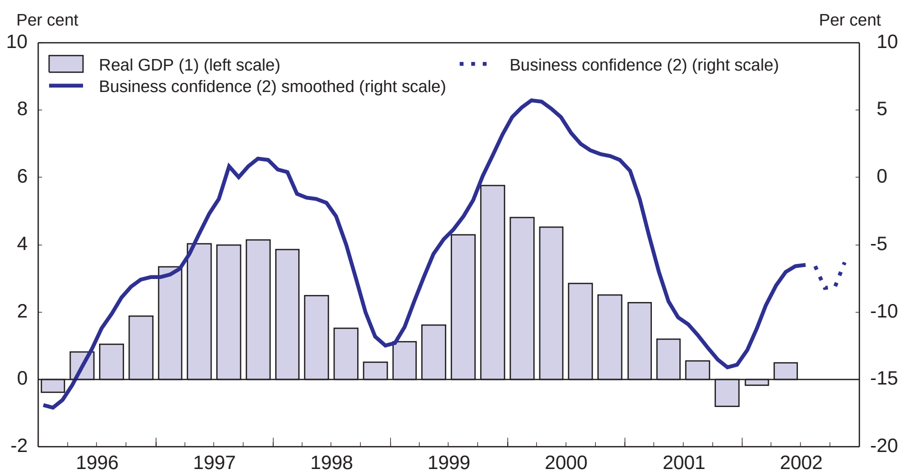
I. Recent economic developments and prospects

Economic activity slowed sharply from the beginning of 2000, with growth reaching a trough in the fourth quarter of 2001 before recovering somewhat in 2002 (Figure 1). The slowdown in the Belgian economy was largely in step with that in the euro-zone economy although, as usual, the Belgian cycle slightly leads the euro-zone cycle (probably owing to specialisation in intermediate manufactured goods) and has larger amplitude (owing to the relative openness of the economy) (Figure 2). The main cause of the slowdown was the deterioration in the international business climate, which resulted in less demand for Belgian exports and reduced business profitability. Domestic demand was also weakened somewhat

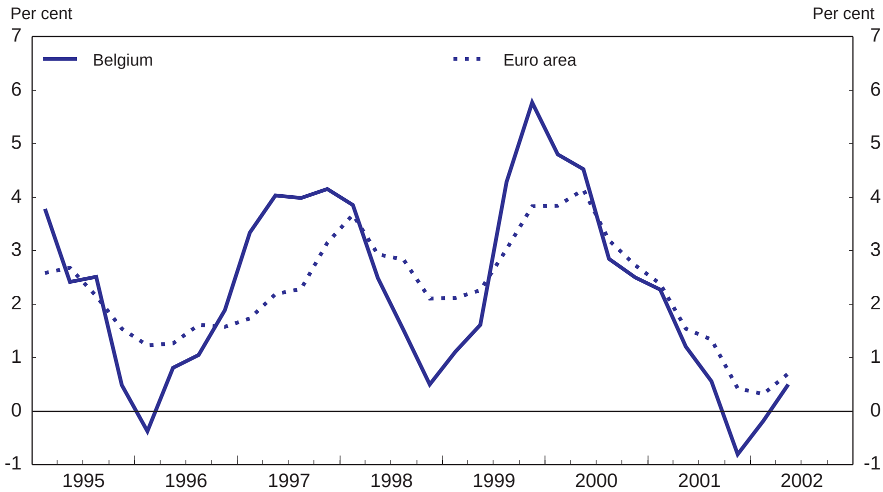
Figure 1. **Growth and the NBB's business cycle indicator**



1. Percentage changes from corresponding quarter of the previous year.
2. Monthly, seasonally adjusted.

Source: National Bank of Belgium and National Accounts Institute.

Figure 2. **Real GDP growth in Belgium and the euro area**[1]

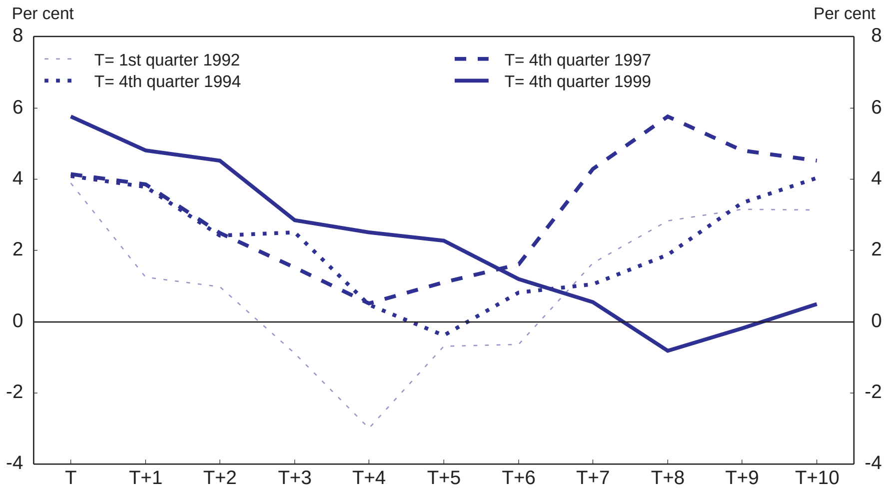


1. Percentage changes from corresponding quarter of the previous year.
Source: Eurostat and National Accounts Institute.

by the loss of purchasing power resulting from increases in energy prices. Declining consumer confidence further weakened domestic demand growth. Employment growth slowed with the usual two to three quarter lag and unemployment began to rise in the last quarter of 2001, after having reached the lowest rate (6.6 per cent for 2001) in 10 years. The slowdown has eased tensions on production capacity that had emerged during the upswing. The OECD estimates that the output gap has fallen from 1.7 per cent of potential GDP in 2000 to minus 1.5 per cent in 2002. This, together with appreciation of the euro, the passing of the food price shock and the abolition of the radio and television licence fees in Flanders and Brussels, has contributed to a sharp fall in inflation to around 1½ per cent in 2002.

This slowdown was more drawn out than the previous three cyclical downturns (Figure 3). It took eight quarters for growth to fall from its cyclical peak (which was 2 percentage points higher than in the previous cycles) to trough, approximately twice as long as during the earlier episodes. The upturn in growth since the trough has also been weaker than in the past. The Belgian National Bank's business cycle indicator, which reflects underlying cyclical developments in the manufacturing-, retail- and construction sectors, points to continuing recovery in coming months, although the recent declines in this indicator suggest that the recovery

Figure 3. **Comparison with recent business cycles**[1]



1. Percentage changes in real GDP from corresponding quarter of the previous year.
Source: National Accounts Institute.

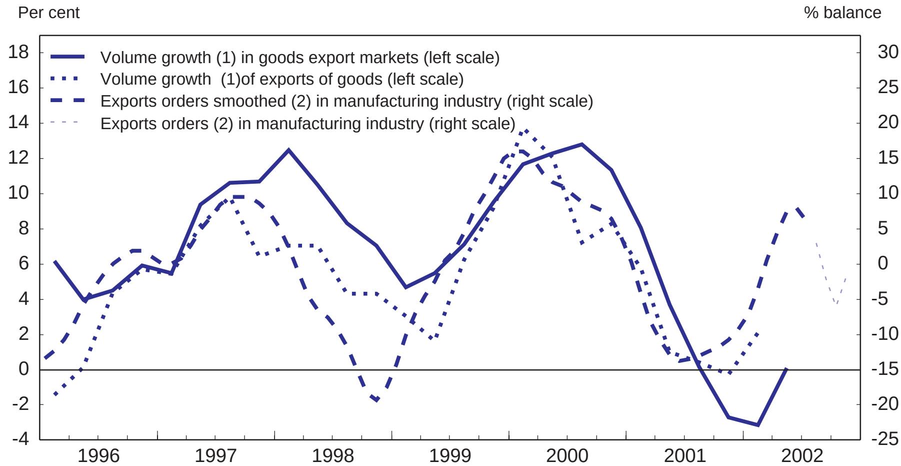
could remain hesitant for some time (see Figure 1). The OECD projects that growth will remain subdued over coming months but, as export markets recover, will progressively rise to potential (around 2½ per cent) during the course of 2003 and will strengthen further thereafter. On this basis, annual average GDP growth is projected to rise from an estimated 0.7 per cent in 2002 to 2¾ per cent in 2004, though a modest negative output gap would remain.

Recent economic developments

The international downturn has slashed export growth

After reaching a peak in early 2000, export market growth plunged, taking down export growth in its wake (Figure 4).[1] The decline in growth in both export markets and in export volumes continued unabated until early 2002, when the first signs of stabilisation in export markets began to appear. There was also a marked improvement in manufactured export orders at this time, pointing to a recovery in exports. Unfortunately, this improvement did not last because the projected US-led recovery was weaker than expected, with export orders subsequently falling back almost to the low levels recorded in late 2001. For the time being, there are no signs of a sustained pick-up in manufacturers' export orders. In annual average terms,

Figure 4. **Export volumes, export market growth and export forward orders**



1. Percentage change from corresponding quarter of the previous year.
2. Monthly, seasonally adjusted.

Source: National Bank of Belgium and National Accounts Institute.

growth in the volume of exports of goods and services fell from 8.2 per cent in 2000 to 1.1 per cent in 2001 and is estimated to have fallen further in 2002 (Table 1).

Given the high degree of openness of the Belgian economy (exports represent about 75 per cent of GDP), this has meant that exports have gone from having a large contribution to growth in 2000 to having a negative contribution (Table 2). As Belgium's exports have a high import-content, these effects on growth have been largely offset by related movements in imports. Indeed, import growth fell by as much as export growth in 2001, with the result that net exports made the same positive contribution to growth as in 2000. With some restocking expected, the contribution of net exports to growth is estimated to fall in 2002.

Belgium has lost export market share over recent years, although this loss was much smaller during this downturn than during the previous expansion (see Figure 4). This structural loss of market share, which averages about 1 percentage point per year, is largely attributable to Belgium's export product mix. It specialises in intermediate products (such as chemicals and steel) that have lower structural growth than, for example, machines and equipment (which includes computers). Adjusted for its product mix, Belgium's export market share has been broadly stable in recent years.

Table 1. **Demand and output**[1]
Percentage change, volume[2]

	1999	2000	2001	2002[3]	2001 I	2001 II	2002 I
Private consumption	2.2	3.4	0.9	0.6	1.3	–0.8	1.3
Government consumption	3.6	2.3	2.2	1.5	2.4	0.6	1.9
Gross fixed capital formation	4.3	4.1	0.5	–2.2	4.3	–7.2	–0.6
Public sector	19.4	1.9	–11.8	–3.7	–5.1	–31.4	39.1
Excluding sale of public buildings			–6.2	–4.2			
Private sector	3.1	4.3	1.6	–2.1	5.2	–4.9	–3.3
Residential	5.7	0.9	–2.0	–0.1	–2.9	–1.3	–4.0
Non-residential	2.2	5.5	2.9	–2.8	8.1	–6.1	–3.0
Excluding purchase of public buildings			2.2	–2.8			
Final domestic demand	2.9	3.3	1.1	0.2	2.2	–1.9	1.0
Stockbuilding[4]	–0.5	0.3	–0.6	0.6	–1.2	–0.4	0.6
Export of goods and services	5.0	8.2	1.1	–0.8	0.9	–4.7	–2.7
Import of goods and services	4.1	8.4	0.8	–0.8	1.4	–6.8	–2.5
Foreign balance[4]	0.9	0.3	0.3	–0.1	–0.3	1.4	–0.3
Statistical discrepancy[4]	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GDP at market prices	**3.2**	**3.7**	**0.8**	**0.7**	**0.6**	**–0.8**	**1.2**
Memorandum:							
Output gap	0.3	1.7	–0.2	–1.7	0.9	–0.9	–1.5
Gross operating surplus	2.3	7.9	2.7				
GDP current prices	4.6	5.0	2.8	3.5	2.3	1.8	3.7
Investment current prices (per cent of GDP)	20.9	21.2	20.8	19.9	21.2	20.3	19.8
Current balance (per cent of GDP)	4.8	3.8	3.8	5.8	3.1	4.4	6.1

1. Figures for 1999-2001 refer to the non-working days adjusted concept while all quarterly figures refer to working days adjusted statistics. For some components, the difference in the yearly average change may be sizeable.
2. Semi-annual data are seasonally adjusted; annualised growth over previous period.
3. Projections.
4. Contribution to GDP growth.

Source: National Bank of Belgium and OECD, *National Accounts*.

Destocking, which cut growth in 2001, has slowed

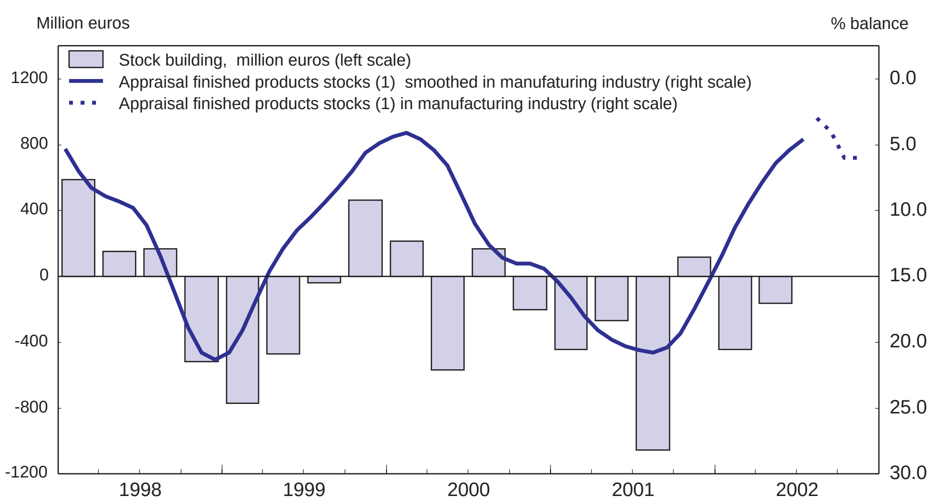
In the face of sharply deteriorating demand prospects, firms drastically cut stock levels during the first three quarters of 2001, as also occurred in other euro-zone countries (Figure 5). This adjustment reduced GDP growth by 0.6 percentage point in 2001 (see Table 2). Destocking has considerably decelerated since the fourth quarter of 2001. As manufacturers have been reporting that stock levels are appropriate since the beginning of 2002, it seems likely that a restocking phase should become apparent as soon as final demand gains strength. In any case, due to lower destocking than in 2001, the change in stock building is estimated to contribute 0.6 percentage point to GDP growth in 2002.

Table 2. **Contributions of expenditure components to GDP growth**[1]

	1999	2000	2001	2002[2]
Private consumption	1.2	1.8	0.5	0.3
Government consumption	0.7	0.5	0.4	0.3
Investment	0.9	0.9	0.1	–0.5
Stockbuilding	–0.5	0.3	–0.6	0.6
Total domestic demand	2.3	3.4	0.4	0.8
Exports	3.8	6.3	0.9	–0.7
Imports	2.9	6.0	0.6	–0.6
Net exports	0.9	0.3	0.3	–0.1
GDP growth	3.2	3.7	0.8	0.7

1. Figures for 1999-2001 refer to the non-working days adjusted concept while all quarterly figures refer to working days adjusted statistics. For some components, the difference in the yearly average change may be sizeable.
2. Projections.
Source: OECD.

Figure 5. **Stock building and manufacturers' assessment of the adequacy of stock levels**



1. Monthly, seasonally adjusted.
Source: National Bank of Belgium and National Accounts Institute.

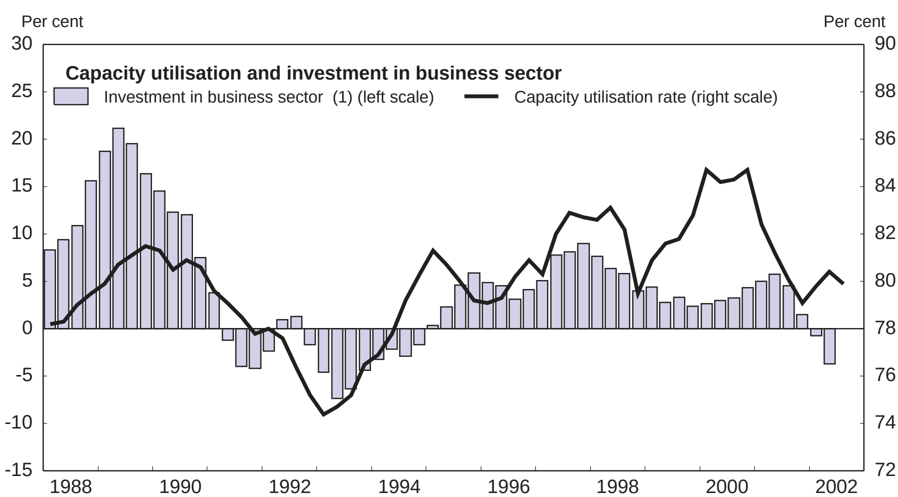
A *weakening business environment has reduced investment*

In view of weak demand conditions and uncertainty about the strength and timing of the economic recovery, firms also adopted a more cautious approach to business investment, with growth dropping to 1.1 per cent in 2001 (0.4 per cent excluding purchases of public buildings). Deteriorating profitability (see Table 1) and rising credit risk margins also contributed to this weakening in business investment expenditures. Capacity utilisation in manufacturing declined from a peak of around 85 per cent in 2000 to 79 per cent in late 2001 but has since increased slightly, albeit remaining below average levels for the past decade (Figure 6). This suggests that manufacturers may still face some pressure to cut production capacity somewhat, and hence investment. In these circumstances, business investment is likely to remain subdued in 2002.

Deteriorating consumer confidence has weakened growth in consumption expenditure

The deteriorating economic outlook took its toll on consumer confidence and growth in consumer expenditure, which fell sharply from the end of 2000 until the end of 2001 Households brought growth in consumer expenditures more into line with growth in disposable incomes in 2001, reducing the decline in the household savings ratio from that which had occurred in previous years (Table 3); the

Figure 6. **Capacity utilisation and business investment**



1. 3-month moving average.
Source: Eurostat and National Bank of Belgium

Table 3. **Household appropriation account**
Current prices, percentage change

	1997	1998	1999	2000	2001	2002e[3]	2002e
Gross primary income	3.2	3.3	3.2	5.1	3.5	3.6	3.6
of which:							
Wages and salaries	4.1	3.4	5.2	4.6	5.2	3.5	3.5
Employment	0.9	1.8	1.3	1.9	1.4	–0.2	–0.2
Salary per employee	3.2	1.6	3.9	2.7	3.7	3.8	3.8
Current net transfer payments[1]	7.9	4.8	4.3	5.9	6.2	2.4	0.6
Gross disposable income	2.2	2.9	2.9	4.9	2.8	4.0	4.4
At constant prices[2]	0.5	1.9	1.6	2.6	0.3	2.1	2.5
Final consumption expenditure	4.0	4.1	3.4	5.6	3.5	2.1	2.5
At constant prices	2.3	3.0	2.2	3.3	1.0	0.2	0.6
Savings ratio	15.7	14.5	14.1	13.4	13.0	14.5	14.5

1. This is the difference between transfers paid to other sectors and transfers received from other sectors, excluding transfers in kind.
2. Data deflated by the final household consumption deflator.
3. Excluding pure accounting effects from the change in National Accounts classification of public broadcasting enterprises (they have been transferred to the public administration sector).

Source: National Accounts Institute and National Bank of Belgium.

household savings ratio fell by 6.1 percentage points between 1993 and 2000. This change in behaviour was undoubtedly in response to the worsening outlook for employment which, together with an uptick in inflation, reduced growth in disposable income and affected confidence. Growth in consumption expenditures is estimated to weaken further in 2002, owing to less employment growth and an increase in the household savings ratio.[2] The increase in the savings ratio may partly be attributable to households anticipating tax cuts, as they appear to have been doing over 1993-2000 when they ran down the savings ratio as public debt (future taxes) fell, with the result that the savings ratio rose when the tax cuts actually occurred.

Wealth effects do not have a very large impact on consumption expenditures in Belgium. The National Bank of Belgium (NBB, Banque Nationale de Belgique,) estimates that the marginal propensity to consume out of financial wealth is only 1 cent per euro.[3] This may in part be explained by Belgian households' preference for a low-risk portfolio. Fixed interest investments are relatively popular in Belgium. Moreover, most shares held by households are in non-quoted companies (mostly family-owned companies). These shares are relatively illiquid, making it difficult to draw on them or borrow against them to support consumption expenditures. In all, listed shares comprise only a small proportion of households' financial assets.[4] Real estate wealth effects are also likely to be rather small by international comparison as real estate represents a smaller proportion of total wealth than in many other countries owing to relatively low prices in Belgium. Moreover, cashing out increases in home equity from capital gains is rare.

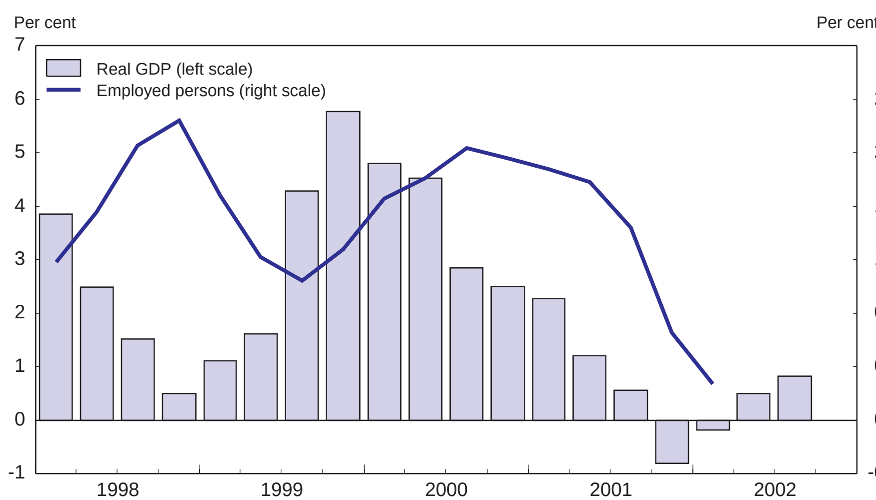
Residential construction remains subdued

Residential construction has been subdued since 1999, although it did strengthen slightly (in year average terms) in 2001 in response to lower interest rates and rising rents. Nevertheless, the indicator of the volume of committed residential construction projects with architects declined throughout 2001. This, together with the more morose economic outlook points to weaker residential investment in 2002.[5]

Employment growth has fallen and unemployment has edged up

Employment growth held up during the initial stages of the economic slowdown in 2000 but began to fall from early 2001 (Figure 7). Growth in hours worked has fallen only slightly more than employment, indicating that employers have not made heavy use of reductions in working time (notably, less overtime) to reduce labour inputs. This contrasts with the previous period of labour market weakness (1998-99) and suggests that employers expect the current slowdown to be too deep and/or too long lasting for reductions in working time to be an adequate response. The standardised unemployment rate began to increase in late 2001 from around 6.5 per cent, the lowest rate in 10 years, to 7.0 per cent by late-2002 (roughly the OECD estimate of the NAIRU). The registered unemployment rate[6] began to

Figure 7. **Growth in activity and employment**[1]



1. Percentage changes from corresponding quarter of the previous year.
Source: National Accounts Institute and National Bank of Belgium.

Table 4. **Unemployment and job vacancies**

	1997	1998	1999	2000	2001	2002[1]
Belgium						
Unemployed[2] (thousand)	570	541	508	474	470	488
Unfilled vacancies (thousand)	25	36	44	53	46	41
Unemployed per unfilled vacancies	23	15	12	9	10	12
Unemployment rate[3]	9.2	9.3	8.6	6.9	6.6	6.8
Memorandum:						
Unemployment rate[4]	13.3	12.6	11.7	10.9	10.8	11.2
Brussels						
Unemployed[2] (thousand)	77	77	73	70	71	78
Unfilled vacancies (thousand)	2	3	3	3	2	2
Unemployed per unfilled vacancy	39	28	25	25	28	40
Unemployment rate[3]	13.7	14.5	14.2	11.4	11.0	..
Wallonia						
Unemployed[2] (thousand)	252	250	242	235	229	223
Unfilled vacancies (thousand)	5	8	8	7	7	7
Unemployed per unfilled vacancy	50	31	32	32	33	31
Unemployment rate[3]	12.7	13.8	13.5	11.0	10.6	..
Flanders						
Unemployed[2] (thousand)	241	214	192	170	170	187
Unfilled vacancies (thousand)	18	25	34	43	37	32
Unemployed per unfilled vacancy	14	8	6	4	5	6
Unemployment rate[3]	6.5	6.3	5.7	4.1	3.8	..

1. Estimates calculated from January to October growth rates except for the unfilled vacancy series in Belgium and Brussels where estimates are calculated from January to September growth rates.
2. Registered unemployed: unemployment persons entitled to benefit, young workers during the waiting period, voluntarily registered persons and other unemployed jobseekers.
3. Standardised unemployment rates.
4. Registered unemployment rate.

Source: National Bank of Belgium

increase in mid-2001 from 10 per cent, a local minimum (though higher than the 9 per cent trough at the top of the cycle in the early 1990s), reaching 12 per cent by late-2002.

Labour market tensions have eased somewhat since 2000. With unemployment rising, the number of job vacancies notified to regional employment offices has declined, raising the number of unemployed persons per job vacancy from 9 in 2000 to an estimated 12 in 2002 (Table 4). Nevertheless, acute structural labour shortages persist owing to the mismatch between the qualities sought by employers (competencies, experience and qualifications) and those possessed by the unemployed (CEFORA and UPEDI, 2002). The number of unemployed persons per job vacancy increased slightly in Flanders over 2000-02 but decreased slightly in Wallonia. There continue to be far fewer unemployed persons per job vacancy in Flanders than in the other two regions.

Inflation is falling

Underlying inflation began to rise in 2000 and accelerated sharply until early 2002 (Figure 8). In addition to business cycle pressures and the depreciation of the euro, this profile reflected the indirect effects of the increases in energy prices and unprocessed food prices. The introduction of the euro may also have temporarily pushed up underlying inflation by about 0.2 percentage point (NBB, 2002a). Underlying inflation has fallen from a peak of 2.7 per cent in the first quarter of 2002 to below 2 per cent in recent months. Part of this reduction is attributable to the abolition of the television licence fee in Flanders and Brussels.[7] Other factors, which will also continue to reduce underlying inflation for some time to come, are the progressive passing of the indirect effects of the energy and food price shocks of 2000-01 and the substantial weakening in import- and industrial production prices in 2001(which have delayed effects). The weak stage of the business cycle should also contribute to a decline in underlying inflation in coming months. However, higher increases in unit labour costs relative to the period before 1999 (which, owing to indexation, partly result from the rise in inflation in 2000 and 2001) mean that underlying inflation is unlikely to fall back to the very low rates recorded in the late 1990s. Headline inflation has fallen by even more than underlying inflation, to only 1.2 per cent in recent months, owing to the passing of energy and food price shocks (Table 5).

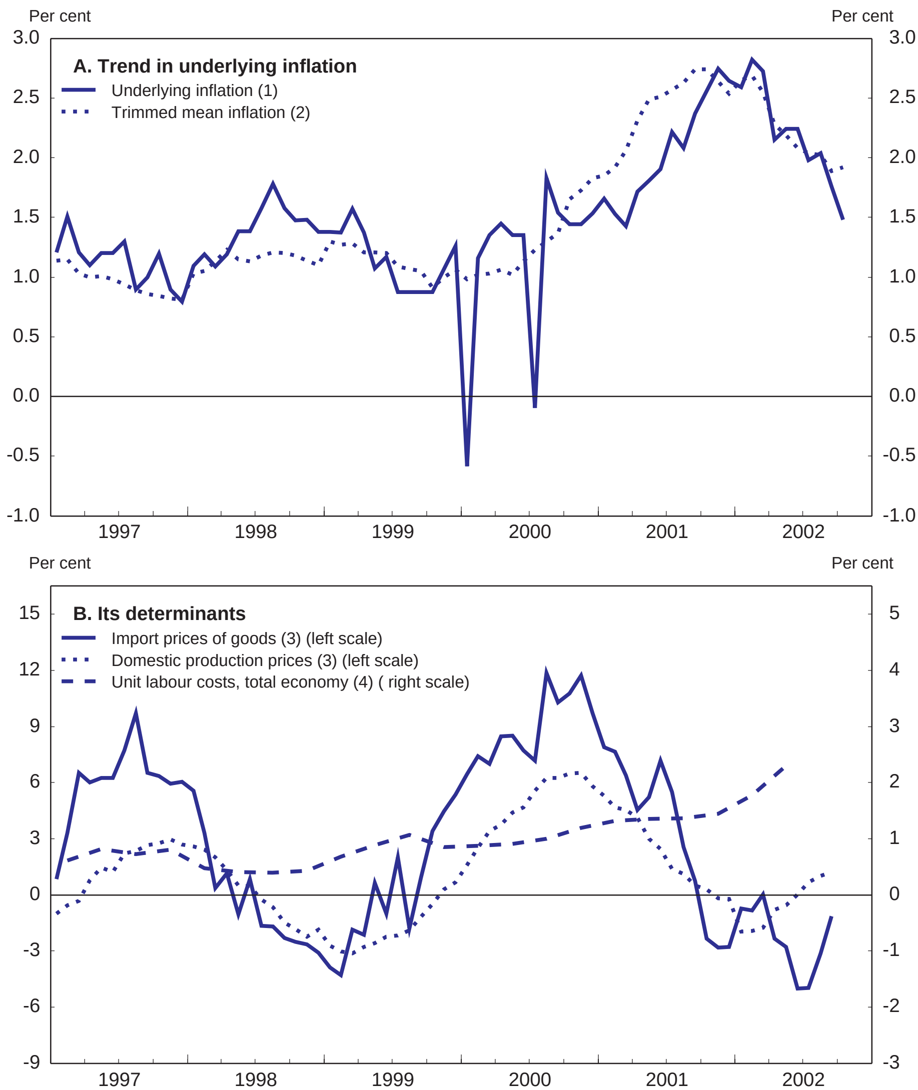
Indexation has held up wage increases

Wage developments in 2001-02 have been largely determined by the framework agreement reached between employers and unions in December 2000 for wage increases in 2001-02 and wage indexation. In this agreement, the social partners undertook to take into account the limit for hourly wage increases calculated by the Central Economic Council (*Conseil central de l'économie*) as being compatible with preserving cost competitiveness against Belgium's three main neighbouring countries. This limit was 6.4 per cent for 2001-02. The accord nevertheless allowed highly profitable sectors to agree higher wage increases provided that they were not recurrent and that total hourly wage costs in these sectors did not rise by more than 7 per cent over the two-year period.

On the basis of this agreement, the social partners negotiated real hourly wage increases in the various sectoral collective agreements that amounted to 0.8 per cent in 2001 and 1.5 per cent in 2002 (Table 6). The increases were higher in 2002 than in 2001 despite the deteriorating economic conditions owing to the delay in reaching sectoral agreements in 2001. Indexed hourly wage increases were 2.5 per cent in 2001 and are likely to be only slightly lower in 2002. These increases reflect the evolution of the health index of consumer prices[8] and the delay allowed for in the various indexation mechanisms. Structural reductions in employers' social security charges again slowed increases in wage costs in 2001-02,

Figure 8. **Underlying inflation**

Percentage changes over previous year



1. HICP excluding unprocessed food and energy.
2. Measured by national CPI components.
3. Excluding energy.
4. Moving average over 10 quarters.

Source: Eurostat and National Bank of Belgium.

Table 5. **Inflation by HICP component**[1]

Percentage changes from previous period

	Total	Energy	Unprocessed food	Underlying inflation[2]				*Memorandum*: health index[3]
				Total	Processed Food	Non-energy goods	Services	
1996	1.8	5.7	1.4	0.7	0.8	0.6	2.5	1.7
1997	1.5	3.1	2.7	1.1	2.3	0.1	1.7	1.3
1998	0.9	–3.6	2.2	1.4	1.4	0.7	2.1	1.3
1999	1.1	2.0	0.0	1.1	0.6	0.8	1.8	0.9
2000	2.7	16.3	0.2	1.1	1.3	0.0	2.3	1.9
2001	2.4	1.4	6.9	2.1	2.2	2.0	2.1	2.7
2002[4]	1.6	–4.3	3.7	2.2	1.5	1.8	2.8	1.9
2002:								
January	2.6	–3.3	10.4	2.6	2.4	2.1	3.1	3.2
February	2.5	–5.1	8.7	2.8	2.1	2.2	3.7	3.1
March	2.5	–3.5	7.9	2.7	1.8	2.1	3.7	3.0
April	1.7	–3.6	4.2	2.2	1.5	2.1	2.6	2.0
May	1.4	–6.3	2.2	2.2	1.4	1.9	2.8	1.7
June	0.8	–8.0	–0.5	2.2	1.7	1.6	2.9	1.2
July	1.1	–5.4	1.8	2.0	1.3	1.6	2.5	1.4
August	1.3	–3.9	0.4	2.0	1.1	1.4	2.8	1.3
September	1.2	–4.1	2.6	1.8	0.8	1.3	2.5	1.3
October	1.3	0.1	0.7	1.5	1.0	1.2	1.7	1.1
Last 3 months	1.2	–2.7	1.2	1.8	1.0	1.3	2.3	1.2

1. Harmonised prices.
2. Excluding unprocessed food and energy.
3. All items national consumer prices excluding tobacco, alcoholic beverage and petroleum products for transport.
4. Average January to October.

Source: National Bank of Belgium and Eurostat.

Table 6. **Wage costs in the market sector**
Percentage change from the previous year

	1997	1998	1999	2000	2001	2002e
Hourly wage costs	2.4	1.3	4.5	1.9	3.1	4.0
Increases resulting from:						
Automatic indexation[1]	1.5	1.2	1.1	1.5	2.5	2.3
Real wage increase under collective agreements	0.2	0.7	0.5	1.3	0.8	1.5
Employer's social security contributions paid to government[2]	0.1	0.3	–0.5	–0.6	–0.2	–0.2
Other factors[3]	0.5	–0.9	3.3	–0.2	–0.1	0.4
Change in working time per full-time equivalent[2]	0.6	0.2	–0.1	0.4	–0.3	–0.2
Wage costs per full time equivalent	3.0	1.5	4.4	2.4	2.8	3.8
Change in part-time work[2]	–0.3	–0.4	–0.7	–0.4	0.1	–0.1
Wage costs per employed person	2.7	1.0	3.7	2.0	2.9	3.7
Productivity per employed person[4]	3.4	0.5	2.2	1.9	–1.0	0.8
Unit labour costs	–0.6	0.6	1.4	0.0	3.8	2.9

1. Wages are indexed to lagged changes in the "Health Index", a national price index excluding most fuel prices, alcohol and tobacco.
2. Contribution to the increase of labour costs.
3. Includes increases granted by enterprises over and above collectively agreed or scale adjustments, social contributions paid to the private sector and employers' imputed contribitions, the wage drift due to changes in employment structure within firms (*e.g.* the creation of low-pay jobs) and errors and omissions.
4. Value added at constant prices per unit of labour, including self-employed.

Source: National Bank of Belgium; Federal Ministry of Employment and Labour; National Institute of Statistics and National Accounts Institute.

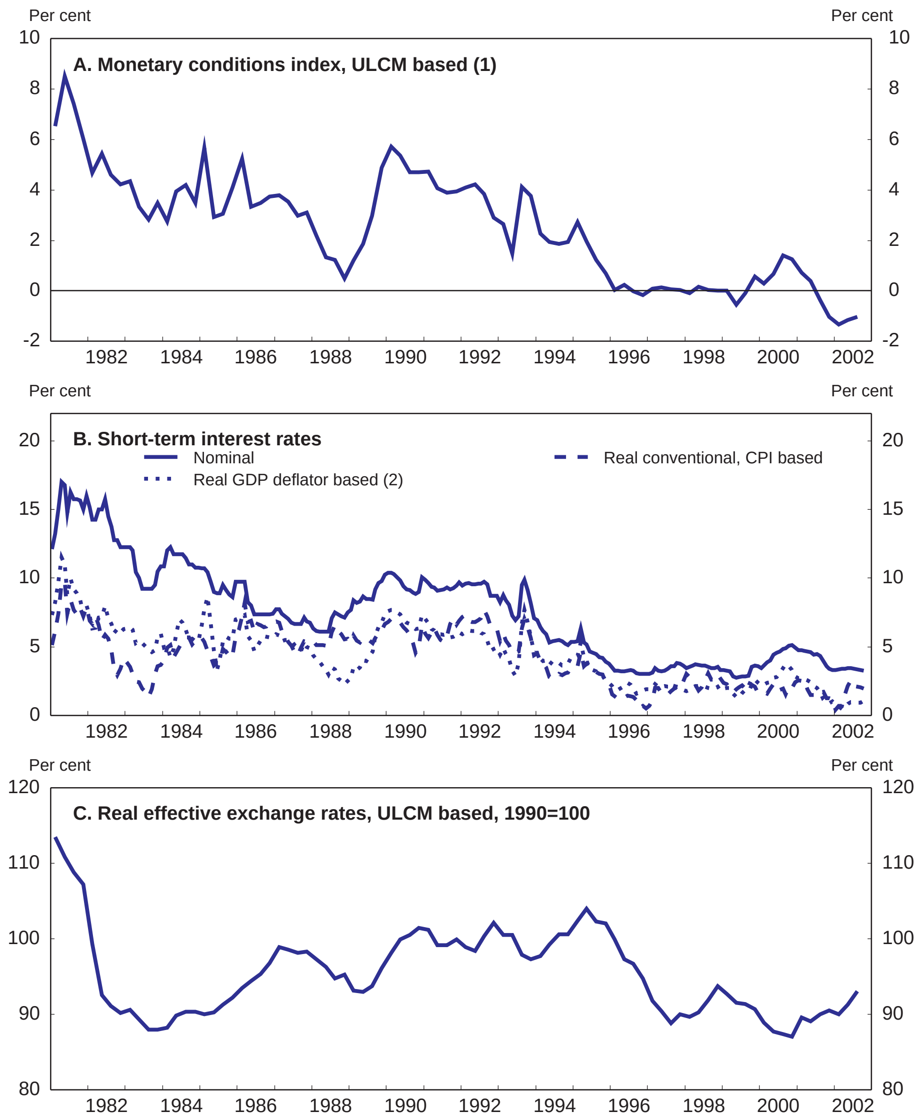
but by less than in 1999-2000. Wage drift was again very low in 2001 but should pick up somewhat in 2002. In all, hourly wage increases are likely to amount to 7.1 per cent over 2001-02, somewhat higher than the limit fixed by the Central Economic Council. The excess over what had been agreed by the social partners is mainly attributable to higher indexed wage increases than anticipated.

Unit labour cost increases in the business sector are likely to amount to 6½ per cent in 2001-02. This is 1½ percentage points greater than estimated for Belgium's three main neighbours. Wage increases are estimated to have been higher and growth in labour productivity lower than in the neighbouring countries.

Monetary conditions support growth

Monetary conditions have tightened slightly since the beginning of 2002, but remain supportive of economic growth (Figure 9).[9] This tightening is attributable both to an increase in short-term real interest rates, reflecting falling inflation, and appreciation of the real effective exchange rate. However, both short-term real interest rates and the real effective exchange rate remain low by historical standards. It is assumed for the projections presented below that short-term policy interest rates will be cut by 25 basis points at the end of 2002 but begin to rise

Figure 9. **Monetary conditions index (MCI)**



1. MCI = (R – Ro) + (1/w) * (Et – Eo) where R is the real short-term interest rate; E the real effective exchange rate based on unit labor costs in the manufacturing sector (ULCM) in logarithms and w the relative weight of R (w = 2.5).
2. Real short-term interest rate is defined as the difference between the nominal 3-month interest rate and the annual rate of change in the GDP deflator between the months (t – 6) and (t + 6).

Source: National Accounts Institute; National Bank of Belgium and OECD, *Main Economic Indicators*.

again in late 2003, with rates some 75 basis points above the current level by the end of 2004. This, together with the assumption that the euro remains unchanged at its value of 3 September (roughly parity against the US dollar), implies a small tightening of monetary conditions over the projection period.

Outlook

The recovery should gain strength during 2003

Economic growth is projected to remain weak until early 2003 but to pick up subsequently as the international economy recovers, lifting growth to 2¾ per

Table 7. **Short-term projections**

	1999	2000	2001	Projections 2002	2003	2004
	Percentage changes					
Demand and output (volume)						
Private consumption	2.2	3.4	0.9	0.6	1.9	2.4
Government consumption	3.6	2.3	2.2	1.5	1.9	2.0
Gross fixed capital formation	4.3	4.1	0.5	–2.2	2.2	3.3
Private sector non-residential	5.7	0.9	–2.0	–0.1	0.6	1.5
Private sector residential	2.2	5.5	2.9	–2.8	2.0	4.0
Public sector	19.4	1.9	–11.8	–3.7	9.2	2.0
Final domestic demand	2.9	3.3	1.1	0.2	2.0	2.5
Change in stockbuilding[1]	–0.5	0.3	–0.6	0.6	0.0	0.0
Total domestic demand	2.4	3.6	0.5	0.8	2.0	2.5
Exports of goods and services	5.0	8.2	1.1	–0.8	5.1	6.6
Imports goods and services	4.1	8.4	0.8	–0.8	5.2	6.5
Change in net exports[1]	0.9	0.3	0.3	–0.1	0.2	0.5
GDP at market prices	3.2	3.7	0.8	0.7	2.1	2.8
Inflation						
GDP deflator	1.4	1.3	2.0	2.8	1.6	1.8
Private consumption deflator	1.3	2.3	2.5	1.9	1.7	1.7
	Per cent					
Others						
General government balance (% of GDP)	–0.5	0.1	0.4	0.0	0.0	0.5
Unemployment rate[2]	8.6	6.9	6.6	6.9	6.9	6.8
Household savings ratio	14.1	13.4	13.0	14.5	14.3	13.7
Current account balance (% of GDP)	4.8	3.8	3.8	5.8	5.8	6.0
Short-term interest rates	3.0	4.4	4.2	3.3	3.0	3.6
Long-term interest rates	4.7	5.6	5.1	4.9	4.8	5.2

1. Contribution to GDP growth.
2. Standardised rates.
Source: OECD.

cent in 2004 (Table 7). While this will reduce the output gap in 2004, it will remain negative. Employment growth is likely to remain weak until mid-2003, holding the unemployment rate at around 7 per cent in 2003, but should subsequently recover more strongly. Underlying inflation is projected to fall to around 1¾ per cent in 2004, reflecting lower increases in unit labour costs. The main risks to this outlook concern the timing and strength of the international recovery and the possibility that households save a large proportion of their tax cuts, which would weaken the recovery. Of course, without the personal income tax cuts, the risk of household spending remaining weak would be even greater.

Notes

1. Exports of goods comprise 85 per cent of exports of goods and services.
2. The reclassification of public radio and television enterprises from the market sector to the government administration sector also reduces measured growth in consumption expenditures in 2002. This change in national accounts classification was made following the decision to transfer control over television licence fees to the regions. This reduced the share of own revenues for those enterprises below the minimum required to be classified as an enterprise. Consequently, television licence fees are recorded in the national accounts as a tax, not private consumption, and collective private consumption expenditure now only includes the value of inputs.
3. This is based on a partial elasticity of private consumption with respect to financial wealth of 5 per cent.
4. Direct listed share holdings only accounted for 8.3 per cent of households' financial assets at the end of 2001. Taking into account some assets directly linked to listed shares, the proportion rises to 12.3 per cent if equity mutual funds are taken into account and to 15.9 per cent if index-linked mutual funds are also included.
5. There is normally a three quarter delay between commitments with architects and construction getting underway.
6. This includes unemployed persons entitled to a benefit, young workers during the waiting period, voluntarily registered persons and other unemployed jobseekers.
7. This reduced inflation by 0.3 percentage point in April and will have the same effect in October. The fact that the trimmed mean of underlying inflation (see Figure 9), which excludes extreme price movements such as that related to the abolition of the television licence fee, is falling underlines that other factors are also contributing to the decline in underlying inflation.
8. The health index excludes petroleum products for transport and cigarettes and alcohol from the consumer price index.
9. It should be noted a monetary conditions index abstracts from many important factors in the monetary transmission mechanism, including asset prices, long-term interest rates and the credit channel. However, it is doubtful that taking these factors into account would alter the current assessment of monetary conditions.
10. The initial autumn 2000 projection by the National Accounts Institute ("Budget économique") expected GDP growth to be 3.1 per cent in 2001 but the government decided to base the Federal budget on 2.5 per cent growth. Unlike in many other countries of the euro area, the government in Belgium has been providing itself with a safety margin since several years to meet the budget target even in case of lower-than-projected GDP growth ("golden-hamster-principle"). Over the cycle, this should ensure

government projections that are at best cautious and at worst realistic. A variety of the hamster principle was to neglect that the implicit interest rate on public debt had come down until mid-2001.

11. Other one-off government receipts and negative outlays equivalent to 0.3 per cent of GDP occurred in 2001 and therefore do not affect the two-year comparison 2000-02. Sales of public buildings and restitution by private companies of reductions in social security contributions under the "Maribel" arrangement (incompatible with EU legislation), contributed 0.3 per cent of GDP. The auction of UMTS licenses held in 2001 yielded another 0.2 percentage point. This was less than in other European countries due to the small size of the Belgian market, the unexpected withdrawal of a fourth bidder and the date of the auction well after the peak in telecommunication share prices.
12. The OECD estimates for Belgium of the GDP-elasticity of direct tax revenues from households and of current expenditure are 1.3 and 0.4, respectively (Van den Noord, 2000, p. 19). The OECD measure of the adjusted fiscal balance is cruder than Bouthevillain *et al.* (2001) in that it does not take into account changes in the composition of growth in GDP by expenditure in different years (*e.g.* stronger-than-average consumption *versus* stronger-than-average export growth) although these might affect the government budget balance.
13. The implicit interest rate on public debt came down only in 2002. In 2001 it remained stable as the rate on bonds with a maturity of up to one year increased – this rate follows reductions in market rates by the ECB with a time lag – and the share of long-term debt in total debt kept rising. Interest payments relative to GDP came down in 2001 on average because of the significant fall in the debt-to-GDP ratio in the course of the year 2000 and a moderate further reduction in 2001.
14. In general the funds available to Ministries are not spent to 100 per cent. A constant utilisation rate of credits implies a special saving effort in Ministries, which had seen their budget reduced and in those, where the credit utilisation rates for whatever reason had been low in 2001.
15. Another net stimulus of 0.1 per cent came from regional and local initiatives. The Flemish region abolished the radio and television fee, reduced registration taxes from 12.5 to 10 per cent and granted a one-off tax reduction by € 62 on revenues of 2000. These Flemish measures were partly offset by increases in personal income tax supplements levied at the municipal level.
16. Net VAT receipts usually swing around substantially at cyclical turning points, since refunds have a longer lag than gross receipts. Nevertheless the deterioration of revenues between 2000 and 2001 appeared to be extraordinary. The sustained buoyancy of refunds (driving down net receipts) can be explained partly by the strength of exports in the second half of 2000 when the domestic economy had already cooled down. After the announcement of tighter controls by the government in July 2001 refunds fell sharply suggesting that the measure was a success. Refunds have been corrected since mid-2001, leading to growth in net VAT receipts during the first nine months of 2002 (+2.4 per cent) despite sustained weakness in the economy.
17. The remaining part of the margin was dedicated to spending priorities identified in the fields of Community finance, social security, and social transfers to the poor.
18. These calculations are based on primary expenditure deflated with the national index of consumer prices.
19. Potential output is projected to grow by an average 2.3 per cent in the 2002-04 period.
20. The OECD output gap for Belgium (in per cent of potential GDP) averaged 0.1 from 1997 to 2001 but only –1.5 from 1992 to 1996 (whole decade: –0.7).

21. The level of tax revenues reshuffled to the communities as a percentage of GDP will be higher by 0.3 in 2005, 0.6 in 2010, and 1.1 in 2020 compared with the level in 2001.
22. This results from a sensitivity analysis by the NBB.
23. This projection does not yet take into account government plans to take over gradually the debt of the national Railway Company. A first step of debt assumption equivalent to about 2 per cent of GDP is planned for the end of 2004, provided that the debt-to-GDP ratio remains below 100 per cent after the debt takeover.
24. By contrast, spending pressures are going to ease in the field of security after full implementation of the police reform.
25. As the Flemish Region has decided tax cuts, the scope for the Walloon and Brussels Regions reaching their targets by tax increases is limited by inter-regional tax competition.
26. The regions, however, being the responsible authority, do subscribe to the commitment to convince the local authorities to respect their budgetary targets.
27. For an individual benefits are based on 1.33 per cent of career average earnings per year of employment, with a maximum of 45 years employment taken into account. A married couple can choose between a pension based on the earnings of each spouse or can draw the highest of the two pensions increased by 25 per cent. Earnings more than 27 per cent above the pay of the average production worker do not give the right to a pension.
28. Past earnings have not always been up-rated in line with average earnings and not all employees work for 45 years.
29. For people with career-average earnings less than 40 per cent of average pay, there is a minimum pension equivalent to 30 per cent of the earnings of the average production worker, provided the person has worked for 15 years. Thus a low-paid person, earning 30 per cent of average earnings, would have a replacement rate of 80 per cent.
30. No matter how few years a person has worked, there is a guaranteed minimum pension that is equal to 20 per cent of average earnings. The share of pensioners receiving this minimum fell from 6.7 to 5.3 per cent of all pensioners between 1990 and 2001.
31. The legal retirement age for women is progressively raised to that for men. It will be 63 in 2003 and 65 in 2009.
32. 260 per cent of GDP compared with 244 per cent in the United Kingdom and 308 per cent in the United States.
33. Proceeds of the fund are invested in government bonds, as occurs with similar arrangements in the United States (the social security fund) and the Netherlands (the silver fund). In common with these other arrangements, transfers to the fund amount to an accounting entry within the public sector: they have no direct effect on the public debt ratio.
34. In April 2002 the Study Group on Ageing (*Comité d'Étude sur le Vieillissement*) published its first report (High Finance Council 2002). It was prepared by the Federal Planing Bureau (FPB) which serves as the Secretariat to the Study Group and ensures consistency of the scenarios with the FPB's medium-term macroeconomic projections (*e.g.* FPB, 2002b). The report was then used by another section of the High Finance Council (*Section "Besoin de financement des pouvoirs publics"*) in its annual report 2002 (July 2002), which gives general recommendations concerning the budgetary position.
35. Second-pillar pension benefits paid out as annuities are now also taxed at 16.5 per cent as lump sum withdrawals of accumulated savings. The complementary savings scheme (including employees' contributions to pension saving funds, life insurances

and the second pillar) receive the following favourable tax treatment: a personal income tax reduction amounting to between 30 and 40 per cent; exemption from the withholding tax on interest (assumed to accrue at a rate of 4.75 per cent per year); and a tax rate on benefits of 17.5 per cent (see Chapter III, Box 1).

36. Measured on a System of National Accounts (SNA) basis for all levels of government.
37. Part of the high share of personal income taxes in the total (and low share of property taxes) is explained by the fact that the real estate withholding tax is included in personal income taxation whereas the comparable tax (rates) in other countries is included in property tax. Even allowing for this factor, however, the share of personal income taxation in the total remains high in Belgium by international comparison.
38. The average effective tax rate on labour equals the labour tax wedge expressed as a share of gross labour costs. The labour tax wedge is the difference between labour costs to the employer and the wage that the employee receives after all taxes have been paid. It is calculated by applying tax rules to a hypothetical worker. The main alternative approach to measuring the tax burden on labour is to calculate the labour tax ratio (see Carey and Rabesona, forthcoming, for a discussion of the advantages and disadvantages of this approach). Such calculations also show that Belgium's tax burden on labour is one of the highest in the OECD, though not the highest, as suggested by the AETR calculations. When consumption taxes are included, the labour tax ratio in Belgium is still high, although there are now six countries with higher ratios; this ratio was 50 per cent in Belgium in 2000, compared with EU and OECD averages of 46.5 per cent and 43.1 per cent, respectively (*op. cit*).
39. A number of studies were used to make assumptions for the elasticities of labour demand with respect to real labour costs and of wages with respect to unemployment.
40. The government has also reduced employers' social security contributions for workers aged 58 or more, although the fiscal scale of this measure is very small in relation to the structural reductions (targeted on low-income earners). The reductions for older workers, which came into effect in 2002, are proportional to the age of the employee and are intended to discourage employers from making such employee redundant and to encourage employers even to hire such workers.
41. Stockman (2002) distinguishes between low-skilled, high-skilled and special programme (for which wage cost reduction measures are conditional on creating additional employment or meeting other regulatory conditions) employment. Low wages are defined as 65 per cent of APW or less. Low wage earners represented 27 per cent of full-time equivalent employment in 2001 while special programme employment accounted for only 2 per cent. With a wage benchmark, the low-wage measure generates 4 040 extra jobs by 2007, compared with 1 530 for the same reduction but focused on high-wage earners and 1 840 for a general measure (the same percentage reduction in social security charges at all wage levels). Net substitution between low- and high-wage labour is particularly strong with the low-wage measure (one high wage job is lost for three additional low-wage jobs) but weaker if the high-wage measure is implemented (one low-wage job lost for 10 additional high-wage jobs). The reduction in real labour costs per employee (market sector) is larger with the low-wage measure (–0.21 per cent) than with the high-wage measure (–0.07 per cent) or the general measure (–0.09 per cent). He also finds that the increase in employment and decline in labour costs is smaller in the absence of a wage benchmark; on the other hand, labour productivity is higher.
42. These arise when net replacement rates from unemployment and related benefits are sufficiently high that it is not worth while for an unemployed person to accept a job.

This problem mainly concerns low-income earners with dependants; replacement rates in Belgium are lower for unemployed persons without dependants, decline over time for such persons, and are capped in all cases, resulting in low replacement rates for high-income earners (see Annex I for details).

43. Individual social security contributions were cut by € 82.5 per month for full-time employees earning up to € 1 150 per month. This reduction is progressively withdrawn, falling to zero for salaries of € 1 350 and above and adding 41.25 per cent to the marginal effective tax rate on incomes in the withdrawal range.

44. This measure should stimulate increased labour supply and, for persons earning sufficiently more than the minimum wage for their wages to be flexible, reduce labour costs and hence, increase labour demand. For persons earning the minimum wage, this measure does not reduce labour costs and hence, increase labour demand. It could even contribute to higher unemployment among persons only able to find employment at the minimum wage rate.

45. The following complimentary measures aimed at specific unemployment traps have been taken:
    - A one-off payment of € 75 is paid to a single parent families taking up employment after a long period of unemployment so as to help with the costs of returning to employment;
    - A one-off payment of € 75 is paid to long-term unemployed persons accepting a job which requires them to travel far;
    - So as to encourage older unemployed persons to accept a lower-paid job than their last one, social security rights are based on the previous (higher) salary;
    - The statute of persons without employment who become unemployed again after a part-time job has been improved;
    - The part of earnings between € 849 and € 912 that could be confiscated has been reduced; and
    - The increased family benefit given to long-term unemployed persons is maintained during the first two quarters of taking up employment and continues if the new job lasts less than six months (previously, a stand-down of six months after taking up a job was required before being able to claim again an increased family benefit).

46. The tax credit is progressively withdrawn as (full-time) income rises above 56 per cent of the average production wage (APW) and is completely phased out by 67 per cent of APW.

47. This reform is complemented by transforming deductions for dependants into refundable tax credits. This will enable families that don't have enough taxable income to benefit fully from the current deductions to do so in the new system.

48. The tax credit rises from € 78 per year in 2002 to € 500 per year in 2005.

49. For example, the *Working Families Tax Credit* in the United Kingdom for a single-earning couple at 54 per cent of APW (the highest income at which the tax credit in Belgium is € 500) with two children aged under 16 family was £4 470 (23 per cent of APW) in 2001.

50. Net replacement rates were still high – 79 per cent or more for all family types except singles – at the minimum unemployment benefit.

51. This margin, which is considered to be appropriate by the High Employment Council (*Conseil supérieur de l'emploi*), is necessary at least partially to compensate for the costs of working, such as for transport, childminding, and clothing.

52. The ACS was phased out earlier for low-middle income earners. The schedule for phasing it out is as follows:

Additional crisis surcharge (per cent)

Taxable income €	Income earned in:				
	1999	2000	2001	2002	2003
0-19831.47	2	1	0	0	0
19831.48-21070.94	phased transition	phased transition	phased transition	0	0
21070.95-29747.21	3	2	1	0	0
29747.22-30986.68	3	phased transition	phased transition	phased transition	0
30986.69 and above	3	3	2	1	0

53. The allowance for the first income bracket (€ 0-4 320) increases from 20 to 23 per cent in 2002 and to 25 per cent in 2003. But the upper limit to the deductible amount (€ 2 880) remains unchanged. This means that taxpayers with a tax base exceeding around € 55 000 do not get any additional allowance.

54. Feedback effects refer to the effects on employment via the impact of the reform on other economic variables. For example, an increase in employment will increase consumption demand and output, raising demand for labour and hence, employment.

55. Stock options are taxed at grant rather than at vesting, as in most other countries. This is done to preserve consistency with the general exemption of capital gains (not related to a professional activity, such as property development, for example) from taxation under Belgian law. However, it is difficult to see why gains on stock options should not be considered as labour income and taxed accordingly, as is already the case, for example, for property developers.

56. The overall social security contribution rate is about 48 per cent (35 per cent for the employer, less € 979, plus 13 per cent for the employee) while the standard company tax rate is presently 40 per cent (including the ACS of 3 per cent). Although stock options grants are not subject to social security contributions, personal income tax receipts from taxation of them is entirely handed over to the National Social Security Office.

57. These are that:
   - the exercise price is fixed at grant;
   - the option cannot be exercised either before the end of the third calendar year following that in which the grant is made or after the end of the tenth year following that in which the grant is made;
   - the option cannot be transferred to other living persons;
   - the risk of a fall in the value of the underlying shares after granting of the option cannot be directly or indirectly covered either by the persons granting the option or by someone with a link to that person; and
   - the underlying shares are in the firm for which the beneficiary provides labour services or in a firm that has a direct or indirect equity interest in the former firm in the sense of the Royal Decree of 8 October 1976 concerning firms' annual accounts.

58. If these conditions are not satisfied, options are valued at 15 per cent of the underlying shares, rising by 1 per cent per year beyond five years.

59. The profit-sharing plan:
   - must be voluntary, organised by the firm and elaborated within the firm;
   - must result from collective negotiations between employers and workers;
   - must be proposed to all employees of the firm;
   - must contain a predetermined formula which clearly shows the link to the firm's profits;
   - must not replace regular remuneration – profit-based payments are supposed to be an income supplement;
   - is not subject to the same rules for taxation and social security contributions as regular remuneration;
   - shall enable workers to take their share of profits either in cash or in the firm's shares or in a combination of the two, in proportions fixed in the plan.

60. Employers may not deduct distributions of profits to employees from taxable corporate income but do not have to pay social security contributions either (although one half of corporate tax paid on these distributions is transferred to the social security system). If the distribution is paid in shares or in cash that is lent back to a SME employer, employees pay 15 per cent tax. In the event that the distribution is in cash, employees pay a 13.07 per cent solidarity contribution plus a 25 per cent tax on the distribution net of the solidarity contribution.

61. Taking the example of a firm that wishes to grant its workers € 100 out of post-corporate tax profits, this would give workers € 85 after tax if paid as shares or in cash that qualifies for the same tax treatment or € 66 after-tax if paid in cash. For a regular salary payment that reduces after-tax profits by € 100, the after-tax benefit for the employee is € 65. (It is assumed that the corporate tax rate is 33 per cent, the marginal income tax rate is 50 per cent, the employer social security contribution rate is 25 per cent and the employee rate is 13 per cent.) As noted above, profit-share payments are not tax deductible for companies. As employers equally do not have to pay social security contributions on such payments, the cost to after-tax profits of a € 100 profit-share payment is € 100. If the payment is made in shares (including the equivalent SME case of cash lent back to the employer), the employee pays a 15 per cent final tax, giving a final after-tax benefit of € 85. If the profit share is paid in cash, the employee pays a final tax of 34.8 per cent [13.07 + (1 – 0.1307) * 25], giving an after-tax benefit of € 65.9. Finally, a regular salary payment that reduces after-tax profits by € 100 is € 199 {= 100/[1 – (0.33 + 0.25 * (1 – 0.33)]}; all labour costs, including social security contributions, are tax deductible. Out of this amount, the gross wage received by the employee is € 149.5, which falls to € 129.85 after the deduction of employee social security contributions. Personal income tax reduces this amount to € 64.9.)

62. The dividend is first taxed as part of company profits at 40.17 per cent and is then taxed again at the dividend withholding tax rate of 25 per cent, giving a total tax rate of 55 per cent [0.4017 + (1 – 0.4017) * 0.25]. This was the top personal income tax rate before the current personal income tax reform.

63. The lowest rate is for companies with taxable profits of less than € 25 000. In this case, the corporate income tax rate is 29.71 per cent, giving a total tax rate (including the 25 per cent withholding tax) of 47 per cent [0.2971 + (1 – 0.2971) * 0.25]. There is a phasing out range for companies enjoying reduced rates, so that the average corporate

income tax rate is 39 per cent (excluding the ACS) at the € 323 750 limit for progressive corporate income tax rates, the same as the standard corporate income tax rate.

64. If the property is purchased and re-sold within this period, a capital gains tax of 16.5 per cent applies. To calculate the gain, the purchase price is increased either by the notary fee paid or by a lump sum rate of 25 per cent and by 5 per cent per year since the purchase year.
65. Since 1986, there is an additional interest deduction which can exceed the amount of imputed rentals. It concerns only building, purchase of a newly-built house or renovation work [minimum amount of € 22 261 (2000 value, indexed)]. In addition, this deduction only applies to the principal residence, which has to be owner occupied, and financed by a mortgage loan with a duration of at least 10 years. The tax deduction is limited to the first income bracket of € 55 652 (2000 value, indexed and increased for dependent children) for building or purchasing a new house and to the first bracket of € 27 838 (2000 value, indexed) for renovation work. Up to 80 per cent of the amount obtained after the first limitation is taken into account may be applied in the first 5 years (sliding proportion to 10 per cent in the 12th year).
66. Incidentally, the high rate of owner-occupied housing is another factor to take into account when considering the adequacy of Belgians' savings for retirement.
67. However, Belgium's real estate property withholding tax is recorded as income tax in OECD *Revenue Statistics*, whereas rates are recorded as a property tax. There is also a tax reduction on the first € 12 500 of the purchase price of a principal residence.
68. The second principal residence must be bought within two years of the sale of the first.
69. The tax-exempt amount is € 60 000 in a Reinforced Development Zone for Housing and Urban Renewal (Espaces de développement renforcé du logement et de la rénovation urbaine) and € 45 000 elsewhere. There is no "imputation through time" system, as in Flanders.
70. These are 12.5 per cent. It is assumed that the property is held indefinitely.
71. As noted above, effective tax rates are negative on second pillar savings.
72. For example, for a long-term government bond yielding 5 per cent in nominal terms and 3 per cent in real terms, the real effective tax rate is 25 per cent (*i.e.* the 15 per cent final withholding tax on 5 per cent expressed as a percentage of 3 per cent).
73. While Flanders and Brussels-Capital have respectively implemented and announced small reductions in duty rates on direct-line successions recently, they have not reduced the rates on other successions.
74. This and a number of the following sections on corporate taxation draw heavily on Valenduc (2002b).
75. These were the following:
    - "Upstream taxation" and anti-abuse rules were introduced (1990, 1991, 1996) to ensure that the participation exemption system (which allows a company to deduct 95 per cent of a dividend it receive from a company in which it has a significant shareholding) did not lead to a double exemption of distributed profits.
    - The notional withholding tax credit of 15/85 for interest received from abroad was replaced by a credit for foreign withholding tax effectively paid (1991).
    - The notional tax credit for resident companies providing new equity or lending money to a co-ordination centre was repealed (1990-91), although the preferential tax regime for co-ordination centres remains in force.

– The large investment allowance introduced in the early 1980s to compensate for high inflation was restricted to small businesses or investments that generate externalities (such as R&D or environmental investments) with the rate linked to the inflation rate (1992).
– The conditions to be met to qualify for reduced corporate tax rates for small businesses were made more restrictive (1993).
– Disallowed expenses were expanded (including, for example, part of car expenses) and a thin capitalisation rule for interest deductions was introduced (various measures from 1989 to 1995).
– A tax credit was introduced for new equity raised by SMEs (1996).

76. This measure uses tax statistics to obtain a corporate profit series that excludes losses. The reason for excluding losses is that they cause the standard tax ratio measure to vary over the business cycle even when there is no change in tax policy. To construct this modified tax ratio, tax data on corporate profits must be adjusted to exclude deductions that are considered to be tax expenditures (increasing the tax base) while disallowed expenses that are genuine economic expenses are deducted from the tax base. See Valenduc (2002b, p. 60) for more information.

77. This approach adapts the King-Fullerton (KF) (1984) methodology to deal with investment projects that earn some economic rent. The resulting Average Effective Tax Rate (AETR) is a useful indicator in the case of imperfect competition. By contrast, the KF approach only considers marginal investments and thus is only appropriate to discuss the effects of the tax system under perfect competition.

78. Capital export neutrality means that taxation is the same regardless of where an investment is made. These reforms improved capital export neutrality by making exemptions of foreign-source dividends and interest from Belgian taxation more dependent on the foreign taxes actually paid on such income.

79. A closed economy framework is used because SMEs do not have direct access to world capital markets. Shareholders are thus subject to personal income tax in Belgium. Accordingly, the AETR must integrate both taxation of the SME and the taxation of private savers in Belgium. In fact, SME managers play a major role in financing their companies.

80. Belgian co-ordination centres are subject to income tax on a cost-plus basis but interest paid is not included in the cost-base. Combined with the fact that the tax base includes neither interest, nor dividends received, nor retained earnings, this means that co-ordination centres are not subject to tax on investment income. Despite this, the Belgian parent can still benefit from a 95 per cent tax exemption on dividends received from a co-ordination centre and from a full exemption on capital gains on shares in the co-ordination centre (Valenduc, 2002a).

81. Personal income tax reductions since the government took office (abolition of the 3 per cent ACS, reindexation of tax brackets and abolition of the top two tax brackets (52.5 per cent and 55 per cent)) have reduced marginal income tax rates by around 15 per cent, approximately the same amount as the announced reduction in progressive company tax rates.

82. Benefits are also considered because they are a close substitute for taxes in redistribution. For example, if benefits are indirectly means tested through withdrawing tax concessions, as occurs in Belgium, this will tend to reduce the redistribution effect of the benefit system but to increase that of the tax system relative to direct means testing, as occurs in Australia or the United Kingdom. For the purposes of an international

comparison, it is also preferable to focus on the working-age population as high reliance on public old-age pension systems in some countries, such as Belgium, exaggerates the initial inequality of income distribution and the redistribution effect of government transfers.

83. See Box 3 for a summary of the main recommendations for tax reform.

84. Series have been smoothed with a Hodrick Prescott filter up to and including 2001. To mitigate the so-called endpoint problem, series have been extended up to 2005 on the basis of projections in the OECD *Economic Outlook* 72 (OECD, 2002a) and by the Federal Planning Bureau (FPB, 2002). A lambda of 30 was chosen to obtain a symmetric distribution of filtering weights up to 2001. At this lambda for annual data, for cycle lengths up to nine years, at least 90 per cent of the cyclical components is excluded from the original series (Bouthevillain *et al.*, 2001).

85. These data at the branch level were only available for 1995.

86. Figures calculated by Kegels *et al.* (2002) before the upward revision of employment figures in November 2002.

87. Aggregate figures on employment and participation rates in this section incorporate the upward revision in November 2002 (by around 3 percentage points). Revised disaggregate data are not yet available.

88. Percentages on the basis of the European Labour Force Survey. Other goals are halving the number of youngsters with only primary education and an increase in the employment rate of women to 60 per cent.

89. In 2000, the employment rate, measured in terms of persons, was about 3 percentage points lower than in the OECD and even 9 percentage points lower than in the Netherlands. Already before the upward revision of employment data, however, Belgium ranked more favourably, if employment rates were measured in full time equivalents (relative to the Netherlands, for instance, the lag would decrease to 2 percentage points European Commission, 2002a).

90. Due to these exemptions in 2001 only 57 per cent of the persons entering the early retirement programme were replaced.

91. The official pre-pension age is 60, but social partners are allowed to set a minimum age of 58 in sectoral agreements. The pension age for women is being progressively raised to 65 by 2009.

92. According to Cockx (2001), the chances to find a job are particularly small for low-skilled workers, for which there is insufficient demand. In 2000, the unemployment rate among Belgians born outside Europe was about 35 per cent (Federal Ministry of Employment and Labour, 2002a).

93. OECD (2002c). Figures refer to 1999 and have been calculated using purchasing power parities.

94. This is due to lower tax rates, higher child and other allowances and lower municipality taxes. Other allowances may concern the costs of healthcare, electricity and public transport.

95. In that case the number of years worked must be at least 15 years.

96. Université catholique de Louvain (2000); OECD (1998a). Workers with a tertiary degree had a 17 per cent higher wage than workers with a secondary education.

97. HEC (2002), p. 122. According to the broader national definition, used by the Federal Ministry of Employment and Labour, the unemployment rates were 7.9, 17.1 and 19.8 per cent respectively (September 2002).
98. The above figures imply that an increase in outward mobility of Walloon workers by around one-quarter (from 20 to 25 per cent) would halve the unemployment rate in the region.
99. The cost of commuting by public transport is, however, limited. Reimbursements by employers are fully deductible from personal income taxes up to a commuting distance which in 2003 will be raised from 25 to 50 km.
100. For more details on the measures taken up till 2000, see Federal Ministry of Employment and Labour (2001).
101. Social security contributions by workers with a monthly wage below € 1 500 (around half a million employees), are to be further lowered in 2003, resulting in net income increases of up to 4 per cent, part of which would lead to a further reduction in the replacement rate.
102. Having worked for at least 20 years is a condition many women under the previous scheme did not meet, but those already in the old scheme were allowed to switch to the new scheme.
103. The bonus corresponds with the wage for 2 hours (age 45) to 6 hours (workers 55 and over).
104. In 1999, 11 000 unemployed lost their benefit because the duration of their inactiveness exceeded the average duration of their reference group of unemployed by more than 50 per cent.
105. Communication by the Federal Ministry of Employment and Labour.
106. Since January 2002 these jobs are integrated in the so-called ACTIVA plan.
107. *http://meta.fgov.be/pdf/pd/frdf25h.pdf*
108. Federal Ministry of Employment and Labour, Press release 28-08-2002
109. Vouchers represent a subsidy of € 30 for each amount of € 30 spent by a firm on training. In 2001, for vouchers the government had reserved some € 50 million.
110. The budgetary cost in 2000 was around € 50 million.
111. For 2001 and 2002 the total increase was limited to 6.4 per cent, except for very well performing industries, which were allowed to increase wages by an additional 0.6 per cent.
112. Written communication by the Central Economic Council.
113. In Belgium a merger is subject to notification if at least two of the firms involved have a turnover higher than € 15 million and at the same time the combined Belgian turnover exceeds € 40 million.
114. For example, in 2001 only two mergers notified earlier led to a Phase II investigation. No merger decision was appealed against at the Brussels Court of Appeal. This compares with a total of 48 notified mergers. During the eight years from 1994 to 2001, 5 decisions not to approve a merger were taken, 32 cases are outstanding (OECD, 2002d, p. 6).
115. In the Netherlands, the turnover threshold for the individual firms engaging into a merger was lifted from € 14 million to € 30 million in 2002.

116. This gives other stakeholders (service providers without network and consumers) a chance of articulating their interests.

117. This requirement is met in Belgium by the annual reports of the regulators for the electricity and gas markets (CREG) and of the telecommunications and postal sectors (BIPT).

118. Another measure to increase the personal distance between the regulator and the regulated firm consists in sector-to-sector job rotation within the regulation agency, a common practice in the German Cartel Office.

119. See Knieps (2000, p. 20) for technical progress and Kumkar (2000b, p. 374) for finding optimal allocation rules for network access revenues by a learning process.

120. The benefits of bringing telecommunications and electricity regulation under a common roof are discussed in Kumkar (2000, pp. 26-27).

121. In the Netherlands, for example, the regulation agency for electricity and gas is affiliated to NMa, the overall competition authority. It is also interesting to note that the Australian Competition and Consumer Commission regulates access pricing in several sectors including telecommunications.

122. Due to technical, administrative and legislative barriers, trains lose most of the travel time at boundaries. The average speed of international rail freight haulage is only 18 km/hour (European Commission, 2001c, p. 28).

123. Market entry is prevented by falling marginal and huge sunk costs in infrastructure management, *i.e.* this stage of railway service production is a natural monopoly, whereas traction presents ample scope for competition. In analogy to air traffic, some authors consider capacity management and security services as a separate stage of production "in between", since fixed costs are not sunk, making the market for these services contestable and thus removing the static inefficiency implied by its monopolistic provision (Knieps 1996). At each stage, vertical disintegration involves efficiency gains from actual or potential competition, which have to be assessed against higher co-ordination costs.

124. The somewhat better result for Belgium from input distance function estimates in Coelli and Perelman (2000) is called into question when using the stochastic frontier method (rather than a deterministic approach) to account for cross-country differences in exogenous factors (Trujillo 2003, forthcoming).

125. One insight from a comparison between the six studies reported is that results are sensitive to the measure chosen. Rank correlation coefficients for the ten countries covered by all six studies are broadly positive (but mostly below 0.5) only after ignoring the Gathon-Pestieau results. This makes the consistently low performance of Belgian railways all the more striking.

126. This holds in application of the theory of effective tariff protection, which states that lower tariffs on inputs than on final goods and services strengthen the protection for domestic value added. In the current situation, tariffs on goods imports are virtually zero whereas access to essential service input markets is nearly prohibitive.

127. A vertically disintegrated network owner maximises revenues from (regulated) user fees and therefore has an incentive to get a maximum number of trains on his network. In a vertically integrated firm such a strategy would cost market shares to the in-house transport services branch and joint profit maximisation would account for the trade-off between the market share of own transport services and revenues from third-party access.

128. Already in 1998 the European Commission noted the insufficiency of mere accounting separation, since it leaves incumbent railway undertakings closely linked to infrastructure managers who control access (European Commission, 1998).

129. Unit costs are likely to come down following liberalisation. Reform experience in other countries (*e.g.* Germany) shows that niche market suppliers are capable of providing transport services at terms accepted by customers on routes given up by the former incumbent (OECD, 2001h, p. 80).

130. One motivation for cheap transports is to combat labour market mismatches. However, this is better achieved with specific labour market and labour tax policies (Chapters III and IV). Besides, receipts from pricing congestion can be used to lower distortionary taxes on labour.

131. Belgian households still pay higher electricity prices than the EU average (they used to have among the highest prices in the European Union), whereas companies pay less than the EU average according to the authorities.

132. In most cases, Electrabel is a capital co-owner in these trusts ("*intercommunales mixtes*").

133. In line with an OECD-wide trend, fixed charges were increased and bundled with set-up charges – occurring when the first time unit costs more than subsequent units – in the basic subscription. In terms of prices, Belgacom *de facto* abolished the distinction between local and long-distance calls (OECD, 2001b, p. 171). The incumbent, which has still a 95 per cent market share for long distance calls, reduced prices for national calls in 2001 from € 1.74 (ten minutes call) to € 0.54. On the other hand, the price of local calls increased from € 0.49 to € 0.54, staying among the highest of the EU (32 per cent higher than the EU average. These price evolutions initiated by the incumbent may have created difficulties for other operators mainly active on international and long distance calls. More recently, new types of subscriptions combining a higher monthly fee with some amount of free time were introduced together with moderate increases of variable charges for national calls.

134. Press Release by the Ministry of Telecommunications of 6 February 2002. *http://belgium.fgov.be/fr_index.htm*. This calculation system also applies to binary access services for large band Internet access.

135. This means that gross costs for public services provision, currently estimated at € 62 to 86 million, would have to be lowered by the receipts from fees for public services and the intangible benefits in terms of enhanced visibility.

136. Currently the incumbent firm takes more time than agreed on for breakdown services and for connecting new users to the network (BIPT 2002).

137. Measured in US dollars at purchasing power parities (PPP), the average costs of 40 hours Internet use per month at peak hours increased by 44 per cent between September 2000 and August 2001. This is more than what could be explained by the "rebalancing" of local call prices by incumbent operators observed in many OECD countries (OECD, 2001b, p. 173). For off-peak Internet use, the price increase reached 12 per cent over the same period.

138. Demand pressures also contributed to a quicker coverage of the territory. The ombudsmen of the telecommunication sector reported 333 complaints in 2001 referring to non-availability of high-speed Internet access.

139. An SSL protocol is to encrypt information before transmitting it *via* the Internet to protect client data but also to ensure privacy of information subscribers pay for, thereby overcoming the failure inherent to markets for information (OECD, 2001b, p. 103).

140. According to an EU-wide survey, uncertainties about the conditions of use appear to be the main obstacle for e-purchasing, whereas high costs are the main obstacle for e-sales (OECD, 2002e, p. 2).
141. They usually consist of an initial connection charge, a monthly rental charge including an unlimited or limited amount of free flows and – in the latter case – a charge per Megabyte beyond the threshold.
142. On a more positive note, users of Belgacom ADSL Internet access are exempted from initial charges, and the monthly charge ranges on an intermediate position among incumbent suppliers within the OECD area (OECD, 2001i, p. 53). Note, however, that price comparisons in the field of broadband Internet access have to be interpreted with caution due to the huge diversity of service qualities – especially connection speeds. Assuming that a Belgian user remains below the included allowance, he gets about 15 Kbps per USD PPP spent, which is the eighth most competitive offer by all incumbent firms in the OECD.
143. In North America, non-metered access is the standard pricing model. In Australia and New Zealand, broadband access usually implies a per-unit cost beyond specified thresholds. However, in all four countries flat rates are applied to the traditional dial-up connections (PSTN), by which most persons got acquainted to the Internet in recent years.
144. About one-quarter of the subsidy is to cover the costs for a number of free financial services la Poste delivers. Discussion is under way to replace the subsidy by a universal banking service funds financed by all banks.
145. La Poste took away most of the market shares from a private competitor in a classical business-to-business mailing service by combining this mailing service with preferential general mail tariffs. The European Commission stopped this practice considering it as an abuse of dominant position (European Commission, 2002d, p. 32).
146. A characteristic of the Basle II Accord is that capital requirements will become more responsive to banks' individual risk profiles. A number of banks will have to increase their own funds; others will be allowed to relax them. Yet the repercussions of Basle II on the banking sector as a whole will be limited, according to preliminary results from the NBB's quantitative impact study (NBB, 2002b, p. 136).
147. The Banking Supervision Committee, composed by ECB staff and national regulators, is in charge of macro-prudential co-operation. Regarding international co-operation on the micro-prudential level, an EU directive on financial conglomerates is being prepared by the EU Commission. In the meantime, given the presence of two bi-national conglomerates, the BFC and OIC signed Memoranda of Understanding with other national authorities.
148. In this context, the CFS will have to decide which activities should be pooled and manage these pooled activities. The modalities of this pooling of resources will have to be precised in a protocol between the three institutions. If this protocol is not signed six months after the appointment of the new Boards, the Minister of Finance may impose a pooling of resources.
149. The Minister of Finance backs such a merger (L'Echo of 11 July 2002).
150. See OECD, 2002f, pp. 8-9, for further details.
151. This becomes especially likely when the managers of a subsidiary and of the controlling firm are the same persons. A typical case of tunnelling with a Belgian subsidy (Flambo) as the loser is described in Wymeersch (1993).

152. The strongly negative correlation between minority protection and ownership concentration around the world (La Porta *et al.*, 1998) further strengthens the relevance of this point.

153. Kortum and Lerner (2000) show that $1 of venture capital generates 5 to 10 times as many patents as $1 of R&D investment in big companies.

154. In case of *ex ante* subsidies promising and less promising projects get the subsidy due to asymmetric information and moral hazard problems. By contrast, payments that are made conditional on success (*ex post* subsidies) would increase private actors' marginal utility of additional efforts.

155. This is particularly obvious for interest subsidies. In case of a well-established big company the probability of bankruptcy is low even if an innovative project fails. Thus the subsidised credit crowds out a normal bank credit. This is different for a start-up the survival of which depends on the success of the innovative project. Bank credits are generally not available in this case and the venture capitalist asks for high dividends to compensate his high risk. If part of the investment is financed by a subsidised loan, the outcome is the same in case of failure but the start-up has to pay back less high dividends in case of success.

156. Further insights of the study are that regulations themselves are the major source of dissatisfaction and that often interactions with the administration depend on the person contacted and decisions lack explanation.

157. The harmonisation of conditions for cuts in employers' social security contributions provides a successful example of how not only the readability but also the *content* of legislation can be made less complex.

158. First an indicator of the burden is obtained as a weighted average of "marks" for various aspects (*e.g.* fees, proper guiding information, number and readability of forms, possibility of electronic exchange). This indicator is then multiplied with the frequency of the formality and the number of persons concerned (OECD, 2001j, p. 45).

159. More than 80 projects were implemented at the time of writing. About the same number of further projects are scheduled until 2005 (*http://premier.fgov.be/topics/reports/sav/mix-corr.ppt*).

160. The government shall not ask the citizen one and the same information twice. Agency B shall get an information from Agency A rather than from the citizen.

161. Technological foundations of e-government include a metropolitan area network for Brussels, Internet portals for citizens and companies and a "back-office" with the Business Crossroads Databank for data exchange between government agencies. Further elements are a single identification number for citizens and companies, the electronic identity card, and a public key infrastructure for interactive communication.

162. The policy preparation unit, composed by civil servants, provides technical expertise and policy options. The policy council, composed by the Minister, the president and managers of the FGS, and external experts, gives strategic advice and controls the implementation of measures.

163. Moreover, the current economic environment of low activity is favourable to the implementation of the reform as finding the high number of ICT consultants needed to modernise information systems and provide training services is much easier than during in a boom.

164. This incentive mechanism was implemented for the senior level of ministerial staff under the "at risk pay" scheme in Canada and led to conditional pay rises of between 15 and 25 per cent. The lessons learned include that corporate priorities should be

precise enough to enable executives of making comparable, measurable and "stretching" commitments that cannot vary arbitrarily between services (OECD, 2002h).

165. Such concerns led the OECD Ministerial Council to ask the Organisation to initiate peer reviews of sustainable development.

166. Such a cost is similar to that estimated for Austria and France in 1996. The estimated cost of particle pollution is much lower in Switzerland, reflecting lower use of diesel vehicles in that country (Künzli *et al.*, 1999). However it is extremely difficult to separate the cost of particle pollution from that of other pollutants (Sommer *et al.*, 2000). Consequently, these estimates are best seen as overall estimates of the car air pollution. About three-quarters of these health costs relate to the value placed on the loss of life, the remainder being reduced morbidity costs. The value placed on loss of life would be markedly less if it were to reflect just lost income and consumption, rather than the willingness-to-pay to avoid death as revealed by labour market and survey data.

167. A study concluded that dioxin emissions from an incinerator in the vicinity of Antwerp did not produce any statistically significant effect on human health (Nouwen *et al.*, 2001). Exposure to dioxin was even found to decline while incineration activity increased twofold.

168. The ceilings for Belgium under the EU agreement are lower than its commitments within the framework of the UNECE convention on long-range transboundary pollution.

169. The higher estimate refers to initial Commission proposals which were slightly more demanding than the objectives in the final version of the directive. The lower estimate refers to a scenario with significantly less demanding objectives than in the directive.

170. The issue is complicated, however, by the fact that some pollution avoidance technologies result in higher energy consumption which in the absence of appropriate pricing of carbon emissions could compromise the least cost achievement of Kyoto limits. Consequently, requirements regarding both greenhouse gases and conventional air pollutants should be simultaneously implemented for comparable time horizons and the regional systems should be connected with each other and with wider international efforts through permit trading.

171. The EU auto/oil policy will limit the sulphur content of motor fuels to 50 parts per million by 2005. US regulations require diesel fuel to contain less than 15 parts per million by 2007.

172. For diesel cars, there is an excise compensating duty (*taxe compensatoire d'accise*) in addition to a higher annual vehicle tax (*taxe de circulation*). This tax penalty on diesel cars is offset, on average, by the lower duty on diesel fuel for motorists insofar as they do more than 22 000 kilometres per year. There is also a registration fee which has to be paid when the car is bought (*taxe de mise en circulation*). Between 2003 and 2005 that fee will be differentiated in favour of less polluting cars, with a permanent reduction for liquid petroleum gas (LPG) powered cars. Over the same period, the registration fee will cease to be higher for EURO4 compliant diesel cars.

173. By 2010, motorcycles may account for 14 per cent of hydrocarbon emissions but only 2½ per cent of road traffic by 2010. Currently, the emissions of hydrocarbons from the average motorcycle are the equivalent of those from 200 cars compliant with present EU standards.

174. Diesel-engined cars with almost zero particulate emissions are currently price competitive on European markets. In the United States, significant progress has been made in

the development of filters for diesel trucks (EPA, 2002). Even without these advances on the cost side, benefits of a major reduction in particles emitted by trucks were estimated to be 17 times greater than the costs (EIA, 2000).

175. This does not mean that Belgium transport prices take into account all externalities. A major one, congestion, is not adequately reflected in prices (Prost *et al.*, 2002). Fuel taxes are not well suited for internalising congestion costs which would better be contained through road pricing.

176. The only exceptions are federal taxes and the regulation of product quality for which the federal government is responsible within the limits of EU internal market rules.

177. In Flanders, only one out of ten existing landfills for household waste is planned to operate after 2010. In Wallonia, a public enquiry to identify new landfill sites ended in 1999 with the decision not to create new landfills. The Brussels-Capital region has no space available for new landfills.

178. FOST Plus does not intervene directly to either collect or recycle waste in contrast to the position in Germany. Moreover, there is competition amongst recycling companies. There is, however, a lack of transparency in determining the payments that are made to recyclers and local authorities.

179. This increase reflects one-off investment costs, while the amount of recycled packaging waste subsidised by FOST Plus rose by just 21 per cent in the same period.

180. Municipal waste collection and treatment costs € 155 per household (€ 62 per person). Just under 5 per cent of this cost is met by regional subsidies.

181. For 2002, the threshold is set at 240 kilograms per inhabitant and the tax rate is € 35 per tonne. The introduction of this levy may have been one reason behind the fall in the collection of mixed waste from 310 to 175 kg per capita between 1998 and 2000.

182. Euro per tonne for plastics and euro per tonne for other drink containers against euro per tonne for incineration.

183. According to FOST Plus's annual report, a 4 per cent increase in quantity of material recycled would result in a 40 per cent increase in cost.

184. Such a difference between the actual and optimal recycling rate led the Chairman of FOST Plus to write "Is this additional cost still justified when one takes into account the existence of other environmental black spots, especially in the light of the larger social context?" and "Is it not a waste of time and energy to consider packaging as the scapegoat on the debate on the environment?" (FOST Plus, 2002).

185. In this section, the year 2010 is a synonym for the target period 2008-12 for which all policy commitments pertaining to the Kyoto protocol are formulated.

186. In the Walloon region, CO_2 emissions by energy-producing industries fell by 28.8 per cent from 1990 to 1993 (Federal Department of the Environment, 2002).

187. The forecast that the target is missed at current policy settings is not very sensitive to the assumption on energy prices. If oil and natural gas prices were 20 per cent higher, the final energy consumption would lie 3 per cent below the baseline projection in 2007 (FPB, 2002, p. 109).

188. House insulation and building insulation, energy audits and certification are the main actions that will be carried out, in order to reduce the contribution of residential warming and industrial consumption to total CO_2 emissions.

189. In its Regional Development Plan the Brussels Region sets a target of 20 per cent reduction for road traffic by 2010 compared with 1999. Besides the RDP the Brussels Region has a Mobility Plan with the objective of stabilising the number of car trips in the morning rush hour at its 1991 level by 2005.
190. The broad aim is to enhance the technical and environmental performance of transport (through "green" taxes).
191. Moreover, worse congestion mitigates the ecological benefits from the expected reduction in road use as lower speed and more stop-start-driving boost CO_2 emissions per vehicle (OECD, 2002i, p. 35).
192. Operational rail subsidies should not only be removed on competition policy grounds. Oversupply of public transport results in higher emissions than adequately priced private transport (Sustainable Mobility Programme, 2001).
193. A co-operation agreement on the implementation of the national climate plan and the co-ordination of the international reporting obligations should be launched early in 2003.
194. United Nations Framework Convention on Climate Change (UNFCCC).
195. To increase the efficiency of such a measure, EU governments should ensure that a considerable share of emission permits would be auctioned rather than grand-fathered.
196. This section provides a short follow-up on assessments and recommendations of the previous *Survey* (OECD, 2001f). It will therefore deal with sewage in the Brussels region, bathing water in the Walloon region and effects from livestock on groundwater quality in Flanders, although each region has policies on other water quality issues than those described here.
197. Following a legal action by the EC, the Walloon region and the EC reconsidered the classification of bathing zones. There is still some disagreement since the EC identifies 21 bathing zones down from 30.
198. Article 174 section 3 of the EU Treaty requires such a review.
199. A large information campaign also helped to obtain better surface water quality in some rural areas.

List of acronyms

AAS	Agency of Administrative Simplification
ACS	Additional Crisis Surcharge
ADSL	Asymmetrical digital subscriber line
AETR	Average effective tax rate
ALE	Local employment agencies
APW	Average Production Worker
BFC	Banking and Finance Commission
BIPT	Belgian Institute for Postal services and Telecommunication (Regulator of post and telecommunications)
BPG	Belgian Post Group
BRP	Business re-engineering programmes
CFS	Council for Financial Stability
CO	Carbon monoxide
CO2	Carbon dioxide
CREG	Regulator of the electricity and gas market (*Commission de régulation de l'électricité et du gaz*)
DSL	Digital Subscriber Line
ECB	European Central Bank
EEA	European Environment Agency
EMEP	Co-operative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe
FGS	Federal Government Service
FPB	Federal Planing Bureau
FTE	Full-time equivalent
GHG	Greenhouse gas
HEC	High Employment Council
ICT	Information and communications technology
INS	National Institute of Statistics
KWh	Kilowatt hour
LNG	Liquified natural gas
LPG	Liquid petroleum gas
METR	Marginal effective tax rate
MFP	Multifactor productivity
MNE	Multinational enterprise
NBB	National Bank of Belgium
NMVOC	Non-methane volatile organic compound
NO2	Nitrogen dioxide
NOx	Nitrogen oxides
OIC	Office for Insurance Control

ONEM	Federal body administering unemployment benefits (*Office national de l'emploi*)
PM	Particulate matters
PPP	Purchasing power parities
PSTN	Public Switched Telephone Network
SBIC	Small business investment companies
SME	Small-and-medium-sized enterprises
SNA	System of National Accounts
SNCB	Belgian National Railway Company (*Société nationale des chemins de fer belge*)
SO2	Sulphur dioxide
SOx	Sulphur oxides
SSC	Social security contributions
SSL	Secure socket layer
TSO	Transmission System Operator
ULCM	Unit labour costs in the manufacturing sector
VAT	Value added tax
VDAB	*Vlaamse Dienst voor Arbeidsbemiddeling en Beroepsopleiding* (placement service of the Flemish region)
VOC	Volatile organic compound

Bibliography

André, E. and A. Desimpel (2002),
"Accès des PME au crédit bancaire et aux marchés boursiers", Intermediate report of the Task Force to the Minister of Finance, Brussels.

Bassanini, A. and E. Ernst (2002),
"Labour market institutions, product market regulation, and innovation: Cross-country evidence", OECD *Economics Department Working Paper* 316, Paris.

Belgian Institute for Postal Services and Telecommunications (BIPT) (2002),
Rapport de l'I.B.P.T. concernant l'évolution du service universel des télécommunications pendant l'année 2001, Brussels.

Belgian Progress Report (2001),
Economic Reform of the Products, Services and Capital Markets, Belgian Report for the European Union, Brussels.

Blundell, R. (2000),
"Work incentives and "in-work' benefit reforms: a review", *Oxford Review of Economic Policy*, Vol. 16, No. 1.

Bouthevillain, C. P. Cour-Thimann, G. van den Dool, P. Hernandez de Cos, G. Langenus, M. Mohr, S. Momigliano and M. Tujula (2001),
"Cyclically adjusted budget balances: An alternative approach", ECB *Working Paper* 77, Frankfurt.

Bretin and S. Guimbert (2001),
"Tax competition, to cure or to care?", ministère de l'Économie et des Finances, Paris.

Brouwer, M. and B. Hendrix (1998),
"Two Worlds of Venture Capital: What Happened to US and Dutch Early-Stage Investment?", *Small Business Economics* 10 (4), pp. 333-48.

Bruvoll, A. and K. Nyborg (2002),
"On the value of households' recycling efforts", *Discussion Papers* 316, Statistics Norway, Kongsvinger.

Cantos, P. and J. Maudos (2000),
"Efficiency, technical change and productivity in the European rail sector: A stochastic frontier approach", in: *International Journal of Transport Economics*, 27 (1), pp. 37-56.

Cantos, P. and J. Maudos (2001),
"Regulation and efficiency: the case of European railways", Part A: Policy and Practice, *Transportation Research*, 35 (5), pp. 459-472.

Carey, D. and J. Rabesona (2002, forthcoming),
"Tax ratios for labour, capital and consumption", OECD *Economic Studies*, Paris.

Cefora and Upedi (2002),
"Fonctions critiques", Enquête auprès des consultants en intérim, Brussels.

Centrale Raad voor het Bedrijfsleven (2002a),
Sociaal-economische nieuwsbrief 71.

Centrale Raad voor het Bedrijfsleven (2002b),
Sociaal-economische nieuwsbrief 73.

Chambre des Représentants (2002),
"Projet de loi relatif au statut du régulateur des secteurs des postes et des télécommunications belges", 11 July 2002, *www.lachambre.be/documents/1937/1.pdf*

Cockx, B. (2001),
"The Design of Active Labour Market Policies. What Matters and What Doesn't?", IRES and Department of Economics, Université Catholique de Louvain.

Coelli, T. and S. Perelman (2000),
"Technical efficiency of European railways: a distance function approach", *Applied Economics*, Vol. 32, pp. 1967-1976.

Central Economic Council (*Conseil central de l'économie*) (2002),
Analyse du dérapage salarial sur la période 1999-2000, Brussels.

Cowie, J. and G. Riddington (1996),
"Measuring the efficiency of European railways", *Applied Economics* 28, pp. 1027-1035.

Dang, T.T., P. Antolin and H. Oxley (2001),
"Fiscal Implications of Ageing: Projections of Age-related spending", OECD *Economics Department Working Paper* 305, Paris.

De Callataÿ, E. (2002),
"Réforme et conservatisme: analyse critique de la réforme de l'impôt des personnes physiques en Belgique," *Bulletin de documentation du ministère des Finances*, No. 3.

De Coster, G. and C. Valenduc (2002, forthcoming),
"Recettes publiques et politique fiscale: les années 1990", *Institut belge de finances publiques*.

De Lathouwer, L. and K. Bogaerts (2001),
Financiële incentieven en laagbetaald werk, University of Antwerp.

Dellis, A., A. Jousten and S. Perelman (2001),
"Micro-modelling of Retirement in Belgium", *Centre for Economic Policy Research Discussion Paper* No. 2795 (*www.cepr.org*).

DeVil, G. and C. Kegels (2002),
"Les charges administratives en Belgique pour l'année 2000", *Planning Paper* 92, Federal Planing Bureau, Brussels.

Devreux, M. and R. Griffith (1998a),
"The taxation of discreet investment choices", *Institute for Fiscal Studies Working Paper* 98/16, London.

Devreux, M. and R. Griffith (1998b),
"Taxes and the location of production: evidence from a panel of US multinationals", *Journal of Public Economics*, Vol. 68.

Elmeskov, J., J. Martin and S. Scarpetta (1998),
"Key lessons for labour market reforms: Evidence from OECD countries' experience", *Swedish Economic Policy Review*, No. 5.

Englert, M., N. Fasquelle, M.-J. Festjens, M. Lambrecht, M. Saintrain, C. Streel and S. Weemaes (2002),
"Perspectives financières de la sécurité sociale 2000-2050: Le vieillissement et la viabilité du système légal des pensions", *Planning Paper* 91, Federal Planing Bureau, Brussels.

Estevão, M. (2002),
"Regional Labour Market Disparities in Belgium", IMF *Working Paper* WP/02/134, Washington D.C.

Eunomia Research And Consulting (2002),
Costs for Municipal Waste Management in the EU, Final Report to the DG Environment, Brussels.

European Commission (1998),
"Implementation and Impact of Directive 91/440/EEC", COM(1998)202, Brussels.

European Commission (1999a),
TRENEN II STRAN, ST 96 SC 116, Final Report for Publication, project funded by the Commission under the Transport RTD Programme of the 4th Framework Programme.

European Commission (1999b),
Economic Evaluation of a Directive on National Emission Ceilings for Certain Atmospheric Pollutants, DG Environment, Brussels.

European Commission (2000a),
"Potential output, the 'New economy' and output gaps – measurement issues and policy applications", (ECFIN/771/00-EN), Brussels.

European Commission (2000b),
Pricing European Transport Systems (PETS), project funded by the European Commission under the transport RTD programme of the 4th Framework Programme, Brussels.

European Commission (2001a),
Company taxation and the internal market, Brussels.

European Commission (2001b),
"The Rosetta Plan: A springboard for young people into employment, Belgium, *Peer Review*, Brussels.

European Commission (2001c),
"European Transport Policy 2010: Time to decide", *White Paper*, Luxembourg.

European Commission (2002a),
Broad Economic Policy Guidelines 2002, Brussels.

European Commission (2002b),
European competitiveness report 2002, Brussels.

European Commission (2002c),
"Towards an Integrated European Railway Area: The New Railway Package". Memo, DG Transport, Brussels.

European Commission (2002d),
European Union competition policy – 2001, Luxembourg.

European Commission (2002e),
"Business Impact Assessment Pilot Project. Final Report – Lessons Learned and the Way Forward" *Enterprise Papers* No 9, DG Enterprise, Brussels.

European Environment Agency (EEA) (2002),
"Analysis and comparison of national and EU-wide projections of greenhouse gas emissions", *Topic report* 1/2002, European Topic Centre on Air and Climate Change, Copenhagen.

Eurostat (2000a),
Enquêtes sur les forces de travail, Luxembourg.

Eurostat (2000b),
Labour Force Survey 2000, Luxembourg.

Federal Ministry of Employment and Labour (2001),
La politique fédérale de l'emploi, Brussels.

Federal Ministry of Employment and Labour (2002a),
Belgisch rapport over de kwaliteit van de arbeid, Brussels.

Federal Ministry of Employment and Labour (2002b),
Tewerkstelling van de jongeren, situatie en vooruitzichten, Brussels.

Federal Planning Bureau (FPB) (2002a),
Perspectives économiques 2002-2007, Brussels.

Federal Planning Bureau (FPB) (2002b),
"General and selective reductions in employers'social security contributions in the 2002 vintage of Hermes", *Working paper* 02-06.

Federal Planning Bureau (FPB) (2002c),
The Namea Air For Belgium 1994-1998, Brussels.

Federal Department of the Environment (2002),
Belgium's third national communication under the United Nations Framework Convention on Climate Change, Ministry of Social Affairs, Health and the Environment, Brussels.

Förster, M.F. assisted by M. Pellizzari (2000),
"Trends and driving factors in income distribution and poverty in the OECD area", OECD *Labour Market and Social Policy Occasional Papers* 42, Paris.

Fost Plus (2002),
Rapport annuel 2001, April, Brussels.

Gathon H.J. and P. Pestieau (1995),
"Decomposing efficiency into its managerial and its regulatory components: The case of Europoean railways", in: *European Journal of Operational Research* 80, pp. 500-507.

Gebhardt, G. and K.M. Schmidt (2002),
"Der Markt für Venture Capital: Anreizprobleme, Governance Strukturen und staatliche Interventionen", *Perspektiven der Wirtschaftspolitik* 3 (3), pp. 235-255, Oxford.

High Employment Council (HEC) (2000),
Verslag 2000, Brussels.

High Employment Council (HEC) (2001),
"Het Belgische arbeidsmarktbeleid in het kader van de Europese Werkgelegenheidsstrategie/La politique belge de l'emploi dans le cadre de la stratégie européenne pour l'emploi", Brussels.

High Employment Council (HEC) (2002),
Verslag 2002, Brussels.

High Finance Council (HFC) (1991),
Rapport sur certains aspects d'une réforme de l'impôt des sociétiés, Ministry of Finance, Brussels.

High Finance Council (HFC) (1993),
Analyse comparative du régime fiscal de l'assurance-group et des fonds de pension, Ministry of Finance, Brussels.

High Finance Council (HFC) (2001),
La réforme de l'impôt des sociétés : le cadre, les enjeux et les scénarios possibles, Ministry of Finance, Brussels.

High Finance Council (HFC) (2002),
Rapport Annuel, Study Group on Ageing, Brussels.

International Monetary Fund (IMF) (2001),
"Belgium: Selected Issues", IMF *Country Report* No. 01/45, *www.imf.org*, Washington D.C.

Immervoll, H., F. Berger, M. Borsenberger, J. Lumen, B. Scholtus and K. de Vos (2001),
"The Impact of Tax-Benefit Systems on Low-Income Households in the Benelux Countries", *Schmollers Jahrbuch* 121, pp. 313-352, Berlin.

Johnson, S., R. La Porta, F. Lopez-de-Silanes and A. Shleifer (2000),
"Tunnelling", NBER *Working Paper* 7523. Cambridge, Mass.

Jorgenson, D., M.S. Ho and K. Stiroh (2002),
"Projecting Productivity Growth: Lessons from the US Growth Resurgence", *Economic Review*, Federal Reserve Bank of Atlanta.

Kegels, C., M. van Overbeke and W. van Zandweghe (2002),
"ICT contribution to economic performance in Belgium: preliminary evidence", *Federal Planning Bureau*, *Working Paper* 8-02, Brussels.

Kesti, J. and C. Balle eds (2000), *European Tax Handbook* 2000,
International Bureau of Fiscal Documentation, Amsterdam.

King, M. and D. Fullerton (1984),
The taxation of income from capital, NBER and University of Chicago Press.

Knieps, G. (1996),
Wettbewerb in Netzen – Reformpotentiale in den Sektoren Eisenbahn und Luftverkehr, Walter Eucken Institut Vortraege und Aufsaetze 148, Tübingen.

Knieps, G. (2000),
"Der disaggregierte Regulierungsansatz der Netzökonomie", in G. Knieps and G. Brunnekreeft (eds.), *Zwischen Regulierung und Wettbewerb*, Heidelberg.

Kortum, S. and J. Lerner (2000),
"Assessing the contribution of venture capital to innovation", *Rand Journal of Economics* 31, pp. 674-692.

Kumkar, L. (2000a),
"Zur institutionellen Ausgestaltung der Strommarktregulierung: Brauchen wir eine eigenständige Regulierungsbehoerde für den Stromtransport?" *Kiel Discussion Paper* 371, Kiel.

Kumkar, L. (2000b),
"Wettbewerbsorientierte Reformen der Stromwirtschaft: Eine institutionenökonomische Analyse", *Kiel Study* 305, Tübingen.

Künzli, N., R. Kaiser, S. Medina, M. Studnicka, O. Chanel, P. Filliger, M. Herry, F. Horak Jr, V. Puybonnieux-Texier, P. Quénel, J. Schneider, R. Seethaler, J-C. Vergnaud, H. Sommer (2000),
"Public-health impact of outdoor and traffic-related air pollution: a European assessment", *The Lancet* 356.

La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R. Vishny (1998),
"Law and Finance", *Journal of Political Economy* 106, pp. 1113-55.

La Porta, R., F. Lopez-de-Silanes, A. Shleifer and R. Vishny (2000),
"Investor protection and corporate Governance", *Journal of Financial Economics* 58 (1), pp. 3-27.

Ministry of Finance (2000),
Impôt des personnes physiques, Brussels.

Ministry of Finance (2002a),
"Le Programme de Stabilité de la Belgique (2003-2005)", Brussels.

Ministry of Finance (2002b),
Tax Survey No. 14, Brussels.

Ministry of Mobility and Transport (2002),
"L'avenir du rail en Belgique", *http://vici.fgov.be/mobil/fr/L'avenir.pdf*, Brussels.

Mira, T. (2001),
Milieu- en natuur rapport Vlaanderen: thema's, Vlaams minister van Leefmilieu en Landbouw, Leuven.

National Bank of Belgium (NBB) (2002a),
"Effets du passage à l'euro fiduciaire sur l'inflation", *Revue économique* 2002 II, 8e année, Brussels.

National Bank of Belgium (NBB) (2002b),
"Évolution économique et financière", *Rapport* 2001, Vol. I, Brussels.

National Bank of Belgium (NBB) (2002c),
Financial Stability Review, Issue 1, Brussels.

National Institute of Statistics (NIS) (2002),
Médias et audiovisuel, *http://statbel.fgov.be/figures/d75_fr.asp#2*, Brussels.

Nickell, S. and R. Layard (1999),
"Labor Market Institutions and Economic Performance", in O. Ashenfelter and D. Card (eds.), *Handbook of Labor Economics* 3, pp. 3029-3086.

Nicoletti, G., A. Bassanini, E. Ernst, S. Jean, P. Santiago and P. Swaim (2001),
"Product and labour market interactions in OECD countries", OECD *Economics Department Working Paper* 312, Paris.

Nicoletti, G., S. Scarpetta and O. Boylaud (1999),
"Summary indicators of product market regulation with an extension to employment protection legislation", OECD *Economics Department Working Paper* 226.

Nouwen, J., C. Cornelis, R. De Fre, M. Wevers, P. Viaene, C. Mensik, J. Patyn, L. Verschaeve, R. Hooghe, A. Maes, M. Collier, G. Schoeters, R. Van Cleuvenbergen and P. Geuzens (2001),
"Health risk assessment of dioxin emissions from municipal waste incinerators: the Neerlandquarter (Wilrijk, Belgium)", *Chemosphere* 43, pp. 909-923, Pergamon Press.

OECD (1994),
Taxation and household savings, Paris.

OECD (1998a),
Education at a Glance, Paris.

OECD (1998b),
Environmental Performance Reviews of Belgium, Paris.

OECD (2000a),
"Towards global tax co-operation: Progress in identifying and eliminating harmful tax practices", *Financial Market Trends* 77, Paris.

OECD (2000b),
Policies towards full employment, Paris.

OECD (2001a),
"Corporate tax incentives for foreign direct investment", *Tax Policy Studies*, No. 4, Paris.

OECD (2001b),
Communications Outlook, Paris.

OECD (2001c),
The New Economy; Beyond the Hype, Paris.

OECD (2001d),
Education at a Glance, Paris.

OECD (2001e),
Knowledge and Skills for Life: First Results from PISA 2000, Paris.

OECD (2001f),
Economic Survey of Belgium, Paris.

OECD (2001g),
Railway Reform, European Conference of Ministers of Transport (ECMT), Paris.

OECD (2001h),
Economic Survey of Germany, Paris.

OECD (2001i),
"The Development of Broadband Access in OECD Countries", Working Party on Telecommunication and Information Services Policies, DSTI/ICCP/TISP(2001)2/Final, Paris.

OECD (2001j),
"Appendices: OECD flagship report on regulatory quality", Meeting of the Regulatory Management and Reform Working Party, Public Management Committee, OECD, Paris.

OECD (2002a),
OECD *Economic Outlook* 71, Paris.

OECD (2002b),
OECD *Employment Outlook*, Paris.

OECD (2002c),
Benefits and wages, OECD *indicators*, Paris.

OECD (2002d),
Annual Report on Competition Policy Developments in Belgium – 2001" Directorate for Financial, Fiscal and Enterprise Affairs, Competition Committee, DAFFE/COMP(2002)27/03 (for official use), Paris.

OECD (2002e),
"E-Commerce In Europe: Main Findings of the Eurostat Pilot Survey (2000-2001)", Working Party on Indicators for the Information Society, DSTI/ICCP/IIS/RD(2002)2 (for official use), Paris.

OECD (2002f),
"Survey of Actions Taken or Contemplated to Improve the Integrity and Transparency of Financial Markets", DAFFE/CMF(2002)17/REV1, Paris.

OECD (2002g),
"Public Service as an Employer of Choice", *Policy Brief*, Paris.

OECD (2002h),
"Performance Management Program in the Canadian Federal Public Service", OECD-Germany High-Level Symposium, Berlin, 13-14 March 2002, PUMA/HRM(2002)12, Paris.

OECD (2002i),
Strategies to Reduce Greenhouse Gas Emissions from Road Transport: Analytical Methods, Paris.

OECD (2002j),
"Vieillir au travail : comment promouvoir l'emploi des plus de 50 ans en Belgique ?", *Rapport national sur la Belgique*, Paris.

Office national de l'emploi (2001),
Jaarverslag 2001, Brussels.

Pamukçu, T. and W. Van Zandweghe (2002),
"Constructing Productive ICT Capital Stock Series for Belgium", *Federal Planning Bureau Working Paper* 12-02, Brussels.

Parry, I.W.H. (2002),
"Comparing the efficiency of alternative policies for reducing traffic congestion", *Journal of Public Economics* 85, pp. 333-362.

Pilat, D. and F.C. Lee (2001),
"Productivity growth in ICT producing and ICT using industries: A source of growth differences in the OECD?" OECD STI *Working Paper* 2001/4, Paris.

Pissarides, C. A. (1998),
"The impact of employment tax cuts on unemployment and wages: The role of unemployment benefits and tax structure", *European Economic Review* 42, pp. 155-83.

Proost, S. and I. Mayeres (2001),
"Should diesel cars in Europe be discouraged?", *Regional Science and Urban Economics*, Vol. 31 pp. 453-470, Elsevier.

Proost, S., K. Van Dender, C. Courcelle, B. De Borger, J. Peirson, D. Sharp, R. Vickerman, E. Gibbons, M. O'Mahony, Q. Heany, J. Van Den Bergh and E. Verhoef (2002),
"How large is the gap between present and efficient transport prices in Europe?", *Transport Policy* 9, pp. 41-57, Pergamon Press.

RDC (2001),
"Evaluation of costs and benefits for the achievement of reuse and recycling targets for the different packaging materials in the frame of the packaging and packaging waste directive 94/62/EC", RDC-Environment and Pira International, Brussels.

Saintrain, M. (2001),
"Effets macro-économiques et budgétaires de la réforme fiscale," *Bulletin de documentation du Ministère des Finances*, No. 3, pp. 129-143.

Scarpetta, S., P. Hemmings, T. Tressel and J. Woo (2002),
"The role of policies and institutions for productivity and firm dynamics: Evidence from micro and industry data", OECD *Economics Department Working Paper* 329, Paris.

Schertler, A., and M. Stolpe (2000),
"Venture Mania in Europe: Its Causes and Consequences", *Kiel Discussion Paper* 358, Kiel.

Sommer, H., R. Haler, O. Channel, M. Herry, M. Buero, S. Masson, J-C. Vergnaud (1999),
Economic Evaluation of outdoor and traffic-related air pollution: a report to the WHO Ministerial Conference EDMZ, Bern.

Stockman, P. (2002),
"General and selective reductions in employer social security contributions in the 2002

vintage of HERMES – a revision of WP8-01", *Federal Planning Bureau Working Paper* 6-02, Brussels.

Trujillo, C.R. (forthcoming),
"Measuring technical efficiency of European railways using a stochastic frontier model: An innovative approach", Institute for Transport Studies, University of Leeds.

United Kingdom Department for Transport, Local Government and the Regions (2001),
Transport Statistics Great Britain 2001, London.

United States Commercial Service (2001),
"Environmental Technologies Market Profile", *Belgium Market Profile*, *www.usatrade.gov*.

United States Environmental Protection Agency (2000),
Heavy-Duty Engine and Highway Diesel Sulfur Control Requirements: Regulatory Impact Analysis, *A cost-Benefit Analysis*, EPA 420-R-00-26, Washington D.C.

United States Environmental Protection Agency (2002),
Highway Diesel Progress Review, EPA 420-R-02-16, Washington D.C.

Université catholique de Louvain (2000),
Pour construire l'avenir de la Wallonie et de Bruxelles, Leuven.

Valenduc, Christian (1996),
"Imposition des revenus des facteurs de production et de la consommation en Belgique", *Bulletin de documentation du Ministère des Finances* 4, pp. 211-238, Brussels.

Valenduc, Christian (2002a),
"Effective or implicit tax rates? Some evidence from the past reforms and the present debate on corporate income tax in Belgium", *Bulletin de documentation du ministère des Finances* 4, pp. 54-89, Brussels.

Valenduc, Christian (2002b),
La réforme de l'impôt des personnes physiques: ses effets sur l'imposition des salaires, l'incitation à l'emploi et la distribution des revenus", *Bulletin de documentation du ministère des Finances*, Brussels.

Van den Noord, P. (2000),
"The size and role of automatic fiscal stabilisers in the 1990s and beyond", OECD *Economics Department Working Papers* 230, Paris.

Vandenberghe, V. (2002),
"Un enseignement à réguler, des filières à régulariser", Université Catholique de Louvain.

Van der Wiel, H. (2001),
"Does ICT boost Dutch productivity growth?", CPB *Document* 16, The Hague.

Van Oberbeke, M. (2001),
"Les politiques de recherche et d'innovation aujourd'hui", *Federal Planning Bureau Working Paper* 01-01, Brussels.

Vlaamse Dienst voor Arbeidsbemiddeling en Beroepsopleiding (VDAB) (2000),
"atabeheer and -analyse: Knelpunt beroepen 2000" Brussels.

World Health Organisation (1999),
"Questions/Réponses sur les dioxines et leurs effets sur la santé humaine", *Aide-mémoire n°* 225, Geneva.

Wymeevsch, E. (1993),
Groups of Companies in the EEC: A Survey Report to the Commission on the Law Relating to Corporate Groups in Various Member States, Berlin.

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BASIC STATISTICS OF BELGIUM, 2001

THE LAND

Area (1 000 km^2)	30.5	Major urban areas (thousand inhabitants)	
Agricultural area (1 000 km^2)	13.4	Brussels	964.4
		Antwerp	931.6
		Liège	584.4
		Ghent	496.6

THE PEOPLE

Population (thousands)	10 263	Total labour force (thousands)	4 494
Inhabitants per km^2	337	Total domestic employment (thousands):	4 148
Net increase (31.12.2 000)	24 048	Agriculture	28
Net migration (thousands, 31.12.2 000)	14	Industry and construction	838
		Other	3 282

PRODUCTION

Gross domestic product (billion euro)	254	Gross domestic product by origin, at market	
Gross domestic product per head (US$)	22 189	prices (per cent):	
Gross fixed investment:		Agriculture	1.3
Per cent of GDP	20.7	Industry	19.5
Per head (US$)	4 601	Construction	4.7
		Other	74.5

THE GOVERNMENT

General government (per cent of GDP):		Composition of the House of Representatives	
Current expenditure	46.3	(number of seats):	
Current revenue	46.9	Liberals	41
Gross debt	108.6	Socialists	33
		Christian-socials	32
		Ecologists	20
		Others	24
		Last election: 13.6.1999	

FOREIGN TRADE

Exports of goods and services		Imports of goods and services	
(per cent of GDP)	85.6	(per cent of GDP)	82.0
Main exports (per cent of total),		Main imports (per cent of total),	
SITC, Rev. 3 :		SITC, Rev. 3 :	
Iron and steel products (67 + 68)	5.8	Iron and steel products (67 + 68)	4.2
Chemical products (5)	19.8	Chemical products (5)	18.3
Machinery and equipment (71 to 77)	14.9	Machinery and equipment (71 to 77)	18.0
Textile products (65)	3.2	Textile products (65)	1.9
Transport equipment (78 + 79)	15.2	Transport equipment (78 + 79)	12.9
		Energy (3)	8.7

THE CURRENCY

Irrevocable conversion rate :	40.3399	Currency units of euro per US$, average of daily figures:	
		Year	1.1166
		December 2002	0.9817

Note: An international comparison of certain basic statistics is given in an annex table.

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•

The Secretariat's draft report was prepared for the Committee by David Carey, Hubert Strauss, Gerrit van den Dool and Boris Cournède under the supervision of Andreas Wörgötter.

•

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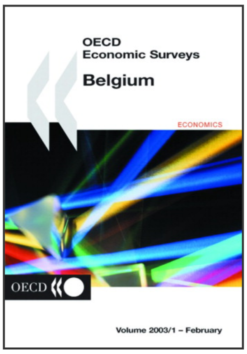

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