# Quarterly Newsletter of the Federal Planning Bureau

Short Term Update (STU) is the quarterly newsletter of the Federal Planning Bureau. It is published four times a year in English. It contains 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

As compared with the November forecast, the FPB now expects GDP to grow by 2.7% in 1997 (instead of 2.4%) and by 2.5% in 1998 (instead of 2.7%).

The Belgian economic situation has been affected by the world economy in two entirely different ways. On the one hand the Asia crisis has had a dampening effect on exports and on the outlook for business profitability. It is estimated that its impact will be 0.4% of GDP in 1998. On the other hand, the European economy in general, and the Belgian economy in particular, has recently shown signs of an upturn in domestic demand.

Activity growth turned out better than expected in 1997. The appreciation of the US dollar and UK pound meant that foreign trade contributed strongly to economic growth. Private consumption was higher than forecast. The NBB survey indicators for foreign order books would seem to show that exports may experience a lower rate of growth in the quarters to come, partly because of declining growth in world trade as a result of the Asian crisis.

It is increasingly likely that the growth in GDP for 1998 will be more balanced. The contribution of exports should diminish while domestic demand should gain in strength. This trend was already apparent in the second half of last year.

Consumer price inflation was 1.6% in 1997. This year, even a lower inflation rate seems likely. The underlying inflation rate has hovered around 1.25% in 1997, although import price inflation was about 4.5%. For 1998 CPI inflation is estimated at 1.2%, and the "health-index" should increase by 1.3%.

The impact of activity on employment in 1997 is still difficult to assess. The FPB estimates the increase in domestic employment at 0.6%. The impact on unemployment figures has been slight, due to higher participation rates. Employment should rise in 1998 by some 33,000 (or 0.9%), leading to a small fall in the unemployment rate. A proportion of the growth in employment can be attributed to specific employment programmes.

The better than expected economic performance should result in a lower general government deficit of around 2% of GDP in 1997. Due to lower interest rates and a declining debt ratio, there should be a further reduction in interest payments in 1998.

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

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

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# **Table of Contents**

Special Topic
Economic Forecasts
Summary of Economic Forecasts
Economic Forecasts by the Federal Planning Bureau Economic forecasts for Belgium by different institutions
Recent Economic Evolution  General economic activity Private consumption Business investment Housing investment Stockbuilding Foreign Trade Labour market Prices Interest rates Exchange rates Fiscal indicators
Recent Publications
Recent Publications
Demographic ageing and the financing of social security: a sustainable challenge? Modelling the Essen Employment Priorities
Demographic ageing and the financing of social security: a sustainable challenge? Modelling the Essen Employment Priorities
Demographic ageing and the financing of social security: a sustainable challenge?  Modelling the Essen Employment Priorities  News  Other Recent Publications Forthcoming Publications
Demographic ageing and the financing of social security: a sustainable challenge?  Modelling the Essen Employment Priorities  News
Demographic ageing and the financing of social security: a sustainable challenge?  Modelling the Essen Employment Priorities  News

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# Changes in the Wage Wedge over the Past 15 Years

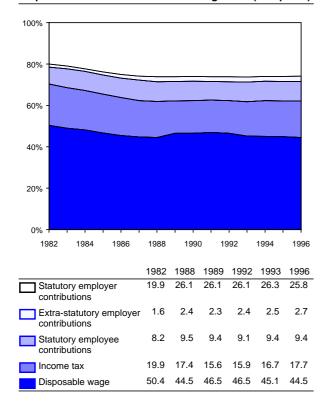
The wage wedge represents the gap between the wage cost and the disposable wage.

The macro-economic concept of wage costs covers all elements of remuneration allocated to the factor labour which contribute to the formation of value added. Part of this remuneration of the factor labour is paid directly to wage-earners: the disposable wage. The other part, i.e. the wage wedge, goes towards the provision of public goods and services or is redistributed in the form of transfers, according to social or other criteria. Hence, although the wage wedge is not part of the disposable wage, it indirectly contributes in part to the total disposable household income.

The wage wedge is therefore composed of both statutory or extra-statutory social security contributions, taxes on income and social transfers when these are paid directly by employers to wage-earners.

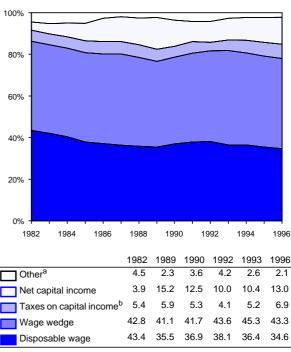
The disposable wage is deemed to be disposable because its final allocation is a matter of individual choice. For instance, the private insurance expenditure, such as the constitution of pension savings, is part of the disposable wage. In contrast, contributions on group insurance form part of the wage wedge.

Graph 1 - Macro-economic structure of wage costs (enterprises)



Graph 1 sets out the macro-economic structure of wage costs for enterprises, indicating the fiscal and para-fiscal components. Graph 2 shows the structure of net value added at factor cost for enterprises, distinguishing between remuneration of the factor labour and remuneration of the factor capital, and the corresponding levies.

Graph 2 - Structure of net value added at factor cost (enterprises)



Financial charges and statistical adjustment.

 Corporate tax and withholding tax on income from dividends paid to households.

Source: FPB and National Accounts 1996

These macro-economic indicators provide interesting information on some of the social and economic characteristics: primary (before taxation) and secondary (after taxation) distribution of value added between labour and capital, private or collective appropriation of income, the extent of publicly-organised solidarity and insurance schemes, etc.

Since 1982, changes in the wage wedge have fallen into three distinct phases.

### 1982-1988

From 1982 to 1988, the wage wedge grew from 49.6 % to 55.5 % of the wage cost, i.e. a 5.9 point rise: social contributions rose by 8.4 points, as a result in particular of the increase in statutory employer contributions (from

19.9~% to 26.1~% of wage costs, i.e. a 6.2 point rise), but income taxes on labour fell by 2.5 points (from 19.9~% in 1982 to 17.4~% of wage costs in 1998).

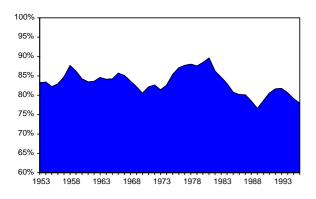
This tax reduction resulted primarily from various measures benefiting families and a number of other legal provisions introduced in 1986 (e.g. partially indexlinked tax brackets).

On the other hand, some social security contribution rates increased; in 1982, the ceilings on contributions were removed and the reduction in employer contributions under the Maribel scheme was halved. Moreover, social contributions were increased in 1984, 1985 and 1987 (index jumps).

There was indeed a greater awareness of the public debt problem in the 80s, leading to cuts in transfers from central government to social security. On the other hand, social benefits as a percentage of GDP were reduced and the level of wage-related contributions increased.

These increases in social security contribution rates coincided with a reduction in the wage bill, resulting from a policy of wage restraint, aimed at restoring the profitability and competitiveness of Belgian businesses, which had fallen sharply during the seventies (see Graph 3). From 1982 to 1989, the wage share (wage cost as a % of net value added) dropped from 86.2 % to 76.6 %, i.e. a fall of 9.6 points. During the same period, remuneration of capital, after tax, increased by 11.3 points (from 3.9 % to 15.2 % of net value added).

Graph 3 - The wage share in % of net value added at factor cost (enterprises)



Source: FPB and National Accounts 1996

#### 1989-1992

From 1988 to 1989, the disposable wage increased from 44.5% to 46.5% of wage costs (+2 points), primarily as a result of a tax reduction (-1.8 point, from 17.4% to 15.6% of wage costs): the tax reform, introduced in the 1990 fiscal year, consolidated separate earned income taxation

for spouses and a specific tax reduction for couples with only one income. The top marginal rates were also reduced.

The subsequent years, until 1992, were a period of relative stability for the various fiscal and para-fiscal components of the wage wedge, expressed as a percentage of wage costs.

After three years of strong economic growth (from 1988 to 1990), the declining trend of the wage share reversed: between 1989 and 1992, the wage share increased by 5.1 points, i.e. from 76.6 % to 81.6 %, thereby reducing the share of revenue from capital. From being almost stable as a percentage of wage costs, the disposable wage grew from 35.5 % in 1989 to 38.1 % of net value added in 1992, an increase of 2.6 points.

#### 1993-1996

The income tax component of the wage wedge began to increase again in 1993, with the introduction of a "Supplementary Crisis Contribution", partial removal of tax bracket indexation , the addition in 1994 of a "Special Social Security Contribution". These tax rises, coinciding with a down turn in the economic cycle, were aimed at a further reduction in the public deficit, notably to meet the criteria for the single currency. The income tax component of the wage wedge increased from 15.9 % of wage costs in 1992 to 17.7 % in 1996, representing a 1.8 point increase.

The level of social contributions has, on the contrary, declined slightly since 1994, as a result of various measures for reducing the employer contributions, with a view to stimulating employment. These reductions in social contributions were offset by higher direct and indirect taxes, transferred from the Federal Government to social security (alternative financing). Statutory employer contributions fell from 26.3 % of wage costs in 1993 to 25.8 % in 1996, i.e. a 0.4 point fall.

Overall, the wage wedge grew from 53.5 % of wage costs in 1992 to 55.5 % in 1996, so that the disposable wage dropped 2 points, reaching its lowest level since 1988, i.e. 44.5 % of wage costs in 1996.

Expressed in percentage of net value added, the decline in the disposable wage is more striking: -3.4 points from 1992 to 1996. Wage moderation since 1994 has, indeed, led to a 3.8 point drop in the wage share (from 81.8 % in 1993 to 78 % in 1996). Capital income, after tax, has however, increased since 1992, reaching in 1996 its highest level since 1989, with 13% of net value added. In 1996, compulsory levies constituted 50.2 % of net value-added, the factor labour accounting for 43.3 % and the factor capital for 6.9 %.

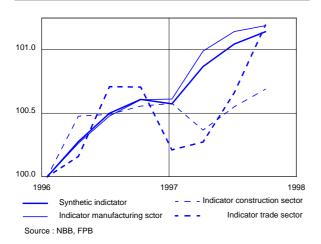
## **Economic forecasts 1997-98**

The FPB prepares Economic forecasts for the Institute of National Accounts. In accordance with its terms of reference, the Institute adopts the final figures. A scientific committee has expressed its approval of the Economic forecasts. The figures are used in preparating the Federal Budget. The forecasts were completed on 13 February 1998. Data available up to this date have been used in compiling the text which follows.

Activity in 1997 was somewhat better than expected. Domestic demand, and in particular private consumption, strengthened considerably over the second half of the year. While exports of manufacturing products fuelled the recovery in early 1996, this is no longer the case.

The NBB Survey synthetic indicator can be broken down in three separate indicators, covering the business cycle in the manufacturing, construction and trade sectors. The graph below shows the pattern of these indicators, starting from the low point in the cycle in the first quarter of 1996. While the trade (both wholesale and retail) sector lost ground in the first half of 1997, changes in the third and fourth quarter of the year compensated fully for this. The construction sector, on the other hand, has remained somewhat weak over the past six months.

Graph 1 - Sectoral survey indicators, 1996Q1=100



In 1998, the economy should build on this pattern of growth. On the one hand, export growth is likely to suffer to some extent as a result of less buoyant world trade. On the other hand, private consumption should benefit further from a better employment outlook, leading to an improvement in real disposable household income.

The international environment is likely to continue to support this evolution. Domestic demand is also expected to start to improve in Germany and France. Employment in these two countries is recovering more slowly than in Belgium, however there is broad consensus among economists that during 1998, there will be a change for the better. Outside Europe, the Asian Continent has attracted considerable attention.

#### Labour market

The FPB estimates that job creation continued to be moderate during 1997. While job creation was very low at the beginning of the year, employment growth is estimated to have been more substantial in the second half of 1997. Average total employment for the year should have increased by 0.6%. The number of wage and salary earners should have increased by 0.8%. Part-time work continues to expand. Expressed in full-time equivalents or in number of hours, the creation of labour volume has therefore been less dynamic.

The impact of job creation on unemployment remained relatively limited, due to an increase in the participation rate of the population.

The growth in labour productivity was relatively strong, partly because of the business cycle. Labour productivity is estimated to have increased by 2.5% per worker and by 2.6% per hour.

For 1998, the employment evolution remains of prime importance for the development of the Belgian economy. So far, there are some ecouraging signs that the strength of the economy is gradually moving from export-led to demand-led, as a result of job creation. This is the only way to ensure the recovery is sustainable.

For 1998 as a whole, job creation should be 0.9% (i.e. +33,000 people form June to June). Enhanced active labour market policies should account for one-third of the estimated overall increase in employment.

The growth of labour productivity in the business sector should fall to 1.6% per person and 1.9% per full-time equivalent or per hour.

## Competitiveness

In 1997-98, wage increases seem to remain below the maximum growth rate set by the Government. The most recent forecasts of wages by international institutions are based on lower inflation rates in Belgium as well as in the three neigbouring countries. When these figures are taken into account, Belgian wage increases seem

comparable to what is expected in the three surrounding countries.

As compared with its seven main trading partners, the fall in the BEF led to a substantial improvement in wage competitiveness (+8.6% from 1995 to 1998). Somewhat higher growth rates for labour productivity in the seven countries led to slightly lower increases in unit labour cost competitiveness for Belgium

The depreciation of the Asian currencies should lead to an appreciation of the BEF of 0.9% in 1998, leaving bilateral exchange rates unchanged untill the end of the year. Part of the improvement in competitiveness as compared with its seven main trading partners (+1.2%) will therefore be offset by a loss of competitiveness *vis-à-vis* the Asian countries.

### Prices and interest rates

Consumer price inflation continues to be subdued. Underlying inflation (i.e. excluding indirect taxes, energy and fresh food prices) hovered around 1.25% in 1997. While import prices increased markedly as a result of the considerable depreciation of the BEF, the underlying inflation rate has not increased. This has led to diminishing profit margins for domestic sectors.

For 1998, the increase in import prices should gradually begin to slow, but its impact on consumption prices will be slight. Underlying inflation will increase slightly during the year, leading to an average inflation rate of 1.2% for the CPI and 1.3% for the "health-index" - the index used to link prices with wages and rent.

Oil prices fell dramatically around the turn of the year. The average price for 1998, 16.5 USD per barrel, will be considerably lower than for 1997. Due to the higher weight of energy in imports than in exports, terms-of-trade gains are expected in 1998.

Nominal long term interest rates have fallen to historic lows. Inflation is expected to remain low and the Asian crisis has led to a "flight to quality". Interest rates in the DEM-zone have probably benefited from this.

### Impact in Belgium of the Asian crisis

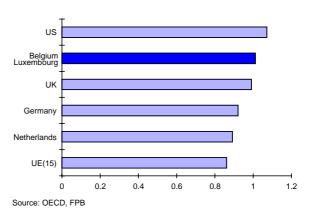
Since Summer 1997, the withdrawal of foreign capital from several Asian countries (Thailand, Malaysia, Philippines, Indonesia, Singapore, Hong-Kong, Taiwan, South Korea) has led to a sharp fall in currencies and stock markets in this region.

The main direct impact of this financial crisis on the other economies is its effect on trade:

- a fall in Asian imports as a result of the decline in their domestic demand;
- an increase in Asian competitiveness on domestic as well as third markets.

In Belgium, the direct impact on trade should not be too severe since Belgian exports to the Asian countries hit by the crisis represents (on average for 1994-95) about 3.1% of its total exports as opposed to 4.8% for the European Union as a whole, and 1.0% and 0.9% of the Belgian and European final demand respectively.

Graph 2 - Exports of goods to South East Asia, in % of final demand



The FPB has estimated the impact of the Asian crisis on Belgium in 1998. This simulation was achieved using the "Modtrim model" and was based on the following assumptions:

- a depreciation of the Asian currencies leading to a rise in the Belgian franc effective exchange rate of about 1% in 1998;
- the contracting demand in the Asian countries, and its indirect impact on the other markets, leading to a potential fall in Belgium's export market growth of 0.6% in 1998.

The results of this simulation only reflect the "trade impact" of the crisis and do not take into account any interest rate or business cycle modifications since the baseline projection.

On the basis of these assumptions, growth would decline by 0.4% in 1998, mainly due to lower net exports (-0.3%). Inflation should remain constant since lower import prices (-0.6%) will be offset by higher unit production costs (due to lower productivity gains).

This simulation does not take into account any potential lagged effects of the crisis, such as loss of confidence, negative wealth effects following stock market corrections, systemic risks relating to the involvement of banks in Asia....Indeed, the latest information would seem to indicate that these will not occur: stock markets remain high as does consumer and business confidence.

# **Economic Forecasts by the Federal Planning Bureau**

Changes in volume (unless otherwise specified)

	1995	1996	1997	1998
Private consumption	1.1	1.3	1.6	2.0
Public consumption	0.9	1.8	1.2	1.3
Gross fixed capital formation	3.2	0.6	4.5	3.6
Final national demand	1.4	1.1	2.1	2.2
Exports of goods and services [1]	6.8	3.2	6.2	5.6
Imports of goods and services [1]	6.1	2.8	5.5	5.4
Net-exports (contribution to growth)	0.7	0.4	0.7	0.4
Gross Domestic Product	2.1	1.5	2.7	2.5
p.m. Gross Domestic Product - in current prices (bn BEF)	8056	8305	8662	9003
Traditional consumer price index	1.5	2.1	1.6	1.2
Consumer prices: "health" index	1.6	1.7	1.3	1.3
Real disposable income households	0.1	-0.4	0.8	2.1
Households saving rate (as % of disposable income)	17.7	16.3	15.6	15.7
Domestic employment (change in #000, situation on June 30th)	18.8	14.8	12.1	33.1
Unemployment (Eurostat standardised rate, yearly average) [2]	9.9	9.8	9.5	9.1
Current account balance BLEU/UEBL (as % of GDP)	5.0	4.9	5.3	5.7
Short term interest rate (3 m.)	4.8	3.2	3.4	3.6
Long term interest rate (10 v.)	7.5	6.5	5.8	5.2

<sup>[1]</sup> The 1995 growth rate should be interpreted with care due to a break in the series between 1994 and 1995

# **Economic forecasts for Belgium by different institutions**

	GDP-g	rowth	Inf	ation	Governmen	t deficit	Date of update
	1997	1998	1997	1998	1997	1998	
Federal Planning Bureau	2.7	2.5	1.6	1.2	2.5(*)	2.3(*)	17/02/98
INR/ICN	2.7	2.5	1.6	1.2			17/02/98
National Bank of Belgium	2.7		1.6		2.3		01/02/98
European Commission	2.4	3.0	1.7	1.8	2.6	2.3	01/10/97
OECD	2.4	2.8	1.7	1.6	2.5	2.2	16/12/97
IMF	2.2	2.6	1.6	1.9			05/09/97
BBL	2.6	2.7	1.6	1.5	2.6	2.4	20/01/98
Generale Bank/Générale de Banque	2.5	2.7	1.6	1.6	2.4	2.1	01/01/98
Gemeentekrediet/Crédit Communal	2.7	2.5	1.6	1.5	2.6	2.3	02/01/98
Kredietbank	2.4	2.9	1.6	1.6	2.4	2.3	14/01/98
J.P. Morgan	3.0	3.0	1.7	1.5	2.7	2.4	02/01/98
Morgan Stanley	2.5	2.6	1.7	1.6			06/01/98
Paribas	2.7	2.7	1.7	2.1	2.6	2.3	12/12/97
Petercam	2.5	2.5	1.7	1.7	2.8	2.5	12/12/97
IRES	2.6	2.5	1.6	1.9	2.8		14/01/98
DULBEA	2.5	3.0	1.8	1.8	2.5	2.0	12/12/97
Averages							
All institutions	2.6	2.7	1.6	1.6			
International institutions	2.3	2.8	1.7	1.8			
Credit institutions	2.6	2.7	1.7	1.6			
Consensus The Economist	2.5	2.8	1.7	1.9			07/02/98

Collaborating institutions for The Economist: BZW, Daiwa Institute of Research, Economist Intelligence Unit, Goldman Sachs, Hoare Govett, IBJ, James Capel, Kredietbank, Lehman Brothers, Merill Lynch, J.P. Morgan, Morgan Stanley, Nordbanken, Paribas, Royal Bank of Canada, Solomon Brothers, UBS, Long-Term Credit Bank, Scotiabank

<sup>[2]</sup> Other unemployment definitions can be found on page 14 (table 7).

<sup>(\*)</sup> See FPB "Medium Term Economic Outlook 1997-2001", April 1997

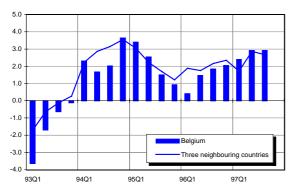
## **General economic activity**

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

	94	95	96	95Q3	95Q4	96Q1	96Q2	96Q3	96Q4	97Q1	97Q2	97Q3
Germany	3.0	1.9	1.0	1.3	0.9	0.7	0.9	2.1	1.8	1.4	2.8	2.3
France	2.8	2.2	1.4	2.0	0.4	1.1	0.8	1.4	2.3	1.3	2.6	2.6
Netherlands	3.4	2.3	3.3	2.0	2.2	3.9	3.4	2.8	3.0	2.4	3.1	3.1
Belgium	2.4	2.1	1.5	1.5	0.9	0.4	1.5	1.8	2.0	2.4	2.9	2.9

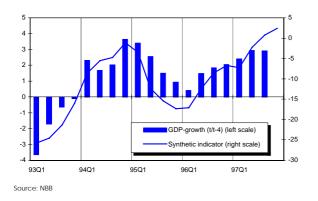
Source: National sources, NBB

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

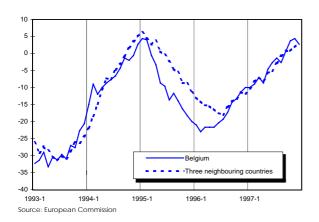


Source: NBB, National sources

Graph 2 - Belgian GDP-growth and synthetic indicator



Graph 3 - Industrial confidence: international comparison



The Belgian GDP-growth rate for 1997 is estimated to be 2.7%. This growth rate is comparable with the expected average for its three neighbouring countries (France, Germany and the Netherlands). Differences in growth rates between the four countries have also diminished. This has been the case in particular since the middle of last year.

The growth components, however, were not the same for each country. While private consumption remained buoyant throughout the year in the Netherlands, this was less the case in France and still less in Germany. Belgium was somewhere in the middle. Private consumption remained very weak at the beginning of the year but gradually gained strength towards the end of the year.

The same picture holds true for investment. The positive pattern in the Netherlands contrasted with the very slow pace of recovery in investment in Germany and France. Investment in Belgium was more positive than in those two countries but the dynamic was clearly weaker than in the Netherlands.

The NBB synthetic indicator for the last quarter of 1997 continued to show a positive trend. Other indictors are equally buoyant so that a further strengthening of economic activity can be expected around the turn of the year.

One of the most encouraging signs is that private consumption has been stronger than expected. While the FPB expects that the manufacturing sector will have little more to contribute to a further strengthening of the economy, the opposite may be true for the domestic sectors.

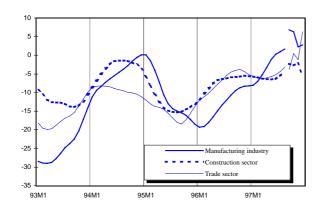
Table 2 - Monthly business surveys [1]

	96	97	97Q1	97Q2	97Q3	97Q4	97M7	97M8	97M9	97M10	97M11	97M12
Synthetic indicator	-11.2	-1.6	-7.3	-2.3	0.8	2.4	-0.6	-1.0	3.9	4.1	1.1	2.1
Manufacturing industry	-13.3	-0.3	-7.8	-0.2	2.9	3.8	1.5	0.3	6.8	6.3	2.3	2.8
Construction sector	-7.0	-5.1	-4.8	-7.1	-5.1	-3.5	-8.9	-4.0	-2.3	-2.7	-2.1	-5.7
Trade sector	-5.8	-4.0	-7.6	-7.0	-3.3	1.9	-1.8	-4.3	-3.7	0.5	-1.2	6.3

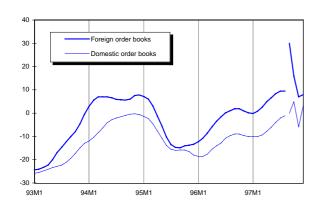
[1] Qualitative data

Source: NBB, FPB

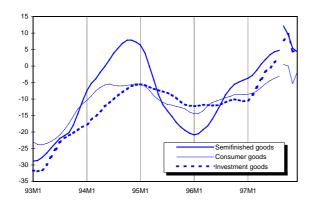
Graph 4 - Business cycle: sectoral evolution



Graph 5 - Manufacturing industry: order books



Graph 6 - Manufacturing industry: different types of goods



Source: Business cycle survey NBB

The recovery which has taken place since the beginning of 1996 has been mainly fuelled by the manufacturing sector. Foreign orders were the main driving force behind this recovery. Exchange rate changes - in particular the rise of the US dollar and the UK pound since the beginning of 1996 - led a strong surge in exports.

Since the middle of 1997, the effective exchange rate has not shown any clear direction, so that an impetus cannot be expected from further depreciation. Due to the timelag between the exchange rate changes and the full impact on exports (estimated to spread over three quarters), relatively strong export growth is expected in the first few months of this year. Foreign order books dropped significantly in November-December. This may have been partly due to lower import demand from Asian countries.

Survey indicators for the (wholesale and retail) trade sector and domestic order books, on the other hand, improved over the past months. A spill-over of an export-led recovery into domestic demand, as a result of an increase in employment, would seem to be taking place. The contribution of the trade sector to the synthetic indicator should increase further over the next few quarters.

The survey indicator for the construction sector remains weak. An improvement in real disposable household income should, however, also have a positive impact on housing investment and activity in the construction sector.

## **Private consumption**

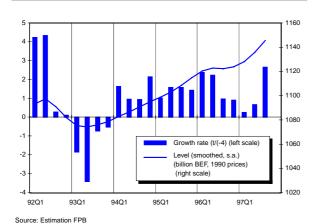
Table 3 - Private consumption indicators

	96	97	97Q1	97Q2	97Q3	97Q4	97M7	97M8	97M9	97M10	97M11	97M12
Turnover (VAT) - retail trade [1]	3.5	•	2.3	2.3	5.1		6.9	5.1	3.3	4.6		•
New car registrations [1]	7.8	-5.7	-12.2	-6.4	1.7	-0.4	-7.8	4.5	11.5	-1.8	-2.9	5.9
Consumer confidence indicator [2]	-22.5	-21.0	-23.3	-25.7	-21.7	-13.3	-23.0	-20.0	-22.0	-15.0	-15.0	-10.0

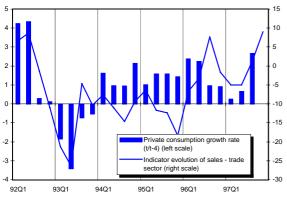
[1] Change (%) compared to same period previous year; [2] Qualitative data

Source: NIS/INS, Eurostat, NBB, Febiac, FPB

Graph 7 - Private consumption at constant prices

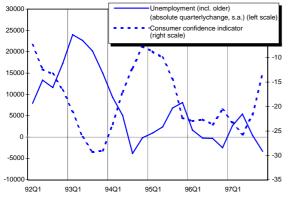


Graph 8 - Private consumption and related survey indicator



Source: FPB, Business cycle survey NBB

Graph 9 - Consumer confidence and unemployment



Source: RVA/ONEm, Eurostat, FPB

Short-term indicators (qualitative as well as quantitative) show that growth in private consumption accelerated markedly during the second half of 1997. Private consumption has probably started on the road to more dynamic growth, after the very moderate upturn since the second half of 1993.

The growth rate for turnover in the retail trade sector (derived from VAT statistics) doubled in the third quarter of 1997 (5.1%) as compared with the first two quarters of the year (2.3%) (growth rates t/t-4 at current prices). This pick-up in the growth rate in the third quarter was partially due to the fact that growth in the first semester of 1997 was adversely affected by the strong car sales during the corresponding period in 1996. It is clear, however, that this mechanical effect is only a partial explanation and that consumption has in fact gained in strength.

As expected, the number of new cars registered in 1997 was slightly above 310,000, down 5.7% as compared with 1996, but up 1.7% as compared with 1995 (year without a Motor Show). The success of the Motor Show at the beginning of 1998 would seem to have been comparable to that of 1996. The Motor Show normally leads to new car registrations over a period of two quarters.

The consumer confidence indicator fell back from -20 at the end of 1996 to almost -26 in the second quarter of 1997. During the second half of 1997, there was a substantial improvement (to -10 at the end of the year). Rising consumer confidence during the second half of 1997 was in line with the fall in the unemployment level in the same period.

All in all, private consumption should have grown in real terms by 1.6% in 1997. This figure is based on a growth of less than 1% in the first six months and of over 2% during the second half of the year.

## **Business investment**

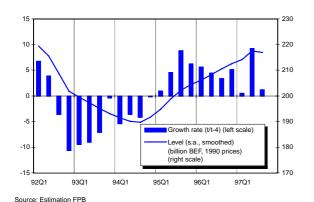
Table 4 - Business investment indicators

	96	97	98	97Q1	97Q2	97Q3	97Q4	97M6	97M7	97M8	97M9	97M10
Investment (VAT) [1]												
Industrial companies	9.3			-5.4	4.2	-3.1		6.1	3.1	-13.4	0.8	1.4
Non-industrial companies	3.1			5.7	22.7	6.4		3.1	6.9	13.5	0.3	10.9
Total companies	5.5	•		1.2	15.4	2.5	•	4.9	5.7	1.0	0.9	6.8
Investment survey [1]	5.1	7.0	9.2									
Capacity utilisation rate (s.a.) (%)	79.9	82.0		81.0	82.0	82.5	82.3					

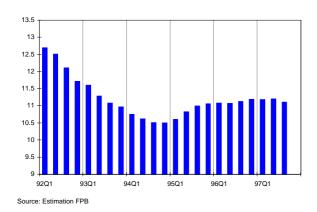
[1] Change (%) compared to same period previous year

Source: NIS/INS, NBB, FPB

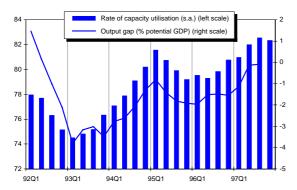
Graph 10 - Business investment at constant prices



Graph 11 - Business investment rate (in % of gdP)



Graph 12 - Business investment indicators



Source: NBB (capacity utilisation), FPB (methodology output gap)

The quarterly pattern of investment for 1997 was marked by a temporary down turn in the first quarter and an exceptional rise in the second (in the non-industrial sector). The third quarter was again rather weak, while initial estimates would seem to indicate stronger growth in the fourth quarter.

All in all, growth in business investment for 1997 (estimated at 3.3% in real terms) was somewhat lower than in 1996 (4.7%).

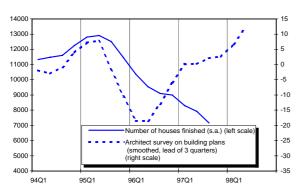
Nevertheless the investment climate continues to be favourable. Long-term interest rates are at historic lows and even seem to decline further. In January 1998, the Belgian 10-year benchmark interest rate was at 5.2%, as compared with 5.9% at the beginning of 1997. Other factors contributing to the favourable business investment climate were the high level of business profitability (especially in export-oriented sectors), and the positive trend in external, and more recently also domestic, demand.

During the third quarter of 1997 the rate of capacity utilisation in manufacturing industry reached a peak level of 82.5% (in seasonally-adjusted terms). This high level also continued in the next quarter. In 1997 as a whole, the output gap remained negative, but this was due to the negative output gap in the first few months of 1997. During the second half of 1997 the output gap was close to zero.

Based on these factors, the good investment performance is expected to continue in 1998. A continuing upward trend in business investment in 1998 should bring the business investment rate (in per cent of GDP) to about 11.5% by the end of this year. This level has not been achieved for the past five years, but would still be at least one per cent lower than the levels observed between 1989 and 1992.

# **Housing investment**

Graph 13 - Activity in the residential housing sector



Source: NIS/INS, NBB, FPB

Graph 14 - Mortgage rate (in %)



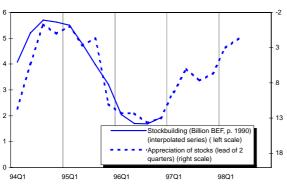
The housing starts indicator, commonly used to estimate housing investment, has been subject to administrative change. Since the most recent quarterly figures will (probably) be revised upwards, this indicator no longer serves to assess the trend in housing investment in the recent past.

In contrast, the quarterly survey among architects concerning the volume of building plans can be used as a leading indicator (a three quarters lead) for activity in the residential construction sector. The survey results would seem to indicate a gradual turnaround in housing investment from the third quarter of 1996 onwards, and this positive trend should continue until at least the middle of 1998.

Housing investment is among other factors sustained by the historic lows of mortgage interest rates experienced in 1997 and expected in 1998.

# Stockbuilding

Graph 15 - Stockbuilding and related indicator



Source: INR/ICN, NBB (Survey), FPB

Based on the assessment of the level of existing stocks by business (as a leading indicator) and in the context of the economic recovery which began in the second half of 1996, stockbuilding would appear to have contributed positively to economic growth in 1997.

The evolution for 1998 is still shrouded in uncertainty. The contribution of stockbuilding this year will probably be close to zero.

# **Foreign Trade**

Table 5 - BLEU/UEBL Trade statistics (intra/extrastat) [\*]

	95	96	96Q4	97Q1	97Q2	97Q3	97M6	97M7	97M8	97M9	97M10	97M11
Exports - value [1]	8.0	4.6	8.2	9.2	12.3	14.8	14.6	15.5	15.4	13.7	8.4	4.3
Imports - value [1]	7.7	8.1	10.3	5.3	11.2	10.3	12.3	12.1	8.4	10.3	7.4	9.8
Exports - volume [1]	8.0	2.5	5.8	5.5	8.4	8.2	11.8	9.4	9.4	6.2	4.3	-1.1
Imports - volume [1]	5.5	5.6	6.4	0.9	5.4	3.3	7.2	4.7	0.7	4.2	3.2	4.6
Exports - price [1]	0.0	2.0	2.3	3.5	3.7	6.0	2.4	5.5	5.4	7.2	3.9	5.5
Imports - price [1]	2.1	2.5	3.7	4.3	5.5	6.9	4.8	7.1	7.7	5.8	4.1	5.1

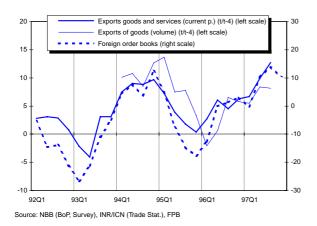
<sup>[1]</sup> Change (%) compared to same period previous year

Table 6 - BLEU/UEBL Balance of payments statistics

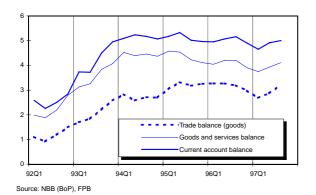
	95	96	96Q4	97Q1	97Q2	97Q3	97M4	97M5	97M6	97M7	97M8	97M9
Exports - goods [1]	11.8	4.7	7.0	6.2	9.8	13.4	12.5	4.2	12.7	12.5	15.9	12.1
Imports - goods [1]	11.0	5.4	9.0	8.8	8.6	10.9	13.3	2.1	10.6	10.9	12.9	9.1
Trade balance [2]	279	263	67	51	87	88	31	30	26	39	10	39
Exports - goods and services [1]	3.2	4.9	6.3	6.7	9.9	12.7	11.0	4.0	14.7	11.3	13.4	13.6
Imports - goods and services [1]	3.7	5.4	8.4	8.0	9.2	11.7	12.9	2.8	12.0	12.3	11.4	11.5
Goods and services balance [2]	352	345	81	96	114	84	36	38	40	32	9	43
Exports - current transactions [1]	-6.8	0.2	-1.2	5.1	7.5	9.6	8.3	2.9	11.1	8.5	9.9	10.4
Imports - current transactions [1]	-7.2	0.1	-0.3	6.4	6.5	9.4	9.0	2.5	7.7	9.4	8.7	9.9
Current account [2]	425	433	108	98	139	111	49	45	46	44	17	50

[1] Change (%) compared to same period previous year; [2] Level in Billion BEF Source: NBB, FPB

Graph 16 - Growth of exports and related indicator



Graph 17 - Foreign balances (4 quarters cumulated, % of GDP)



Real exports of goods grew during the third quarter of 1997 at a rate of more than 8%, which is comparable with the result for the previous quarter. As the latest figures show, this growth rate will decrease somewhat during the first half of 1998, mainly due to the diminishing demand from Asia.

After a strong increase in exports to Asian countries during the first three quarters of 1997 (+22% compared to the same period of 1996) a clear downturn has been observed for the last quarter of 1997 (-4%) especially for Japan and the countries whose currencies have depreciated recently. On the other hand, expected import increases from Asia are not visible in value data as volume and price effects may compensate each other.

Export prices picked up during the third quarter of 1997, but still lagged behind import price increases. With the recent depreciation in several Asian currencies and the fall in oil prices on international markets, terms of trade losses should disappear in the course of 1998.

In the balance of payment statistics, the trade balance showed a very similar surplus in the second and third quarter of 1997.

<sup>[1]</sup> Methodological changes in the beginning of 1997 make comparisons with the past difficult. This table shows estimates to facilitate the analysis

Source: INR/ICN, FPB

# **Labour market**

Table 7 - Labour market indicators

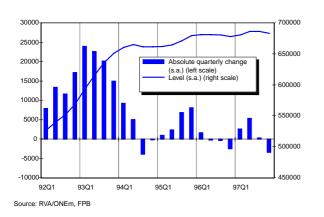
	96	97	97Q1	97Q2	97Q3	97Q4	97M8	97M9	97M10	97M11	97M12	98M1
Unemployment (excl. older) [1]	588.3	570.0	570.5	542.9	598.1	568.7	607.0	599.0	577.6	562.6	565.9	561.3
Unemployment (incl. older) [1]	679.9	683.9	678.4	654.5	714.1	688.6	722.9	715.8	696.1	682.6	687.0	683.2
Unemployment rate-FMTA/MfET[2]	13.7	13.2	13.2	12.6	13.9	13.2	14.1	13.9	13.4	13.1	13.1	13.0
Unemployment rate-Eurostat [3]	9.8	9.5	9.5	9.6	9.6	9.3	9.6	9.5	9.4	9.3	9.3	9.2

<sup>[1]</sup> Level in thousands; [2] In % of labour force of June 1996, 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

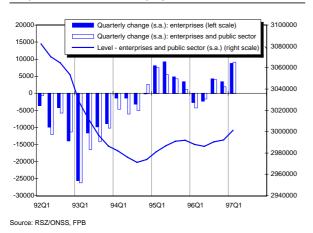
Graph 18 - Evolution of unemployment (incl. older)



Analysing the figures for the labour market has been complicated by the fact that changes were made in 1996 to the administrative treatment of various categories of workers and unemployed people. No definitive conclusions can therefore be drawn from the monthly figures.

The RSZ/ONSS recently started to publish quarterly data on employment with a delay of around six months. Statistics for three quarters are now available. Greater use will probably be made of these data in the future.

**Graph 19 - Evolution of employment** 



Employment creation by firms has been modest for the past three years (1995-97). Growth in economic activity was indeed barely sufficient to increase employment. From the second half of 1997 onwards, this situation should gradually show a change. Stronger economic growth and specific employment schemes should lead to a more substantial increase in employment. Some of the employment schemes are aimed at increasing the labour supply so that the fall in unemployment might be lower than the employment creation.

The latest figures for the final quarter of 1997 for unemployment (which include the 'older unemployed') confirm that unemployment is falling, after stabilising in the third quarter.

# **Prices**

Table 8 - Inflation rates: change compared to the same period in the previous year, in %

	96	97	97Q1	97Q2	97Q3	97Q4	97M8	97M9	97M10	97M11	97M12	98M1
Consumer prices: all items	2.06	1.63	1.91	1.53	1.79	1.29	1.85	1.62	1.30	1.42	1.15	0.42
Food prices	0.62	2.20	0.97	1.26	3.27	3.29	2.51	3.94	3.46	3.52	2.89	0.95
Non food prices	2.37	1.50	2.47	1.55	1.55	0.44	2.06	1.11	0.47	0.66	0.20	-0.98
Services	2.35	1.48	1.78	1.59	1.36	1.18	1.37	1.05	1.13	1.17	1.24	1.74
Rent	2.48	1.69	1.80	1.71	1.59	1.64	1.49	1.67	1.61	1.69	1.63	1.27
"Health" index	1.65	1.32	1.44	1.22	1.42	1.20	1.38	1.27	1.13	1.32	1.15	0.56
Brent oil price in USD (level)	20.6	19.3	21.0	18.6	18.6	18.9	18.7	18.8	20.1	19.3	17.4	15.7

Source: MEZ/MAE, IWH

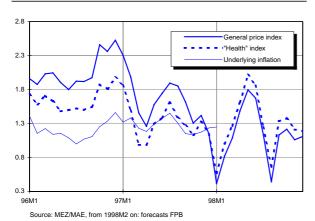
Table 9 - Monthly inflation forecasts

	98M1	98M2	98M3	98M4	98M5	98M6	98M7	98M8	98M9	98M10	98M11	98M12
Consumer prices: all items	101.99	102.28	102.08	102.46	102.92	102.98	103.25	102.75	103.01	103.08	103.19	103.15
Consumer prices: "health" index	101.83	102.10	101.89	102.25	102.76	102.79	103.10	102.55	102.82	102.88	103.02	102.96
Moving average "health" index	101.71	101.87	101.89	102.02	102.25	102.42	102.72	102.80	102.82	102.84	102.82	102.92

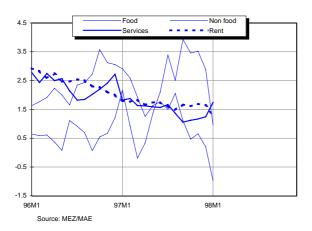
Source: Observations (up to 98M1): MEZ/MAE; forecasts: FPB

The new price index computation (new base year 1996 and corresponding new basket of products) started in January 1998. It should not have a significant impact on average inflation in 1998, but will have an effect on the observed monthly pattern. The forecasts in Table 9 take this monthly pattern into account.

Graph 20 - Monthly inflation evolution in % (t/t-12)



Graph 21 - Inflation rates in % (t/t-12): decomposition



For 1997 as a whole, general consumer price inflation was 1.63%, as compared with 2.06% in 1996. The "health index" grew by 1.32%, which was also less than in 1996 (1.65%). The low level of inflation in 1997 was due to a number of factors.

Firstly, in contrast with the five preceding years, indirect taxes did not generate an upward price movement in 1997. The mechanical upward impact of increased indirect taxes during the period 1992-96 was estimated at 0.3 to 0.4% per year, whereas in 1997 this effect was almost zero. For 1998 no increases in indirect tax are expected.

Secondly, underlying inflation remained within the 1.2-1.4%-range for most of 1997. Unit labour costs were kept under control and rising import costs had little impact on domestic prices, meaning that profit margins were compressed. Since unit labour costs will continue to grow at a very moderate pace and import costs will grow less than in 1997, underlying inflation is expected to increase only slightly this year.

As a result of the low starting point of world oil prices and provided there is no further rise in dollar, energy prices in 1998 should, on average, have a downward effect on inflation. All these factors should lead to a further fall in inflation in 1998. Inflation, as measured by the general CPI and the "health index" respectively, should amount to 1.2% and 1.3% this year. Public-sector wages and social benefits will not be adjusted for price changes this year. The pivot index for the public sector should not be reached until early 1999.

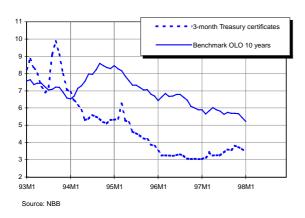
# **Interest rates**

Table 10 - Interest rates

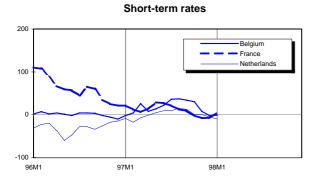
	96	97	97Q1	97Q2	97Q3	97Q4	97M8	97M9	97M10	97M11	97M12	98M1
Short-term rates (3 months)												
Belgium	3.21	3.44	3.20	3.25	3.54	3.76	3.58	3.59	3.83	3.77	3.67	3.50
Germany	3.21	3.26	3.12	3.11	3.18	3.63	3.21	3.25	3.53	3.69	3.69	3.51
Long-term rates												
Belgium: traditional bonds (6+ y)	6.30	5.59	5.61	5.70	5.50	5.54	5.55	5.52	5.61	5.62	5.40	5.14
Belgium: 10 y benchmark OLO	6.49	5.75	5.80	5.92	5.69	5.61	5.75	5.69	5.69	5.68	5.45	5.22
Germany (7-15 y)	6.1	5.5	5.6	5.6	5.5	5.4	5.5	5.5	5.5	5.5	5.3	5.1
Germany: 10 y benchmark	6.22	5.65	5.69	5.78	5.60	5.49	5.66	5.59	5.58	5.56	5.32	5.12

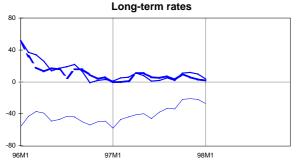
Source: NBB, Frankfurter Allgemeine Zeitung

Graph 22 - Interest rate levels in Belgium, in %



Graph 23 - Interest rate differentials with Germany (in basis points)





Source: NBB, Frankfurter Allgemeine Zeitung, Crédit Lyonnais

During the last quarter of 1997, the volatility of the financial markets was accentuated by the Asian crisis. Uncertainties led to a "flight to quality" resulting in capital being moved from the Asian markets to bond markets in the West. This has contributed (in a context of diminishing inflationary expectations) to the reduction in long-term interest rates to an historic low in January 1998 of nearly 5.5% in United States of America and 5% for the German 10-year benchmark. Convergence of long term interest rates in Europe continued during this period.

Three months ago, financial markets were expecting an increase in US short-term interest rates by the end of 1997, or the beginning of 1998, in order to prevent inflationary pressures. Today, as a result of the "deflationary" impact of the financial crisis in Asia, this risk seems to have disappeared, at least for the near future.

After the rise in October, German authorities left their short-term interest rates unchanged since inflation had remained below 2% since September and domestic demand continued to be weak. The Asian crisis has also diminished any expectation of a tightening of monetary policy at the beginning of this year. With inflation falling and exchange rates stabilising, the Italian, and Spanish central banks relaxed their official interest rates in December while, the opposite was true for England.

On the money markets, the spread between Belgian and German short-term interest rates narrowed to 13 basis points in the last quarter of 1997 and even became slightly negative in December. Belgian long-term interest rates followed the downward trend of the main European markets, but the spread with long-term German rates increased somewhat in the last quarter of the year (to 14 basis points).

# **Exchange rates**

Table 11 - Exchange rate (Belgian Francs per ...)

			ı				ı					
	96	97	97Q1	97Q2	97Q3	97Q4	97M8	97M9	97M10	97M11	97M12	98M1
German Mark	20.58	20.63	20.63	20.64	20.64	20.63	20.65	20.64	20.63	20.63	20.63	20.63
French Franc	6.05	6.13	6.11	6.12	6.13	6.16	6.13	6.14	6.15	6.16	6.16	6.16
Dutch Guilder	18.37	18.33	18.35	18.35	18.33	18.31	18.33	18.33	18.31	18.30	18.31	18.31
Italian Lira	2.01	2.10	2.09	2.09	2.12	2.11	2.11	2.12	2.11	2.11	2.10	2.10
British Pound	48.38	58.59	55.76	57.85	60.61	60.12	60.94	59.09	59.11	60.34	60.91	61.29
American Dollar	30.96	35.78	34.21	35.36	37.31	36.22	38.01	36.94	36.23	35.75	36.67	37.48
ECU	38.77	40.41	40.04	40.27	40.61	40.71	40.63	40.49	40.54	40.82	40.81	40.75

Source: NBB

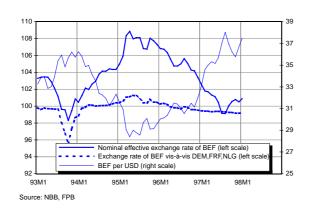
Table 12 - Nominal effective exchange rate of the Belgian Franc

	96	97	98	97Q1	97Q2	97Q3	97Q4	97M9	97M10	97M11	97M12	98M1
Level (Jan.92=100)	105.2	100.8		102.0	101.0	99.4	100.6	100.0	100.5	100.8	100.5	100.9
Growth rate [1]	-2.0	-4.2		-4.3	-3.9	-5.5	-3.2	-4.8	-3.6	-3.2	-2.8	-1.6
ld. with constant rate till year end			0.1									

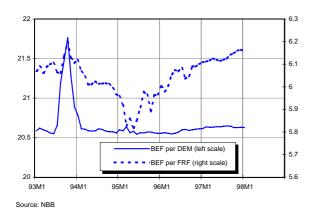
[1] Change (%) compared to same period previous year

Source: NBB, FPB

Graph 24 - Effective exchange rate (jan. 92=100) and dollar rate



Graph 25 - Belgian Francs per French Franc and Deutsche Mark



Between September and November 1997, the Us dollar weakened against the deutschemark as a result of the rise in German interest rates at the beginning October and the fall in the New York stock market. This was only temporary, however, since December the impact of the Asian crisis heightened the dollar's role as a "refuge currency". This led to the dollar rising to a peak of 1.84 deutschemark on the 20 January.

The short term prospects for the dollar exchange rate are highly dependant on how the Asian crisis evolves and its consequences in terms of the risk of Japanese funds withdrawing from the US market. The progressive slowing down of the US economy expected in 1998 and the continuing high current account deficit may dampen the dollar exchange rate against the European currencies. On the other hand, until the final selection of the countries participating in the euro (and the fixing of parities), the dollar will probably continue to play the role of "refuge currency".

For 1997 as a whole, BEF effective exchange rates fell by about 4.2% due to the appreciation of the dollar and the UK pound. However, during the last quarter of the year, the BEF strengthened somewhat and regained its central BEF/DEM rate.

# **Fiscal indicators**

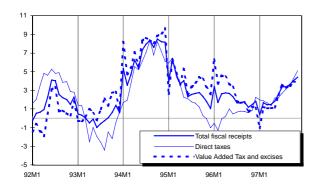
Table 13 - Fiscal receipts (1)

	95	96	96Q4	97Q1	97Q2	97Q3	97M6	97M7	97M8	97M9	97M10	97M11
Total	2.5	4.0	3.8	4.8	6.4	7.6	6.6	10.3	2.2	7.9	7.0	8.9
Direct taxes	4.1	3.2	2.5	6.1	6.6	6.9	10.0	11.2	-7.2	10.1	6.9	2.3
Withholding earned income tax	3.1	4.0	2.5	7.9	4.1	3.9	-17.0	37.0	-28.5	8.0	12.4	22.4
Advance payments	11.3	4.5	-1.0	-6.2	8.7	15.2	71.0	13.2	-150.0	-6.5	13.0	0.0
Value Added Tax and excises	0.4	4.4	5.7	3.2	4.8	8.0	0.9	8.7	10.3	4.2	9.1	14.7
Other	3.8	3.7	2.6	5.7	7.1	7.3	9.6	11.1	-4.9	10.3	6.0	4.9

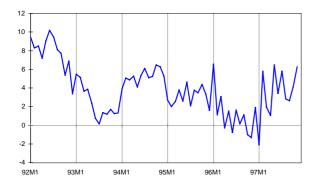
<sup>(1)</sup> Change (%) compared to same period previous year

Source: MvF/MdF, FPB

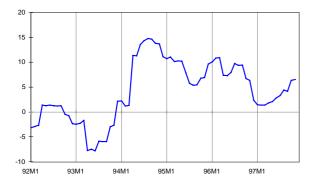
Graph 26 - Real total fiscal receipts (2)



Graph 27 - Real withholding earned income tax (2)



Graph 28 - Real advance payments (2)



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

Total tax receipts increased by 7% in 1997. The intra-year trend for 1997 and the composition of the receipts confirm what was said earlier about the economic cycle over the year.

The nominal growth rate for tax receipts increased over the year, while the inflation rate dropped. A real growth rate (after adjustment for inflation) of total tax receipts of 3% was observed in the first quarter, gradually rising to 7.5% in the last quarter.

This trend not only reflected the fact that the economy became stronger in the second half of the year, but also that the tax-content of growth has increased. The tax-content of domestic demand, and of private consumption in particular, is higher than that of exports.

Withholding tax on earned income and advance tax payments by companies and the self-employed increased faster than forecast. Part of the increase in withholding tax on earned income can be attributed to three factors: (1) shift to 1997 of some tax receipts (e.g. those linked to end-of-year wage supplements for employees of the French Community); (2) delayed repayment of some taxes and (3) the removal of indexation on tax brackets. These changes aside, the increase in withholding tax on earned income was still better than expected.

# Demographic ageing and the financing of social security: a sustainable challenge?

A fundamental reform of the pension system for the private sector was introduced in July 1997 (see the page "The background to recent major economic policy measures"). In preparing for this reform, the FPB assessed the financial impact of this reform on the Belgian social security system and on public finances as a whole. The study was based on new demographic patterns and led to a revision of the FPB long term outlook. The results of this broad and multidiscipline study were presented at a two-day Conference ("Demographic ageing and the financing of social security: a sustainable challenge?", 2 and 3 December 1997, Brussels).

Changes in population until 2050, the pension reform and its implications, the new long-term financial prospects for the Belgian social security system are presented in three separated publications (see summaries below).

The FPB is grateful to the Federal Office for Scientific, Technical and Cultural Affairs (SSTC-DWTC) for its contribution to the achievement of this project within the framework of the "public economics program".

# Population ageing: From the analysis of developments in population to the risk of making hasty conclusions

A valuable insight into the volume, structure and course of population is of singular importance for many public policies. Ageing will be, in this context, the major challenge for the decades to come. Long term analysis of the components of the population, from 1950 to 2050, helps to provide an understanding of how the phenomena work. The impact of changes in population alone on socio-economic aggregates is measured. Rapid comparisons with multidiscipline approaches, such as those using the MALTESE model, highlight the limitations of hasty conclusions based solely on demographic factors.

The ageing of the population is due to a combination of low fertility rates, below replacement level, and ever increasing life expectancy. These two factors are exacerbated by generations with a decreasing number of fertile women and, particularly around 2010-2030, by the late "baby-boom" generations reaching retirement age.

The latest figures for population prospects are the result of close cooperation between the National Institute for Statistics, the FPB and a large community of scientists and administrative users. As compared with the earlier edition of demographic forecasts, fertility assumptions are somewhat lower, life expectancy continues to grow but at a lower pace than at present, international migra-

tion results in a fall in net migration up to the year 2050. Alternative scenarios test variations of the parameters.

In the central scenario, deemed to be the most likely, the total population of Belgium would remain slightly above 10 million people between 1995 and 2050. More striking is the change in the structure of the life-groups. Older persons aged 60 or more would, in 2050, represent 32 percent, one-third, of the population (they represented 16 and 21 percent in 1950 and 1995 respectively). Demographic dependency ratios would increase significantly, especially for the elderly.

Following a more detailed analysis of the composition of the medium and older age groups, the paper estimates the impact of demographic changes alone on several socio-economic populations: students, active persons, pensioners and on the contribution rate theoretically necessary to finance pensions from work revenues, without any government intervention. From the purely demographic point of view, this rate would rise from 18 percent in 1996 to 31 percent in 2050. The exercise undertaken using the model MALTESE and incorporating various social, legislative, and economic factors, gives a a rate of 23 percent in 2050. The impact of these non-demographic factors is briefly discussed in the paper.

"Le vieillissement démographique. De l'analyse des évolutions de population au risque de conclusions hâtives".
"De vergrijzing van de bevolking. Over de analyse van de bevolkingsevolutie en het gevaar voor overhaaste conclusies".
M. Lambrecht, Planning Paper 81, November 1997.

# Public Pension Reform. A new generation entering into a new pension contract

In order to study the financial consequences of the postwar baby-boom generation reaching retirement age early next century, the FPB was asked to develop a longterm model, focusing on entitlement patterns and benefit levels in line with current legislation and with explicit specification of the policy parameters.

An analysis of the pension scheme for salaried workers highlights - in addition to demographic ageing - three major factors influencing pension expenditures:

- rising female work participation since the mid-sixties will entitle more women to their own pension as of 2005-2010;
- earnings-related pensions are affected by the spread between the evolution of wages and the increase of the wage-ceiling, since the amount of salary exceed-

ing the ceiling is not taken into account for the purposes of pension benefits. The replacement rate will decline for some future retirees because the ceiling was only linked to prices between 1982 and 1998;

 the difference between the indexation of pensions and the wage rate, throughout the duration of retirement, has an important impact on the general replacement rate, affecting the standard of living at various stages of life;

The current Pension Reform (Basic Law of 26/7/1996 relating to salaried and self-employed workers) comprises four main initiatives.

- To strengthen the legitimacy of the public pension scheme, a commitment was given to link the wageceiling to conventional wages. Moreover, welfare adjustments can be made for older pensioners.
- 2. To align gradually the retirement age of men and women, increasing from 60 to 65 for women. In the same transitional period, 1997-2009, the calculation of female pensions will change from a 40 to 45 years base for a full career. Early retirement can be applied for from the age of 60, provided the criteria of a minimum career of 35 years is satisfied. For women, this starts with a minimum of 20 years in 1997, increasing annually by two years, to reach 35 years by 2005.
- 3. To support retirees who held low paid jobs (mainly female retirees), a new minimum-claim scheme is provided for each year in the career, provided it amounts to a minimum of at least 15 years and a working time of at least one-third or an authorised inactivity period.
- To adapt the pension scheme to the recent more flexible working programs, some periods of inactivity will now be assimilated to years in service.

Taking into account the new Pension Act with an indexation of the ceiling in line with wages (i.e. 1.75 percent) and assuming partial welfare adjustments of 0.5 percent (as compared with 2.25 percent productivity growth), public pension expenditure for salaried and self-employed workers will fall from 6.6 percent of GDP in 2000 to 6.5 percent in 2010, rising to 8.4 percent when the baby-boom generation retires in 2030, and to 8.1 percent in 2050 as this generation becomes older, with pension benefits being eroded by the partial welfare adjustments.

The new Pension Act will reduce retirement benefits in 2010 by 0.5 percent of GDP. The impact of the higher retirement age will be partially offset by bridging benefits for unemployment, disability and pre-retirement. The net saving, mainly as a result of women returning to inactivity without a social allowance, will be 0.2 percent of GDP in 2010, slowing to 0.05 percent thereafter as the new basic support for women reaches maturity. In spite

of the modest results of the Pension Reform on the social expenditure, the overall impact on the budget should not be underestimate since continued savings lasting more than a decade before the baby-boom generation retires (see Planning Paper n° 83).

"De pensioenhervorming", "La réforme des pensions", Marie-Jeanne Festjens, Planning Paper 82, November 1997.

# Financial outlook for Social Security for the year 2050

Many European countries will soon be faced with the process of demographic ageing. In Belgium, the critical years will be between 2010 and 2030. This prospect leads to some worrying questions about the survival of the pension scheme and the future of the Belgian social security system.

The MALTESE system (Model for Analysis of Long Term Evolution of Social Expenditure), used for simulating the long term financial outcome for Social security, takes into account demographic trends, macro-economic and socio-economic parameters, as well as social welfare policy. Changes in the social security accounts is considered within the framework of the general government account.

The various scenario's are all based on the central scenario for the 1995-2050 demographic trends and encompass the pension reform (see the two publications mentioned above).

In the MALTESE baseline scenario, between 2000 and 2030, pension (private and public) and health expenditure would rise, whereas other social expenditure would fall. Although total social expenditures would increase, this rise would seem relatively modest as compared with the increase in the purely demographic dependency coefficients. These results are not only due to opposite trends in the number of beneficiaries in the different schemes but also to complex changes in average benefits.

Nevertheless, social security will be in deficit for almost fifty consecutive years. However, thanks to the long and painful process of fiscal consolidation of the last 17 years, the budget should be in balance (in compliance with the Stability and Growth Pact) arround 2008 and the debt ratio should reach 60 percent of GDP in the second decade (despite the budgetary cost of ageing). Assuming that budgetary policy would exclude budgetary surpluses, additional budgetary leeway or "margins" would have to be developed, amounting to 1.9 percent of GDP in 2030 in the baseline scenario.

The results of the baseline scenario show that the financial consequences of ageing could be mastered under far from unrealistic macroeconomic, budgetary and social policy conditions.

Alternative macroeconomic scenarios show the importance of economic growth and employment patterns. Growing employment would produce larger budgetary margins but might also cause long run labour shortages that might impede economic growth. In turn, slower economic growth would then considerably reduce budgetary margins. Alternative Social policy scenarios focus on the specific effects of different rates of welfare

adjustment of benefits and of wage ceilings. Weak adjustment of ceilings would lead to a drift towards a lump sum allowance system in the long term; moreover, the spread between the rate of welfare adjustment of benefits and ceilings would appear to have strong implications for the distribution of benefits between new and older beneficiaries.

"Perspectives financières de la Sécurité Sociale à l'horizon 2050". "Verkenning van de financïele evolutie van de Sociale Zekerheid tot 2050". N. Fasquelle, S. Weemaes, Planning Paper 83, November 1997.

# **Modelling the Essen Employment Priorities**

This Planning Paper presents the main simulation results of a study carried out by the FPB in 1996 for the DG V of the European Commission. In this study, the macroeconomic effects of various types of policies in favour of employment in respect of Germany, France and Belgium are evaluated.

In its White Paper of 1993 on growth, competitiveness and employment, the European Commission stressed the need for policies in favour of employment at a European level. In the wake of this White Paper, the European Council which took place in Essen in December 1994 identified five prioritiies with regards to employment.

DG V of the European Commission asked the FPB to carry out an evaluation of the macroeconomic and employment effects of the implementation of policies resulting from these priorities, using for this purpose the HERMES-Link system of econometric models. The study considers three Member States of the European Union, namely Germany, France and Belgium, and attempts to evaluate the economic implications of five different types of measures related to Essen priorities.

The first part evaluates the effects of wage moderation policies. The results of both productivity-oriented wage moderation as well as real wage freeze policies, implemented within a concerted and simultaneous framework by Germany, France and Belgium are presented. It is shown that wage moderation, and more particularly wage freeze policies, can lead to substantial increases in employment, mainly through factor substitution mechanisms. It is also shown that such policies can lead to higher growth through increased competitiveness, though this increase in output is attained at the expense of a fall in domestic demand and produces recessive effects on main trading partner countries.

The second part examines the impact of reductions in employer Social security contributions. Simulation experiments were carried out for both general and targeted reductions. The simulations show that these measures have a positive effect on employment and output, while leading to non-negligible increases in the budget deficits for social security. Furthermore, the models show that targeted measures seem to produce more important effects on employment than general measures.

The third part of the study analyses the consequences of working time reduction - reorganisation schemes. It is shown that working time reduction policies are efficient in promoting employment, inasmuch as they do not lead to production cost increases for firms. These increases in production costs can be effectively contained through work reorganisation schemes and/or parallel reductions in employers' social security contributions.

The fourth and fifth parts evaluate the effects of policies aimed at promoting new employment creation opportunities. In the fourth part, an analysis is made of the possible economic effects of the development of neighbourhood or close-to-home services, financed through a government subsidy on consumption of these new services. Finally, in the fifth and last part of this study, an attempt is made to characterise the emerging environmental or "green" sectors and the nature of the related employment. The section concludes with the presentation of a simulation experiment concerning the employment, growth and environmental effects of fiscal policies aimed at the promotion of BAT (Best Available Technologies) in Europe.

"Modélisation des priorités d'Essen en matière d'emploi". "De prioriteiten van Essen inzake tewerkstelling". F. Bossier, I. Lebrun, S. Mertens, C. Streel, P. Van Brussselen, Planning Paper 84, January 1998.

## **Other Recent Publications**

Medium Term Economic Outlook 1997-2001, April 1997 (available in Dutch and in French).

Economic Forecasts 1998, Februari 1998 (available in Dutch and in French).

Planning Paper 80, September 1997.

K. Hendrickx, L.Masure, S. Schüttringer, "Quarante années d'évolution de la durée du travail en Belgique"-"Veertig jaar arbeidsduurontwikkeling in België". Working Paper 3-97, October 1997.

I. Bracke, E. Meyermans, "Specification and estimation of an allocation system for private consumption in Europe".

Working Paper 4-97, November 1997.

T. Bréchet, I. Lebrun, "La proposition Rocard de réduction du temps de travail: une évaluation micro-macro".

Delokalisatie-Mondialisering, een actualisatierapport over België. Delocalisation-Mondialisation, un rapport d'actualisation concernant la Belgique, 1997.

P. Bernard, H. Van Sebroek, H. Spinnewijn,

P. Vandenhove, B. Van Den Cruyce, 1997.

# **Forthcoming Publications**

Demographic aging and the financing of social security: a sustainable challenge? Reports of the two-day conference organized by the FPB, on December 2 and 3 1997, in Brussels.

Medium term economic outlook 1998-2003. The new Spring outlook focuses on changes in the labour market, in public finances and in the other main economic aggregates. Emphasis is also placed on future changes in energy consumption and CO2 emissions. The impact of the Asian crisis is also taken into account in a separate chapter. As usual, a series of detailed tables, describing every aspect of the Belgian economy, is given in annex.

## Personal income taxes in Belgium: a macroeconomic analysis.

This methodological and empirical study focuses on the following topics: the pattern of so-called "tax progressivity" over the past 25 years, the impact of the latest tax reforms on tax elasticity, the consistency of enrolled tax bases and macroeconomic revenues, the fiscal contribution of specific income categories, the wage wedge and taxes on labour, and the proposal for a model for personal income taxes.

Macro-economic factors determining labour demand. The quantitative pattern of employment over time and its main determining factors in Belgium as compared with its most important trading partners is described. Moreover, an overview is given of the macro-economic and budgetary impact of labour market policies to encourage job creation that have been the subject of recent research by the FPB.

ExternE project: case study. Since 1991 the Directorate General XII of the European Commission has sponsored the ExternE project to develop an appropriate methodology for quantifying external environmental costs for different fuel cycles in electricity generation. Currently, the ExternE accounting framework is implemented within all EU countries, including Belgium. The objective of the small policy case study drawn up by the FPB was to provide some insight into ExternE damage costs for the Belgian electricity sector in relation to the structuring of electricity taxes.

The sustainable development project. Five years after the Earth Summit: Five years after RIO. The study looks at progress made in the project of sustainable development on an international basis. The purpose is to inform the public authorities, politicians as well as the general public about the concept of 'global approach'. The study is based on information with regard to progress with the Action 21 programme for sustainable development.

The 1985 input-output table. In December 1994, the FPB was commissioned to compile input—output tables. Since data for the 1995 table was lacking and with a view to gaining experience in this field, a table for 1985 has been drawn up based on a a somewhat mechanical method. The publication will describe the framework, the definitions and the estimation methods and will outline various applications of input-output analysis such as the link between final demand and primary inputs, the cost composition of output and the import content of output.

# **Forthcoming Events**

Globalisation, Dislocation. The FPB organizes a one day Conference in May related to "Globalisation, Dislocation" (a book of 350 pages will be presented at the Conference). Both Belgian and international experts from the academic and business world will give their opinion on the meaning and impact of globalisation. More details and the program will become available in the near future. Interested persons could already contact Mr. H. Dekens (tel. +32 2 507 73 41).

## Recent history of major economic policy measures

October 1997

July 1997

The 1998-Budget was presented to the Parliament. Employers' contributions are to be cut by a further 6 billion BEF in 1998, and by 12 billion in 1999. The Justice Department is to receive an extra 4 billion BEF. Three one-off receipts: 8 billion from a third telephone operator; 2.4 billion from pharmaceutical companies and 1.5 billion from electricity producers.

- Changes in the pension system for the private sector were introduced. Men and women will gradually be treated equally in the calculation of their pension. Consequently, the legal retirement age for female workers will rise to 65. Anticipated retirement between 60 and 65 will henceforth only be allowed to workers with a career of minimum 20 years. This condition will be progressively increased to 35 years in 2005. A minimum pension right for every year worked was also introduced. The savings for government of these changes are evaluated by the FPB to be limited in the near future but will amount to 0.25% of GDP in 2010.
- The EU-Amsterdam Summit extended the "Stability and Growth Pact" to include an employment chapter. Countries with budget deficits above 3% of GDP could receive fines between 0.2% and 0.5% of GDP unless there are exceptional circumstances (e.g. an economic recession).
- The Federal Government extended and changed the criteria for Maribel: reduction of employers' social security contributions are based on the 'blue-collar intensity<sup>a</sup> of each company; the total reduction of contributions is increased from 18 to 25 billion.

The Federal Government decided that the maximum increase of the wage cost rate (per hour) would be 6.1% over 1997-98, as the Social partners were unable to reach an agreement earlier.

October 1996

December 1996

The Federal budget 1997 was presented to Parliament. The major measures were:

- Increase in excise taxes on petroleum and tobacco products and alcohol expected impact (excise taxes and VAT on excise taxes included): 1.2 billion in 96 and 13.2 billion in 97-;
- Non-indexation of tax brackets in 97 and 98 expected impact: 5.4 billion BEF in 97-.
- · Taxes on the delivery of financial products expected impact: 4 billion BEF in 97-.

August 1996

Three framework laws gave the Government extensive powers to encourage employment and competitiveness, as well as in the area of budgetary policy with a view to joining EMU and modernising the social security system. One of the laws defined a wage norm providing for a minimum and maximum increase of the hourly compensation.

October 1995

Federal Budget 1996 was presented with the main measures as follows:

- $\bullet \quad \text{Excise taxes on petroleum products were increased (expected impact: 8.6 billion in 96, {\tt VAT included});}\\$
- The 20.5% VAT rate was increased to 21% (expected impact: 12 billion in 1996) from January 96 onwards;
- "Tax" on diesel cars (expected impact: 8 billion in 1996);
- The withholding tax rate was increased to 15% from January 1996 onwards (after increases from 10% see January 90 to 10.3% in July 1993 and 13.39% in the beginning of 1994);
- Extension of the number of "low paid workers" entitled to benefit from lower social security contributions to workers with a gross wage of up to 60,000 BEF per month (applied from April 96 onwards).

Januari 1994

The 19.5% VAT rate was increased to 20.5%. Excise duties on petroleum and tobacco products were also increased

November 1993

The Federal Government presented its 'Global plan'. The main measures were as follows:

- A new price-index was defined (the so-called 'health-index') as the CPI excluding: petroleum and tobacco products, alcohol and a new tax on household energy consumption. This price index would be used to link wages, house rents and social expenditure to prices;
- A real wage-freeze in 1995-96;
- Increase in indirect taxes (see January 1994);
- Reduction of social security contributions.

August 1993

- The EMS fluctuation bands were widened.
- · Reduction of employers contributions to social security in the "open sector" (so-called Maribel bis).
- Several measures to encourage employment by reducing employers contributions to social security
  (e.g. the "Youth employment plan" August 93 -, a measure aimed at low wage earners, leading to a
  reduction of labour costs by up to 12% for the lowest paid employees April 94- and the "Advantage
  plan" January 95 -.)

April 1992

VAT rates were aligned with EU norms

June 1990

The National Bank of Belgium announced that the BEF would be more closely linked with the stronger currencies of the EMS.

January 1990

The withholding tax rate on fixed income investments was reduced from 25% to 10% from March 90 onwards.

23

### Abbreviations for names of institutions used in this publication

BLEU/UEBL Belgisch-Luxemburgse Economische Unie / Union Economique Belgo-Luxemburgeoise

DULBEA Département d'Economie Appliquée de l'Université Libre de Bruxelles

FÉBIAC Fédération Belge des Industries de l'Automobile et du Cycle "reunies"

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

IWH Institut für Wirtschaftsforschung Hamburg

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

DEM Deutsche Mark

European Currency Unit

EMS European Monetary System

European Monetary Union

FRF French Franc

GDP Gross Domestic Product

OLO Obligations linéaires / Lineaire obligaties

s.a. seasonally adjusted

t/t-4 growth rate between present quarter and the corresponding quarter previous year

t/t-12 growth rate between present month and the corresponding month previous year

UKP United Kingdom Pound

USD United States Dollar

VAT Value Added Tax