 3 - GDP growth and leading indicator



Source: INR/ICN, FPB

In the second quarter of 2001, growth weakened substantially in the United States and the euro area. In both areas qoq growth rates were only slightly positive. Japan performed even worse and is now facing a recession, since there have been two consecutive quarters of negative growth. Both Japan and the euro area have been hit strongly by the decline in world trade which was initiated by the downturn in the US and subsequently magnified through trade links. The first improvements in the current situation are expected to occur in the second half of 2002, since the downturn in the US economy will last longer than anticipated before the terrorist attacks of 11 September. The flash estimate for the third quarter in the US, which was recently released, points to negative qoq growth of 0.1%.

The Belgian economy performed very badly in the second quarter of 2001, but thanks to very strong growth in the fourth quarter of 2000, the yoy growth rate in the second quarter of 2001 is not much lower than that of the euro area as a whole. As the FPB's leading indicator for the yoy growth rate of GDP indicates, we do not expect a turning-point before the end of this year. Nevertheless the leading indicator is bottoming out, which is probably the sign of a turning point during 2002. The leading indicator of the cyclical component of GDP shows a similar picture, although the evolution towards a turning point is less clear. Note, however, that a turning-point in the latter indicator must be interpreted differently than a turning-point in the first indicator.

The growth rate in the other euro area economies has generally declined due to the slackening of internal demand following the decrease of exports. The exception to this rule is the Netherlands, which performed surprisingly well during the second quarter of 2002 after a weak first quarter.

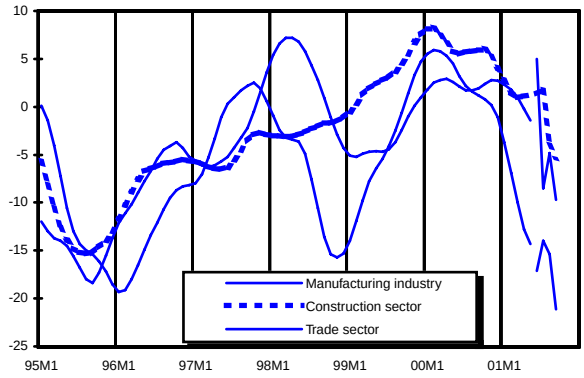
Table 2 - Monthly business surveys [1]

	99	*00*	*00Q4*	*01Q1*	*01Q2*	*01Q3*	*01M4*	*01M5*	*01M6*	*01M7*	*01M8*	*01M9*
Synthetic indicator	-2.9	3.8	1.9	-3.9	-10.7	-13.3	-11.6	-9.5	-11.0	-10.8	-12.1	-17.0
Manufacturing industry	-4.1	3.5	1.2	-6.5	-15.5	-16.8	-15.9	-13.4	-17.1	-14.0	-15.4	-21.1
Construction sector	2.9	6.5	5.9	0.0	0.8	-2.6	-0.6	1.7	1.4	1.7	-4.1	-5.3
Trade sector	-3.0	2.7	1.1	4.2	0.1	-7.7	-2.2	-2.5	5.0	-8.5	-4.8	-9.7

[1] Qualitative data

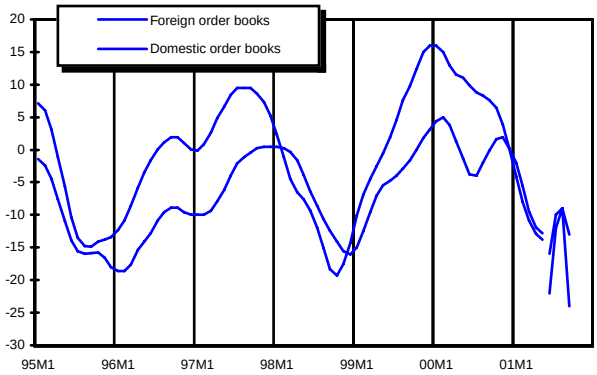
Source: NBB, FPB

Graph 4 - Business cycle: sectoral evolution



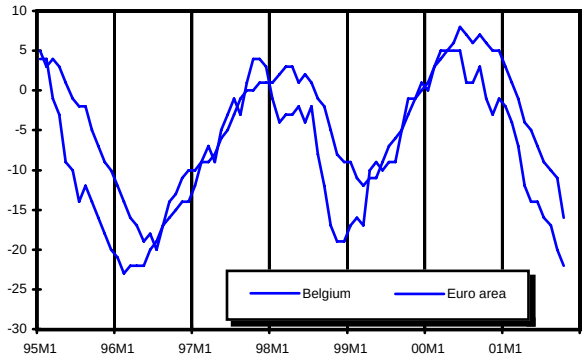
Source: NBB

Graph 5 - Manufacturing industry: order books



Source: NBB

Graph 6 - Industrial confidence: international comparison



Source: Eurostat

It seemed that the downward trend in the NBB synthetic indicator was reversed in May 2001, but after some levelling off in June and July the indicator began to decline again. It is important, however, to mention that we must be careful when interpreting the plunge in all indicators in September 2001, since the terrorist attacks gave rise to psychological effects that can cause overshooting in our indicators. It is also clear that on the whole the manufacturing industry has been most exposed to the downward trend in world trade.

The recent evolution in the indicator for the trade sector has been quite volatile, but there is an indication of a downward trend. It seems that this trend will be reversed in the near future since order books are judged to be more favourable. The same is happening in the construction sector, where it is also the assessment of the current situation that causes the indicator to fall, but where prospects are improving slightly.

In manufacturing industry the prospects are gloomier, since almost all components of this indicator have deteriorated during the last two months. The only positive sign is the trend in the order book position that seems to be bottoming out, although it is still at a very low level.

According to the business survey carried out by the European Commission, industrial confidence fell further during the third quarter of 2002 both in the euro area and in Belgium. The fall in the confidence indicator was more marked in Belgium than in the euro area because production expectations were more pessimistic and because the number of entrepreneurs considering their stocks to be excessive was rising faster in Belgium than in the euro area as a whole.

Private consumption

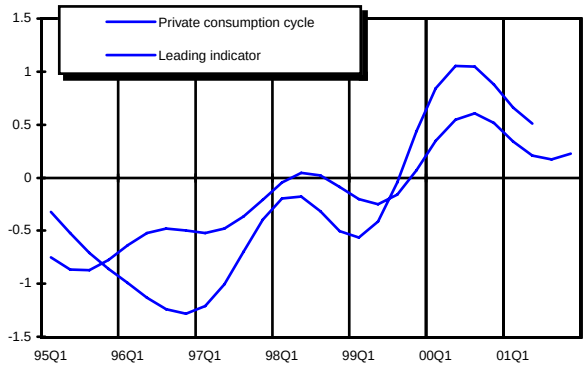
Table 3 - Private consumption indicators

	99	00	00Q4	01Q1	01Q2	01Q3	01M5	01M6	01M7	01M8	01M9	01M10
Turnover (VAT) - retail trade [1]	3.5	8.9	9.4	6.6	7.3	.	4.9	12.8	9.5	.	.	.
New car registrations [1]	8.3	5.2	-0.7	-13.9	-7.6	5.1	-9.9	2.4	11.3	5.9	-2.9	6.5
Consumer confidence indicator [2]	2.6	13.5	15.7	9.7	5.0	1.0	4.0	5.0	5.0	1.0	-3.0	-13.0

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

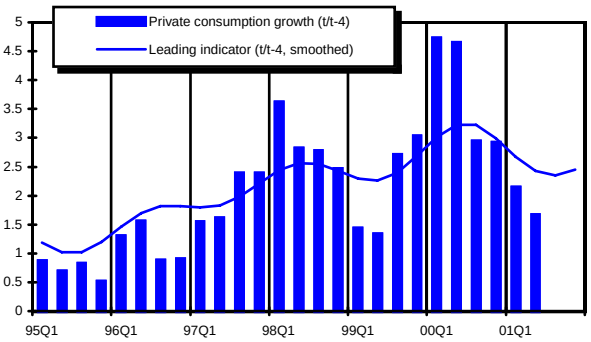
Source: NIS/INS, Eurostat, Febiac, FPB

Graph 7 - Private consumption cycle and leading indicator



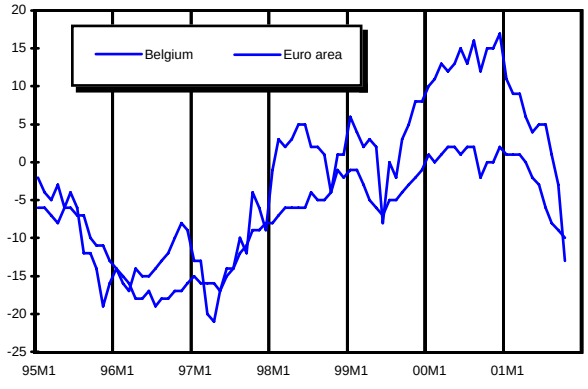
Source: INR/ICN, FPB

Graph 8 - Private consumption growth and leading indicator



Source: INR/ICN, FPB

Graph 9 - Consumer confidence: international comparison



Source: Eurostat

Consumer confidence has been progressively deteriorating during recent months and it is expected to decline sharply in the wake of the tragic events that occurred last September. The assessment of the general economic situation is the main cause for this fall, while households are still less pessimistic about their future financial situation. As can be seen from the graph below, consumer confidence also decreased in other European countries.

The private consumption cycle reached a maximum in the middle of last year and has been declining since then. In terms of year-on-year growth rates, private consumption grew by more than 4.5% during the first two quarters of 2000, as compared with modest figures of 2.2% and 1.6% in the first and second quarters of this year. As most indicators point out, private consumption should continue to increase at a moderate pace well below 2% during the second half of this year.

With an annual expected growth rate of around 1.7% in 2001, growth in private consumption will be clearly below the growth trend, which is estimated at 2.4%. If consumer confidence is only temporarily affected, the FPB's leading indicator profile suggests that a turning-point could be reached during the first half of next year. Even then, the almost zero carry-over implies that the growth in private consumption should still, on average, be less than this year.

In response to the present growing uncertainties the propensity to save should not decline any further this year as it did last year when households had to compensate for their loss of purchasing power due to oil price rises.

Business investment

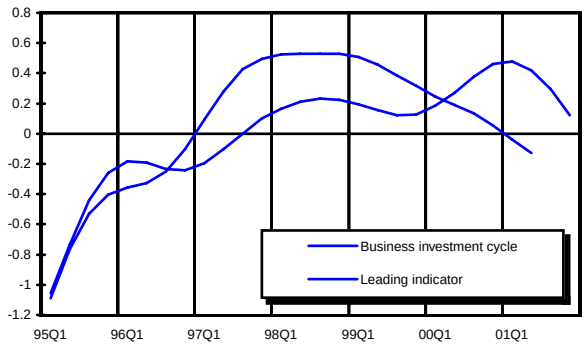
Table 4 - Business investment indicators

	99	00	01	00Q3	00Q4	01Q1	01Q2	01M3	01M4	01M5	01M6	01M7
Investment (VAT) [1]												
Industrial companies	4.6	3.3	.	-0.3	4.5	2.5	-0.8	-6.2	-0.8	-2.9	1.2	11.1
Non-industrial companies	8.7	8.5	.	3.2	10.3	6.1	2.9	-0.1	11.7	-6.8	5.5	6.0
Total companies	7.2	6.6	.	2.0	8.1	4.8	1.6	-2.4	7.1	-5.3	4.0	8.1
Investment survey [1]	2.3	2.8	7.5									
Capacity utilisation rate (s.a.) (%)	81.9	84.5	.	84.3	84.7	82.4	81.2					

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

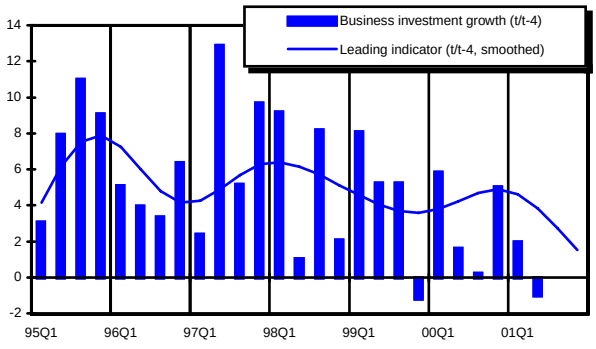
Source: NIS/INS, NBB, FPB

Graph 10 - Business investment cycle and leading indicator



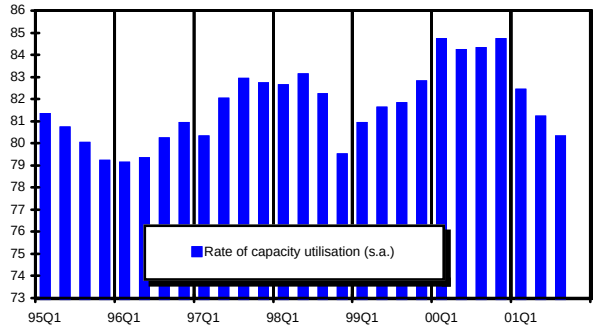
Source: INR/ICN, FPB

Graph 11 - Business investment growth and leading indicator



Source: INR/ICN, FPB

Graph 12 - Capacity utilisation in manufacturing industry



Source: NBB, FPB

Compared to the same quarter last year, business investment fell by almost 1% in the second quarter of 2001, after experiencing modest growth of 2%. In fact, as the business cycle indicates, investment has been progressing at a rate below trend growth since the beginning of 1999, following an expansionary period of four years. Between 1995 and 2000 the business investment to real GDP ratio increased by almost one and a half percentage points.

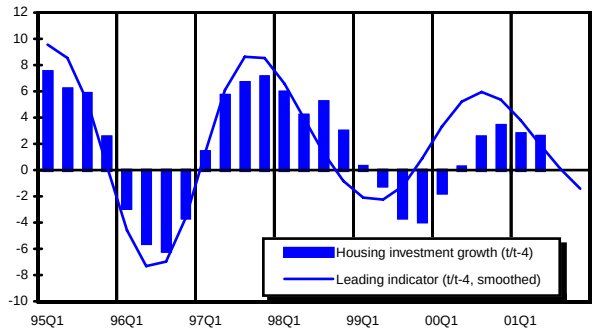
The capacity utilisation rate in manufacturing industry was historically very high during the course of 2000, but it has been declining very rapidly since then, reflecting the sharp deceleration in industrial production growth. With low utilisation rates and no improvement in prospects in the short term, investment by industrial companies should remain very weak during the second half of this year, with growth rates probably in negative territory.

Growth in investment by non-industrial companies was still substantial during the last quarter of 2000 and the first quarter of this year, but with weaker internal demand it has already begun to slow down in the second quarter of 2001. No recovery is expected before the beginning of next year.

On the whole, business investment should increase by less than 1% in 2001, which is a spectacular revision in comparison with our previous forecast.

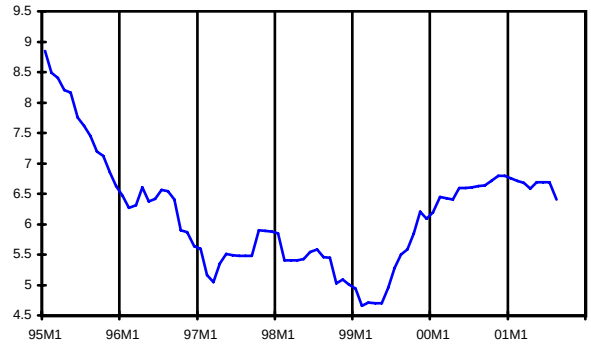
Housing investment

Graph 13 - Housing investment growth and leading indicator



Source: INR/ICN, NBB, FPB

Graph 14 - Mortgage rate (in%)



Source: NBB

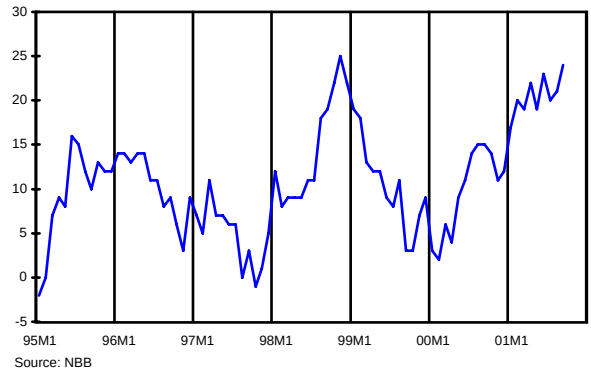
According to the revised national accounts, investment in housing (new construction and major renovation) increased by only 1.1% in 2000 (against a previous estimate of 2.8%) due to a very weak first half of the year. During the last two quarters of 2000, however, housing investment did gain some momentum, with year-on-year growth rates of around 3%.

During the first two quarters of this year, housing investment was still increasing at a rate of over 2.5%. According to most surveys, which are reflected in the FPB's leading indicator profile, housing investment should slow down, particularly in the second half of 2001. Indeed, the sharp increase in land prices in Flanders and the deterioration of economic prospects have damped down the number of requests for building permits.

All in all, investment in housing should increase by a respectable 2% on an annual basis, thus constituting one of the few forces driving economic growth this year.

Stockbuilding

Graph 15 - Appreciation of stocks



Source: NBB

The NBB survey of manufacturing industry shows that an increasing number of entrepreneurs consider their level of stocks to be excessive. This upward trend began back in the beginning of 2000 in the context of a slowdown in industrial production growth and it has recently been exacerbated by the worsening prospects of the world economy.

According to the national accounts, stocks made a contribution to GDP growth of 0.5% last year. It seems clear from the survey results that firms are adjusting their stocks downwards and that a negative contribution towards growth should be expected this year. Stock levels are not expected to begin to increase again before the second half of 2002, implying a contribution of approximately zero next year.

Foreign Trade

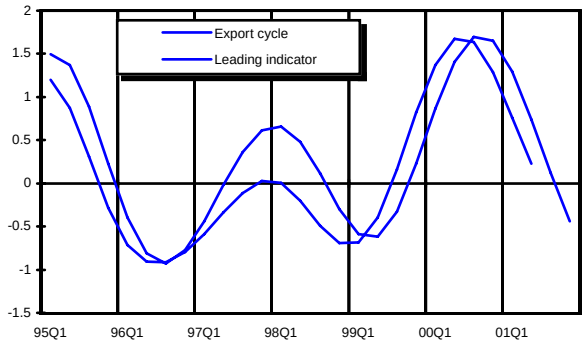
Table 5 - Belgium - Trade statistics (goods, intra/extrastat)

	99	00	00Q3	00Q4	01Q1	01Q2	01M2	01M3	01M4	01M5	01M6	01M7
Exports - value [1]	4.5	21.2	18.5	20.3	11.2	4.6	7.4	5.8	7.0	-1.3	8.6	5.8
Imports - value [1]	4.5	23.0	22.8	20.7	12.1	6.9	8.2	5.2	11.8	1.0	8.8	5.1
Exports - volume [1]	5.0	10.3	7.3	8.2	5.6	-0.4	1.9	0.5	1.6	-5.2	3.0	1.5
Imports - volume [1]	3.2	9.4	8.7	6.7	4.7	0.5	0.9	-0.4	5.9	-4.6	1.2	-0.5
Exports - price [1]	-0.6	9.9	10.4	11.1	5.3	5.0	5.4	5.3	5.4	4.2	5.4	4.2
Imports - price [1]	1.2	12.5	12.9	13.1	7.1	6.3	7.2	5.6	5.5	5.9	7.5	5.6

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

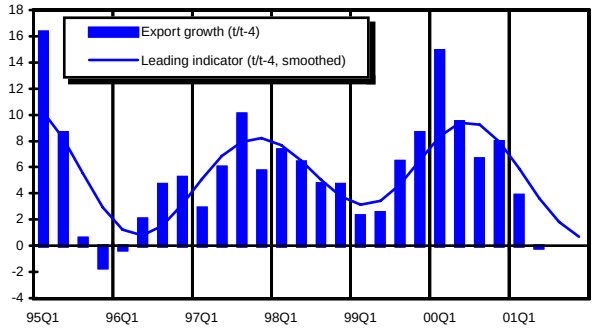
Source: INR/ICN, FPB

Graph 16 - Export cycle and leading indicator



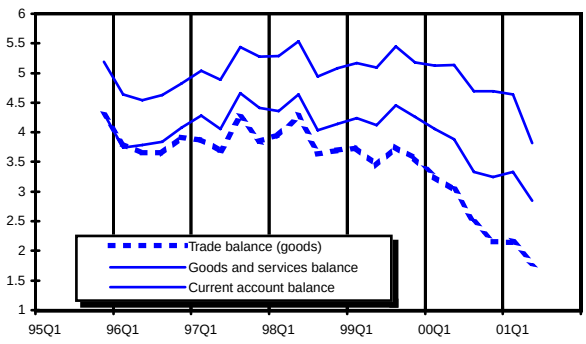
Source: INR/ICN, FPB

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

World trade has been hit badly by the simultaneous slowdown in all regions of the world (except China and India). This has had very negative consequences on Belgian export markets. While these markets grew year-on-year at well above 10% during the course of 2000, slightly negative growth rates are expected for the last two quarters of this year. This profile is indeed reflected in the export cycle which peaked during the first two quarters of 2000 and declined sharply during the first half of this year. As the leading indicator shows, no turning point is expected in 2001. All in all, Belgian exports of goods and services should grow in real terms by less than 1% this year.

As the downswing also hit internal demand, import growth (volume, yoy) declined during the last couple of quarters. Import growth may even become negative during the second half of this year. As a result, the contribution of net exports towards real GDP growth should be close to zero.

Due to oil price increases and the depreciation of the effective exchange rate of BEF, the Belgian economy has suffered large terms of trade losses in 1999 and 2000. Since the beginning of this year, the slowdown in world trade has had a tempering effect on world prices and the effective exchange rate of the BEF has recovered somewhat. Nevertheless, according to the trade statistics, the evolution of the terms of trade has remained negative during the first half of this year, but this situation should be reversed in the second part of 2001.

These terms of trade losses are reflected in the evolution of the current account balance. Despite a positive contribution from net exports towards real GDP growth, the current account has deteriorated almost continually since the beginning of 2000 and represented less than 4% of GDP in the second quarter of 2001.

Labour market

Table 6 - Labour market indicators

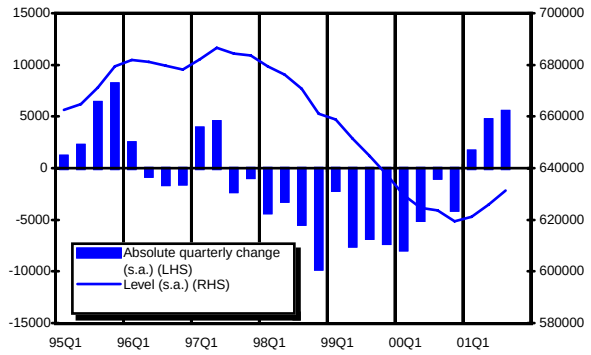
	99	00	00Q4	01Q1	01Q2	01Q3	01M5	01M6	01M7	01M8	01M9	01M10
Unemployment (excl. older) [1]	507.6	474.4	469.8	458.4	436.8	502.2	436.1	431.3	484.0	509.7	512.9	502.8
Unemployment (incl. older) [1]	647.8	624.1	623.9	615.1	595.6	662.4	594.9	590.7	644.1	669.8	673.3	664.1
Unemployment rate-FMTA/MfET[2]	11.6	10.8	10.7	10.5	10.0	11.5	10.0	9.9	11.1	11.6	11.7	11.5
Unemployment rate-Eurostat [3]	8.8	7.1	6.9	6.8	6.9	6.8	6.9	6.8	6.8	6.8	6.9	.

[1] Level in thousands; [2] In % of labour force of June 1999, 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

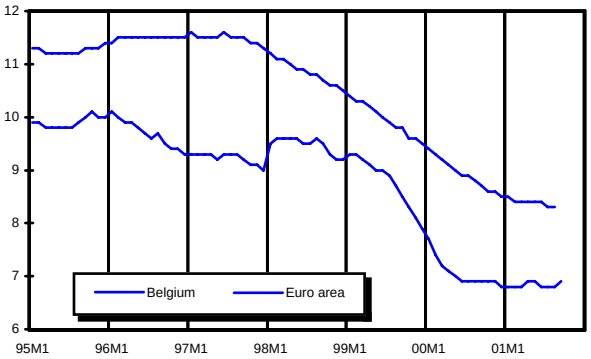
Source: RVA/ONEm, FMTA/MfET, Eurostat, FPB

Graph 19 - Evolution of unemployment (incl. older)



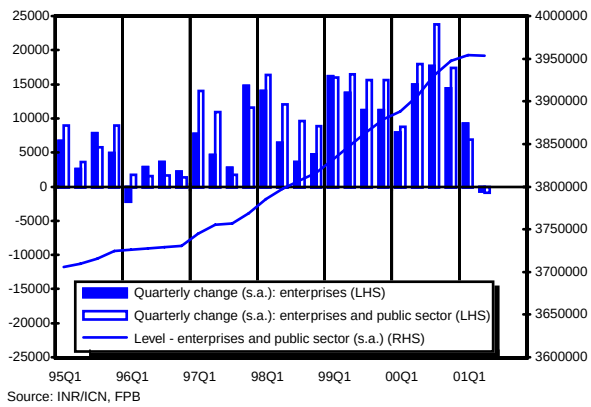
Source: RVA/ONEm, FPB

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



Source: Eurostat

Graph 21 - Evolution of domestic employment



Source: INR/ICN, FPB

The labour market is now clearly suffering from the pronounced slowdown in the growth of economic activity. During the third quarter of the current year broad unemployment (including "older unemployed" people) continued on an upward trend. On a seasonally adjusted basis, the average rise in broad unemployment accelerated from almost 5000 persons during the second quarter to almost 7000 persons during the third quarter. September has been a particularly bleak month, with unemployment soaring by 10000 persons.

Again it must be emphasised that half of the registered increase in September and approximately one-third of the registered increase for the third quarter are due to the adoption of new rules for registering / removing job searchers not entitled to unemployment benefits on / from the administrative records in Flanders. When allowance is made for this statistical artifice, the "real" increase in broad unemployment during the third quarter is slightly lower. The acceleration since the second quarter is, however, more pronounced in that case: the number of unemployed people receiving benefit remained approximately constant during the second quarter, but increased by some 4000 persons during the third quarter. For the first time since the second quarter of 1997 the number of active job searchers in receipt of unemployment benefits (excluding "older unemployed" people) has increased.

Recent head-count employment figures for the first quarter still indicate a respectable average quarter-on-quarter increase (10000 persons or 0.4% in the private sector). Social security data, however, indicates that private sector employment growth measured in full time equivalent units amounted to only half of the growth in head-count terms, suggesting that firms have been hoarding labour. This impression is confirmed by the increase in the number of employees for whom employers are resorting to the "temporary unemployment" scheme. Given the observed evolution of unemployment during the last two quarters, it may be conjectured that the decrease in activity has affected head-count figures for employment growth more conspicuously since the second quarter.

Prices

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

	99	00	00Q4	01Q1	01Q2	01Q3	01M5	01M6	01M7	01M8	01M9	01M10
Consumer prices: all items	1.12	2.55	2.85	2.18	2.95	2.53	3.14	2.93	2.65	2.67	2.26	2.35
Food prices	0.20	0.86	1.98	2.71	4.55	4.67	5.00	4.85	4.19	4.96	4.86	5.65
Non food prices	1.24	3.87	4.19	2.31	2.89	1.62	3.09	2.54	2.07	1.90	0.90	0.27
Services	1.57	2.01	1.69	1.66	2.07	2.50	2.06	2.32	2.61	2.32	2.58	3.24
Rent	1.43	1.45	1.61	1.78	1.87	1.88	1.87	1.89	1.82	1.92	1.90	2.09
Health index	0.94	1.88	2.37	2.17	3.01	2.97	3.09	3.21	3.06	3.07	2.79	3.00
Brent oil price in USD (level)	17.8	28.4	29.4	25.8	27.3	25.3	28.4	27.8	24.6	25.7	25.5	20.5

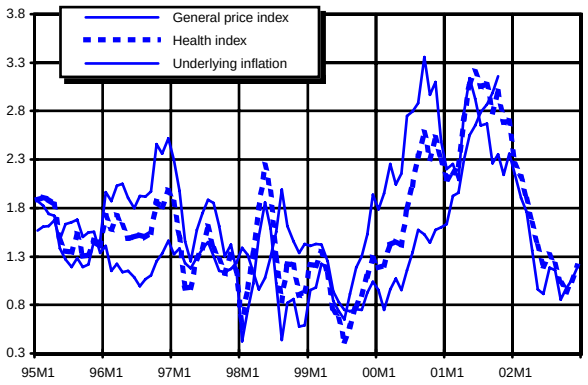
Source: MEZ/MAE

Table 8 - Monthly inflation forecasts

	01M1	01M2	01M3	01M4	01M5	01M6	01M7	01M8	01M9	01M10	01M11	01M12
Consumer prices: all items	107.11	107.57	107.81	108.75	109.43	109.62	109.54	109.53	109.84	109.67	109.80	109.75
Consumer prices: health index	106.48	106.83	107.14	107.94	108.46	108.81	108.92	108.99	109.16	109.22	109.31	109.27
Moving average health index	106.34	106.54	106.71	107.10	107.59	108.09	108.53	108.80	108.97	109.07	109.17	109.24
	02M1	02M2	02M3	02M4	02M5	02M6	02M7	02M8	02M9	02M10	02M11	02M12
Consumer prices: all items	109.41	109.62	109.71	110.23	110.48	110.62	110.84	110.80	110.78	110.74	110.96	111.06
Consumer prices: health index	108.88	109.10	109.17	109.71	109.98	110.12	110.35	110.32	110.27	110.25	110.46	110.58
Moving average health index	109.17	109.14	109.11	109.22	109.49	109.75	110.04	110.19	110.27	110.30	110.33	110.39

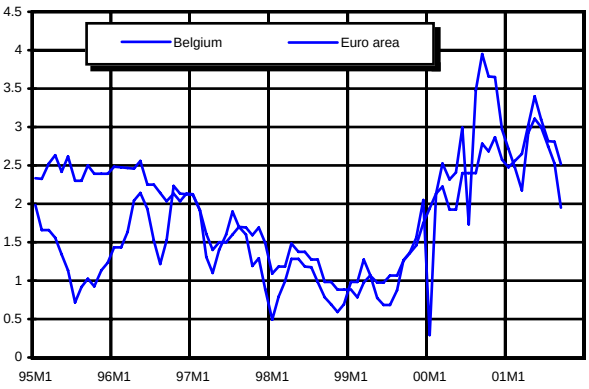
Source: Observations (up to 01M10): MEZ/MAE; forecasts: FPB

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



Source: MEZ/MAE, from 01M11 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 3.1% in May of this year. Since then it has followed a clear downward trend, falling to 2.3% on average over the last two months. The most important factor explaining this fall in CPI inflation was the drop in oil prices. The Brent oil price was at 20.5 USD per barrel in October, more than 25% below its level in May. In BEF terms the fall was more than 30%. Food prices remained rather volatile during the last few months and seem not yet to have come down after the hike earlier this year that resulted from bad weather conditions and animal diseases. Contrary to the fall in headline inflation since May, underlying inflation has so far not started on a downward trend and is currently slightly above 3%.

As lower imported inflation should, after a certain delay, be passed on to underlying inflation, this is expected to come down in the course of next year. Moreover, our inflation forecast for next year takes into account the abolition (in January 2002) of the radio and television taxes in Flanders (impact estimated at -0.5%-point). All in all, CPI inflation is expected to fall from 2.5% this year to 1.3% next year. The health index, which is used for price linking of wages and rents, should rise by an average of 1.4% in 2002, after 2.7% this year. According to the monthly forecasts for the health index, the pivotal index for public wages and social benefits (currently 109.45) should next be reached in May 2002.

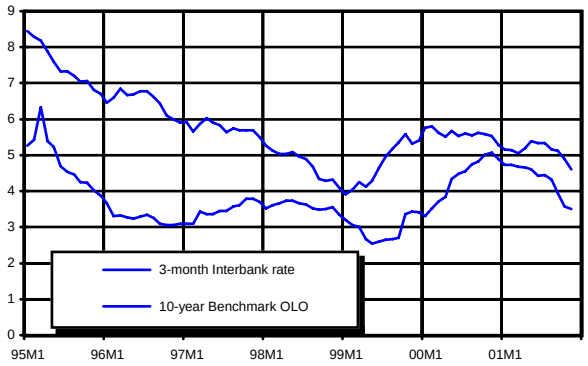
Interest rates

Table 9 - Interest rates

	99	00	00Q4	01Q1	01Q2	01Q3	01M5	01M6	01M7	01M8	01M9	01M10
Short-term money market rates (3 months)												
Belgium	2.94	4.36	4.99	4.71	4.56	4.24	4.60	4.42	4.44	4.32	3.94	3.57
Euro area (Euribor)	2.96	4.39	5.02	4.75	4.60	4.27	4.64	4.46	4.47	4.35	3.98	3.60
United States	5.33	6.46	6.59	5.26	4.10	3.34	4.02	3.74	3.66	3.48	2.89	2.31
Japan	0.13	0.25	0.55	0.33	0.05	0.05	0.05	0.03	0.05	0.05	0.04	0.03
Long-term government bond rates (10 years)												
Belgium	4.76	5.59	5.46	5.12	5.30	5.21	5.38	5.33	5.34	5.15	5.13	4.89
Germany	4.50	5.26	5.09	4.76	4.97	4.90	5.05	5.02	5.02	4.84	4.83	4.62
Euro area	4.63	5.43	5.28	4.95	5.16	5.07	5.23	5.20	5.21	5.01	5.00	4.78
United States	5.63	6.03	5.55	5.05	5.26	4.97	5.38	5.26	5.22	4.96	4.74	4.55
Japan	1.76	1.77	1.72	1.35	1.27	1.34	1.30	1.17	1.32	1.35	1.37	1.36

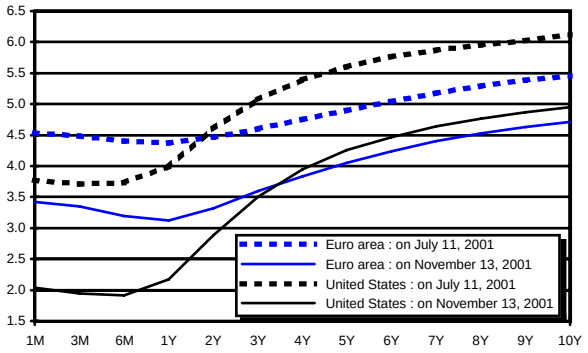
Source: NBB, ECB

Graph 24 - Interest rate levels in Belgium, in%



Source: NBB

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



Facing a further weakening of the economy and a recovery delayed to some extent by the terrorist attacks of 11 September, US monetary authorities have reduced their federal funds rate three times by a total of 175 basis points, from 3.75% at the beginning of July to 2.0% at the beginning of November. In that way, the Federal Reserve lowered the federal funds rate ten times this year, by a total of 450 basis points, while the ECB only lowered its main refinancing rate four times by a total of 125 basis points in 2001. The ECB's refi rate now stands at 3.25%, which is considered appropriate to maintain price stability. Both central banks injected a lot of liquidity in the financial markets after 11 September, and they both reduced their main interest rates by 50 basis points on 17 September to avoid a collapse in the stock markets.

On the money markets, short-term interest rates have gone down more in the US than in the euro area due to the more aggressive easing of monetary policy in the US. As a result the gap between short-term rates in the United States and the euro area has widened further.

After the upswing in US long-term bond yields in the second quarter of 2001, US long-term interest rates began to decline again due to a fall in inflationary expectations and the prospect of lower short-term interest rates than were expected a few months ago. The same happened in the euro area, although to a lesser extent since lower short-term interest rates did not have such an impact.

Since short-term interest rates have declined more than long-term interest rates, the yield curves both in the US and the euro area have turned more positive.

Exchange rates

Table 10 - Bilateral exchange rates

	99	00	00Q4	01Q1	01Q2	01Q3	01M5	01M6	01M7	01M8	01M9	01M10
BEF per USD	37.82	43.65	46.37	43.73	46.20	45.28	46.11	47.31	46.87	44.78	44.27	44.52
USD per EUR	1.067	0.924	0.870	0.923	0.873	0.891	0.875	0.853	0.861	0.901	0.911	0.906
UKP per EUR	0.659	0.609	0.601	0.632	0.614	0.619	0.613	0.609	0.609	0.627	0.623	0.624
JPY per EUR	121.38	99.58	95.63	108.92	107.06	108.17	106.53	104.30	107.16	109.31	108.04	109.92

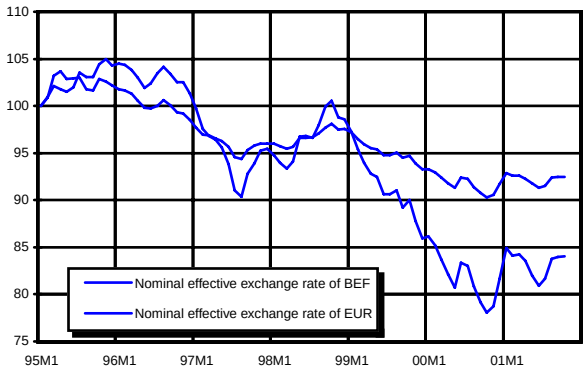
Table 11 - Nominal effective exchange rates (Jan. 95 =100)

	99	00	01	00Q4	01Q1	01Q2	01Q3	01M6	01M7	01M8	01M9	01M10
Effective exchange rate BEF	95.1	91.8		90.9	92.7	91.8	92.1	91.3	91.5	92.4	92.4	92.4
Growth rate [1]	-1.7	-3.5		-0.7	2.0	-0.9	0.4	-0.5	0.2	0.9	0.1	0.0
Id. with constant rate till year end			0.5									
Effective exchange rate EUR	91.4	81.9		79.5	84.4	82.2	83.1	80.9	81.6	83.8	84.0	84.0
Growth rate [1]	-5.6	-10.4		-1.8	6.2	-2.7	1.2	-1.3	0.9	2.6	0.3	0.0

[1] Change (%) compared to previous period

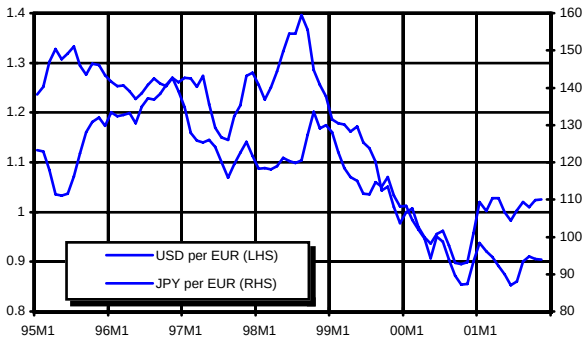
Source: NBB, BIS, FPB

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



Source: NBB, BIS, FPB

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



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

The euro has appreciated by about 7% against the dollar during the last four months (June to September). This appreciation was associated with a serious decline in world trade and lower levels of interest rates in the US, both causing a lower demand for US dollars. The terrorist attacks of 11 September have also resulted in a flight to quality, spurring economic players to sell foreign stocks and take their money home. These last two factors have had a mixed impact on bilateral exchange rates.

The yen depreciated against the euro between June and August, but appreciated again in September. The depreciation of the yen was associated with the publication of surveys indicating that the Japanese economy is sliding into a recession. The appreciation in September was probably the result of the Japanese selling their foreign assets. The ECB and the BOJ tried to counter this phenomenon by some technical operations in which they sold yen. These actions were driven by the fact that a depreciation of the yen is the only expansive policy that can help the Japanese economy out of a recession at present.

Due to the appreciation of the euro against the dollar and the yen, and its less pronounced appreciation against sterling, the nominal effective exchange rate of the euro has gone up by almost 4% between June and September. The nominal effective exchange rate of the BEF appreciated less because Belgian external trade relations are mostly situated within the euro area.

Forward exchange rates reveal that the financial markets are not expecting any major changes in current exchange rates.

Tax indicators

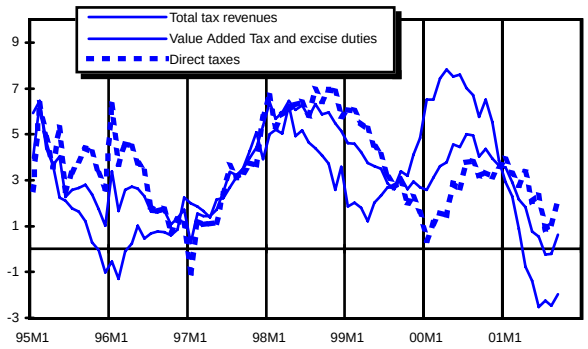
Table 12 - Tax revenues (1)

	99	*00*	*00Q4*	*01Q1*	*01Q2*	*01Q3*	*01M4*	*01M5*	*01M6*	*01M7*	*01M8*	*01M9*
Total [2], of which:	3.9	6.3	4.9	0.9	3.1	3.7	4.9	-1.6	3.9	-0.4	5.6	9.9
Direct taxes, of which:	2.7	6.2	5.5	1.9	6.8	3.5	9.4	-1.4	8.4	-3.5	11.0	13.7
Withholding earned income tax	6.3	5.6	-1.0	5.3	5.8	7.2	3.5	5.4	7.5	5.0	8.1	10.2
Prepayments	-3.7	4.4	2.0	.	9.0	-13.0	9.0	.	.	-15.5	.	.
Value Added Tax and excise duties	6.1	6.5	4.0	-2.1	-4.1	3.9	-4.9	-1.9	-4.8	5.1	0.9	5.9

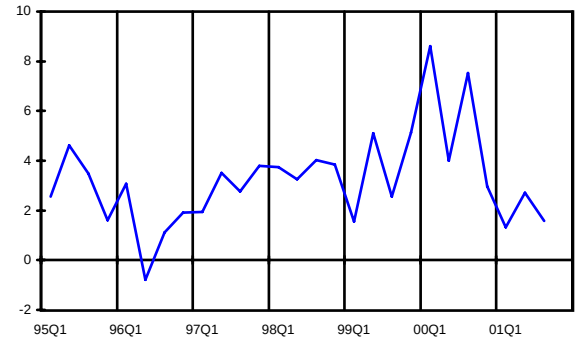
[1] Change (%) compared to same period previous year;[2] Total received by federal government, excl. of death-duties

Source: MvF/MdF, FPB

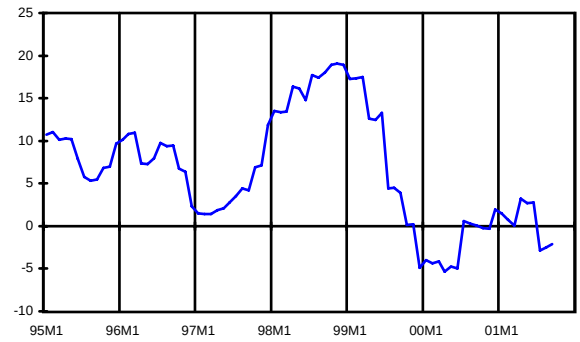
Graph 28 - Real tax revenues (3)



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

During the first nine months of 2001, total tax revenues in nominal terms have been 2.7% higher than in the corresponding period in 2000. This growth rate is markedly lower than the annual growth rate in 2000 (6.3%) and even in 1999 (3.9%), reflecting to a considerable extent the deceleration in economic activity from mid-2000 onwards. The declining growth rate of total taxation is due both to a decrease in indirect taxation revenues and to a slowdown in direct taxation receipts.

Indirect taxation revenues (value-added tax and excise duties), which account for about 35% of total tax receipts, are almost constant in nominal terms after nine months, compared with the same period in 2000 (a fall of less than 1%). After experiencing negative growth rates in the first and second quarters of 2001, indirect taxes have slightly recovered during the last three months under review. On a year-on-year basis, however, indirect taxation is still clearly in line with the evolution of leading indicators for economic activity and consumption cycles.

Direct taxation revenues (which account for 60% of total taxes) increased by 4.7% over the first nine months of 2001, which is less than the annual growth in 2000 (6.2%). The most striking feature is the weak performance of advance payments (a share of about 10% of total receipts): in July 2001 (July is the second due date for prepayments), advance payments were 15% lower than in July 2000. Provisional figures for October 2001 (third due date) again show a decrease in prepayments by corporate businesses. The other component of direct taxation, withholding earned income taxes (representing more than 40% of total tax revenues), is still growing at a more sustained pace, albeit curbed by the slowdown in the evolution of job creation.

Foreign Direct Investment : inflows and outflows for Belgium

This working paper looks at the data on foreign direct investment (FDI) in Belgium. Particular attention is paid to the most recent figures which show the consequences of mergers and acquisitions (M&A's) for Belgium. There is also some consideration of the importance of the "coordination centers" in Belgium.

The OLI paradigm (Dunning) is the most influential theory on FDI and addresses three questions. (i) Which firms undertake FDI? (ii) Where do firms choose to exploit their advantages, in the home country or abroad, and in which foreign locations? (iii) Why do firms choose to internalise their advantages by direct investment in preference to selling them to other firms? This paradigm was formulated primarily to explain the start of a new company in a foreign country (the so-called greenfield investments), and explains less well other forms of FDI. It is therefore useful to consider motivations specifically for cross-border mergers and acquisitions (M&As). Two factors stand out as particularly important: speed and access to proprietary assets. But the acquisition behaviour of firms is also greatly affected by changes in the economic and regulatory environment.

Total foreign direct investment in the world accounted for 1271 billion US$ in 2000 and 1075 billion US$ in 1999, which was an increase of 55% compared to 1998, while world trade grew by "only" 4%. UNCTAD expects growth rates of FDI to be reduced in 2001 and 2002.

BLEU's ranking is among the top 10 of the world according to UNCTAD, following the important growth of FDI to and from BLEU[1]. It is in eighth place internationally in terms of its inflows and outflows in 1998. But these figures have to be treated with care. Without coordination centres and without Luxemburg, Belgium moves to the fourteenth place in terms of inflows and is in sixteenth place in terms of outflows. In fact, the so-called 'coordination centres' distort the Belgian figures. Coordination centres are set up in Belgium by multinational companies partly for tax reasons. These centres deal with large FDI flows that do not lead to real investments in Belgium.

Since 1986 the growth rate of investment flows to and from Belgium has increased more than the growth rate of GDP or foreign trade. There have been two waves of FDI in Belgium between 1990 and 2000. During the early 1990s (1990-1992), it was mostly accounted for by the creation of the European single market. Since 1997 the main reason for the increase has been the globalisation of the economy in general and the prospect of the introduction of the Euro. A general rise in share prices also inflated the amounts involved in mergers and acquisitions (M&A's).

FDI in Belgium is superior to Belgian FDI in foreign countries, which leads to capital imports for Belgium. Other financial transactions, however, more than compensate this amount, so that on the balance of payments Belgium is a net capital exporter.

Many different branches of the economy have been affected by inflows and outflows of FDI. During the past five years the service sector has clearly gained in importance. Its share in total outflows has increased from 43.6% in 1996 to 77.7% in 1998, while the share of the services sectors inflows has moved from 70.9% in 1995 to 86.8% in 1998. The financial institutions are mainly responsible for these increases. The coordination centres are equally important for the inflows. Two specific services sectors have been particularly important: the telecom sector as well as the sector of "other business services", entailing consultancy, selection and temporary employment agencies. 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, 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).

At the international level, M&As activity helps to distinguish the source of FDI by country. Switzerland, the Netherlands and Germany were the most important investors in Belgium in 2000. The EU accounted for almost 54% of investment in 2000 (which was low because of the exceptional part played by Switzerland), while in 1999 it accounted for 89% of Belgian inflows. In 1999, only 68% of Belgian outflows were to EU countries, while 9.6% of outflows (3.2% in 1995) went to the candidate countries for EU enlargement[2].

"De directe investeringen in het buitenland: binnenkomende en uitgaande investeringen voor België",
Working Paper 06-01, P. Vandenhove, November 2001.

1. The international comparisons are based on net-investments in capital as well as in loans. Net-investments equal investments minus disinvestments. A disinvesment takes place when a company sells its shares in a foreign company or when a foreign company pays back a loan.

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

Some economic implications of Eastern EU enlargement for Belgium

The impact of EU enlargement into the 10 central and eastern European countries (CEECs) may take place through different channels. Trade may be affected through lower trade barriers, increased competition and specialisation, and a 'catching-up' effect in the CEECs. The CEECs will also get more FDI when entering the Single Market. Labour markets, growth and public finances will also be affected by the influx of foreign workers. This working paper presents initial findings on the implications for the Belgian economy of EU enlargement focusing only on certain aspects of trade, FDI and migration between Belgium and the CEECs.

As EU enlargement takes place, future patterns of trade and FDI between Belgium and the CEECs will be affected by the free movement of goods, services and factors between the EU and the CEECs. Although it is expected to be moderate, this impact is difficult to assess because trade and capital flows between the EU and the CEECs have already been liberalised to a large extent and because some developments can be attributed to the transition process in general. In addition to the liberalisation efforts that have already been made on the basis of the Europe Agreements between the EU and CEECs, full membership will involve the elimination of all remaining barriers due to the extension of the Single market to the CEECs.

In the field of trade, this further liberalisation means that firms will be able to find additional outlets for their products, new trading partners and new opportunities to invest in CEECs. At the same time, however, this process may be a source of concern for producers in the existing EU countries, as competition will intensify, possibly forcing a number of products out of the market because of cheaper substitutes being produced in the CEECs.

In order to analyse the extent to which the different sectors of the Belgian economy are exposed to trade with the CEECs, it is necessary to account for the existing trade pattern, Belgium's rather modest involvement in trade with CEECs and the increasingly positive trade balance for the BLEU since 1991. To some extent, this "backward looking" analysis also contains elements that will forecast the future impact of Eastern EU enlargement.

The prospects for future trade between Belgium and the CEECs must also consider the catching-up process and its potential positive impact on trade. Growth prospects for the CEECs appear rather favourable and integration into the EU will reinforce this trend. Moreover, on the basis of past experiences of enlargement, gradual convergence towards the EU's GDP per capita is expected.

EU enlargement will also imply higher FDI flows towards the CEECs. For the EU economies, however, these will be too small to have an impact on investment or growth. Since most of the FDI into the CEECs seem to have been market-seeking FDI, the accession of a candidate country to the EU will tend to reinforce the main incentive to investment, because the size of the potential market accessible to firms based in the CEECs has increased. In some cases, FDI in the CEECs may also lead to some relocation of production.

The likely impact of Eastern EU enlargement on the migration of populations and workers to and from Belgium is limited. A recent report produced by a European Integration Consortium of research centres projected the effects of EU enlargement on net migration flows from CEECs to EU countries once the borders are opened up. In comparison with current population forecasts, which are already taking into account regularly increasing flows without the free movement of persons, migrations due to EU enlargement in 2002 are expected to give rise to a population increase of 12,300 by 2010, 7,700 of whom would join the labour force. In the medium term, the increase in the labour force in the EU is expected to lead to faster economic growth. On the basis of a study carried out by the Commission and a simulation using the FPB's international model, the EU's GDP is forecast to increase by 0.3% after ten years.

The macroeconomic and budgetary implications for Belgium of increased export growth to the EU, together with a modest increase in Belgium's labour force, can be assessed using the FPB's national macroeconomic model. The majority (almost 70%) of the increase in the labour force should be reflected in higher employment. GDP should rise by 0.1-0.2% in the medium term; social and education spending should rise slightly (unemployment, family allowances, health care). Overall there would be virtually no effect on the state's financing capacity (as a percentage of GDP).

"Some Economic Implications of the Eastern EU enlargement for Belgium: Trade, FDI and Migrations", Working Paper 07-01, D. Simonis, M. Lambrecht, November 2001.

General and selective wage cost reduction policies in a model with heterogeneous labour

This working paper shows how both general and selective wage cost reduction policies can be assessed by the 2001 vintage of HERMES.

In this model, gross wage rates are either restricted to obey a government-sanctioned benchmark (referred to below as the wage benchmark) or left to free wage bargaining in response to Phillips and productivity effects. Employment in the market sector (broken down into 11 subsectors) is endogenous whereas employment in the non-market sector (basically government employment and a variety of subsidised employment programmes) is exogenous. The market sector employs 'regular' low-wage labour, 'regular' high-wage labour, and labour hired through four major special-employment programmes. Demand for labour in the market sector is determined in two stages. Firstly, aggregate demand and the average cost of labour relative to other factor prices determine total demand for labour. Secondly, total demand for labour is allocated among the three subcategories of labour, depending on relative wage costs. The composition of labour demand affects average wage cost rates, which in turn feed back into the total demand for labour. The elasticities of substitution are probably less than one for realistic wage cost-cutting policies, which is in tune with the international empirical literature.

Several reductions in employer social security contributions, amounting to a decrease of employer social security contributions worth 0.5% of GDP, are simulated: a 'general measure' aimed at both low-wage and high-wage jobs, a 'low-wage measure' aimed at low-wage jobs only and a 'special-programme measure' aimed at jobs in special-employment programmes only. These simulations point to differences in effectiveness when conducted in a *wage benchmark* regime. In a wage benchmark regime, gross wages are negotiated under the constraint of a benchmark imposed on the wage cost. Once gross wage rates have been set, they can no longer respond freely to new labour market conditions. Considered in terms of *GDP* and *employment*, the low-wage measure is most favourable for the nation as a whole. If corporate *profitability* were the criterion, firms would prefer the low-wage measure as well. Measured by the *government balance*, whether in absolute figures or as a percentage of GDP, the low-wage measure is the most expensive option for the government and the special-programme measure is the cheapest. Measured by the *cost per additional job*, the low-wage and the special-programme measure are most effective. Judged by *real disposable income* and private *consumption*, the general reduction is most favourable for households. The comparatively dire consequences of the low-wage measure for public finances and households follow from the substitution of high-wage labour for low-wage labour, which tends to undermine the wage bill and the tax base. Another difference between a low-wage measure and a general reduction is that the increase in *aggregate demand* is more foreign-demand driven in the former case and more domestic-demand driven in the latter case.

If conducted in a *free-wage* environment, wage-cost reduction measures are much more benign to the public finances on the one hand but also less stimulating for the economy and employment on the other hand. This is because the increased demand for labour and the fall in the unemployment rate exert upward pressure on the gross wage rate, increasing the wage bill and therefore also the tax base but also reducing the scope for more employment. Differences across wage-cost reducing measures do persist. In terms of *employment* and the profitability of *firms*, the low-wage measure ranks as the most beneficial policy. If judged by *consumption*, there is not much difference between the high-wage measure and the low-wage measure. The general reduction is still the most expensive policy in terms of *net cost per job*, but the fall in *government surplus* it generates barely differs at all from the one generated by the low-wage measure.

Ignoring government finances and considerations other than macroeconomic effectiveness, there are no compelling reasons to expand special-employment policies because the special-programme measure performs no better than either the low-wage measure or the general reduction. In any case, extra jobs do not come cheap to the government: the low-wage measure requires a fall in the government surplus by 1.3 million BEF per head (if wages are benchmarked) or 1.6 million BEF per head (if wage setting is free). The corresponding self-financing rates are 10% (if wages are benchmarked) and 38% (if wage setting is free). In spite of higher self-financing rates (29% or 37% respectively), the general measure is even more costly in terms of net cost per job in both the wage-benchmark and the free-wage regime (2.0 and 2.6 million Bef per head respectively are required) than the low-wage measure. The higher net cost per job in a free-wage regime is due to the lower increase in employment; the higher self-financing rate in a free-wage regime is due to the higher tax base.

"General and selective wage cost reduction policies in a model with heterogeneous labour", Working Paper 08-01, P. Stockman, November 2001.

Other Recent Publications

Economic Forecasts 2002,
July 2001, (available in Dutch and in French)[1].

Medium Term Economic Outlook 2001 - 2006,
April 2001, (available in Dutch and in French).

Planning Paper 89, July 2001,
"International co-operation and instruments for climate change policy",
Th. Bernheim.

1. See last update on our website:
"Budget Economique 2002 - Révision d'automne",
(http://www.plan.be/fr/news/presse/20011026/press.htm);
"Economische Begroting 2002 - Najaarsherziening",
(http://www.plan.be/nl/news/presse/20011026/press.htm).

Working Paper 03-01, July 2001,
"The NIME Model : A macro-econometric world model 2001",
E. Meyermans, P.Van Brusselen.

Working Paper 04-01, July 2001,
"E-GOV - Naar een elektronische overheid in België",
H. Van Sebroeck.

Working Paper 05-01, July 2001,
"Les politiques de recherche et d'innovation aujourd'hui ",
M. Van Overbeke.

Research in progress

The modtrim II model

The 'Short term forecasts and business cycle analysis' team has recently built a quarterly model for the Belgian economy. Although this new model is still being tested, some of its results have already been used in our July forecasts and the Autumn revision. To this end new routines have been developed in order to deal with the most recent quarters where only some of the data is available. Further research includes a more detailed modelling of public finances and social security. The simulation properties of the model will be analysed in the coming months through the use of exogenous shocks and policy measures.

Long-term sustainability of public pensions

The FPB investigates the impact in Belgium of ageing populations on public pension expenditure in particular, and on social security and public finances in general. This update of previously estimated long-term projections includes updated demographic projections, new medium-term macroeconomic developments, and new budgetary forecasts. A new methodology for computing the retirement rates is used. In addition, projections are produced and compared with international results (EC, OECD) in order to allow for international comparability.

Impact of ICT in Belgium.

As a follow-up of its study on ICT diffusion in the Belgian economy, the FPB studies the effects of ICT on the Belgian economy. This project has six components: macro-economic impact, micro-economic impact, digital divide and dualisation, ICT and the localisation of economic activities, e-government, and Internet and indirect taxation.

Administrative simplification

Following a convention with the Agency for Administrative Simplification (ASA/DAV), the FPB helps to perform a new survey in order to quantify the administrative burden on Belgian enterprises and self-employed people for the year 2000. Based on its previous analysis, the FPB has constructed a new questionnaire and has defined the stratification of a sample which should allow us to obtain representative results. A short note containing the first results of the administrative burden, as well as a final detailed report will be published.

Effects of energy and co_2 taxes in Belgium

The FPB has investigated the impact on the Belgian economy, of the introduction of energy and co2 taxes. Various modalities are considered. In a first modality, the harmonization of energy taxation with our three main partners has been studied. Two other modalities consider the introduction of a co2 tax (two levels of taxation are studied). A last variant studies the impact of a CO_2 tax limited to the transportation sector. Energy and CO_2 taxes are generally introduced gradually (over a 9- year period for the CO_2 tax and over a 3-year period for the energy tax) and are, optionally, used to finance cuts in social security contributions. The economic impact of the various forms of taxation as well as effects on energy consumption and GHG emissions will be presented.

Recent history of major economic policy measures

November 2001

The WTO's Ministerial Conference in Doha approved the launch of a new world trade round, which will focus on development. The Ministerial Conference also made an important declaration on TRIPs and public health giving greater confidence that developing countries will be able to provide access to medicines for all.

The WTO's Ministerial Conference in Doha approved by consensus Chinese and Taiwanese accession to the WTO. China and Chinese Taipei will become legally members 30 days after the WTO receives notification of the ratification of the agreements by China's and Chinese Taipei's Parliaments.

At the United Nations Climate Conference held in Marrakech, 172 countries finalised the rulebook for the implementation of the Kyoto Protocol agreed upon in 1997. Under this agreement, industrialised countries committed themselves to reduce their total emissions of greenhouse gases. The finalisation of the implementation rules was requested by industrialised countries before engaging ratification by the signatories and entry into force of the Protocol.

The European Commission, in a letter signed by the Commissionner Loyola de Palacio, allows the bridging loan of 125 million euro to be used by DAT, which is a 100% subsidiary of Sabena.

Sabena is declared bankrupt by the Court in Brussels.

Over the last 6 months, the ECB gradually lowered its interest rate on refinancing options (REPO) by 150 base points, bringing it to 3.25%.

Over the last 6 months, the FED, lowered its lending rate, i.e. the federal funds rate, by 175 base points to 2,00%.

October 2001

The European Commission authorises the bridging loan of 125 million euro granted to Sabena by the Belgian authorities as rescue aid. Unlike restructuring aid, rescue aid is not subject to the "one time, last time" principle (Sabena already received restructuring aid in 1991). As always in the case of rescue aid, the Commission imposed strict conditions : it is an interest-bearing loan at market rates (6,33%) and it is granted for a period not exceeding 3 months.

CPTE (Electrabel and SPE) and Publi-T (Belgian communities) sign an agreement in principle about the communities' participation of 30 % in the capital of ELIA. The agreement is a first step towards the appointment of a transmission system operator (TSO).

A Flemish decree on the organization of the natural gas market is published in the 'Moniteur Belge' (the Belgian statute book), which was adopted by the Flemish government on 6 July

September 2001

Electricité de France (EDF) took a participation of 10 % in SPE, the Belgian public electricity supplier.

The European Commission has lodged a complaint against Belgium at the European Court of Justice for an incomplete conversion of the directive concerning the opening of the electricity market. Indeed, Belgium still has not appointed a transmission system operator (TSO).

July 2001

At the Climate Conference held in Bonn, 180 countries have reached a political agreement on the implementation of the Kyoto Protocol that was concluded in 1997. In Kyoto, industrialised countries committed themselves to cut their emissions of greenhouse gases.

The parliament has approved the personal income tax reform proposed by the government on 17 October 2000. The reform would enter progressively into force as from the fiscal year 2002. Its budget cost would reach 1.3% of GDP from 2006 onwards.

June 2001

The Income Guarantee for Elderly (IGE) substitutes for the Guaranteed Income for Seniors (GIS). Now, the minimum pension amount will increase and the former family amount will disappear. Another difference is the basic amount. It will be granted if the applicant is married or is living together with one or more persons. The 'real' single persons will receive a higher basic amount. Before, in the GIS system, persons entitled who were living together, would each receive a higher basic income. This will no longer be the case. What remains the same, are the levelled up age conditions for men and women. Although the means test will still be applicable, conditions will be less severe.

CPTE (Electrabel's subsidiary and owner of the Belgian high-voltage electricity network), created a new subsidiary called Elia SA that will operate the Belgian high-voltage grid. The establishment of Elia is a further step towards the appointment by the federal government of an independent Transmission System Operator.

The Flemish Parliament approved The Flemish Gas Act.

March 2001

The Walloon parliament adopts the decree, which completes the federal act of 29th April 1999 concerning the opening of the Belgian electricity market. For the Flemish Region, the decree on the organization of the electricity market had already been adopted on 17th July 2000.

February 2001

Responding to a request by the Council of Ministers of 22 November 2000, the CREG (Commission for the Regulation of Electricity and Gas) presents to the government a declaration of intent concerning its tariff policy. This document presents the main features of the tariff policy and the reasonable margin with respect to the manager of the national electricity-transporting network.

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)