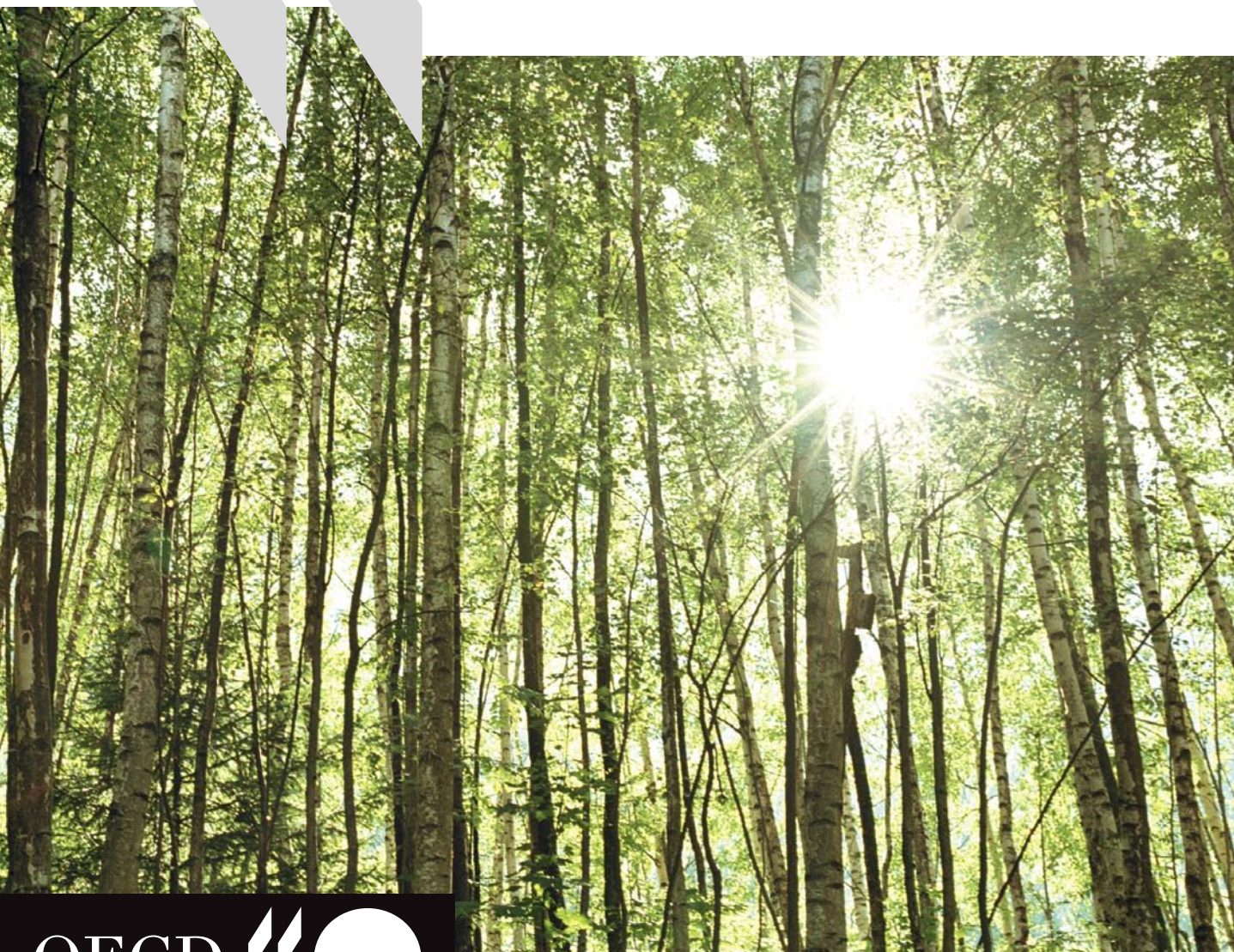




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Table of contents

Executive summary	8
Assessment and recommendations	11
Chapter 1. The policy challenge: preparing for population ageing	21
The economic and budget consequences of population ageing	22
A strategy to attenuate the impact of population ageing	30
The macroeconomic context	41
Summing up the policy challenges	43
Notes	45
Bibliography	45
Chapter 2. Putting public finances on a sustainable path	47
Main issues	48
The short-term challenge: achieving a small surplus by 2007	52
Enhancing the efficiency of public spending	57
Notes	66
Bibliography	67
Annex 2.A1. Key assumptions	69
Chapter 3. Constraining public health expenditure growth	71
Factors driving high growth	73
Policy responses: already initiated and desirable reforms	78
Assessment	85
Notes	86
Bibliography	87
Chapter 4. Increasing the employment rate	89
Keeping older workers in employment longer	90
Reducing the high structural unemployment rate	104
Combating unemployment and fostering employment of youngsters	114
Notes	117
Bibliography	121
Chapter 5. Enhancing the economic impact of migration	123
Immigration policy	129
Immigrants in the labour market	130
The fiscal impact	137
Assessment	138
Notes	139
Bibliography	141

Chapter 6. Raising achievement in secondary education	143
School access, streaming and grade repetition are the major selection mechanisms	144
Improving the quality and attractiveness of technical and vocational education	150
Reallocating resources to where they are most needed.	150
Fostering teacher and student performance: striking the right balance between central regulation and autonomy	151
Notes	153
Bibliography	154
Chapter 7. Increasing productivity growth	155
Removing barriers to higher productivity growth in ICT-using sectors	156
Increasing product-market competition more generally.	160
Strengthening the national innovation system	174
Notes	182
Bibliography	184
Glossary	187
Annex A. Calendar of main economic events	189



Boxes

1.1. Trends in labour productivity growth	25
1.2. Trends in working time	27
1.3. Budget cost of population ageing based on OECD economic projections ..	30
2.1. Public finance recommendations.	49
2.2. Measures to reinforce the budgetary process	56
3.1. Constraining public health expenditure growth: policy recommendations	74
4.1. Increasing employment: policy recommendations.	91
4.2. Major routes to early withdrawal from the labour market	94
4.3. Measures to increase the employment rate for older workers in Finland, New Zealand, and the Netherlands	102
4.4. The new procedure of following up on jobseekers' search efforts	109
4.5. The Comprehensive Approach of the Flemish PES	110
5.1. Recommendations to enhance the economic impact of migration	124
5.2. Work permits in Belgium	130
6.1. Raising achievement in secondary education: policy recommendations ..	146
6.2. Main features of the non-tertiary education system in the French Community	147
7.1. Increasing productivity growth: policy recommendations	157
7.2. The product market regulation (PMR) indicator system.	162
7.3. Administrative burden on start-ups	168

Tables

1.1. Population growth by age group.	22
1.2. Contributions to the projected evolution of labour supply	23

1.3. Decomposition of long-term economic growth projections	24
1.4. Decomposition of hourly labour productivity growth	25
1.5. Official long-term economic growth projections	28
1.6. Budget cost of population ageing ? official baseline projections	29
1.7. Budget cost of population ageing based on OECD economic projections 2003-30	30
1.8. Impact of policy reforms on future participation rates, 2000-50	35
1.9. Short-term projections	43
2.1. Replacement rate for a basic typology	48
2.2. Projections for total public health care expenditure	50
2.3. Evolution of the structural primary surplus	52
2.4. Maximum implied primary spending growth under different growth assumptions	54
2.5. Origin of newly hired managers	60
3.1. Indicators of supply in the health sectors	75
3.2. Indicators of lifestyle habits	77
4.1. The combined influence of ageing and alternative employment rate hypotheses for the age group 55-64	93
4.2. Income replacement rates in various exit schemes depending on income levels and family situation, 2003	97
4.3. Net replacement rates in the initial phase of unemployment, 2002	106
4.4. Net replacement rates after 60 months of unemployment, 2002	107
4.5. Road distance between provincial capitals	108
5.1. Shares of foreigners in population, main nationalities in 2002	126
5.2. Labour market status, age and education: Belgians and foreigners, 2003 ..	129
5.3. Labour market indicators by nationality, 2001	132
5.4. Skill structure of the Belgian population aged 25-64 (average 1996-2002) ..	135
5.5. Employment by sector and nationality	135
5.6. Registered independents by nationality, 2002	136
6.1. Performance in reading, mathematical and scientific literacy in secondary education	145
6.2. Proportion of pupils with no year lost in the French and Flemish communities, 2001-02	148
6.3. Rate of degree achievement by branch of education	149
7.1. State control: country scores by domain and sub-domain	164
7.2. State control: values of the low-level indicators	165
7.3. Barriers to entrepreneurship: country scores by domain and sub-domain.	166
7.4. Barriers to entrepreneurship: values of the low-level indicators	167
7.5. Regulation indices in professional services	170

Figures

1.1. Old age dependency ratio	24
1.2. Hourly labour productivity growth	25
1.3. Gap in hourly labour productivity levels between Belgium and the United States	26
1.4. Trend growth in hours worked per person employed	27
1.5. Employment rates	32
1.6. Employment rate for the 15-24 age group and tertiary attainment	32

1.7. Employment rate for older workers and employment/unemployment rates for younger workers	33
1.8. Working time and GDP per capita	36
1.9. Government administration expenditure.	37
1.10. Hourly labour productivity gap vis-à-vis the United States	38
1.11. Contribution of ICT-using services to value added per person engaged	39
1.12. Labour productivity growth in the distribution and financial sectors	40
1.13. Product Market Regulation (PMR) indicators	40
1.14. GDP growth and the NBB business cycle indicator	42
2.1. Government financial balances	52
2.2. Public administration employment 2002	58
2.3. E-government maturity and growth since 2001, 2001-04	62
2.4. State-aid to the railway sector	64
3.1. Health expenditures and GDP per capita	72
3.2. Average number of doctors' consultations.	76
4.1. Labour market status of persons aged 50-64	93
4.2. Change in labour force participation rate of 45-59 year old males and level of the output gap	96
4.3. Wages increase steeply with age	98
4.4. Progress in raising the employment rates of older workers has been slow	101
4.5. Unemployment rate by region, age and attainment.	104
4.6. Incidence of long-term unemployment	105
4.7. Unemployment and vacancies.	108
4.8. Public spending on labour market measures	111
4.9. Few students work and many non-students do not work	115
5.1. Population movement: natural increase, net migration and naturalisations .	127
5.2. Migration flows by nationality, gross and net	128
5.3. Belgium, recorded immigration, asylum seekers, and work permits issued.	131
5.4. Prosecutions for irregular employment by sector	137
7.1. Summary indicators of regulation in retail distribution.	158
7.2. Product market regulation	161
7.3. The PMR indicators system.	163
7.4. Electricity prices excluding taxes.	171
7.5. Relative efficiency in railways	172
7.6. Rail Liberalisation Index	173
7.7. R&D spending and patenting are close to EU averages	175
7.8. Educational attainment of the 25- to 64-year-old population (1991-2002). .	179
7.9. Expenditure on tertiary education institutions	181

BASIC STATISTICS OF BELGIUM, 2003

THE LAND

Area (1 000 km ²)	30.5	Major urban areas (thousand inhabitants)	
Agricultural area (1 000 km ²)	13.4	Brussels	999.9
		Antwerp	944.9
		Liège	587.0
		Ghent	502.5

THE PEOPLE

Population (thousands)	10 396	Total labour force (thousands)	4 531
Inhabitants per km ²	340	Total domestic employment (thousands):	4 124
Net increase (31-12-2003)	40 577	Agriculture	97
Net migration (thousands, 31-12-2003)	28	Industry and construction	872
		Other	3 155

THE PRODUCTION

Gross domestic product (billion euro)	270	Gross domestic product by origin, at market	
Gross domestic product per head (USD)	29 369	prices (per cent):	
Gross fixed investment:		Agriculture	1.2
Per cent of GDP	18.9	Industry	18.4
Per head (USD)	5 563	Construction	4.5
		Other	75.9

THE GOVERNMENT

General government (per cent of GDP):		Composition of the House of Representatives	
Current expenditure	51.0	(number of seats):	
Current revenue	51.3	Liberals	50
Gross debt (31-12-2003)	99.9	Socialists	48
		Christian-democrats	28
		Ecologists	4
		Others	20
		Last election: 18.5.2003	

THE FOREIGN TRADE

Exports of goods and services		Imports of goods and services	
(per cent of GDP)	81.6	(per cent of GDP)	77.6
Main exports (per cent of total),		Main imports (per cent of total),	
SITC, Rev. 3:		SITC, Rev. 3:	
Iron and steel products (67 + 68)	5.4	Iron and steel products (67 + 68)	4.1
Chemical products (5)	26.7	Chemical products (5)	23.2
Machinery and equipment (71 to 77)	13.1	Machinery and equipment (71 to 77)	15.7
Textile products (65)	2.7	Textile products (65)	1.6
Transport equipment (78 + 79)	14.2	Transport equipment (78 + 79)	13.0
		Energy (3)	8.9

THE CURRENCY

Irrevocable conversion rate:	40.3399	Currency units of euro per USD, average	
		of daily figures:	
		Year	0.8852
		December 2004	0.7454

Executive summary

The dominant challenge for Belgium in the years to come is to prepare for population ageing. This entails putting in place policies to attenuate its effects on economic growth and public finances. The few years left before large numbers of baby boomers retire provide a window of opportunity to push ahead with such policies and so preserve the essential elements of the system of social protection. First, further budget consolidation is required to put public finances on a sustainable path. Second, reforms are needed to increase employment rates, especially for the older working age-population, school leavers and ethnic minorities, and to slow the decline in working time. Finally, reforms are required to raise productivity growth.

Putting public finances on a sustainable path

The government should implement consolidation measures to improve the structural budget balance by about 1% of GDP by 2007, with the focus being on expenditure restraint. Healthcare reforms will be needed to contain expenditure growth in the medium term. Should efficiency reforms fail to constrain adequately the growth in public health expenditure, it will also be necessary for the authorities to re-consider the public share of healthcare expenditures. Savings on government expenditure to make room for reducing the high tax rates on labour income should be sought by increasing the efficiency of government and reducing subsidies. In particular, high public transport subsidies should be reduced when it becomes feasible to introduce road pricing, also reducing the economic cost of climate change policies.

Increasing labour utilisation

Belgium has considerable scope to attenuate the effects of population ageing by raising the currently low employment rate of school leavers, older workers and ethnic minorities and slowing the decline in working time. This should be mainly achieved by progressively phasing out subsidies for early retirement (abolishing the older unemployed scheme and making retirement decisions actuarially neutral) and using budgetary room to reduce the taxes on labour income. Furthermore, job-search requirements should be more rigorously enforced and active labour market policies redirected from job creation to job placement. The government should also ease EPL on temporary employment contracts, lower barriers to student work and seek ways to improve education outcomes to enable more young people to find a first job. Better education outcomes would also help to improve labour-market integration of ethnic minorities, and more effective anti-discrimination measures are required. Successful programmes to improve the language competence of migrant children should be offered more widely.

Increasing productivity growth

Increasing productivity growth would also attenuate the costs of population ageing. This could be facilitated by removing barriers to productivity growth in ICT-using sectors (in particular retail trade and, at the European level, in retail banking), strengthening product market competition and

refocusing innovation policy. Reaping the benefits from applying more ICT in the distribution sector will require easing zoning restrictions, simplifying rules on overtime, making shop opening hours more flexible and widening the scope for temporary work contracts. In retail banking, the Belgian authorities and their European counterparts should fully implement the Financial Services Action Plan and apply the four-level “Lamfalussy framework”. The high administrative burden on entrepreneurship should be reduced. Competition should be increased in the electricity sector by a series of measures limiting the incumbent’s capacity to abuse its market power. Tertiary education and research institutions could be made more efficient by increasing inter-university competition and the share of private contributions. Innovation policy should provide more support for organisational change, enhance collaboration between business and researchers and foster a broader and more rapid diffusion of knowledge. This should be complemented by improving the ICT-using competencies of persons with lower intermediate skills and low education attainment.

This Survey is published on the responsibility of the Economic and Development Review Committee of the OECD, which is charged with the examination of the economic situation of member countries.

The economic situation and policies of Belgium were reviewed by the Committee on 13 December 2004. The draft report was then revised in the light of the discussions and given final approval as the agreed report by the whole Committee on 7 January 2005.

The Secretariat's draft report was prepared for the Committee by David Carey, Hubert Strauss, Kristel Buysse, and Paul O'Brien under the supervision of Andreas Wörgötter.

The previous Survey of Belgium was issued in February 2003.

This Economic Survey may not include an examination of certain policies that are relevant to the country but fall within the competence of the European Community. While some of these policies may be examined in the Survey of the Euro Area, other policies may not be examined by the EDRC, as the European Commission currently maintains that the Economic Surveys should be limited in their coverage. No limits apply to the policies that can be covered in the Economic Surveys of other OECD countries.

The Commission and the member States of the European Union are working actively on ways of reviewing EC and EU wide policies within the context of the EDRC.

Assessment and recommendations

The main policy challenge is to prepare for population ageing

Belgium's population is ageing, albeit a little less quickly than the OECD average. Growing numbers of baby boomers will retire from around the end of the current decade. This will reduce economic growth mainly through lower growth in the labour supply and will put pressure on public finances for decades to come. While progress has been made in implementing policies to minimise the costs of this demographic shock, notably by a substantial reduction of public debt, the few years left before large numbers of baby boomers retire provide a window of opportunity to go further in implementing such policies and thereby preserving the essential elements of the system of social protection. First, budget consolidation is required to put public finances on a sustainable path – defined as one where government programmes can be financed indefinitely at constant tax rates and public debt eventually stabilises as a share of GDP (as a euro-area country, this must also be less than 60% of GDP). Second, reforms need to be made to increase employment rates, especially for the older working age-population, the younger working-age population and ethnic minorities, and to slow further the decline in working time. Finally, reforms are required to increase productivity growth. With the economy in the recovery phase of the business cycle, this is the ideal time to make substantial progress in implementing these policies.

Population ageing will reduce economic growth and put pressure on public finances

Assuming a persistent decrease of working time, albeit smaller than in the past 30 years, and no further significant decrease of the structural unemployment rate, economic growth could fall from an annual average rate of around 2% in the current decade to a little over 1% over the period 2010-50 according to OECD projections. However these projections do not take into account the future effects on labour supply of the 2001 tax reform, reductions in social security contributions, measures to increase job search and the 1996 pension reform. Taking these factors into account and assuming that further measures will be taken to increase the employment rate, notably for the older working-age population, and that the labour productivity growth rate will rise above the recent trend, the High Finance Council (HFC), which prepares annual projections of the economic- and budget impact of population ageing, projects a more modest decline in the economic growth rate, to around 1½ per cent by 2030. On the basis of this outlook and assuming that the government continues to take measures regularly to restrain healthcare outlays, the HFC projects that the budget cost of population ageing will rise to 3.4% of GDP in 2030, mainly reflecting higher outlays for pensions and healthcare. However, if economic growth were to be as projected by the OECD, which would entail a lower employment rate for the older working-

age population, which receives high social benefits, the budget cost of population ageing would be about 1% of GDP higher.

Budget consolidation is needed to put public finances on a sustainable path

Public finances should be put on a sustainable path so as to avoid large increases in taxes – and hence in the excess burden of taxation – or brutal cuts in social programmes when ageing-related budget pressures rise. The HFC estimates that public finances would be on a sustainable path if the structural budget balance were increased to a surplus of 0.3% of GDP in 2007 rising to 1½ per cent of GDP over 2011-18 before slowly falling back to zero by 2030 as the budget costs of ageing rise. Public debt would fall from 97% of GDP in 2004 to 30% by 2030. Effectively, lower interest payments make room for higher ageing-related budget costs on this trajectory. There is still some way to go to put public finances onto this path – taking into account announced measures and abstracting from non-recurring transactions, the structural budget balance is projected by the OECD to be a deficit of around ½ per cent of GDP in 2007, similar to the estimated current level. The government should take consolidation measures to increase the structural budget balance (abstracting from non-recurring items) by about 1% of GDP by 2007 so as to put public finances on a sustainable path. In view of Belgium’s already high tax burden and the adverse effects that this has on economic activity, the priority should be given to expenditure restraint in budget consolidation.

Ongoing reforms will be required to contain growth in healthcare expenditures

Growth in healthcare expenditures represents a significant risk to the sustainability of public finances. Following pressures that built up in recent years when restrictions were imposed to contain expenditure growth and in response to concerns about equitable access to healthcare, the government lifted the budget limit on real growth in public healthcare outlays to an annual average rate of 4.5% over 2003-07. Cutting that growth rate to 2.8% on average over 2008-30, as estimated in the HFC projections, is likely to be a major challenge. There are a number of measures that are being implemented to restrain growth in healthcare expenditures, mainly by increasing efficiency, including: Diagnosis Related Group arrangements for hospital financing; incentives to develop a gatekeeper role for general practitioners; incentives for the development of a centralised electronic medical file for patients; benchmarking of prescription behaviour and medical practice; and increasing incentives for the use of generic drugs when they are medically equivalent substitutes for formerly patented drugs. *The government should pursue these reforms more vigorously by: not reimbursing medical expenses for patients not referred by a gatekeeper; ensuring that complete and up-to-date electronic medical files are available for consultation by medical practitioners for all patients; and by not reimbursing the difference in price between registered and generic drugs.* The latter measure should not be too harmful to incentives to develop new medicines given that Belgium is also liberalising licensing policies for new drugs. If it proves not to be possible to restrain growth in healthcare expenditures to the extent assumed, the government will need to consider the extent to which it responds by reducing its share of total healthcare expenditures as opposed to increasing taxes and/or reducing other expenditures.

Belgium has considerable scope to attenuate the effects of population ageing by raising the employment rate

Belgium's low employment rate (60%) leaves great room for improvement and can even be a potential advantage compared with other countries in coping with population ageing in that there is considerable scope to offset some of the ageing-related deceleration in labour supply by drawing inactive members of the population into employment, although this will require challenging reforms. Employment rates are particularly low for older workers (28% of the population aged 55-64), younger workers (27% of the population aged 15-24) and ethnic minorities; by contrast, rates are near international averages for prime-age workers. It was estimated in a recent OECD study that if a set of very ambitious reforms to increase employment rates were implemented – reforms that go significantly beyond what is presently being considered in Belgium – employment would increase by 12% over the period to 2050 instead of declining slightly in the unchanged policy scenario. As noted above, the HFC assumes that only part of this potential will be exploited, which may be a reasonable assessment of Belgian popular preferences in this regard. Insofar as it would be possible to go further, that would attenuate the slowdown in growth in living standards as well as creating room for reductions in the tax burden whilst maintaining public finances on a sustainable path.

Government should phase out public subsidies for early retirement

In order to achieve the HFC employment projection, it will be essential to reduce incentives further for older workers to leave the labour force prematurely. Older workers are encouraged to retire before age 60 through attractive income replacement options – pre-pension and “Canada Dry” arrangements (older unemployment benefit plus a top-up from the employer) that are mainly publicly financed. This also suits employers as steep age/seniority premiums in pay scales mainly for white collar workers make older workers relatively unattractive. These schemes were introduced in the 1970s and 1980s in response to widespread industrial restructuring. The idea was to make room for younger workers by facilitating the early retirement of older workers. Such schemes have manifestly failed in this regard as Belgium, like other countries with such schemes, has low employment rates for both older and younger workers. The government has increased the minimum age for entry into the older unemployment benefit scheme, which exempts beneficiaries from job-search obligations, from 55 in 2002 to 58 in July 2004. *The government should phase out these schemes by progressively aligning access conditions with those for early retirement pensions.* Once these schemes were merged, candidates for early retirement would have to have a significantly higher age or longer career history to qualify for a benefit than is currently the case. In addition, pension entitlements would no longer continue to accumulate for retired persons up to age 65, as occurs with pre-pension and “Canada Dry” arrangements. *Top-up payments to early retirees should also be taxed in the same way as regular labour earnings instead of at preferential rates or not at all, as is currently the case. In the transition phase, the top-up payments in pre-pension and “Canada Dry” arrangements should either be subject to full social security contributions or beneficiaries should not accumulate pension rights. Early-retirement pension should also be reduced on an actuarially fair basis relative to an old-age pension taken at*

age 65. Moreover, the accumulation of pension rights while receiving unemployment benefits should be limited to active job seekers, thus excluding early retirement and equivalent spells. It could reasonably be expected that if attractive routes to early retirement were closed and job search requirements for older unemployment beneficiaries enforced (see below), the social partners would find it more rewarding to invest more in continuing education for older employees and to negotiate pay scales that do not price older workers out of the market and to improve working conditions.

Job-search requirements should be more rigorously enforced and ALMPs redirected from job creation to job placement to reduce long-term unemployment

There remains considerable scope to reduce the structural unemployment rate (around 7%), and especially long-term unemployment (almost half of the total) by more rigorously enforcing job search requirements for unemployment beneficiaries. The federal government has begun reviewing unemployment beneficiaries, starting with the youngest, to verify that they in fact fulfil their job-search obligations. It is expected that all beneficiaries up to age 50 will have been examined by mid-2007, at which point the exercise will be reviewed. *This process should be extended as soon as possible to cover unemployment beneficiaries aged 50 to 57 who are no longer exempted from job-search obligations. Subsequently the exemption from job-search requirements for unemployed persons aged 58 and over should be phased out and these obligations should equally be enforced.* More efficient use of ALMP resources would also help to reduce unemployment. While Belgian expenditure on ALMPs is around the European average as a share of GDP, a much higher proportion is devoted to public job creation schemes than in other countries. Redirecting such resources to career guidance and orientation would contribute to lowering the unemployment rate in the medium-term by reducing the duration of unemployment. It would also result in placement in more productive jobs with more potential for employees to enhance their human capital.

Better education outcomes for the less educated, less strict EPL and lower barriers to student work would increase employment in the younger age group

The low employment rate for the younger age group is not the counterpart of a high proportion of the population acquiring tertiary qualifications – indeed a high employment rate for this age group and a high proportion of young people obtaining tertiary qualifications tend to go together in OECD countries. Rather, it reflects poor education achievement in the French Community, high school drop-out rates, strict EPL for temporary contracts and fiscal and social security barriers to student work. The French Community is refocusing school curricula on core general skills (reading literacy, foreign languages, mathematics, and sciences) and devoting more resources to students from lower socio-economic backgrounds. This should also help to reduce drop-out rates. The Belgian authorities aim to strengthen the transition from education to work by emphasising job search requirements and closely monitoring search efforts. *If this reform fails to increase*

employment of younger age groups, benefits for persons who have never worked should be abolished. This would increase the effectiveness of the various activation measures proposed by regional public employment services. In addition, the government should ease EPL on temporary employment contracts and remove fiscal and social security barriers on student work to enable more young people to find a job. This, together with an improvement in education achievement and attainment, would help to reduce the high (national) unemployment rate (19%) for this age group. Less strict EPL and lower fiscal and social security barriers to student work would also make it easier for students to finance their studies by working part time.

To improve labour-market integration of ethnic minorities, better education outcomes and more effective anti-discrimination measures are required

Labour-market performance of ethnic minorities is also poor. The employment rate is one half of the rate for natives and the unemployment rate is three times that for natives. Poor educational outcomes on average contribute to this performance. According to the PISA study, the gap in achievement between natives and immigrants (including first generation) is one of the largest in the OECD area. Poor achievement then contributes to low attainment among immigrant groups, with a relatively high proportion of school drop outs and a low proportion of tertiary graduates. The poor education performance of immigrants seems mainly to be attributable to their low socio-economic status. Hence, the measures being taken to improve achievement among poorer social groups should be very helpful for immigrants. But some ethnic minorities may also get off to a bad start in education owing to their failure to have mastered their mother tongue before learning in one of Belgium's national languages. Flanders has introduced a programme whereby children first master their mother tongue and then move on to learning in Dutch. *If this programme proves to be successful, it should be offered on a wider basis, including in the French Community.* Immigrants' labour-market performance also appears to be weighed down by discrimination. According to survey results, a job applicant from an ethnic minority is three times less likely to be hired than a native with the same qualifications. Indeed, the employment rate for ethnic tertiary graduates is no higher than for unskilled natives. It appears that anti-discrimination legislation is difficult to enforce. *The government should devote more resources to enforcing this legislation and should finance publicity campaigns to counter discrimination. Reducing the costs of becoming self-employed, notably by lowering start-up costs, especially by lowering the administrative burden, would also help ethnic minorities to get around the costs of labour-market discrimination.*

There is also scope to attenuate the effects of population ageing by slowing down the long-term decline in working time by further reducing taxes on labour income

In addition to increasing the employment rate, the impact of population ageing on labour supply could also be attenuated by slowing the long-term decline in working time per person employed. Working time has fallen in recent decades mainly because of rising

productivity, increasing taxes on labour income and rising female participation, and is somewhat below the OECD average. One of the effects of further reductions in taxes and social security contributions on labour income, building on the programme of tax cuts and reductions in social security contributions already under way, would be to further slow down the decline in hours worked per person employed. Reducing the tax burden on labour income would also diminish incentives for economic activity to occur in the shadow economy, widening the tax base and further reducing the efficiency costs of taxation. Making a reduction in the tax burden on labour income would require a fall in government expenditure as a share of GDP. Phasing out social security payments for pre-pensioners and unemployed persons who are not job seekers, as recommended above, would reduce social security outlays by 1% of GDP. If job search requirements were strictly enforced and social partners agreed to spend more on training for older workers and to flatten the age/seniority premium in pay scales, most of the people who would otherwise have been drawing benefits in early retirement would be employed and paying taxes rather than becoming long-term unemployed. Hence, such measures could make a useful contribution to reducing government expenditure. In addition, the measures aimed at increasing employment rates and reducing unemployment rates for the younger age group and for ethnic minorities would also have a positive budget impact, making room for further cuts in tax on labour income.

Some savings on government expenditure could be made by increasing the efficiency of government administration

Room for cuts in tax on labour income could also be created by increasing government efficiency. The federal government has launched the Copernicus reforms to increase public sector efficiency. The main objective is to improve the quality of service provision within a given budget rather than to induce cost savings. *In view of the adverse effects on economic performance of high taxation, the government should also use these reforms to reduce administrative expenditure.* The Copernicus reforms consist of a greater use of ICT and change in work methods, the creation of a new management culture, a new approach to Human Resources Management (HRM) and the adoption of analytical accounting. So far, the gains from ICT have been limited and management reforms have been impeded by a lack of autonomy. *Outcome indicators (needed to measure performance in a more autonomous system) should be further developed to reinforce the analytical underpinning of the reforms. Moreover, managers need to be given more autonomy so that they can in fact be held accountable for outcomes. HRM practices should also be reformed to emphasise the development of competencies, make high quality management training compulsory, increase labour mobility and reduce early retirement through the creation of a job placement office within the public sector, and otherwise to make the public sector more attractive to high-skilled workers. Such reforms should also be implemented by other levels of government insofar as this has not already been done.*

Transport policies should target externalities more efficiently

Another area where budget savings could be made is public transport subsidies, which are high by international comparison. They are intended to encourage commuters to switch

from private motor vehicles and thereby ease severe congestion problems as well as to reduce environmental externalities. Such subsidies are even set to increase from January 2005, when the government will pay 20% of rail commuter train ticket prices for private sector employees provided that their employers pay the other 80%; such train tickets are already free for public sector employees. This is a second-best solution to the main problem – road congestion – for which there are currently no suitable policy instruments in place; excise taxes on motor vehicle fuels and taxes on motor vehicle purchase and ownership are poorly targeted on congestion externalities. These arrangements are not only costly, they also encourage excessive mobility. Recent measures shifting taxation from vehicle ownership to fuel consumption go in the right direction. Nevertheless, *governments should consider introducing a road pricing system as soon as it becomes technically feasible and reliable, targeting fuel taxation on pollution externalities alone and reducing public transport subsidies accordingly.*

Increasing productivity growth would also attenuate the costs of population ageing

Although the level of hourly labour productivity is high – it is estimated to be somewhat higher than in the United States – there is nevertheless considerable scope to increase productivity growth. Productivity growth has surged in the United States and in some other countries since the mid-1990s, notably in ICT-using service sectors, whereas it has slowed down in Belgium, creating an opportunity to emulate the improved performance in these other countries. If it were possible to increase the average annual hourly labour productivity growth rate by 1 percentage point, the decline in the economic growth rate caused by population ageing would be offset and the budget cost of population ageing reduced by 0.8% of GDP in 2030. While this is certainly a large increase in labour productivity growth, it is comparable to what the United States and some other OECD countries have achieved since the mid-1990s. Again, budget savings from improved economic performance would make room for tax cuts without undermining fiscal sustainability.

Removing barriers to productivity growth in ICT-using sectors and ensuring greater competition in rail freight transport is necessary if a large increase in productivity growth is to be realised

The ICT-using service sectors that underpin the increase in labour productivity growth in the United States (and some other OECD countries) since the mid-1990s are distribution and finance. While labour productivity growth has also increased in the distribution sector in Belgium over this period, the increase has been much smaller than in the United States. In the finance sector, productivity growth has been falling. Although ICT is universally available, other ingredients are necessary for its productive use. The main barrier to greater use of ICT in the finance sector to raise productivity growth is the lack of integration of retail banking across Europe. *To remove barriers to integration, the Belgian authorities and their European counterparts should fully implement the Financial Services Action Plan and apply the four-level “Lamfalussy framework”.* Barriers to greater use of ICT to raise productivity in the Belgian distribution sector include restrictive zoning and licensing regulations for large

format retail outlets, restrictive regulations on shop opening hours and a lack of flexibility on working hours – factors which limit economies of scale. A new law will come into effect in July 2005 that reduces regulatory barriers for large stores to enter the market or expand. *If the new law does not result in significantly higher entry or expansion of large stores, the authorities should ease zoning restrictions. The government should seek an agreement with social partners, as it is doing, on cutting back on strict and complex rules on overtime and on easing regulation of temporary work contracts. The government should also make shop opening hours more flexible.* Although there are factors beyond the control of the Belgian authorities that limit the scope for chain stores to realise productivity gains by exploiting an optimal mix of rail and road transport to save inventory cost and achieve just-in-time delivery, the regulatory framework in the rail freight industry could nevertheless be made more conducive to competition. The legal splitting of the state-owned NMBS/SNCB into an infrastructure company and a transport service provider took place in January 2005, with both companies being part of a new holding company. The rail regulator within the Federal Public Service of Mobility and Transport is now responsible for monitoring non-discriminatory access. *In the event that non-discriminatory access is not achieved within the new framework, the infrastructure manager should be more tightly regulated or, better still, the holding company should be broken up, ending ownership links between the incumbent's infrastructure- and transport service companies.*

Product market competition more generally should be strengthened through horizontal measures...

Product market competition more generally increases productivity growth by improving the allocation of resources and strengthening managers' incentives to raise efficiency and innovate. *In this regard, the authorities' plan to increase staffing at the competition authority is welcome, although more should be done to bring staffing closer to that in neighbouring countries.* Product market competition is restrained by relatively high use of command and control regulations. *To reduce recourse to such regulations, regulators should be required to assess alternative policy instruments (regulatory and non-regulatory) before adopting a new regulation and guidance should be issued on using alternatives to traditional regulation to achieve policy objectives. In addition, the government should continue to evaluate the need for remaining price controls and abolish them where they are no longer warranted.* In this respect, the case for professional bodies or representatives of trade and commercial interests being involved in specifying or enforcing pricing guidelines or regulations seems rather weak as does the case for maintaining price controls on medical drugs, taxi fares and petroleum products. Product market competition could also be strengthened by reducing barriers to entrepreneurship. The government programme to reduce the administrative burden on business is helpful in this regard. The Government intends in 2005 to abolish licences and permits for at least eleven trades (for example photography and watch making). *The high burden on entrepreneurship imposed by systems for licenses and permits should be reduced by introducing a "silence is consent rule" (i.e., a rule that stipulates that licences are issued automatically if the licensing office has not acted by the end of the statutory response period) and by creating single contact points ("one-stop shops") for issuing or accepting notifications for licenses.*

... and sector-specific measures

There are also sector-specific measures that should be taken to increase competition. In particular, *the laws and regulations that restrict the number of competitors in rail freight transport and in rail passenger transport, urban-, suburban- and inter-urban transport and in the provision of rail infrastructure and in ground handling at the airports should be abolished.* In the electricity sector, major obstacles to more competition are the quasi-monopoly held by Electrabel in generation and the integration between generation and transport through majority ownership, slowing down the removal of transport bottlenecks and the increase in international interconnection capacity. *Competition should be increased by auctioning a greater proportion of the incumbent's production capacity, increasing interconnection capacity, facilitating the granting of electricity production operating licences and by better monitoring of the respective markets in which the vertically integrated incumbent operates to reduce its scope to abuse its market power.*

Innovation policy should provide more support for organisational change, enhance collaboration between business and researchers and foster more rapid diffusion of knowledge

Innovation policy is also an important lever for increasing productivity growth. In view of the economic importance of service sectors, *a refocusing of existing innovation policies is needed to encourage more investments in organisational change, which is a more important aspect of innovation in service sectors than in the rest of the economy. This should be complemented by improving the ICT-using competencies of persons with lower intermediate skills and low education attainment.* The incentive for the private sector to engage in public-private partnerships will be increased from 2005 with the wage tax reduction granted to private sector R&D staff conditional on co-operation with a public research institution in Belgium. The decision to extend this condition to include public sector research institutions inside the European Economic Area is welcome as it increases the possible number and quality of matches and hence exploits a source of international technology transfer to national production units.

Tertiary education and research need to be strengthened

Universities have difficulty attracting and retaining high quality teachers and researchers. To overcome this difficulty, *universities should be given greater freedom to negotiate contract conditions and should have more access to private sources of funding. This could be done through a greater involvement of the private sector (such as Chairs and research contracts).* Another possibility would be to increase the scope for tuition fees combined with student loans with income-contingent repayments, especially for higher levels of tertiary education. Such systems in other countries have substantially increased the resources available to universities without having any adverse effects on either the proportion of the population completing tertiary education or the socio-economic mix of students. *Public university funding should also be made more dependent on performance criteria and competition between universities should be increased, including by making external evaluations compulsory and publishing the results.*

Chapter 1

The policy challenge: preparing for population ageing

The fundamental challenge in Belgium is coping with population ageing. It will reduce economic growth and put pressure on public finances. The chapter outlines a strategy to minimise the economic costs of population ageing. First, budget consolidation should be implemented to put public finances on a sustainable path. Second, labour-market and social-security reforms are needed to make working more attractive for groups with low employment rates – older workers, younger workers and ethnic minorities – and to make employment of these groups more profitable. Third, the tax burden on labour income should be reduced to slow the long-term decline in working time. Budget room for such tax cuts would result from reduced inactivity rates and could be increased by raising government efficiency. Finally, structural reforms should be implemented to increase productivity growth. In particular, regulatory barriers to the profitable use of ICT in the distribution and finance sectors should be removed.

Belgium's population is ageing rapidly. This will reduce economic growth and put pressure on public finances for decades to come starting in the 2010s. Between now and then, there is a window of opportunity to implement policies to minimise the costs of this demographic shock. Such policies include consolidation measures to put public finances on a sustainable path and structural reforms to increase employment rates, slow the long-term decline in working time and increase productivity growth. The policy challenges raised by population ageing are discussed in the remainder of this chapter.

The economic and budget consequences of population ageing

Population ageing will gain momentum in a few years' time

As in other OECD countries, the population is ageing in Belgium owing both to a sharp decline in the fertility rate since the 1960s and to rising life expectancy for older persons (aged 65 and over). Growth in the population aged 15-64, which includes most of the economically active population, has already slowed significantly since the 1970s, when the "baby boom" generation born in the two decades after World War II was still entering this age group, and will slow further from 2010, when this generation starts to flow out of it (Table 1.1). Concomitantly, growth in the elderly population will be much higher over 2010-25 than currently but will subside thereafter.

Table 1.1. **Population growth by age group**

Annual average growth rate

	0-14	15-64	65 and over	Total
1970-1980	-1.4	0.6	0.8	0.2
1980-1990	-0.9	0.3	0.6	0.1
1990-2000	0.0	0.1	1.5	0.3
2000-2010	-0.5	0.3	0.7	0.3
2010-2025	-0.1	-0.2	1.7	0.2
2025-2050	-0.1	-0.2	0.8	0.1

Source: Burniaux et al. (2003).

Growth in the labour supply will decline and the old-age-dependency ratio will rise

These trends will weigh on growth in the labour supply (defined here as the labour force aged 15 and over) and hence in GDP. The shift in the population structure towards age groups with lower labour-force participation rates (i.e., age groups over 50) will reduce growth in the labour force. On the other hand, there are factors such as rising female participation rates that will attenuate this effect. Burniaux et al. (2004) estimate that shifts in the population structure (i.e., demographic change) had a small positive effect on labour supply growth in 1990-2000 but will reduce such growth over the next half century, with the negative effect peaking at 4.1 percentage points in 2010-25 (Table 1.2).¹ Cohort effects, which reflect the replacement of older cohorts by younger cohorts with different lifetime participation characteristics, contributed strongly to labour supply growth during the 1990s and will

Table 1.2. **Contributions to the projected evolution of labour supply¹**

	Change of aggregate participation rates				Total population change %	Total labour supply %
	Demographic change	Cohort effect	Others ²	Total change		
Period 1990-2000						
Belgium	0.6	3.2	0.1	4.0	3.5	12.9
OECD average ^{3, 4}	0.1	-0.1	0.1	0.1	7.7	8.2
Period 2000-2010						
Belgium	-2.1	2.7	0.0	0.5	4.3	5.3
OECD average ³	-2.0	1.2	0.0	-0.7	6.0	4.8
Period 2010-2025						
Belgium	-4.1	1.4	0.0	-2.7	3.6	-1.8
OECD average ³	-4.4	0.5	0.1	-3.8	4.4	-2.4
Period 2025-2050						
Belgium	-2.8	-0.1	-0.2	-3.1	2.1	-4.1
OECD average ³	-4.1	-0.2	-0.1	-4.4	-2.1	-9.9

1. Aged 15 and over.

2. Projections do not take into account the future effects of the 1996 pension reform, the reform of the older unemployed scheme, measures to increase job search, the 2001 tax reform and the decrease in social security contributions.

3. 1991 for Germany, Iceland, Mexico and Switzerland, 1992 for Hungary and Poland, 1994 for Austria and Slovak Republic.

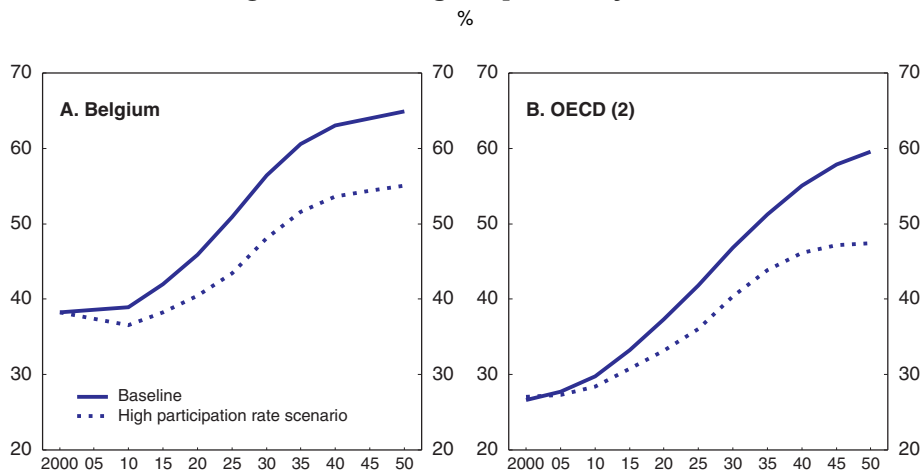
4. OECD countries except Mexico and Turkey, unweighted average.

Source: Burniaux et al. (2003).

continue to do so during the first quarter of the 21st century but not subsequently. This evolution mainly reflects developments in female lifetime participation rates, which are much higher for younger age cohorts than for older cohorts and the assumption that there will be no further change in lifetime participation rates after 2000. In all, the labour-force participation rate rose by 4 percentage points during the 1990s but is projected only to rise slightly (0.5 percentage point) during the current decade and to fall thereafter. Growth in the labour supply is projected to fall from around 13 percentage points during the 1990s and the current decade to -1.8 percentage points over 2010-25 and -4.1 percentage points over 2025-50. It should be noted, however, that these projections do not take into account the future effects of the 1996 pension reform, the reform of the older unemployed scheme, measures to increase job search, the 2001 tax reform and the decrease in social security contributions.

While the projected impact of demographic change on the participation rate during the first quarter of the 21st century in Belgium is about the same as the OECD average, the decline in the participation rate is smaller owing to the large female cohort effect – the catching up in female participation rates to international levels is projected to cushion the demographic effects of population ageing. Nevertheless, the projected growth in the labour supply is only around the OECD average owing to lower growth in the population aged 15 and over. During the subsequent quarter century (2025-50), the decline in the labour supply is significantly less than the OECD average reflecting both stronger growth in the population aged 15 and over and the smaller adverse impact on the participation rate of demographic change.

The old-age dependency ratio (calculated as the ratio of inactive persons aged 65 and over to the labour force aged 15 and over), which gives an indication of the economic pressure from population ageing, is projected to rise in Belgium from 38% in 2000 to 51% by 2025 and 65% by 2050 (Figure 1.1, panel A). In other words, whereas there are presently 2.6 members of the labour force for every inactive elderly person, there will only be

Figure 1.1. Old age dependency ratio¹

1. Calculated as the ratio of the inactives aged 65 and over to the labour force aged 15 and over.

2. Unweighted average.

Source: Burniaux et al. (2003).

2 by 2025 and 1.5 by 2050. While Belgium's age-dependency ratio is projected to remain above the OECD average, it nevertheless increases by somewhat less (Figure 1.1, panel B). Belgium's age-dependency ratio is already relatively high owing to its low participation rate but increases by less than the OECD average on account of a relatively large increase in female participation (see below).

Population ageing will reduce economic growth

These projections imply that the contribution of labour supply growth to GDP growth falls from an annual average rate of around 0.5% over 2000-10 to slightly less than zero over the remainder of the first half of the 21st century (Table 1.3); this slowdown in labour supply growth is smaller than the OECD average, mainly reflecting the female cohort effect during the first quarter of the century. If it is assumed that growth in hourly labour productivity settles at the trend rate since 1995 (1.5%, Box 1.1) and that the annual rate of decline of hours worked per person employed is 0.2% (less than in recent decades but more

Table 1.3. Decomposition of long-term economic growth projections¹

	Labour supply ²	Hours worked per person employed ³	Total hours worked	Hourly labour productivity	GDP	GDP per capita
1990-2000	0.6	-0.4	0.3	1.9	2.2	1.9
2000-2010	0.5	-0.1	0.4	1.4	1.8	1.5
2010-2025	-0.1	-0.2	-0.3	1.5	1.2	1.0
2025-2050	-0.2	-0.2	-0.4	1.5	1.1	1.0

1. The projections do not take into account the future effects of the 1996 pension reform, the reform of the older unemployed scheme, measures to increase job search, the 2001 tax reform and the decrease in social security contributions.

2. Total domestic employment for 1990-2000 underlying the OECD Productivity Database estimates of labour productivity and labour force aged 15 and over thereafter.

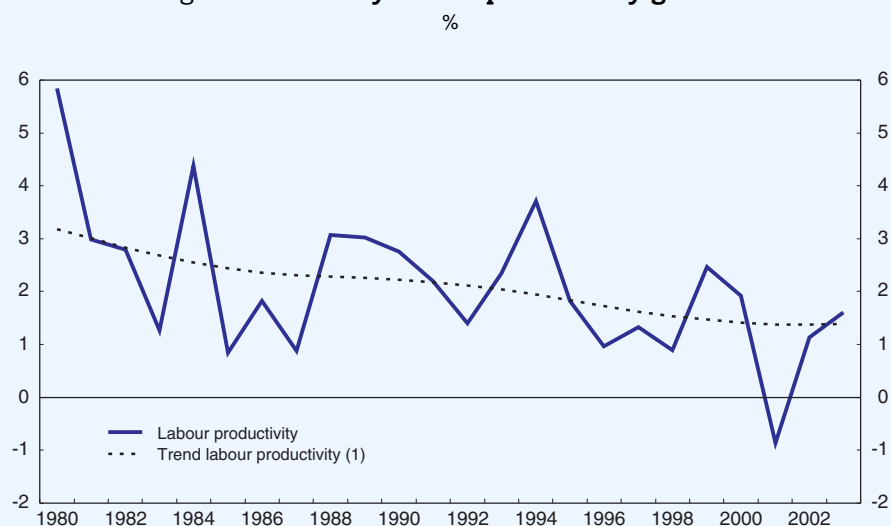
3. Total economy. For 2000-10, the trend growth rate is calculated by applying a Hodrick-Prescott filter ($\lambda = 100$) to the actual series in the OECD Productivity Database extended beyond 2003 by assuming that hours worked per person employed continue to decline at the same rate (-0.1% per year) as over 1995-2003. Trends in working time thereafter are estimated using the pooled sample regression equation presented in Box 1.2.

Source: Burniaux et al. (2003); OECD Productivity Database; and own estimates.

Box 1.1. Trends in labour productivity growth

Hourly labour productivity growth has fallen from around 2.4% in the 1980s to 1.2% over 1995-2003 (Figure 1.2). In trend¹ terms, it fell from 2.5% in the 1980s to 1.5% over 1995-2003. This decline mainly reflects a slowdown in multifactor productivity (MFP) growth² (Table 1.4). There has also been a small decrease in the contribution of capital services deepening. By contrast, the contribution of improvements in the quality of capital services (not shown) rose slightly. The slowdown in labour productivity growth coincides with Belgium having reached productivity levels near to those in the leading country, the United States, making further gains in multifactor productivity more difficult to achieve (Figure 1.3). It also coincides with policies (such as reductions in social security charges) to increase employment, especially of the low skilled, making growth more labour (*i.e.*, less capital) intensive.

Figure 1.2. Hourly labour productivity growth



1. Trend calculated by using the Hodrick-Prescott filter ($\lambda = 100$). To calculate the trend, the original series was extended beyond 2003 using OECD Economic Outlook 76 projections for labour productivity per person employed over 2004-10 and assuming that the annual average rate of decline in hours worked over this period is the same (0.1%) as in 1995-2003.

Source: OECD, Productivity Database and OECD Economic Outlook, No. 76.

Table 1.4. Decomposition of hourly labour productivity growth

	Average annual growth rate			
	Labour productivity	Contribution of capital services deepening ¹	Multi-factor productivity ²	Memorandum: Business cycle effect ³
1985-90	2.3	1.1	1.2	-0.0
1990-95	2.3	1.3	1.0	0.3
1995-01	1.1	1.0	0.1	-0.4

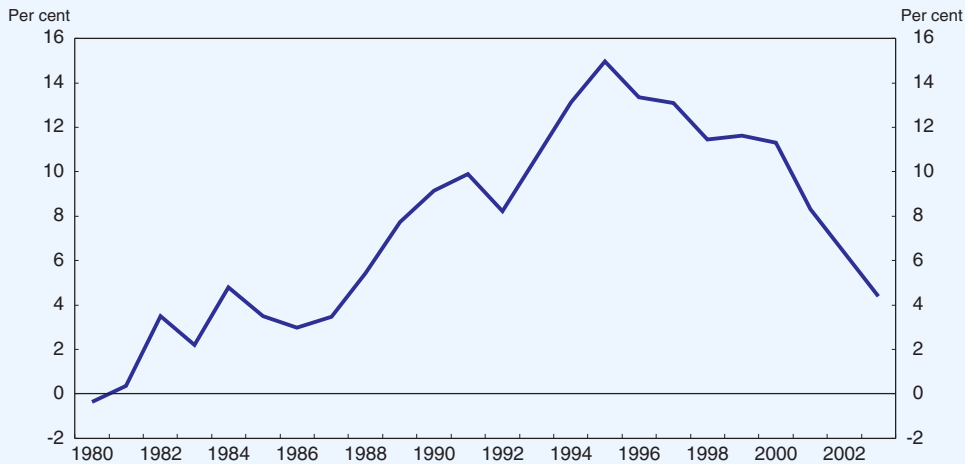
1. Capital services are estimated using harmonised price indices for ICT capital goods. Such data are only available for 1985-2001.

2. Excludes improvements in the quality of the capital stock but includes improvements in the quality of human capital.

3. The business cycle effect is the difference between actual and trend labour productivity growth rates.

Source: OECD Productivity Database.

Box 1.1. Trends in labour productivity growth (cont.)

Figure 1.3. Gap in hourly labour productivity levels between Belgium and the United States¹

1. Based on 2000 prices and PPP exchange rate. A positive (negative) gap indicates that labour productivity is higher (lower) in Belgium than in the United States. No adjustment is made for differences in labour utilisation.

Source: OECD Productivity Database.

1. Trend labour productivity has been calculated by applying a Hodrick-Prescott filter with an adjustment parameter of 100 to the hourly labour productivity series extended beyond 2003 using *OECD Economic Outlook 76* projections for labour productivity per person employed over 2004-10 and assuming that the annual average rate of decline in hours worked over this period is the same (0.1%) as in 1995-2003. Trend growth rates can be calculated from Table 1.4 by deducting the business cycle effect from the (unadjusted) growth rate in labour productivity.
2. MFP growth is the growth in output not accounted for by growth in inputs (labour and capital). In the estimates shown in Table 1.4, capital inputs are quality adjusted but labour inputs are not. Hence, these estimates of MFP still include the effects of improvements in the quality of labour inputs.

than since 1995, Box 1.2), growth in GDP will fall from an annual average rate of slightly less than 2% during the current decade to a little more than 1% over the subsequent four decades. Growth in GDP per capita would slow to slightly lower rates still. It should be emphasised that there is much uncertainty surrounding the projected decrease in working hours. As noted above and in Box 1.2, working time has almost stabilised since 1995. Moreover, the 1996 pension reform, the reform of the older unemployed scheme, the 2001 tax reform and the decrease in social security contributions have not been taken into account in either the labour supply- or the working-time projections.

The official (High Finance Council, HFC) projections, which only go up to 2030, point to a more modest decline in economic growth (Table 1.5). The main differences concern assumptions about trends in hours worked per person employed and hourly productivity growth. In the official projections, it is assumed that labour productivity growth per person employed, which combines both factors, rises from an annual average rate of 1% since the mid-1990s to 1.75% over 2009-30, 0.55 percentage point higher than in the OECD projection presented in Table 1.3. This evolution is certainly possible considering that trend labour productivity growth per person employed is presently low by historical comparison: it

Box 1.2. Trends in working time

Annual hours worked per person employed are estimated to have fallen at an average annual rate of 0.6% over 1970-2003, in line with the average for 19 OECD countries with available data.¹ Working hours in Belgium remain about 4% below the average for these countries. Nevertheless, the decline in working time in Belgium has progressively slowed (Figure 1.4), falling to an annual average rate of only 0.1% over 1995-2003, less than the average (0.4%) for these countries. Hours worked per person employed have declined in Belgium over the long term, as in most other OECD countries, mainly owing to three factors: the rise in labour productivity and hence in real wage rates, which enables workers to consume more of all goods, including leisure; the rise in the female participation rate, which has been associated with an increase in the share of part-time employment; and the rise in the tax burden on labour income. Based on a pooled sample regression for 16 OECD countries (for which full datasets are available)² over 1975-2002 with fixed effects and country-specific trends, the long-run elasticities of working time with respect to labour productivity, the share of female employment and the implicit tax rate on labour income³ are -0.33 , -0.17 and -0.12 , respectively.⁴ This relationship suggests that the slowdown in labour productivity growth in Belgium since the mid-1990s may have accounted for much of the slowing in the trend decline in working time,⁵ with the stabilisation in the implicit tax rate on labour income also contributing, albeit to a much lesser extent. If labour productivity growth settles at around the trend rate in recent years (1.5% over 1995-2003) and allowing for slower growth in female participation and some reduction in the tax burden on labour income, it could be reasonable to assume a decline in working time of around 0.2% per year over 2000-50, greater than in the past 8 years but much smaller than in the past quarter century. This rate also happens to be the trend rate of decline in working time over 1995-2003.

Figure 1.4. **Trend growth in hours worked per person employed**



1. Trend calculated by using Hodrick-Prescott filter ($\lambda = 100$). To calculate the trend, the original series was extended beyond 2003 using *OECD Economic Outlook 76* projections for labour productivity per person employed over 2004-10 and assuming that the annual average rate of decline in hours worked over this period is the same (0.1%) as in 1995-2003.

Source: OECD Productivity Database and *OECD Economic Outlook*, No. 76.

Box 1.2. Trends in working time (cont.)

1. These countries are Australia, Belgium, Canada, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, the United Kingdom and the United States.
2. The countries in footnote 1 except for Iceland, Ireland and New Zealand.
3. Ideally, the averages of all individuals' average and marginal tax rates on labour income (including personal income taxes, social security contributions, payroll taxes, benefit withdrawal and taxes on consumer expenditure – all of which distort the choice between labour and leisure) should be used, with the average rate capturing the income effect and the marginal rate the substitution effect. As such time series are not available, implicit tax rates are used as a proxy. As these are macroeconomic average tax rates, they are effectively income-weighted average tax rates and hence are higher than the average of individuals' average tax rates. At the same time, implicit tax rates are lower than the average of individuals' marginal tax rates. If the redistributive effect of taxation and the tax base remain constant, an increase in the implicit tax rate on labour income will be associated with corresponding rises in the averages of both the average and marginal tax rates on labour income.

4. The results of the panel regression are as follows:

The co-integrating relationship is

$$\log HE = -0.328 \log LP - 0.001 TI - 0.002 FM + Cx + TRx + \text{RESID}$$

(-14.59) (-3.24) (-5.94)

Rbar2 = 0.999; S.E. of regression = 0.014; DW = 0.585

And the error correction equation is

$$d \log HE = -0.004 + 0.343 d \log (HE(-1)) + 0.044 d \log (LP(-1)) - 0.279 \text{RESID}(-1)$$

(-6.72) (7.502) (1.969) (-9.067)

Rbar2 = 0.207; S.E. of regression = 0.009; DW = 2.110

where:

HE = hours worked per person employed;

LP = GDP per hour worked;

TI = implicit tax rate on labour income;

FM = share of female employment in total employment;

Cx = constant for country x;

TRx = trend for country x;

RESID = residual from the co-integrating relationship.

5. On the basis of the estimated relationship, the slowdown in labour productivity growth from an annual average rate of 2.8% over 1975-95 to 1.2% since then would eventually result in a reduction in the annual average rate of decline in working time of 0.5%.

Source: Carey, D. and J. Rabesona (2002) (updated) for implicit tax rate data; OECD Labour Force Survey for employment data; OECD Productivity Database for other data.

averaged 1.55% over 1980-2002 and 2.01% over 1970-2002. The other main difference is that it is assumed in the official projections that a wide definition of unemployment, comprising registered jobseekers and older unemployment beneficiaries (who are not jobseekers), falls from 14.3% currently to 7.5% by 2030, the historical average rate for this series over 1953-2003. By contrast, the OECD (i.e., Burniaux et al., 2003) only assumes that the (standardised) unemployment rate (presently 7¼ per cent) falls to the NAIRU rate (7.2%)

Table 1.5. **Official long-term economic growth projections**

Annual average growth rate

	Employment	Productivity per person employed	GDP	GDP per capita
2003-2008	0.7	1.5	2.1	1.9
2009-2030	0.1	1.8	1.9	1.7
2003-2030	0.3	1.7	1.9	1.7
<i>Memorandum:</i>				
OECD ¹ 2003-2030	0.1	1.3	1.4	1.2

1. See notes to Table 1.3.

Source: HFC (2004); Burniaux et al. (2003), OECD Economic Outlook, No. 76 and own estimates for the memorandum item.

by 2005, reflecting the fact that reforms have not been fully taken into account. These assumptions largely account for the difference in labour supply growth rates in the two sets of projections. While a variety of measures have been taken to reduce the broad unemployment rate (see Chapter 4) and the overall education attainment of the population will upgrade as better educated cohorts grow older, increasing employment rates, the HFC (2004, p. 46) recognises that further reforms would be required for it to fall to the assumed rate.

The budget costs of population ageing are set to rise

Population ageing will impact on the budget mainly through higher outlays for pensions and for healthcare (Table 1.6). Allowing for reductions in some other outlays, notably for unemployment benefits and for family benefits, the HFC estimates that the budget cost of population ageing will rise to 3.4% of GDP by 2030. It should be emphasised that this projection entails a significant slowing in the real growth rate of public healthcare expenditures, from 4.5% per year over 2003-07 to 2.8% on average thereafter, which may be difficult to achieve even if it is consistent with the projection methodology linking economic growth and healthcare expenditures per capita. On the other hand, it is assumed that real pensions and social benefits are increased at an annual average rate of 0.5%, which implies a smaller decline relative to wage rates than in the past.² If labour force participation and productivity growth were to evolve as in the OECD projections, the budget costs of population ageing would be somewhat higher (Box 1.3).

The HFC estimates that increasing the structural budget balances to 0.3% of GDP in 2007 and further to 1½ per cent of GDP over 2011-18 would put public finances on a sustainable path – defined as a path along which government programmes can be financed indefinitely at constant tax rates, with public debt as a percentage of GDP eventually stabilising (at much lower levels than currently). The required surplus in 2007 for fiscal sustainability is relatively low in Belgium because public debt interest payments are high

Table 1.6. Budget cost of population ageing – official baseline projections¹

	2003	2010	2030	2003-30
Pensions ²	9.2	8.8	12.0	2.8
Healthcare ³	6.9	7.8	9.3	2.4
Disability	1.3	1.3	1.3	-0.0
Unemployment	2.3	1.8	1.1	-1.2
Pre-pension	0.4	0.4	0.4	-0.1
Family benefits	1.7	1.4	1.2	-0.5
Other social expenditures ⁴	1.5	1.5	1.4	-0.1
Total	23.4	23.1	26.7	3.4
<i>Memorandum:</i>				
Teaching personnel remuneration	4.4	4.0	3.8	-0.7

1. Assumes that pensions and other benefits, on the one hand, and lump-sum benefits on the other, are increased in real terms by 0.5% and 1%, respectively, per year.

2. Includes public-enterprise pensions for which the state is liable (estimation) and the guaranteed income for the elderly (IGO-GRAPA).

3. Public healthcare expenditures. These are projected to grow at an annual average real rate of 4.5% (for average economic growth of 2.1%) over 2003-07 and at 2.8% (for average economic growth of 1.9%) over 2008-30.

4. Mainly work accidents, work-related illness, social assistance and the (old-age) insurance for non-medical care introduced in Flanders.

Source: High Finance Council (2004), p. 55.

Box 1.3. Budget cost of population ageing based on OECD economic projections

Based on the HFC's (2004, pp. 57-66) sensitivity analysis, substituting the smaller increase in the employment rate among groups receiving high social benefits and lower growth rate of labour productivity per person employed in the OECD projections for the HFC's baseline projections would increase the budget cost of population ageing by a further 1.1% of GDP by 2030 (Table 1.7). It should be noted that this estimated impact is relatively high as it is implicitly assumed that the difference in employment is concentrated in the older working-age group, which receives high social benefits when not in employment.

Table 1.7. Budget cost of population ageing based on OECD economic projections 2003-30¹

	High Finance Council	OECD ³	Impact on budget cost of ageing % of GDP
Change in employment rate (percentage points) ²	7.0	4.7	0.8
Growth in productivity per person employed (%)	1.7	1.3	0.3

1. The budget impact of substituting the OECD long-term economic projects for the official projections is calculated using the sensitivity analysis presented in High Finance Council (2004, pp. 57-66).

2. Per cent of population aged 15-64.

3. The employment rate in 2003 is calculated as the average of 2000 and 2005 data/estimates in Burniaux et al. (2003).

Source: High Finance Council (2004); Burniaux et al. (2003); own estimates.

(4% of GDP in 2007) but falling as public debt declines. On this path, the structural budget balance would fall back near to zero by 2030. Public debt falls from 88% of GDP in 2007 to less than 30% of GDP in 2030, where it stabilises. The decline in public debt interest payments and the running down of budget surpluses after 2018 make room for the budget costs of ageing. The government aims to put public finances on a sustainable path by 2007. This will require budget consolidation of about 1% of GDP; a further consolidation in the primary balance of around ½ per cent of GDP would be required to raise the structural budget surplus to 1½ per cent of GDP by 2010. The planned budget consolidation (up to 2007) is to be achieved mainly through constraining the growth in primary expenditures to one percentage point below GDP growth. The government is right to be ambitious in aiming for this objective although meeting it promises to be challenging. As noted above, the OECD analysis suggests that even more consolidation may be required to put public finances on a sustainable path.

A strategy to attenuate the impact of population ageing

Putting public finances on a sustainable path

Putting public finances on a sustainable path helps to reduce the economic cost of population ageing by avoiding large increases in taxes – and hence in the excess burden of taxation – when ageing-related expenditures rise. Belgium has already implemented tough reforms to contain the growth in pension outlays, which account for the relatively modest increase in such expenditures (see Table 1.6) by international comparison. For healthcare

expenditures, the other main source of ageing-related budget pressures, the official projections are based on the assumption that past behaviour continues in the future, including that the government regularly takes measures to contain growth in healthcare outlays. In this regard, there are a number of promising measures – such as the use of Diagnosis Related Groups (DRGs) to allocate hospital budgets, the centralised electronic medical file, the gatekeeper role for general practitioners, and stronger incentives to prescribe generic drugs – that are being implemented or considered that could help to contain the growth in healthcare outlays without reducing quality (indeed, in some cases quality would be improved) over coming years. Vigilance and ongoing reforms will be needed to hold growth in healthcare outlays to the rates in the HFC's projections for the budget cost of ageing. Assuming that government expenditures evolve as in the official projections, budget consolidation is still required – and indeed is planned – to put public finances on a sustainable path by 2007. In view of Belgium's already high tax burden and the adverse effects that this has on economic activity, the priority given by the authorities to expenditure restraint in budget consolidation is well placed.

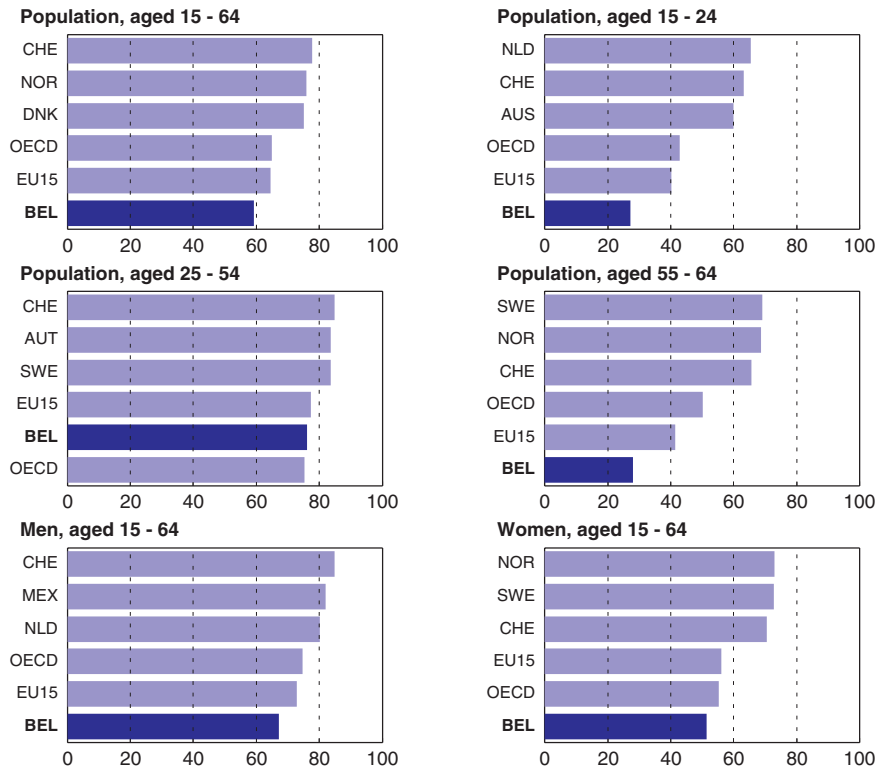
To the extent that it is possible to increase labour utilisation and productivity growth beyond what is assumed in the official projections, the budget cost of population ageing and the amount of consolidation required to put public finances on a sustainable path would be reduced. However, it would not be prudent to go beyond what is already built into the official long-term budget projections when setting budget consolidation objectives for the next few years. In the event that the boost to economic growth from structural reforms proved to be greater than in the official projections, there would be room for tax cuts – which in turn would reinforce the improvement in economic performance – without jeopardising fiscal sustainability.

Increasing the employment rate

Belgium has considerable scope to ease the economic impact of population ageing by drawing inactive sections of the population into employment. The employment rate (population aged 15-64) is low by international comparison (Figure 1.5), *albeit* increasing owing to rising employment of prime-age (25-54) females. Employment rates are particularly low for older workers (aged 55-64) – 28.1% – and for younger workers (aged 15-24) – 27.1% – but are near the international averages for prime-age workers. Older workers are encouraged to retire before age 60 through attractive income replacement options – pre-pension, Canada-Dry arrangements and disability benefit – that are largely publicly financed (see Chapter 2). At the same time, employers seek to get rid of workers because steep age/seniority premiums in pay scales mainly for white-collar workers make them unattractive in any case. For younger workers, the low employment rate reflects the facts that students tend not to combine work and study and that the education system fails to prepare many students well for the labour market, especially those from ethnic minority backgrounds. This low rate is not associated with an unusually high proportion of the population completing tertiary education (Figure 1.6). The low employment rates for both the younger and older age groups and the high unemployment rate for the younger age group suggest that the arrangements developed in the 1970s and 1980s to encourage older workers to make way for younger workers by retiring early have not worked. This is not an isolated experience. In general, countries that have high employment rates for the older working age population also tend to have high employment rates/low unemployment rates for younger workers (Figure 1.7).

Figure 1.5. **Employment rates**¹

2003

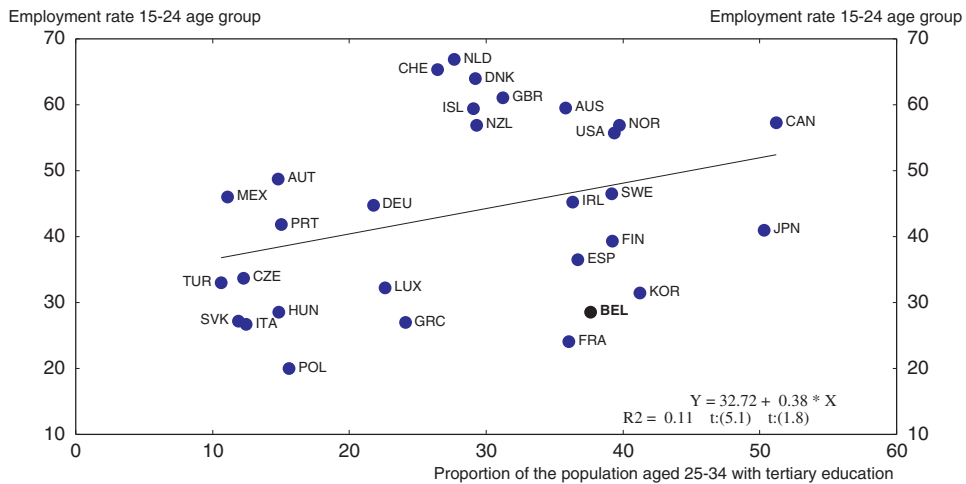


1. Total employment as a percentage of corresponding population.

Source: OECD Employment Outlook (2004).

Figure 1.6. **Employment rate for the 15-24 age group and tertiary attainment**

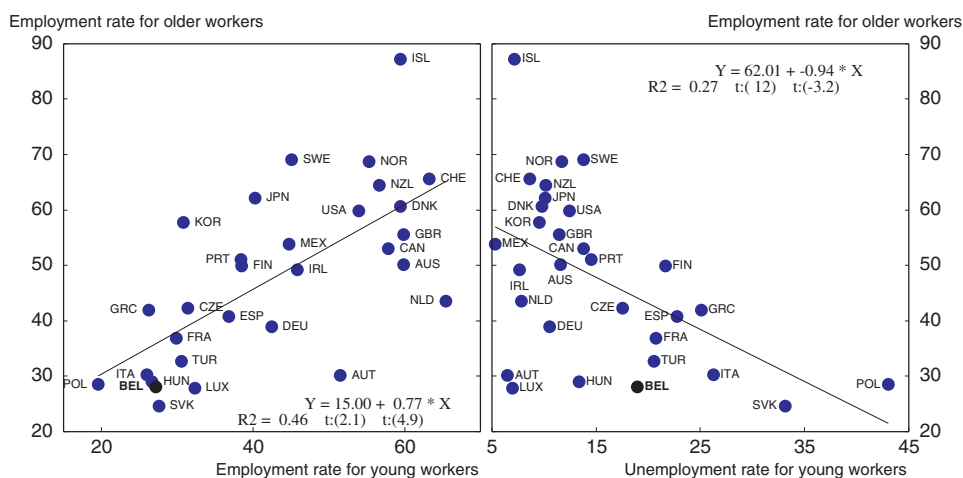
2002



Source: OECD Employment Outlook (2004) and Education at a Glance (2004).

Figure 1.7. **Employment rate for older workers and employment/unemployment rates for younger workers**

2003



Source: OECD Employment Outlook (2004).

As noted above, the HFC assumes a large reduction in a wide definition of unemployment (that includes non-job-seeking older unemployed and registered job seekers) in its baseline scenario. The proportionate reduction assumed in this unemployment rate across different categories of unemployed would have the greatest impact on the employment rate for older workers because this age group is over represented in this measure of unemployment (through the older unemployed scheme, which exempts beneficiaries from job search obligations).³ The HFC also presents a scenario in which it is assumed that the pre-pension rate falls from 9.5% of the potential labour force (aged 50-64, including pre-pensioners and beneficiaries of the older unemployed scheme) to zero and in which the broadly defined structural unemployment rate in the baseline scenario falls by 20% (to 6%). This leads to an increase in the employment rate of 2.5 percentage points by 2030 with almost all of the increase in the employment in the 50-64 age group (the employment rate for this group rises by 12.8 percentage points). The average age of withdrawal from the labour force, which rises from 58 presently to 60 in the baseline scenario owing to rising female participation rates, would increase by one more year, to 61. The budget cost of population ageing is reduced by 0.9% of GDP in 2030 in this scenario compared with the baseline case (3.4% of GDP) assuming that productivity growth remains unchanged. This highlights the potential to attenuate the budget costs of ageing in Belgium by drawing inactive working-age persons into employment, although it should be emphasised that this estimate is relatively high as it is assumed that the increase in employment is concentrated among the older working-age population, which receives high social benefits when not in employment.

Burniaux *et al.* (2003, pp. 17-23) present a high employment scenario in which considerably bolder reforms are implemented to increase participation rates. In the area of pensions, they assume that i) early retirement schemes are abolished; ii) there is a move towards actuarial neutrality of old-age pension schemes; and iii) there is a convergence of standard retirement ages to 67 (*i.e.*, currently the highest age level among OECD countries). They also assume that a variety of reforms is implemented to make female labour force

participation more attractive: the average tax rate on second earners is reduced to the rate on single individuals (at 67% of APW); public expenditures per child in childcare are raised to the OECD average in countries where they are below average; and that tax systems are reformed to give the maximum increase in disposable income from work sharing currently observed. Finally, they assume that the gap in participation rates for the younger age group (15-24) with the United States is progressively halved; the United States has been chosen as a reference because it combines high participation with high education attainment. With all of these reforms, they estimate that Belgium is one of the few countries in which it would be possible to offset entirely the reduction in the participation rate caused by population ageing over 2000-50 (Table 1.8). The participation gains are considerable for each category of reform, but somewhat greater for pension reform than the others. With these reforms, the labour supply would increase by 12% over the first half of the 21st century instead of contracting slightly, increasing GDP per capita correspondingly. The old-age dependency ratio (calculated as the ratio of inactive persons aged 65 and over to the labour force aged 15 and over) would rise by about 10 percentage points less (see Figure 1.1): the number of labour-force members for every inactive elderly person would fall from 2.6 presently to 1.8 by 2050 instead of 1.5 in the baseline scenario. The fact that there would still be a large rise in the old-age dependency ratio suggests that while the budget costs of population ageing can be reduced by increasing participation, they cannot be eliminated. Based on the sensitivity analysis presented in the *Ageing Report* (HFC, 2004, pp 57-66), the increase in growth in the labour supply (aged 15-64) from 2.1% over 2000-30 to 11.8% would reduce the budget cost of ageing from 4.4% of GDP in 2030 to 1.0%. It should be noted that the increase in participation rates in this high employment scenario would require profound reforms that are unlikely to be compatible with current social preferences in Belgium. Moreover, the effect of such an increase in the employment rate on economic growth would likely be partially offset by a decline in productivity growth per person employed.

Slowing the decline in working time per person employed

The economic impact of population ageing could also be reduced by slowing the long-term decline in working time per person employed. Working time has fallen in Belgium at a similar rate to that in most other countries and remains below the OECD average (Figure 1.8). The decline in working time in OECD countries can be explained by rising productivity, rising female participation and increasing taxes on labour income (see Box 1.2). Working time in Belgium is less than what would be predicted on the basis of its GDP per capita partly because taxes on labour income are so high (Carey and Rabesona, 2002; Carey, 2003). It should be noted, however, that implicit tax rates were used as a proxy for the average of all individuals' average and marginal tax rates on labour income as the latter are not available for a sufficiently long period. Reducing marginal tax rates on labour income is one of the possible ways in which the authorities could slow the long-term decline in working time. Insofar as there is little scope for base broadening and the effect of the tax system on income distribution is held constant, this would entail reducing the tax burden on labour income. If the taxation of labour income could be reduced to around the OECD average in 2002 – corresponding to a reduction in the implicit tax rate (including consumption taxes) on labour income of 7 percentage points (representing about 3½ per cent of GDP) to 46%, the average for the 16 OECD countries included in the analysis reported in Box 1.2), the estimates presented in Box 1.2 suggest that hours worked per

Table 1.8. **Impact of policy reforms on future participation rates, 2000-50¹**
Percentage point changes

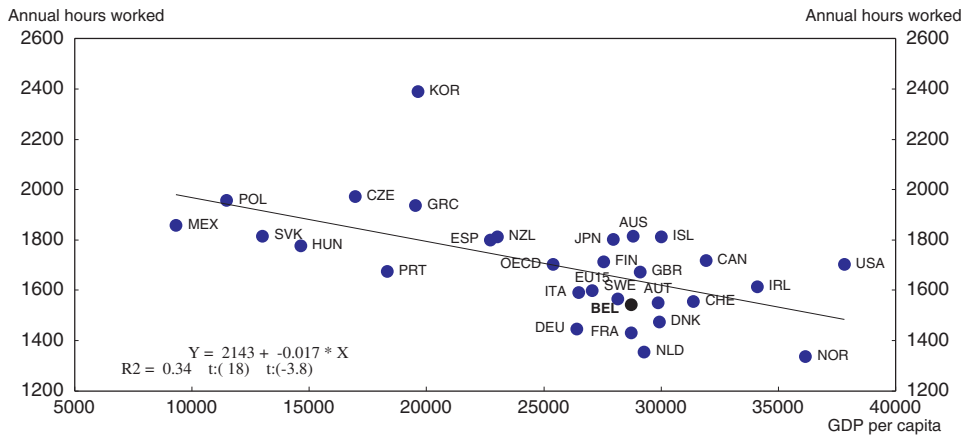
	Aggregate participation change in the baseline scenario	Impact of pension reforms				Impact of additional incentives for female participation	Impact of increasing participation of 15-24 age group	Total impact of policy reforms	Aggregate participation rates changes including all reforms	Rate of growth of aggregate labour supply including all reforms
		Removal of early retirement schemes	Actuarial neutrality of old-age pensions	Delaying normal retirement age	Total impact					
	[1]	[2]	[3]	[4]	[5] = [2] + [3] + [4]	[6]	[7]	[8] = [5] + [6] + [7]	[9] = [1] + [8]	%
Australia	-10.7	0.0	1.1	0.5	1.6	1.7	0.0	3.4	-7.4	26.0
Austria	-12.8	1.3	1.0	0.4	2.6	1.0	0.5	4.1	-8.7	-16.1
Belgium	-5.3	0.8	1.2	0.3	2.3	2.1	1.7	6.1	0.9	12.1
Canada	-9.2	0.0	0.4	0.6	1.0	1.4	0.0	2.5	-6.8	15.0
Czech Republic	-18.6	..	..	1.4	..	1.7	1.2	..	..	-35.2
Denmark	-8.6	..	..	0.4	..	0.8	0.0	..	..	-5.1
Finland	-9.1	0.8	1.6	0.5	2.9	0.0	0.6	3.5	-5.6	-10.4
France	-8.8	0.5	1.4	1.4	3.4	2.3	2.1	7.8	-1.0	7.0
Germany	-6.9	0.9	0.4	0.5	1.9	3.3	0.6	5.7	-1.1	-7.4
Greece	1.1	..	..	0.7	..	0.3	1.4	..	..	2.0
Hungary	-17.5	..	..	0.7	..	0.0	1.5	..	..	-42.2
Iceland	-8.5	0.0	0.8	0.0	0.8	0.0	0.0	0.8	-7.7	14.4
Ireland	0.1	0.8	0.7	0.4	1.9	3.0	0.8	5.6	5.7	46.4
Italy	-6.9	0.0	2.2	0.6	2.7	1.7	1.2	5.7	-1.2	-18.1
Japan	-11.5	0.0	1.7	1.0	2.7	3.1	0.8	6.6	-4.9	-23.4
Korea	-16.5	0.0	2.1	3.2	5.3	2.0	1.4	8.7	-7.8	-15.8
Luxembourg	-4.1	1.6	-0.1	0.2	1.7	2.2	2.2	6.1	2.0	33.4
Mexico	0.9	..	..	0.7	..	0.8	1.0	..	..	86.3
Netherlands	-6.2	0.8	1.7	0.5	3.0	2.9	0.0	5.9	-0.3	14.9
New Zealand	-12.2	0.0	0.0	0.7	0.8	2.2	0.1	3.1	-9.2	13.9
Norway	-3.7	0.5	1.6	0.0	2.1	1.2	0.0	3.3	-0.4	18.7
Poland	-17.1	..	..	0.8	..	1.5	1.4	..	..	-28.8
Portugal	-4.2	2.3	1.1	0.8	4.2	1.9	1.2	7.3	3.1	15.3
Slovakia	-20.4	..	..	1.2	..	1.0	0.9	..	..	-29.7
Spain	-6.5	0.8	3.1	0.6	4.4	3.4	0.9	8.7	2.2	9.6
Sweden	-10.2	0.0	1.5	0.6	2.1	0.4	0.8	3.3	-6.8	-0.3
Switzerland	-5.9	0.0	1.1	0.9	2.0	1.9	0.0	3.9	-2.0	-0.3
Turkey	-15.8	..	..	1.2	..	0.9	1.9	..	..	28.0
United Kingdom	-6.5	0.4	0.8	0.6	1.7	1.4	0.0	3.1	-3.4	7.2
United States	-6.5	0.0	0.6	0.0	0.6	2.2	0.0	2.8	-3.7	40.5
OECD average ²	-7.8	0.5	1.2	0.6	2.4	1.9	0.7	4.9	-2.9	8.3

1. Figures are for the low-case scenario. For the pension reforms, this means that panel data estimates are used, which may underestimate the true long-run participation elasticities with respect to implicit tax rates, instead of bivariate regressions (high-case scenario), whose magnitudes are more in line with the elasticities typically found in the micro-economic literature (Duval, 2003). The other difference that distinguishes the low case from the high case concerns the impact of additional incentives for female participation, where public-child-care expenditures per child are set to the OECD average in those countries where it is lower in the low case and are set equal to the highest observed level among OECD countries in the high case.

2. Unweighted average, excluding countries where pension data are not available.

Source: Burniaux et al. (2003).

Figure 1.8. **Working time and GDP per capita**¹
2003

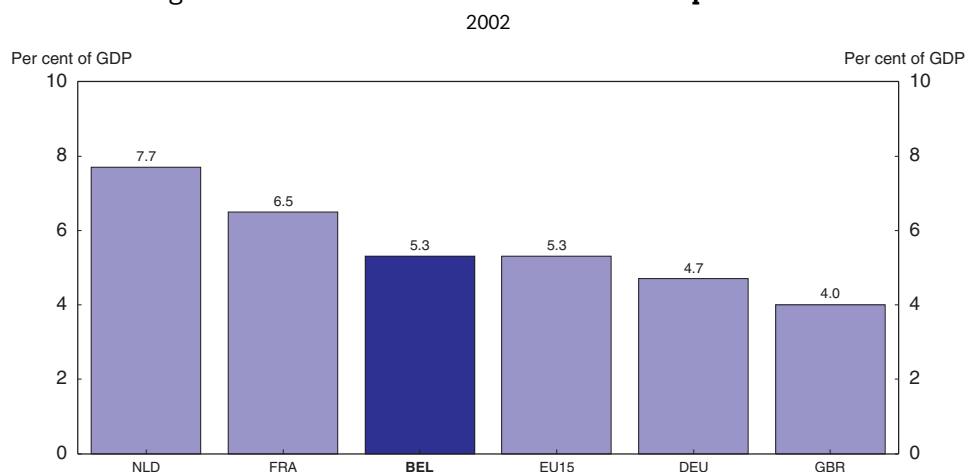


1. Annual average hours actually worked per person in employment. GDP per capita and, for Luxembourg, gross national income per capita (which excludes cross-border workers' incomes), are measured at PPP exchange rates. Source: OECD *Employment Outlook* (2004) and National Accounts.

person employed could rise by 1% compared with the baseline. Thus, such a measure could increase total working time by about one twelfth as much as the vigorous reforms to increase participation rates simulated in the Burniaux *et al.* (2003) low-case scenario and reported in the preceding paragraph. However, the increase in working time could be less than suggested if accompanied by an increase in the participation rate as this would likely entail a rise in the share of older – and/or younger workers in employment, groups that tend to work shorter hours than prime-age workers.

As there is not much scope for shifting the tax burden to capital owing to international tax competition, it would be necessary to reduce government expenditure as a share of GDP to make room for reductions in taxes on labour income. An area in which there is potential for budget savings is in the costs of government administration, which amounted to 5¼ per cent of GDP in 2002,⁴ equal to average for the EU15 but still significantly higher than in some EU countries (*e.g.*, the United Kingdom, where such expenditures amounted to 4% of GDP) (Figure 1.9). Another potential area for budget savings is expenditure on unemployment benefits, which amounted to 3% of GDP in 2001 compared with 1.6% for the EU15 average (EU newcronos database). Such expenditure is inflated by the payment of benefits to pre-pensioners and persons in the older unemployed scheme – groups that are not job-seekers and as such would not be eligible in most other countries for unemployment benefit –, which together comprise of unemployment beneficiaries. Eliminating these programmes, strictly enforcing job search obligations and ensuring that disability pension is not misused as an alternative route to early retirement would generate significant budget savings. More generally, reforms to reduce unemployment would make room for tax cuts on labour income, stimulating working time.

Reducing the tax burden on labour would also lower incentives for economic activity to occur in the black economy. Belgium is believed to have a large black economy by international comparison. Bringing activity back into the official economy⁵ would widen the tax base, making possible a further reduction in marginal tax rates. Reducing the administrative burden on business and increasing labour market flexibility would also lower incentives for activity to occur in the black economy.

Figure 1.9. **Government administration expenditure**¹

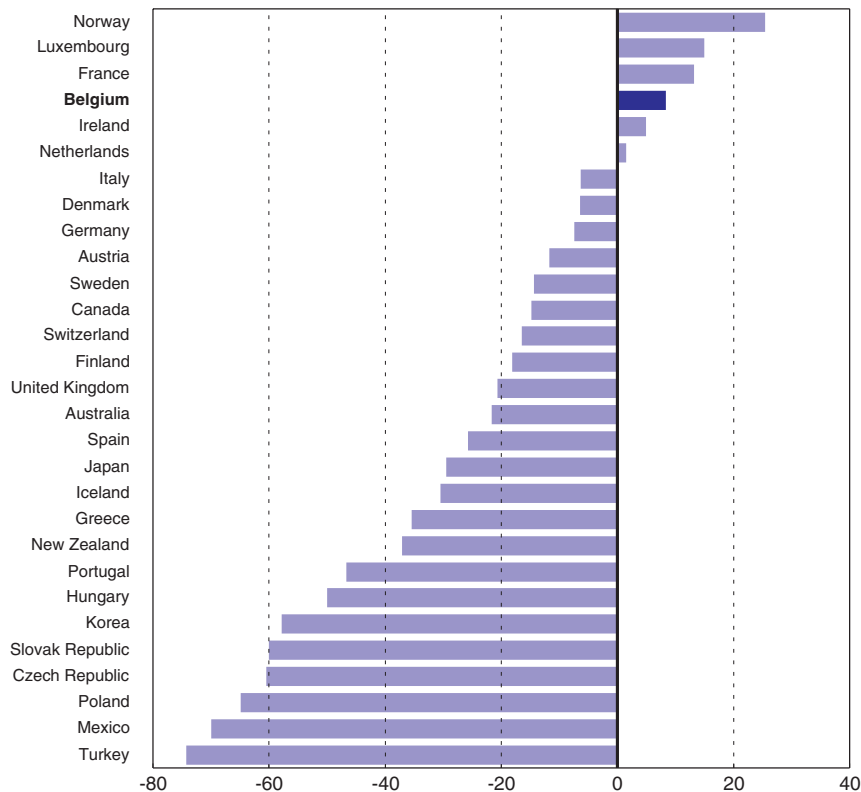
1. Defined as the sum of total compensation of employees and intermediate consumption for the functions general public administration, economic affairs and social protection. EU15 is 2002 except for Finland and Spain, which are respectively 2000 and 2001.

Source: OECD National Accounts.

Increasing productivity growth

At first sight, it might appear difficult to increase labour productivity growth given that the hourly productivity level is already one of the highest in the OECD, precluding rapid growth through catch up to the productivity leader (Figure 1.10). Yet this high level does not mean that Belgium is already at the productivity frontier as the level is partly attributable to labour-market and social policies that have excluded many low-skilled persons from the labour market. It has been estimated that raising the employment rates of the large “high-productivity” European economies with a similarly poor employment record to the level in the United States could reduce their productivity levels *vis-à-vis* the United States by up to 15% (OECD, 2005).⁶ Moreover, productivity growth has surged in the United States from an annual average rate of 1.2% over 1990-95 to 2.3% over 1995-2002, creating more scope for catch up in other countries. This increase in productivity growth is mainly attributable to ICT-using sectors, which have contributed 1 percentage point more to the annual average rate of labour productivity growth (per person) in the United States since the mid-1990s but 0.6 percentage point less in Belgium; these sectors have also made a significantly larger contribution to productivity growth in a number of other OECD countries (Figure 1.11). These trends mainly reflect developments in the distribution (retail and wholesale trade) and financial services sectors. While labour productivity growth (per person) has increased in the distribution sector in Belgium in recent years, the increase has been much smaller than that in the United States (Figure 1.12). In the finance sector, labour productivity growth has been falling since the mid-1990s whereas it has been increasing in the United States. Given that the new technologies that have contributed to the increase in productivity growth in the United States are universally available, it would appear that other ingredients for productive use of the new technologies have been lacking in Belgium, as in most other European countries. The main barriers to greater use of ICT to raise productivity in the distribution sector seem to be restrictive zoning rules and shop opening hours and a lack of flexibility on working hours, factors which reduce the return on ICT investments by limiting economies of scale, and poor service in the transport sector,

Figure 1.10. **Hourly labour productivity gap vis-à-vis the United States**¹
2002

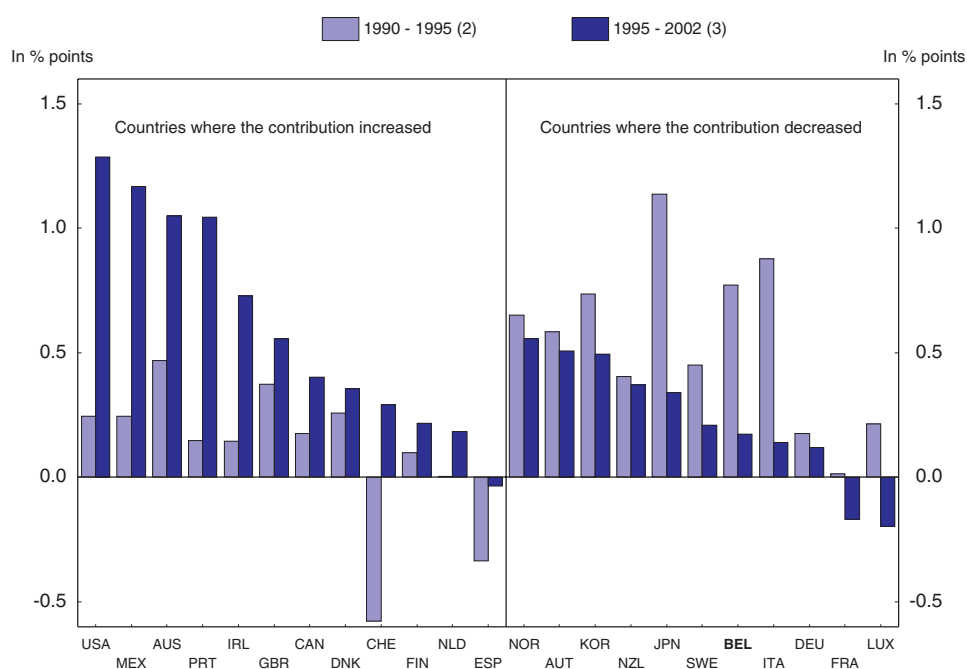


1. Based on 2000 prices and PPP exchange rates.

Source: OECD, *Productivity Database*, 2004.

making it difficult for manufacturers and wholesalers to supply customers frequently (O'Mahony and van Ark, 2003; McGuckin and van Ark, 2001). In the finance sector, the main constraint seems to be barriers to achieving economies of scale in retail banking services across European countries. Easing these barriers to higher productivity growth in the distribution and finance sectors is likely to be necessary if a significant increase in productivity growth is to be achieved.

More generally, regulatory reforms that increase product market competition are likely to raise economy-wide productivity growth (Nicoletti and Scarpetta, 2003).⁷ Product market competition enhances productivity by improving the allocation of resources and strengthening managers' incentives to raise efficiency. Increased innovation and technological diffusion also help to explain the positive effect of product market competition on productivity (Aghion *et al.*, 2001; Gust and Marquez, 2002). According to the *OECD International Regulation Database*, product market regulation in Belgium ranks in the middle range of OECD countries classified as neither relatively liberal nor relatively restrictive (Figure 1.13). The areas where Belgium has the greatest scope to reform regulations to support product market competition concern: i) state involvement in business operations through the use of command and control regulation; and ii) barriers to entry through complex administrative procedures (which concerns the complexity of government communication of rules and procedures as well as of licences and permit

Figure 1.11. **Contribution of ICT-using services¹ to value added per person engaged**

1. ICT-using services are defined as the combination of wholesale and retail trade (ISIC 50-52), financial intermediation (ISIC 65-67) and business services (ISIC 71-74).
2. 1991-1995 for Germany; 1992-95 for France and Italy and 1993-1995 for Korea.
3. 1995-99 for Korea and Portugal; 1995-2000 for Ireland, Spain and Switzerland, 1995-2001 for Australia, France, Germany, Hungary, Japan, Mexico, the Netherlands, New Zealand, Norway, Sweden, the United Kingdom and the United States.

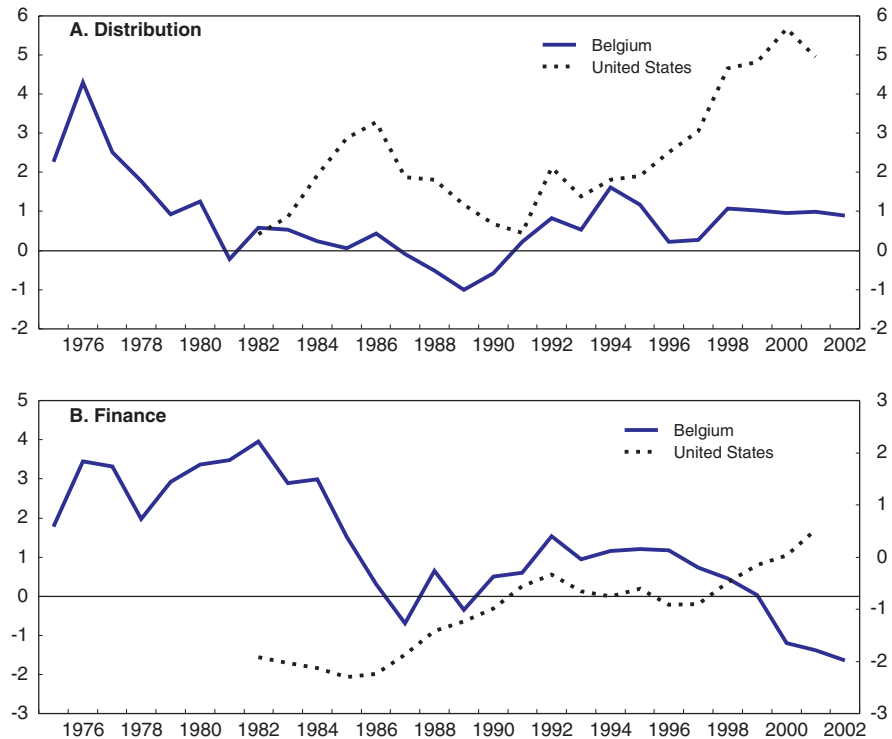
Source: Estimates on the basis of the OECD STAN database, September 2004.

systems) (Conway, Janod and Nicoletti, 2005). In addition, more needs to be done to facilitate competition in network industries and to reduce the administrative burden on business.

Strengthening the national innovation system would also contribute to increasing productivity growth. A weakness in this system, as in those in many other European countries, is that it does not put enough emphasis on organisational dimensions of innovation (new service concepts, new client interface and new delivery systems), which are important in service innovation, relative to technological options, which are more important in the manufacturing sector (Van Ark, Broersma and den Hertog, 2003). Moreover, there is not enough support for technology diffusion programmes to service firms and for management programmes that can promote an innovation culture in service firms. In addition, university resources are increasingly inadequate to attract or retain top researchers.

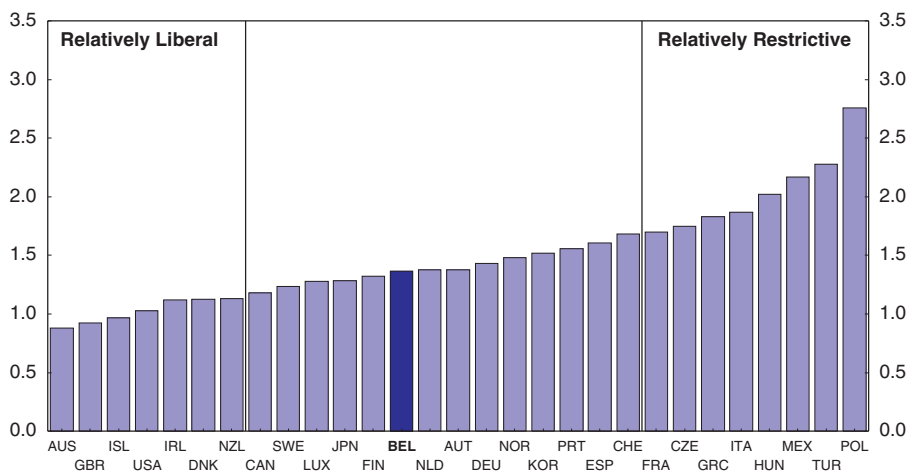
Based on age-cohort data from the 1994 International Adult Literacy Survey (IALS), the literacy level of labour market entrants in Belgium (proxied by IALS results for Flanders) has risen in the past three decades by more than in most OECD countries, thus making a relatively large contribution to productivity growth (Coulombe, Tremblay and Marchand, 2004). While there is still scope to reduce the school drop-out rate, which is especially high for pupils from low socio-economic backgrounds (who are often also from some ethnic minorities), other increases in education attainment are likely to be more difficult to

Figure 1.12. **Labour productivity growth in the distribution and financial sectors**¹
5-year moving average, percentage change



1. Labour productivity per person employed.
Source: OECD, STAN Industrial Database.

Figure 1.13. **Product Market Regulation (PMR) indicators**
2003



Source: Conway, Janod and Nicoletti (2005).

achieve given that attainment is now high by international comparison. Nevertheless, there is still considerable scope to enhance human capital by raising education achievement in the French Community and of students from lower socio-economic backgrounds, including ethnic minorities, throughout the country. Human capital could also be improved by investing more in continuing education, especially for middle-age- to older workers, groups for which the gap between such investment in Belgium and in other countries is particularly large.

If it were possible to increase the annual average rate of productivity growth by 1 percentage point over 2009-30, the budget cost of population ageing would be reduced by 0.8% of GDP in 2030 based on the sensitivity analysis presented by the HFC (2003). While this is certainly a large increase, it is the same as that which has been achieved between 1995-2003 and 1980-95 in the United States and equal to or less than the increase in Australia, Ireland and Iceland over the same period. Moreover, although Belgium ranks in the middle range of OECD countries for the extent to which product market regulation supports competition (and productivity growth), it nevertheless has larger reserves of potentially exploitable productivity growth from improving its regulatory and institutional environment than do most of these countries. But just as with increasing labour utilisation, unlocking potential productivity increases will not occur without vigorous regulatory and institutional reforms.

The macroeconomic context

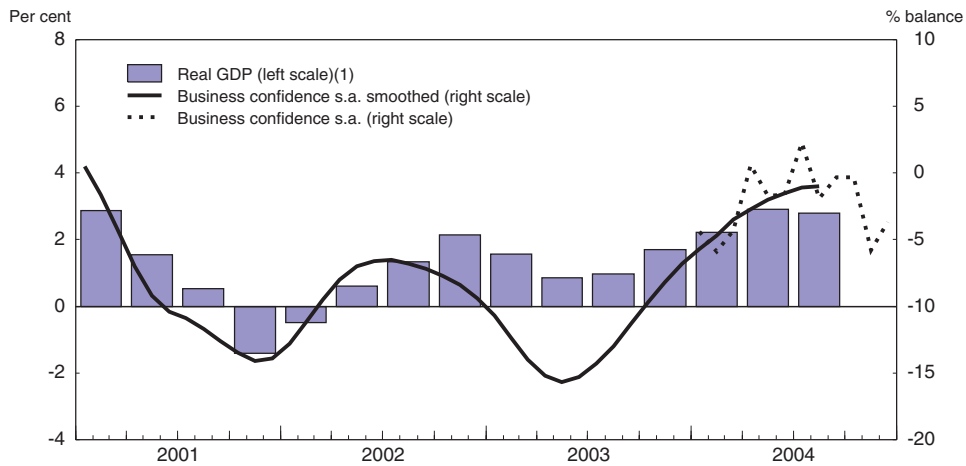
Private consumption and exports have supported the recovery

After three years of low economic growth, a robust recovery got underway in mid-2003, lifting growth to 2.9% (year-on-year) in the second and third quarters of 2004. While private consumption expenditure strengthened in late 2002 and has since remained buoyant, the economic recovery only took hold when exports also picked up. The strength of private consumption expenditure has been such that it has entailed a running down in the household savings ratio, partly reversing the increase since 2000, although the ratio remains high by international comparison.⁸ This performance, which is in contrast to that in some other EU countries, appears to be partly attributable to the more favourable evolution of public budget sustainability in Belgium in recent years and lesser fears about reductions in social benefits than in these other countries (NBB, 2004, p. 15). Another possible explanation is the personal income tax reform, which reduced taxes by almost € 2.1 billion (almost 0.8% of GDP) in 2004, significantly contributing to purchasing power. Even if some recovery, albeit limited, has taken place in the course of 2004, business investment remains weak despite improving profitability, favourable demand prospects, low interest rates and stronger corporate balance sheets.⁹ Business confidence has stabilised at levels that should support continued economic growth at above the trend rate (estimated to be around 2%) (Figure 1.14).

Employment started to grow again from the third quarter of 2003, bringing to an end two years of decline. Nevertheless, the unemployment rate continued to rise until early 2004, since which time it has been stuck at around 7¼ per cent, above the estimated structural rate (7¼ per cent). Growth in the labour force has been underpinned by the trend increase in the participation rate, mainly reflecting rising female participation rates, and the increase in July 2004 to 58 in the minimum age for access to the older unemployed scheme – one of the main routes to early retirement.

Figure 1.14. **GDP growth and the NBB business cycle indicator**

Seasonally adjusted



1. Year-on-year percentage change.

Source: National Bank of Belgium (NBB) and OECD Economic Outlook, No. 76.

Wage increases have again outpaced those in neighbouring countries

Hourly wage costs in the private sector appear likely to have increased by 5.9% in 2003-04, more than agreed in the wage norm (5.4%) but less than in the previous wage norm period. Abstracting from the reduction in employers' social security contribution rates, the increase was 6.6%. This rate of increase exceeded the average (4.5%) for the three neighbouring countries (Germany, France and the Netherlands), adding to the loss of cost competitiveness against these countries already incurred in previous wage-norm periods. Headline inflation has picked up to 2¼ per cent (year-on-year) owing to rising energy prices. Underlying inflation – excluding energy and unprocessed food prices – has remained around 1¾ per cent.

Further consolidation measures are needed to keep the budget in balance

The general government budget balance appears likely to have remained near balance in 2004, despite the partial unwinding of non-recurring items that increased the balance in 2003 (see Chapter 2 for more details on budget developments). Such items will decline from 0.6% of GDP in 2004 to 0.3% in 2005 and zero in 2006. Moreover, the government needs to offset the impact of the personal income tax cuts (amounting to 0.2% of GDP in 2005 and an additional 0.6% of GDP in 2006). Further reductions in social security charges are also programmed, but these are more than compensated by increases in indirect taxes. In addition, there is likely to be a large (temporary) increase in infrastructure investment in 2005-06 to coincide with municipal elections. Taking into account announced policies, the OECD projects that the budget balance will deteriorate to a deficit of ½ per cent of GDP in 2006. Further measures will be needed to realise the government's announced target of balanced budgets in both 2005 and 2006.

The recovery should broaden over 2005-2006

Economic growth is projected to ease somewhat as high energy prices and appreciation of the euro put a brake on the pace of recovery, but to strengthen to 2¾ per cent in 2006 as the effects of these factors pass (Table 1.9). While initially led by private

Table 1.9. **Short-term projections**

	2001	2002	2003	Projections ¹		
				2004	2005	2006
Percentage changes						
Demand and output (volume)						
Private consumption	0.7	0.3	2.2	2.2	2.1	2.2
Government consumption	2.7	2.3	2.7	2.5	2.0	2.0
Gross fixed capital formation	0.6	-3.4	-0.6	1.0	2.8	5.1
Private sector non-residential	3.6	-3.8	-1.9	0.5	2.4	5.0
Private sector residential	-3.4	-3.3	2.6	1.5	1.8	1.2
Public sector	-11.4	-0.6	1.0	3.4	8.7	16.3
Final domestic demand	1.1	-0.1	1.7	2.0	2.2	2.7
Change in stockbuilding ²	-0.9	0.7	-0.1	0.4	0.0	0.0
Total domestic demand	0.2	0.6	1.6	2.4	2.2	2.7
Exports of goods and services	1.8	1.3	1.7	3.6	6.3	7.4
Imports goods and services	1.0	1.0	2.1	3.3	6.2	7.6
Change in net exports ²	0.6	0.3	-0.3	0.4	0.3	0.1
GDP at market prices	0.9	0.9	1.3	2.7	2.4	2.7
Inflation						
GDP deflator	1.8	1.8	2.0	2.3	1.4	1.8
Private consumption deflator	2.5	1.7	1.8	2.1	2.1	1.9
%						
Others						
General government balance (% of GDP)	0.6	0.1	0.3	-0.1	-0.4	-0.5
Unemployment rate ³	6.7	7.3	7.9	7.7	7.6	7.3
Household savings ratio	14.4	14.8	14.2	13.8	13.4	13.9
Current account balance (% of GDP)	3.9	5.7	4.2	3.7	3.1	4.0
Short-term interest rates	4.3	3.3	2.3	2.1	2.1	2.7
Long-term interest rates	5.1	4.9	4.1	4.1	4.1	4.4

1. EO76 projection.

2. Contribution to GDP growth.

3. Standardised rates.

Source: OECD Economic Outlook, No. 76.

consumption, exports and surging government consumption, the recovery should become more reliant on business investment. Employment growth should continue to strengthen, bringing the unemployment rate down to 7¼ per cent by 2006. Underlying inflation is projected to remain around 1¾ per cent as the unfavourable effects of the increase in energy prices on other input costs fade but the economy moves from below to slightly above potential. The main risks to these projections are that the euro could be stronger than assumed, depressing growth, but also reducing inflation.

Summing up the policy challenges

Population ageing will reduce economic growth and put pressure on public finances starting from around 2010. This timing leaves a window of opportunity to implement structural reforms that reduce these costs by raising economic growth and to put public finances on a sustainable path. Moreover, this window of opportunity is especially propitious as it coincides with the recovery-expansion phases of the business cycle. The

specific policy challenges that arise in the context of coping with population ageing are the following:

- **Putting public finances on a sustainable path.** Based on official projections, which assume further structural reforms to increase the employment rate, fiscal consolidation of around 1% of GDP is required to put public finances on a sustainable path by 2007. Thereafter, the structural primary surplus would need to rise by ½ per cent of GDP by 2011, bringing the structural budget balance to 1½ per cent of GDP, where it would need to remain until 2018 before declining to zero by 2030 as the budget costs of ageing rise. In addition, ongoing measures would be needed to contain the growth in healthcare outlays, as in the past. In view of Belgium's high tax burden, consolidation should mainly involve expenditure restraint. Increasing government efficiency could contribute to achieving such restraint, especially in the medium- to long term. Insofar as such savings are realised over and above what is assumed in the official projections, room for tax cuts would be created without endangering the sustainability of public finances. Similarly, reducing the scale of the shadow economy would create room for tax cuts in the rest of the economy. This policy challenge is discussed in Chapter 2 (Putting public finances on a sustainable path) and Chapter 3 (Constraining growth in public health expenditure).
- **Increasing growth in labour utilisation** both by raising the employment rate and slowing the decline in the number of hours worked per person employed. Concerning increasing employment rates, the priority is to raise the particularly low rates by international comparison for certain groups – older workers, younger workers and ethnic minorities. Meeting this challenge would entail reducing incentives for premature withdrawal from the labour force and making older workers more attractive to employers, reducing barriers for younger people to find work and increasing incentives for them to do so, reducing the number of school drop-outs – especially among ethnic minorities – and attenuating the adverse effects of discrimination on ethnic minorities. Labour-market- and social policy reforms to increase employment rates are discussed in Chapter 4 (Increasing employment rates) and, insofar as they concern migrants, in Chapter 5 (Enhancing the economic impact of migration), while education reforms are covered in Chapter 6 (Improving educational outcomes). As regards the decline in working time, one way to slow the long-term decline is to reduce the tax burden on labour which, as noted above, is likely to require significant restraint and greater efficiency in government expenditure (see Chapters 2 and 3). But the reforms to increase employment rates should also lower social transfer outlays, thereby making further room for tax cuts. Hence, it is possible to imagine a virtuous circle of increased labour utilisation.
- **Raising productivity growth.** This is likely to entail increasing product market competition and in particular, removing the barriers to competition in ICT-using sectors, where Belgium has failed to experience a strong increase in productivity growth as has occurred in the United States and some other countries. It would also be important to strengthen the national innovation system and improve education achievement, in particular in the French Community and for ethnic minorities throughout the country. This policy challenge is discussed in Chapter 6 insofar as it concerns raising educational achievement, and in Chapter 7 (Increasing productivity growth).

Notes

1. In other words, demographic change will reduce the labour-force participation rate (based on the population aged 15 and over) by an average annual rate of 0.3% over 2010-25. This rate falls to 0.1% over 2025-50.
2. Real pensions and social benefits increased at an annual average rate that was 1.75% less than that in wage rates over 1956-2002 (HFC, 2004, p. 47). On this basis, the real increase in pensions and social benefits would be zero per cent over the coming decades. The Ageing Committee did not consider this assumption to be realistic in view of the growing electoral weight of the elderly population.
3. Persons aged 55-64 represent 22% of this definition of unemployment but 10% of the corresponding labour force.
4. Government administration expenditure is defined here as the sum of government expenditure on compensation of employees and intermediate government consumption expenditure on the functions general public administration – economic affairs and social protection.
5. An interesting and successful measure in this respect is the recent “re-enforcement” of “service cheques”, which entitle users to a tax deduction when the cheques are used to purchase legally certain services (mainly cleaning), services that traditionally had been supplied mostly in the informal economy.
6. See also Artus and Cette (2004).
7. Based on data for OECD countries, Nicoletti and Scarpetta (2003) find that regulatory environments that favour competition have a positive effect on economy-wide productivity even when other potentially important factors – such as human capital and country- and industry-specific effects – are accounted for.
8. The Federal Planning Bureau estimates that the household saving rate has declined from 16.6% of disposable income in 2002 to 15.2% in 2004 (FPB, 2004b).
9. Net operating surplus is estimated to have increased at an annual average rate of 5.7% in 2003-04, compared with growth in GDP of 3.4% over the same period. Corporate debt has fallen from a peak of 57% of GDP in early 2002 to around 52% at the end of 2004.

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Chapter 2

Putting public finances on a sustainable path

This chapter discusses fiscal policy and public sector reforms with a view to keeping public finances on a sustainable path. As simulations show that the costs of ageing can be financed almost entirely by rapid debt reduction, the High Finance Council recommends that a structural budget surplus of 0.3% of GDP be reached in 2007. The OECD estimates that in order to achieve this target, to which the government has formally committed itself in its latest update to the Stability and Growth Programme, fiscal consolidation of about 1% of GDP in the period 2005-07 will be required. In the medium run, cost savings on public administration can be expected from the implementation of ambitious e-government strategies and efficiency-enhancing public sector reforms. Finally transport policies should be redesigned to reduce congestion costs and to achieve sustainable development objectives more efficiently.

Main issues

Population ageing will impose a budget cost of 3.4% of GDP by 2030 according to the official projections. This cost reflects higher outlays for pensions and healthcare net of reductions for some other outlays (e.g. unemployment benefits) (See Table 1.7). In 2030, the share of public pension outlays and healthcare expenditure in GDP will increase by respectively 2.8 and 2.4 percentage points from their levels of respectively 9.2 and 6.9% of GDP in 2003. These increases are relatively modest by international standards.

Some specific features of the first pillar pension scheme¹ account for this moderate growth in public pension outlays. Pension benefits are related to average career earnings, but the annual earnings taken into account are subject to a relatively low ceiling. Between 1982 and 1998, this ceiling was only adjusted in line with movements in the CPI, implying that a larger fraction of earnings will be affected by the ceiling. As from 1999, the ceiling is indexed to the evolution of conventional wages.² Past earnings are converted into present values using the CPI and a work history of 45 years is required to qualify for a full pension, otherwise the pension benefit is adjusted proportionally to the numbers of years worked (or equivalent) divided by 45. The result is a gross replacement rate – defined as the pension benefit relative to the gross salary earned in the year prior to retirement – for a newly retired single man who has always earned the average wage in the scheme of 36.5% in 2002 (Table 2.1). This rate is projected to remain roughly constant until 2030. With the encouragement of collective sectoral pensions since 2003, second pillar pensions are projected to grow in importance, raising total pension replacement rates over time. In addition, pension replacement rates look more generous when related to net income, reflecting the high burden of taxation on labour relative to pensions. Apart from some discretionary welfare adjustments for older and low pensions, pension benefits are linked to the “health index”.³ But there are no automatic real increases provided by the law. As a consequence, the purchasing power of a pensioner falls behind that of an active person as he/she gets older. The ageing projections include an assumption that there will be political pressure to discreetly raise the real value of pensions (See also Annex 2.A1 for key assumptions underlying the projection).

Table 2.1. **Replacement rate for a basic typology**¹

	2002	2010	2030
Gross replacement rate 1st pillar	36.5	37.1	36.8
Gross replacement rate 2nd pillar ²	3.5	6.1	12.2
Gross replacement rate total	40.0	43.2	49.0
Net replacement rate total	66.1	68.2	77.2

1. Single man retiring at age 65 after 40 years of work with a wage equal to the average wage in the scheme in every year.

2. The average contribution to the second pillar equals 4.25% of gross salary, starting in 1992.

Source: HFC.

Box 2.1. Public finance recommendations

- Public finances should be put on a sustainable path – defined as one where government programmes can be financed indefinitely at constant tax rates and public debt eventually stabilises as a share of GDP (as a euro area country, this also must be less than 60% of GDP) – so as to avoid future large increases in taxes – and hence in the excess burden of taxation – or deep cuts in social programmes when ageing-related budget pressures rise. This objective could be achieved by increasing the structural budget balance to a surplus of 0.3% of GDP in 2007 and allowing it to rise to 1½ per cent of GDP in 2011 and maintaining it at this level until 2018, as recommended by the High Finance Council.
- To this end, the OECD estimates that the government should take consolidation measures, to increase the structural budget balance (abstracting from non-recurring items) by about 1% of GDP by 2007. In view of Belgium’s already high tax burden and the adverse effects that this has on economic activity, the priority should be given to expenditure restraint in budget consolidation, and non-recurrent measures should be avoided.
- In the medium run, savings in government administrative expenditure could be achieved at all levels of government. Productivity gains can be obtained from greater mobility, the promotion of life-long learning and the development of competencies during the career, the introduction of a new management culture and the implementation of e-government.
 - ❖ Labour mobility should be increased through the creation of a job placement office within the public sector.
 - ❖ Competency premia should be introduced and seniority premia reduced.
 - ❖ High quality management training should be made compulsory for prospective managers.
 - ❖ Managers need to be given more autonomy so that they can in fact be held accountable for outcomes. To this end, outcome indicators (needed to measure performance in a more autonomous system) should be further developed to reinforce the analytical underpinning of the reforms.
 - ❖ The take-up of e-government services by the general public should be promoted in order to reap the benefits of scale economies.
- Transport policies should target pollution externalities and congestion costs more efficiently. Recent measures shifting taxation from vehicle ownership to fuel consumption go in the right direction. Moreover, the governments should consider the feasibility of introducing a road pricing system as soon as it becomes technically feasible and reliable, targeting fuel taxation on pollution externalities alone and reducing the need for transport subsidies insofar as they are currently motivated by an inappropriate pricing of road use.

It needs to be emphasised that the projection entails a significant slowing in the real growth rate of public healthcare expenditure from 4.5% per year during the period 2003-07 to 2.8% on average between 2009 and 2030, which explains the moderate increase in the share of healthcare expenditure in GDP over the projection period. The estimate of long-term trend growth of public healthcare expenditure is obtained using a methodology developed by the Federal Planning Bureau for this purpose. In this method, health care

expenditure is broken up into a demographic component and a historical component. The demographic component takes into account the evolving age-profile of the population (including population growth) as well as the statistical relationship between per capita consumption of health care services and age, based on an expenditure profile by age and sex for 1997. Given the empirical findings that healthcare spending on an elderly person (age 70) is 3.5 times higher than spending on a young person (aged 30) and healthcare spending on a frail elderly person (aged 90) 12 times higher, a larger proportion of elderly and frail elderly in the population will drive up expenditure on health care services. The demographic component has been estimated to increase health care expenditure by 0.8% per year on average between 2009 and 2030. The non-demographic component is estimated empirically by a linear expenditure model with a constant marginal propensity to consume and a variable elasticity of per capita health care expenditure to per capita GDP, which is greater than 1 in the short run but converges to 1 in the long run. It was felt that this model fitted the observations better than a model which assumes a constant elasticity.⁴ According to this estimation procedure, non-demographic factors will drive real health care expenditure up by 2.1% annually on average. Adding the two components together yields a long-term average growth rate of 2.8% between 2009 and 2030. However, healthcare expenditure growth is estimated at 5.1% annually for the period 2003-07 owing to measures taken by the federal government in 2003, more specifically an upward revision to 4.5% of the aggregate cap on health expenditure growth until 2007 and the compulsory inclusion as of January 2006 of health insurance against small risks for independent workers into the public package, resulting in an extended coverage for independent workers and a one-off increase in public healthcare expenditure. Combining the two sub-periods and assuming a real growth rate of 3.5% in 2008 yields a long-term average growth rate of 3.2% for 2003-30.

Table 2.2. **Projections for total public health care expenditure**¹

	2009-30	2003-30
Total public outlays on health	2.8	3.2
Demographic factor	0.8	0.9
(ageing)	(0.7)	(0.7)
(population)	(0.2)	(0.2)
Non-demographic	2.1	2.3
(GDP)	(1.9)	(1.9)

1. Deflated by GDP prices; growth rates.

Source: HFC.

Such projections are inherently uncertain. Predictions about the long-term growth rate of health care expenditure are in any case difficult to make because technology, the main non-demographic factor driving expenditure growth, is difficult to model and therefore not explicitly modelled here. Technological progress in the medical sector takes the form of new and/or better treatments, for which there is a growing demand as the population ages. Supply constraints may then produce steeper price increases than in the past. However, it is important to achieve the projected slowdown in healthcare expenditure, which requires the continuous implementation of structural reforms that help contain spending (see Chapter 3), because estimates of the budgetary impact of ageing are very sensitive to the hypotheses about the average long-term growth rate of healthcare expenditure. The High

Finance Council (HFC) presents an alternative scenario in which the long-term growth rate of healthcare expenditure after 2008 is 1 percentage point higher than in the baseline scenario (i.e. 3.8% instead of 2.8%). This leads to a 2 percentage point of GDP increase in the estimated cost of ageing relative to the baseline scenario.

Finally, it is worth noting that the cost of ageing is determined completely by changes in age-related spending programmes as the share of tax revenues in GDP is assumed to be unaffected by ageing. More specifically, the model uses a Cobb-Douglas production function, which is characterised by constant shares of labour and capital income in GDP. This option is a classical one for long term projections.

In view of its high public debt (100% of GDP at the end of 2003), Belgium finds itself in a position whereby it can finance the expected cost of ageing through a budgetary policy aimed at a gradual build-up of the budgetary surpluses in the medium run which would then be run down in the longer term as debt interest payments fall. This could speed up the positive dynamic of lower public debt and lower interest charges. The budgetary margin created by lower interest charges could then be used to finance the initial cost associated with population ageing. When the costs of ageing begin to increase more rapidly (after 2015), this strategy of debt reduction can be combined with a gradual reduction of the surplus in order to cover the additional cost without having to raise future taxes and/or cut spending programmes. More specifically, the HFC recommends the following long-term budgetary strategy, which would ensure that public finances remain on a sustainable path.

- The short-term objective would be to transform the current budget balance into a surplus of 0.3% of GDP in 2007 and 0.6% of GDP in 2008 according to the latest stability programme (2005-08) adopted by the Belgian government on 3 December, 2004;
- Next, the government would increase its overall budget surplus by on average 0.3% of GDP each year to reach 1.5% of GDP in 2011; half of the improvement would come from a further fall in interest rate payments and the other half from an increase in the primary surplus (HFC, 2004). This high surplus should be maintained until 2018, but declining interest charges imply that the primary surplus can be reduced gradually;
- After 2018, the government can bring down the surplus gradually to be back at zero in 2030. In this period, the primary surplus can also fall more rapidly, reflecting both lower interest charges and a relaxation of the overall budget target. In this scenario, public debt would fall below 30% of GDP by 2030.

In order to bring the long-term strategy with respect to ageing described above to a happy conclusion, the government must successfully meet the following challenges.

- First, it must reach a structural surplus⁵ of 0.3% in 2007; this cannot be done without the implementation of consolidation measures in 2005-07. This short-term challenge will be further elaborated in the next section.
- Second, long-term growth of healthcare spending must be contained through a package of structural reforms to bring growth rates into line with the projections. This challenge will be covered more in depth in chapter three.
- Third, given that the government cannot use the created budgetary margins in the short run to finance further tax cuts on labour income, needed to increase the labour utilisation rate in line with the projections, additional budgetary margins must be created by improving the efficiency with which the government meets its objectives. This will be discussed in the second half of this chapter.

The short-term challenge: achieving a small surplus by 2007

In contrast to the worsening fiscal deficits observed in most countries in the euro-area, the Belgian general government budget has been in balance (or slightly above) from 2000 until 2003. A balance was achieved for the first time in 2000 after a decade of budgetary consolidation during which a high net primary surplus – defined as the difference between the general government balance and net interest payments – was steadily built up, reaching 6.8% of GDP in 2001 (Table 2.3, Figure 2.1). Since then, the net primary surplus, as well as the cyclically adjusted net primary surplus, has started to decline. The government has been able to maintain a budget balance thanks to the use of non-recurring measures and a decline in interest charges, reflecting both lower interest rates and a reduction in public debt.⁶

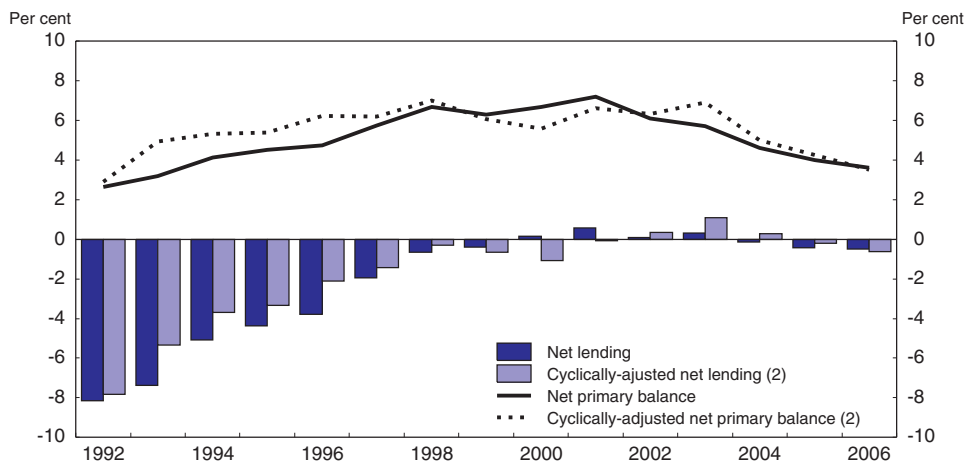
Table 2.3. **Evolution of the structural primary surplus**

	2001	2002	2003	2004 ⁴	2005 ⁴	2006 ⁴
General government balance	0.6	0.1	0.3	-0.1	-0.4	-0.5
Net interest charges ¹	6.2	5.7	5.2	4.7	4.4	4.1
Net primary balance ²	6.8	5.8	5.5	4.6	4.0	3.6
Cyclical component	0.6	-0.2	-0.7	-0.4	-0.2	0.1
Cyclically adjusted net primary balance	6.2	6.0	6.2	5.0	4.2	3.5
Non-recurrent factors	0.4	0.2	1.5	0.7	0.4	0.0
of which: UMTS sales	0.2	0.0	0.0	0.0	0.0	0.0
Transfer pension liabilities Belgacom	0.0	0.0	1.9	0.0	0.0	0.0
Fiscal amnesty	0.0	0.0	0.0	0.1	0.0	0.0
Funding of Belgian Railway Company	0.0	0.0	-0.4	0.4	0.0	0.0
Real estate sales	0.1	0.2	0.1	0.1	0.2	0.0
Securitisation of tax arrears	0.0	0.0	0.0	0.0	0.1	0.0
Structural net primary balance ³	5.8	5.8	4.7	4.4	3.9	3.5
Structural general government balance ³	-0.4	0.1	-0.5	-0.3	-0.5	-0.6

1. Defined as the difference between gross government interest payments and gross government interest receipts.
2. Defined as the difference between the general government balance and net interest charges.
3. Defined as the net primary or general government balance corrected for the business cycle and for non-recurrent factors.
4. Projections OECD.

Source: OECD; NBB.

Figure 2.1. **Government financial balances¹**



1. Projections for 2004 to 2006.
2. Per cent of potential GDP.

Source: OECD Economic Outlook, No. 76.

The net primary surplus dropped by 1 percentage point in 2002, three quarters of which could be attributed to the economic slowdown and the remaining part to a smaller positive impact of one-off factors. As a result, the structural net primary surplus – defined as the net primary surplus corrected for the impact of the business cycle and non-recurrent measures – did not change. However, it deteriorated sharply in 2003, namely by 1.1 percentage point. The strong positive impact of non-recurrent factors amounting to 1.5% of GDP led to a small budgetary surplus of 0.3% of GDP – which exceeded the corresponding objective of a budget balance included in the Stability Programme 2003-05. The most striking one-off measure was the large capital transfer⁷ from Belgacom, which was only partially offset by advancing part of the operational subsidies and all investment subsidies to the national railway company (NMBS/SNCB).

The structural deterioration of the fiscal position can be explained by an acceleration of primary expenditure growth on the one hand, and tax reforms lowering the burden of taxation (on labour in particular) on the other hand. Corrected for the impact of one-off measures, primary expenditure grew by slightly more than 3% in real terms in 2002 and 2003, which is well above the long-term average growth rate of 2.1% (National Bank of Belgium, 2004a). Federal spending was driven up by the need to improve security (reform of the police forces), to invest more in rail infrastructure and to modernise the federal government (Copernic reform). Public healthcare spending was contained in 2002, but has been allowed to grow at an annual real rate of 4.5% between 2003 and 2007 as part of the coalition agreement of the national government and has grown rapidly since. The introduction of the more generous time credit scheme, which will gradually replace the old system of career interruption, and discretionary real increases in selective government transfers – older pensions in the scheme for private sector employees, all pensions in the scheme for independent workers and the guaranteed minimal pension, transfers to disabled people and people on social assistance – have contributed to higher growth of social security outlays. On the revenue side, the federal government has continued with the implementation of the multi-annual labour income tax reform and the reductions in social security contributions, and has also abolished the supplementary crisis tax on labour income. The impact of these measures on total revenues has been somewhat attenuated by higher indirect taxes in 2003 and higher supplements to the labour income tax imposed by the local governments. In addition, the Flemish region also introduced some tax reforms in 2002, leading to a lowering of registration taxes, the abolition of the special contribution for public broadcasting, and a one-off personal income tax rebate. Taken together, these measures caused the share of tax revenues in GDP to drop by 0.7 percentage points in 2002 and a further 0.4 percentage points in 2003.

Some of the same factors underlying the sharp deterioration of the structural net primary surplus in 2003 continue to exert downward pressure on the structural net primary balance in 2004, which is projected to fall to 4.4% from 4.7% of GDP in 2003. However, the structural deterioration has been contained by a slowdown of total primary expenditure growth (corrected for one-off measures) to a long-term growth rate of 2.1%, a lower impact of the personal income tax reforms and the fact that the reduction of social security contributions (0.2% of GDP) has been compensated by indirect tax hikes. According to the latest forecasts of the OECD (*OECD Economic Outlook*, No. 76), a small budget deficit of 0.1% of GDP re-appeared in 2004. However, according to the Excessive Deficit Procedure methodology used in the Stability Programme,⁸ the Belgian government succeeded in attaining its target of budget equilibrium in 2004. The main reason for the deterioration in

the budget in 2004 is that it now benefits much less from the favourable impact of non-recurrent measures. The latter, including a change in the calendar of subsidy payments to the NMBS/SNCB alleviating expenditure in 2004, real estate sales by both the federal and the Flemish government and a fiscal amnesty measure (*Déclaration libératoire unique, DLU*), have also been lower than expected.⁹ However, this setback is offset by more buoyant tax receipts, in particular from indirect taxation, reflecting stronger than expected economic growth. Although to some extent corrective measures have been implemented, an overrun of healthcare expenditures of € 634 million (0.2% of GDP) is expected for 2004.¹⁰

The objectives laid down in the most recent Stability Programme (2005-08) aim for the maintenance of a general government budget balance for 2005 and 2006, turning into a small surplus of 0.3% of GDP in 2007. Assuming that the output gap will be closed by 2007 (so that the cyclical component of the budget is then zero) and the disappearance of non-recurring measures, the structural balance – defined as the actual balance corrected for the impact of the business cycle and non-recurring measures – will also be about 0.3% of GDP. Moreover, assuming that net debt interest payments will remain unchanged in 2007 (Federal Planning Bureau, 2004), the corresponding net primary surplus target will be 4.4% of GDP. Meeting the budgetary targets for 2005-07 will be challenging as simulations have shown that, if the consolidation objective is to be achieved without raising taxes, real primary spending growth should be about 1.25 percentage points lower than the growth of real output (Table 2.4), given the assumptions that:

- The impact of the current one-off measures – 0.7% of GDP in 2004 and 0.4% of GDP in 2005 – will unwind in 2006.
- Short-term market interest rates will remain unchanged and that long-term rates will go up to 4.5%, such that the implicit interest rate on government debt continues to decline to some 4.6% by 2007 and 4.4% by 2011.
- Public debt is increased by 2.5% of GDP in 2005, following the takeover by the Belgian government of the historical debt of the NMBS/SNCB of € 7.4 billion as part of the restructuring of the national railway company.¹¹
- Additional revenue cuts have already been planned, amounting to close to 1% of GDP in the period 2005-07. These include the continued reform of the personal income tax system and additional reductions in social security contributions for employers and employees, which are only partly offset by increases in indirect taxes, mainly excise taxes on tobacco and mineral oils.

Table 2.4. **Maximum implied primary spending growth¹
under different growth assumptions**

Average yearly increases, constant prices

	Economic activity	Primary spending	Primary spending excluding health care ²	Primary spending excluding health care and Ostend/Gembloux ³
	1.93	0.65	0.04	-0.14
2005-2007	2.43	1.20	0.68	0.51
	2.93	1.75	1.33	1.15

1. Subject to the constraint that the budgetary targets of the Stability Programme are met.

2. Implied growth of primary spending excluding health care (increasing by 4.5% a year in real terms).

3. Implied growth of primary spending excluding health care (increasing by 4.5% a year in real terms) and excluding the spending increases decided already in Ostend and Gembloux.

Source: NBB.

- Apart from the planned measures, taxes will grow in line with GDP and the deflator of GDP and primary expenditure will grow at the same rate.

In a reasonable scenario with economic growth averaging around 2.4% in the period 2005-07, primary spending can only increase by 1.2% a year at constant prices, which is low by historical standards. The spending margin becomes even lower if one takes into account the allowed growth norm for total health care spending of 4.5% a year at constant prices until 2007 and the future spending increases decided already in the course of 2004 in the so-called Gembloux and Ostend packages. The burden of consolidation will fall on entity I (federal and social security) considering that this is where the deterioration was most pronounced in the first place and that the benefits of declining interest charges accrue almost exclusively to entity I. Therefore, the outlays of entity II should continue to grow at their long-term average rate of 2.1%. In view of the spontaneous growth in social security spending – 2.2% on average – federal expenditure would need to shrink in real terms in order to meet the budgetary objectives in the absence of additional tax increases or one-off measures.

This is not the path chosen by the government in its budget for 2005, which allows for a real increase in federal government spending of 1%. Earlier commitments to budgetary increases for the departments of security and justice and finance (ICT investment), investment funding for the NMBS/SNCB and cooperation with Brussels have been honoured, but all other departments and programmes are subject to economies (freeze of the personnel envelopes and real reductions in working capital among others) and the government expects to obtain a downward revision of its contribution to the EU budget. One-off measures, more specifically the sale of real estate and the securitization of tax arrears,¹² will again improve the budget by some 0.3% of GDP (Table 2.3). The budget also benefits from new tax increases (higher taxes on packaging waste) on top of earlier measures raising excise taxes on tobacco and mineral oils, some tax-base broadening measures (a greater part of the value of company cars will be subject to employers' social security contributions), the positive impact of the European Savings directive as of July 2005, and continued efforts to combat fraud. Moreover, the better than expected economic growth in 2004 will have some positive carry-over effects for the budget. Even though the government estimates that the measures taken are sufficient to close the gap of € 4 billion needed to balance the budget in 2005, the OECD thinks that it may be necessary to take further measures amounting to 0.4% of GDP in order to preserve an equilibrium.

The budgetary outlook for 2006 is particularly bleak, as the impact of the personal income tax reform reaches its peak, lowering the share of tax revenues in GDP by another 0.6 percentage point of GDP on top of the growth norm of the public healthcare budget by 4.5% in real terms. In the absence of any further measures, the structural net primary balance will fall to 3.5%, which is 0.9 percentage points below the target for 2007. Although the temptation to resort once again to non-recurrent measures will be strong, the federal government should take advantage of the economic upturn to focus on structural measures that permanently reduce government spending in combination with measures that reinforce the budgetary process (Box 2.2) This would reduce the risk of a pro-cyclical fiscal policy which would intensify business cycle fluctuations at a later date. Moreover, recent one-off measures, such as the Belgacom operation which generates additional pension payments for the government or the frequently used real estate sales and rent back operations, are self-reversing implying the short-term gains are offset by a stream of

Box 2.2. Measures to reinforce the budgetary process

In order to achieve the objectives laid down in the Stability Programmes, the Federal Government, the Regions and the Communities concluded a multi-annual cooperative agreement for 2001-05, in which each committed itself to respect a pre-determined path for the budget balance. Regions and Communities are in principle free to achieve their budget targets by adjusting outlays or taxes.¹ During the fourth quarter of each year, there is extensive monitoring by the Federal Government in cooperation with the Regions and Communities to ensure compliance with the objectives. There are no formal sanctions in the event of non-compliance, but it is felt that this arrangement has contributed towards the respect of the general government budget targets, and a new cooperative agreement for the period 2006-10 should be concluded soon.

Improved budgetary mechanisms to ensure fiscal discipline are especially important at the level of the Federal Government, which is under most pressure to consolidate. It is at this level that most initiatives are being developed.

The anchor principle introduces a monthly monitoring of expenditure in each Federal Department to make sure that Departments respect the historical under-utilisation rate by some 2% of the budgetary credits allocated to finance spending programmes excluding personnel expenditure. Given that wage increases are quite uniform across departments and that public sector wages are fully indexed, the timing of which can be predicted with reasonable accuracy, the Budget Department has the ability to set a global envelop for increases in the wage bill, which can then be divided between departments. This implies that the different departments have only limited autonomy with respect to personnel management. The anchor principle is effective in avoiding that budgetary windfalls are spent in the year in which they occur and that growth ceilings are complied with, but it does not stop spending pressures from piling up (especially in the face of windfalls) which will eventually cause the breakdown of spending constraints.

The focus on policy priorities can be strengthened further by systematically putting into practice the existing clause that any proposition for new initiatives must be accompanied by compensation measures. The current practice is still that the departments prepare proposals for new initiatives² with an estimate of their cost and then bargain for additional budgetary resources (bottom-up budgeting). Choices are made in accordance with the policy priorities of the Federal Government. The low emphasis on compensatory measures can be partly attributed to the absence of a systematic review of all spending programmes, which would indicate the areas in which savings can be made. The government should gradually move from bottom up to zero base budgeting.

The Federal Government intends to move towards *performance-based budgeting (PBB)* by 2007, but still has some way to go. Since 1986, the publication of the annual budget is accompanied by a justification, making explicit the overall policy orientation of the Federal Government, the missions assigned to the different departments and programmes, the objectives aimed for and the means devoted towards the achievement of each objective. Nevertheless, the quality of the budget justification could be improved as it is currently mainly descriptive with few quantitative indicators to measure outcomes. This makes it difficult to evaluate *ex post* to what extent the objectives have been achieved. However, international experience suggests that it can be challenging to find a limited number of quantitative indicators that adequately capture the variety and complexity of the tasks performed by a department and poor performance indicators can reduce the quality of the public service when efforts are shifted into tasks whose outcomes are easy to quantify at the expense of equally important tasks that are hard to quantify. Some federal departments are currently in the process of developing quantitative indicators for their services.

Box 2.2. Measures to reinforce the budgetary process (cont.)

Finally, the Federal Government aims to strengthen the analytical ability to measure the *cost effectiveness* with which the objectives are achieved. In view of the existing budgetary constraints, costs are taken into consideration by the different departments, but this is not done in a standardised way. In the framework of a new accounting system, to be implemented progressively from 2005 on, a limited analytical component will be available to calculate the costs of government policies. In addition, the Federal Government wants to create a knowledge centre with a mission to elaborate more sophisticated methods to estimate the costs of public policies.

1. Regions enjoy more tax autonomy (registration taxes, inheritance taxes, real estate taxes). However, communities have no such freedom as they have no tax autonomy in practice.
2. All proposals for new initiatives need to be approved by the Inspection of Finance.

outlays in future years. If assumed to be actuarially neutral, self-reversing one-off measures do not modify the inter-temporal budget constraint of the government, implying that they do not help in restoring the long-term sustainability of public finances.

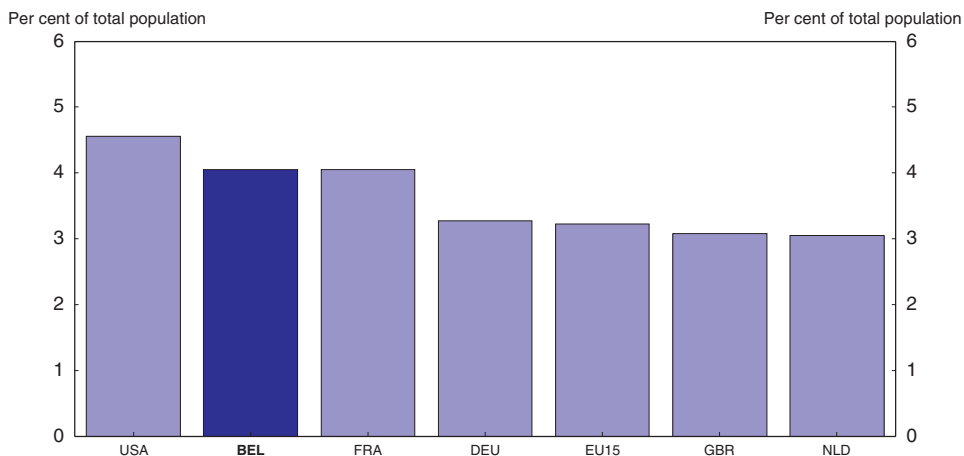
Enhancing the efficiency of public spending

Increasing the efficiency with which the government achieves its objectives is one way in which the government can make room for future reductions in taxes on labour income without undermining the sustainability of public finances, thereby enhancing incentives to work. Current and prospective measures in the healthcare sector will be discussed in the next chapter. Some reforms to raise the efficiency of public administration have already been taken with the aim of improving the quality of public service provision within a given budget, and further reforms are planned to modernise the public administration and to implement the e-government strategies of the federal government, the regions and the communities. This will lead to an innovative and modernised administration with faster delivery of services. It should also create scope for the realization of cost savings and productivity gains in the public sector over a longer period of time. For example, reductions in the share of government employment in total employment could be achieved mainly by the partial replacement of departing employees.

Reducing inefficiencies in public administration

Reducing public sector employment

Belgium is characterised by a high level of public employment (excluding education) relative to the total population (Figure 2.2), suggesting there may be some scope for cost reductions. Successive constitutional reforms since 1969 have resulted in the creation of three Regions and three Communities next to the federal level and the local level (which includes provinces and local communities). This process has been accompanied by an expansion of public services and employment. Traditionally low mobility and life-long employment in the public sector adds to the problem by making public spending behaviour asymmetric: public employment tended to be adjusted upwards when new demands emerged, but failed to be adjusted downwards when demand waned because services are rarely reorganised or abolished. Downsizing will become easier soon, when baby boomers start retiring in large numbers. The government should seize this opportunity to develop a long-term vision with respect to the partial replacement of retiring employees by higher qualified staff and the re-organisation of its services.

Figure 2.2. **Public administration employment,¹ 2002**

1. Includes civil service and defence but excludes education, 2001 for United Kingdom and EU15.

Source: OECD National Accounts.

In all OECD countries, the proportion of high-skilled employment in the public sector is higher than in the private sector, especially in departments responsible for policy-making,¹³ and has increased over time. Skill upgrading has exerted upward pressure on the wage bill of the public administration. In addition, pension arrangements in Belgium are more generous for statutory civil servants (*statutaires*) than for private sector employees. Statutory public sector employees are covered by a final-wage defined benefit scheme, with pensions based on the average wage earned during the last five years and the number of years of public sector employment, whereas private sector employees and contractual public sector employees¹⁴ are covered by an average-wage defined benefit scheme in which earnings are subject to a ceiling. As a consequence, the replacement rate is higher in the public sector pension¹⁵ scheme than in the private sector pension scheme. Pension arrangements in the public sector are viewed as deferred wage payments and this is reflected in lower public sector wages.

Reforming human resource management

One key challenge in raising the efficiency with which the government reaches its objectives is to enable the government to respond with greater flexibility to changing public-service demands through an internal reallocation of resources. Barriers to labour mobility within the public sector should be reduced. Selor, the centralised recruitment office of the federal government, has been formally given a mandate to organise an internal job market, but it still needs to be put in practice. A better internal communication strategy about the existing employment possibilities in different departments could be developed by centralising all vacancies in one database to which all civil servants have access. Departments should be obliged to report all vacancies to Selor and be encouraged to make greater use of internal transfers as opposed to external recruitment. Measures to extend the internal labour market to include the other levels of government should also be considered. A well functioning and large internal labour market would also offer advantages to departments with overstaffing which can make use of it to locate new employment opportunities within the public sector for redundant employees. In addition,

labour mobility and employees' adaptability can also be enhanced through improved training opportunities and stronger incentives for life-long learning.

There is also scope for raising productivity in the public sector by modifying payment schemes, which have traditionally been based on formal qualifications and seniority, providing little incentive for high performance. The *Copernicus* reforms¹⁶ of the federal government aim to break with this tradition by basing remuneration more on the possession and development of competencies during a career in the public sector. The introduction of competency premia should therefore be coupled to a reduction in seniority premia. Competencies refer to skills, abilities to learn and personal traits, and all functions will be redefined in terms of required competences. A system of development circles is expected to be introduced in 2005. This means that every supervisor is obliged to hold a meeting with each of his employees individually during which information about the function is exchanged, performance objectives set, training needs identified, and progress towards achieving the objectives discussed (in subsequent rounds). Such a system would allow outstanding performance to be rewarded and shirking to be sanctioned, although problems with specifying performance targets (outputs and outcomes are not always easy to measure) and inability or unwillingness on behalf of supervisors to differentiate strongly between employees have been found to reduce the effectiveness of such arrangements in practice (Joumard et al., 2004). Training and continued learning are viewed as essential building blocks in the development of competencies, and participation in training programmes is the right and duty of each employee. The federal government has committed itself to raise the amount spent on training from the current 1.2% of the total wage bill to 1.9%. In addition, life-long learning could be stimulated further if promotion prospects and not only salaries took into account the accumulation of skills and the willingness to use them.

Improving senior management performance

Productivity gains in the public sector can only be fully realised when supported by good leadership that stimulates public sector performance. This requires a shift towards a new management approach, focused more on results instead of compliance with procedures. Senior management reforms have been implemented at the level of the federal government, and Regions and Communities, but the following paragraphs reflect mainly the procedures and experiences of the federal government (Regions and Communities have implemented similar changes but started at a different time).

One of the main objectives of the *Copernicus* reforms was to appoint executives with proven capabilities in the civil service or in the private sector. Vacancies for high-level management functions were openly advertised and the recruitment decision was based on an assessment of basic competences by an independent head hunter firm, an assessment of specific knowledge by Selor and an interview with the ministry interested in hiring. In order to limit the number of appeal cases,¹⁷ the first assessment has been re-assigned to Selor, with the help of external consultants. Contracts are given for a fixed period of six years and are renewable (but the person must re-apply). Within three months of appointment, each top-manager and his consultants must present the minister with a management plan, which must include a precise definition of the duties, his strategic objectives, the operational objectives and the budgetary resources. Based on this plan, lower level managers work out operational plans for their own departments. Performance

targets should be carefully assessed, because experience in other countries has shown that poorly formulated targets can produce adverse effects.

Evaluations take place every two years, with the possibility of a premature termination of the contract if performance is found to be really unsatisfactory. In this case, the procedures laid down in the labour code must be respected. A manager whose contract expires after six years is not automatically re-appointed: he/she must re-apply and get through the entire recruitment procedure again unless his/her final assessment note has been "highly satisfactory". Managers do not receive a performance-related premium.

In exchange for greater responsibility, the salaries of top-managers have been raised substantially and autonomy has been somewhat increased. High salaries were also viewed as necessary to make the public sector more competitive and to attract proven managers from the private sector. The high remuneration for top-managers does not burden the public pension scheme because all managers, including those recruited from within the civil service, are hired on a contractual basis implying that they are subject to the same conditions as employees from the private sector. In addition, top-managers were offered an additional (second pillar) pension plan, comparable to what exists in the private sector, financed by a contribution of the employer and a personal contribution equal to 1.5% of the monthly wage paid by the top-manager. Nevertheless, generous remuneration packages were apparently not enough to solicit a strong interest for these positions from private sector candidates (Table 2.5).

Table 2.5. **Origin of newly hired managers**

	Total	Origin : federal government (sensu stricto = Ministers)	Origin other level of government	Origin private sector	Percentage from private sector %
Level					
N	23	8	10	5	28
N -1	107	59	32	16	18
N -2	28	28	0	0	0
Total	156	95	42	21	15

Low interest of the private sector (only 15% of total appointments) may be attributed to the lack of autonomy in the public sector, relative to the private sector. For example, managers have limited control over the personnel budget, limiting their possibilities for reorganising a public service. Managers have to make up a personnel plan, which is subject to approval. Once approved, managers can take all the necessary steps to execute it, taking into account the statutory and contractual rights of the personnel. This low inflow of private sector managers was also one factor¹⁸ prompting the new government to moderate wages of top-managers again, although they remain higher than before the *Copernicus* reform. Moreover, the lack of experience with quantitative performance indicators also makes it difficult to evaluate *ex post* the extent to which the strategic objectives have been achieved. As long as it remains difficult to hold managers responsible for outcomes, a lower wage can be justified. However, the priority should be to further develop outcome indicators (as planned by the Budget Ministry) to reinforce the analytical underpinning of the reforms. This is already the case in some public services (RVA/ONEM, Federal Public Service of Interior Affairs, Federal Public Service of Mobility and Transport). In addition, the recently (December 2004) approved new management evaluation process is based on the execution of the managerial and organisational planning, which will force managers into

the development of performance indicators. Managers have to prepare a self-evaluation. The use of quantitative performance indicators is therefore necessary. This is also needed to give managers more autonomy, so that they can be held accountable for outcomes.

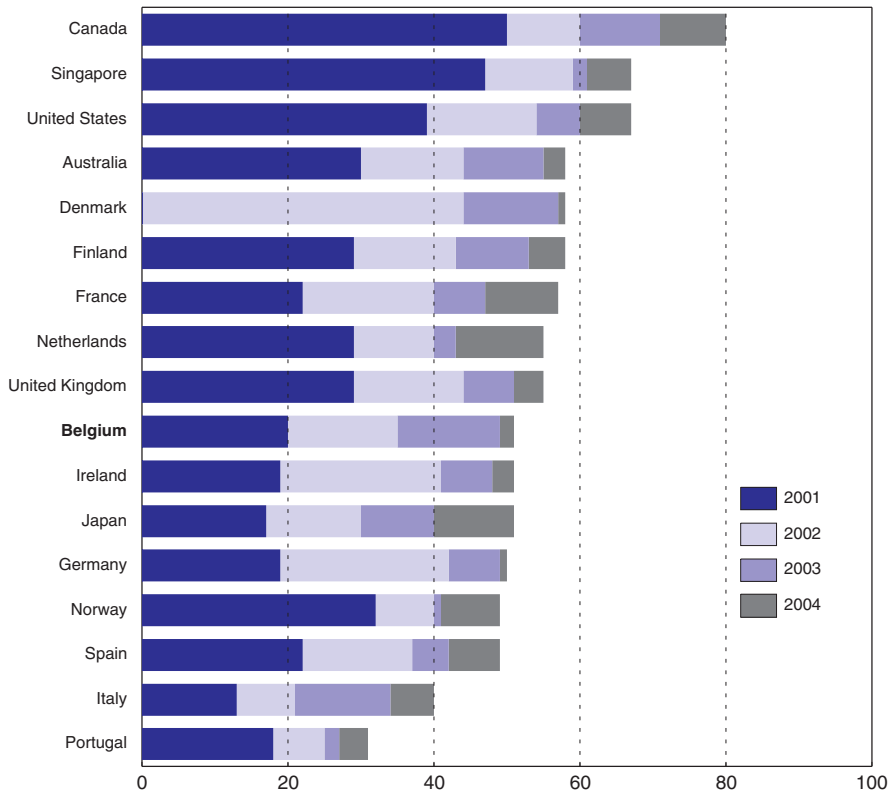
Given the limited interest among private sector managers in assuming a management position in the public sector, the government will have to develop managerial experience in-house and make high quality management training compulsory for new managers. It has already launched a training programme without direct access to management positions but designed to help candidates during selection. Dubbed “Pump”, the programme enrolls about forty people selected after a written test and a personal talk. Training takes several months. It covers both theory and hands-on experience, including a one-month internship in a foreign country. Trainees must also work for three months as a consultant on modernisation projects and propose reform targets.

E-government

E-government provides a powerful tool to improve the efficiency with which the government reaches its objectives, including by reducing the administrative burden (see Chapter 7). Electronic applications can generate savings on data collection and transmission, especially through greater sharing of data within and between governments and through the creation of portals allowing citizens and businesses to find information and to make online transactions with the government. A State Secretary for e-government and computerisation has been appointed in 2003. His mission is to co-ordinate and to push the ICT and e-government strategies of the federal administration, thereby contributing to its modernisation. This ICT support will also help Belgium to grow into a knowledge society. The key principles of e-government in Belgium are the unique collection of data, the development of reference registers or “authentic” sources and of unique identity keys (the National Register number for citizens, the company number allocated by the Crossroads Bank for Enterprises for businesses). The sharing of electronic databases not only reduces the administrative burden on enterprises, citizens and civil servants, but also increases the quality of the data managed by the government. Through cross-comparison of information in different databases, the government has an additional investigative tool at its disposal for identifying fraudulent cases. By enabling the automation of manual transactions, such as tax filing, resources can be freed up for more valuable tasks such as better enforcement and more frequent inspections. Other benefits are the modernisation of the administration, the development of new innovative services and the reduction of the digital divide by granting rights automatically, based on the status of a citizen / business without his intervention. This avoids developing services at the front office.

Belgium has made considerable progress in its implementation of e-government services since 2001 and is now firmly positioned within a large cluster of countries with an e-government maturity score between 50 and 60% (Figure 2.3). E-government maturity is defined as a weighted average of service maturity (70%) and customer relationship management (30%). The Accenture survey assigns a score (1, 2, or 3) for service maturity to each of the 206 services considered at the level of the national government and then computes the average, with the three possible scores defined as: 1) = information only with no possibility for interaction, 2) = one-way or two-way interaction but no possibility to complete end-to-end transactions, 3) = end-to-end transactions. Customer relationship management measures the extent to which government agencies manage interaction with their customers (citizens and businesses) and deliver services in an integrated way.

Figure 2.3. **E-government maturity and growth since 2001**
2001-04



Source: Accenture.

The Belgian approach towards e-government has been first to develop and integrate back-office functions before rolling out new services to businesses and citizens at the front end. The focus is predominantly on providing better services to customers in the form of easily accessible information and additional channels for interactions and transactions with the government. The most impressive realisations so far have been:

- The completion of important building blocks for e-government, including a vast secured broadband network connecting the agencies of the federal government (FedMAN), and a Universal Messaging Engine realising data communication between heterogeneous systems, portals and websites of the different federal agencies.
- The launch of a federal portal, *www.belgium.be*, offering citizens, businesses and civil servants with links to information as well as to useful applications such as the ordering of licence plates and filing of personal income taxes online. Accountants can also file the personal income taxes of their customers (such as independent professionals and company owners online).
- The crossroads Bank for Enterprises (Banque Carrefour des Entreprises, BCE), allocating each company a single unique identification number. Via the BCE, government services will be able to exchange information. The single identification number is necessary to go ahead with administrative simplification (see Chapter 7). The unique “starters” form should give the beginning entrepreneur the possibility to regulate his most important administrative formalities at one single place: “the office for enterprises”.

- After a pilot phase in 2003, the roll-out of the electronic identity card has started in 2004. At the latest in 2009, all residents will have such an ID card. This smart card with embedded digital signature will pave the way for new applications such as electronic voting, paying taxes, online access to their files with the government, request of documents, and the secure exchange of information with the government. Moreover, the ID card will leverage the use of eCommerce and eBanking. All private companies can use the ID card as an identification and authentication tool for secured online transactions.

The implementation of a successful e-government programme requires large, up-front investments, whereas benefits take time to materialise. Belgium is still in a stage where the development of e-government represents a net-cost to the government. A recent survey organised by the State Secretary for e-government shows that ICT expenditures of the federal government (investments in and development of hardware and software) amount to about € 407 million, representing 2.5% of the budget of a public service. One reason why benefits are still low is because the volume of electronic transactions with the government is still limited, especially among citizens, whereas higher volumes would clearly generate economies of scale. The allocation of single ID numbers for companies, along with the BCE, should boost the take-up of electronic transactions between businesses and the government. However, there remain several barriers to a higher take-up of e-government among citizens. The fraction of regular internet users in the Belgian population is still modest (about 49% according to the Belgian internet mapping survey), although the government is actively promoting broadband and access to internet. At the end of 2004, there were about 1.99 million broadband internet connections in Belgium. 82% of Belgian internet users has visited a government website in the last 12 months and one out of five citizens has contacted the government by email in 2003. When the facility to file personal income taxes online became available in 2003, 2% of the population (57 000 persons) used it. This number increased to 169 000 in 2004, an increase of 300% in comparison with 2003. The introduction of electronic ID cards for citizens in combination with a greater availability of services will further stimulate take-up, but the government should consider additional measures to promote its electronic services among citizens, such as well targeted information campaigns (for example in schools) or financial incentive schemes.

Some e-government projects that are currently being implemented will generate cost savings. For example, the federal administration is promoting the use of open standards for its administration and open source softwares are seriously taken into account. The usage of open standards and the re-usability of ICT applications will contribute towards cost reductions for the administration. In addition, a cooperation agreement between the Federal government and the Regions and Communities on e-government commits all parties to the principle of unique data collection using the same unique identification keys and the same data definition. An interoperability framework is currently being developed in order to enable all governments to interconnect with each other, thereby lowering total expenses for administrations through the realisation of scale economies.

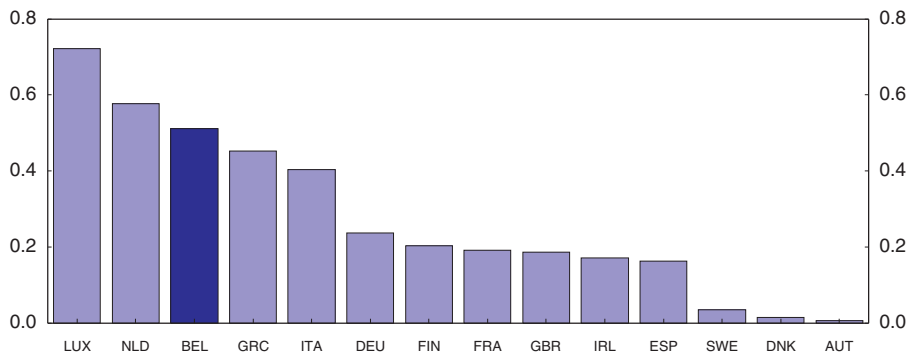
Another area in which other countries with more mature e-government programmes and a higher citizens' take-up have reported significant savings concerns tax revenue services. These took various forms, such as the automation of some of the manual processing of tax returns, the reporting of additional income, savings on postage, savings resulting from more queries being handled through self-help services, an improvement in tax collection following a re-allocation of freed-up resources towards tax enforcement. The latter advantage should be highly relevant to Belgium, which has a sizeable black economy.

Moreover, the Belgian Ministry of Finance has estimated that the implementation of large-scale electronic filing and treatment of taxes would enable it to partially offset the large natural attrition of its personnel in the coming years. Since this could gradually lead to a reduction of its staff by one quarter, the budgetary margin for the hiring of additional tax inspectors within the existing division charged with investigating fraud and with better electronic fraud surveillance could easily be created.

Improving the outcomes of transportation policies

Subsidies by the federal government to the state-owned railway company NMBS/SNCB are still high, also by international comparison (Figure 2.4). These numbers need to be interpreted with caution though. Much of the public financial support to the railways is not notified to the European Commission either because the financing, due to the lack of liberalisation of the sector, is not deemed by Members to constitute State aid under the meaning of Article 87(1) of the Treaty, or because it represents compensation for public services in accordance with Regulation 1191/69. Member states are however required to report overall public expenditure to the sector. Disparities between Member states may reflect different interpretations of the scope of this annual reporting exercise.

Figure 2.4. **State-aid to the railway sector**¹
As a percentage of current GDP, 2001²



1. Includes all public subsidies that have been communicated to the Commission as well as subsidies that have been notified and authorised by the Commission under relevant State aid rules. However the figures exclude compensation for services of general economic interest.

2. 2000 for France.

Source: Commission of the European Communities, *State Aid Scoreboard*, 2004.

In the case of Belgium, the total amount of public financing reported to the European Commission is less than the total amount of subsidies given to the national railway company, which is about 1% of GDP. The NMBS/SNCB receives public money for four different reasons: i) to finance new investments in infrastructure and rolling stock (0.3% of GDP); ii) to cover the costs of operation of domestic passenger transport (0.1% of GDP); iii) to cover the costs of maintaining the railway network; and iv) to pay pensions of retired employees of the NMBS/SNCB.

Operational subsidies to domestic passenger transport and maintenance of the network remain considerable for several reasons. As pointed out in the previous *Survey* (OECD, 2003, pp. 139), the NMBS/SNCB is characterised by high operating costs, over-staffing and low efficiency, with losses in all three services (freight transport, international

passenger transport (Thalys, Eurostar) and domestic passenger transport) as a result. Subsidies are also motivated by the objective of the government to provide a minimum mobility at an affordable price for everyone. In addition, subsidies are used to reduce the price of public transport services, thereby bringing their price relative to that for private transport services closer to relative marginal social costs. Such subsidies are even set to increase from January 2005, when the government will pay 20% of a rail pass for the section between the private sector employees' residence and workplace, provided that their employers pay the other 80% (such train tickets are already free for public sector employees). However, the question is whether operating subsidies for passenger rail transport are not a very efficient way of ensuring that the relative prices of public and private transport reflect marginal social costs as they encourage excessive mobility by making transport cheaper relative to other goods and services, leading to an increase in overall traffic. Similarly, the other instruments aimed at internalising the external costs of private transport (excise taxes on motor vehicle fuels and taxes on motor vehicle purchases and ownership), the greatest of which is congestion costs, might be less efficient as they are poorly targeted. Economic theory suggests that the best solution consists of internalising congestion costs through road pricing and targeting environmental externalities through taxes on road fuels. In this way, the relative price of public and private transport could be brought into line with marginal social costs without the need for large subsidies. Important progress in this direction has been made recently by a decision to shift taxation from vehicle ownership to use. Excise taxes on fuel are gradually being raised, making the use of a motor vehicle more expensive, whereas the fixed taxation of gasoline vehicles is being phased out¹⁹ and the immatriculation tax is set to disappear as well, making the ownership of a motor vehicle less costly. Fuel taxes are more effective at internalising congestion externalities (Chia, Tsui and Whalley, 2001) than vehicle ownership taxes, so they are currently used to tackle both environmental and congestion externalities. However, the government should consider the feasibility of introducing a road pricing system as soon as it becomes technically feasible and reliable, reducing the need for public transport subsidies insofar as they correct for an inappropriate pricing of road use and refocusing road fuel taxes on environmental externalities (including GHG emissions) only.

However, the scope for saving on investment subsidies will be limited because Member States are under pressure to promote railway transport as an environmentally sustainable alternative to private transportation in view of the growing demand for mobility and the need to comply with the Kyoto protocol.²⁰ This will require additional investments to modernise and extend the public infrastructure network. Public involvement in rail infrastructure projects will remain important because it is very difficult for any private investor to secure a profit on such projects, although public-private partnerships (PPP) could be considered as one amongst a wide range of options, as the European Commission has recently done in the context of the Trans-European Network. In order to accelerate major railway projects, the Belgian government is currently investigating a PPP-formula for a number of infrastructure projects, such as Diabolo (railway access to the National Airport), the modernisation of the Brussels-Luxembourg line and the Brussels portuary terminal. A recent study (Friederiszick, Röller and Schultz, 2003) found that the level of aid has a positive impact on railway efficiency, although aid intensity – defined as aid divided by total operating cost – has a negative impact. This result suggests that aid must be complemented with other means of finance to be effective.

Other potential advantages of PPPs are: i) the introduction of private management skills while sustaining a public service ethos within an organisation, ii) lower investment costs to the public sector as the project is co-financed by the private sector, and iii) the potential for efficiency gains in delivery. However, the empirical evidence suggests that most efficiency gains stem not from the private sector involvement as such, but rather from the permanent exposure of potential contractors to competition (Van Den Noord, 2002). In other words, savings are unlikely to be maintained in the long run if the PPP establishes *de facto* a monopoly position for the incumbent private partner. Another drawback is that a PPP entails a greater exposure of the government budget if the private partner fails.

Notes

1. The pension scheme for private sector employees is responsible for two thirds of the public pension outlays. There are separate pension schemes for the public sector (14.5% of total spending on pensions in 2003), for independent workers (12% of total spending) and for employees of public enterprises (4% of spending).
2. The growth of conventional wages is below the growth of average wages in the economy, the difference being accounted for by wage drift, estimated at 0.5% annually.
3. The health index differs from the CPI in that it excludes all products that are harmful to human health from the consumption basket (tobacco, alcoholic beverages, diesel and petrol fuel).
4. Past observations are used to estimate the constant elasticity. Its estimate depends on the length of the period considered, but is always found to be greater than one. The Federal Planning Bureau finds an elasticity of 1.6 for the period 1971-2002. In the 70s, the share of the government has been substantially increased, which of course, has had an important impact on the growth rate of government expenditure in that period. Consequently, the high elasticity of 1.6 for the period 1970-2002 can be partly explained by this evolution.
5. As the cyclical component is projected to be zero in 2007, the surplus will be equal to the structural surplus.
6. Public debt has fallen from its peak of 136.7% of GDP in 1993 to 99.98% of GDP at the end of 2003.
7. The transfer amounted to € 5 billion, or 1.9% of GDP, and reflected the present value of the liabilities of the Belgacom pension fund, which have been taken over by the federal government.
8. Net gains on financial swaps of general government interest payments are included in the data used in the Excessive Debt Procedure and the evaluation of the Stability Programme but are excluded from ESA 1995 data. In the case of Belgium, this results in small differences in some years in data compiled according to the two methodologies as net gains on financial swaps linked to public debt represent on average 0.1% of GDP.
9. The fiscal amnesty measure (*Déclaration libératoire unique, DLU*) brought in an additional € 500 million, € 300 million less than estimated in the initial 2004 budget but € 300 million more than estimated in the adjusted 2004 budget.
10. Measures have been taken in November 2004 to increase income in the health sector by € 160 million (pre-financing, claw back and increases in the reserves of the mutual funds (*mutualités*)).
11. The NBMS/SNCB will be broken up into 3 entities, the railway transport company NMBS/SNCB, the infrastructure management company Infrabel, and the holding company NMBS/SNCB Holding which coordinates the two operational companies. Besides these three entities, the Fund for Railway Infrastructure was created, which owns the railway infrastructure and is liable for the corresponding debt of € 7.4 billion (2.5% of GDP). According to ESA95 methodology, this fund would be considered as part of the general government, causing government debt to increase by 2.5% of GDP in 2005.
12. The government intends to sell packages of tax arrears to financial institutions at a discount reflecting the fact that some tax arrears are lost. Financial institutions receive all the money that could be recovered by the tax inspection service at the department of finance. This would give them an incentive to closely monitor the efforts made by tax inspectors.

13. These would include Regions and Communities in Belgium, which are responsible for important policy areas on their territories.
14. Unlike their peers in the private sector, contractual employees in the public sector do not benefit from occupational (second pillar) pension schemes.
15. Note that there is a ceiling on the maximal public sector pension that a civil servant can earn.
16. The name “Copernic reform” is actually no longer used, but the same philosophy remains in place.
17. By law, the selection procedure must take place in front of a mixed French and Dutch speaking jury. As this was not possible in a private head hunter firm, non-selected candidates could use this as an argument in their appeal (to the *Çour d’Etat*) against the hiring decision.
18. The moderation of the management salary is also due to the fact that the distinction between policy and execution has been maintained. The public services are still mainly focused on the execution of policies.
19. The “taxe compensatoire d’accises” will be abolished completely by 2007.
20. As part of the Kyoto objectives, Belgium has committed itself to reduce greenhouse gas emissions by 7.5% on average during 2008-12 from 1990 levels.

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ANNEX 2.A1

Key assumptions

	2003	2030
Employment rate		
Global	61.5	68.5
55-64	32.6	42.4
Women	53.0	63.9
Participation rate		
Global	71.1	73.1
55-64	43.7	50.4
Women	63.8	68.4
Structural unemployment and productivity		
Productivity and individual wage increases	1.75% after the medium term period (2009)	
Structural unemployment rate ¹	7.5% (in 2030)	
Other		
Welfare adaptation of pensions ²	2 scenarios: 0.5% or 0% annually	
Increase wage ceiling ³	1.25% annually	
Real interest rate	4% after 2009	
Healthcare expenditure	2003-2030 (growth rate)	
Total expenditures	3.2	
Trend evolution	2.3	
Demographic effects	0.9	
Ageing	0.7	
Population volume	0.2	

1. Includes the older unemployed not looking for work.
2. Pensions are automatically adjusted for inflation. In addition, the ageing commission assumes in its baseline scenario that there will be political pressure for discretionary real increases averaging 0.5% per year during the period under consideration. The Belgian law does not provide for any automatic real increases.
3. In the public pension scheme for private sector employees, benefits are related to career earnings but subject to a ceiling. The ceiling increases at the same pace as conventional wages, *i.e.* at a lower pace than the average wage due to wage drift.

Source: HFC.

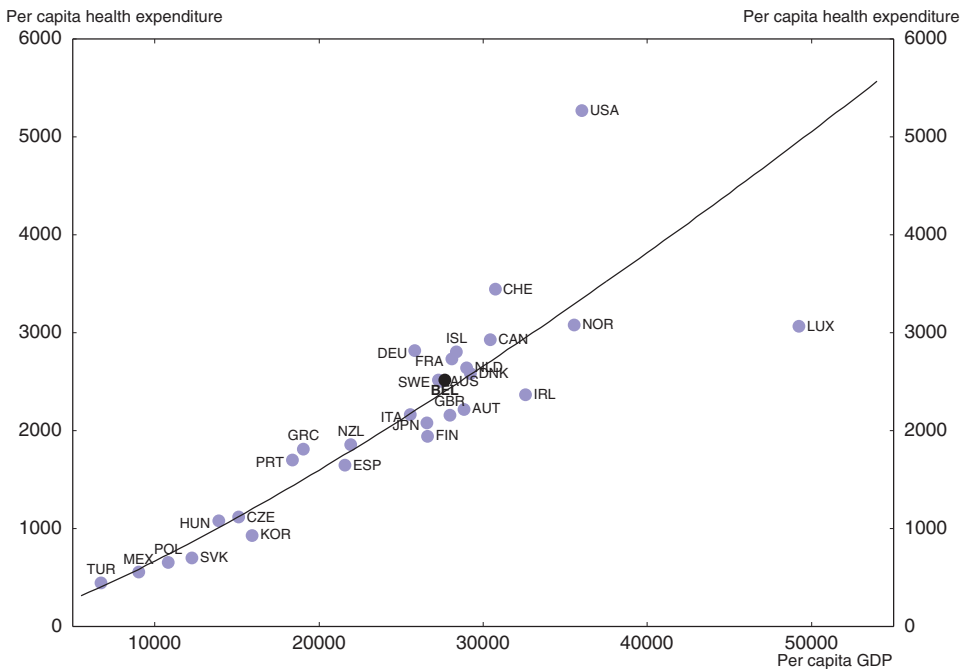
Chapter 3

Constraining public health expenditure growth

This chapter discusses the factors driving high growth on public healthcare outlays and the policy responses to these developments. Supply mismatches (i.e. excess supply of resources in some sub-sectors and shortages in others), excessive consumption of health services and pharmaceuticals, low productivity growth (Baumol effect), technological progress and population ageing are all identified as factors driving growth. For some time, the government has implemented policies to control the level of aggregate spending: budgetary caps, restrictions on the supply of hospital beds and on entry to medical school (numerus clausus), wage agreements, and more recently the introduction of reference pricing for pharmaceuticals. These policies are complemented by measures improving the cost efficiency at the micro-level, such as hospital funding based on Diagnosis Related Groups (DRGs), benchmarking of prescription behaviour of general practitioners, the introduction of centralised medical files for patients and initiatives to strengthen the role of the GP as a gatekeeper.

Gross-country comparisons show that richer countries spend more on health care on a per capita (Figure 3.1) basis, and expenditure on health care by Belgian consumers is in line with its level of per capita income. Because of how health care is financed and various market and government failures, consumption decisions by individuals are not necessarily the only driver of spending levels. Trend growth of health expenditure per capita exceeds that of GDP per capita, as in other OECD countries, resulting in the share of health expenditure in GDP rising over time from 4% in 1970 to 7.8% in 1991 and 9.1% in 2002 according to the OECD Health Data.¹ This trend presents a great challenge to government budgets because health-care expenditure is predominantly publicly funded in most OECD countries, its share reaching almost three quarters of total expenditure on average² in all OECD countries as well as in Belgium in 2002. As a result, public spending on health care amounted to 6.6% of GDP in Belgium in 2002.

Figure 3.1. **Health expenditures and GDP per capita**
2002¹



1. US dollars at purchasing power parity exchange rates (2000 for Turkey, 2001 for Austria, Japan and Korea). The equation of the regression line is the following:

$$\text{LN}(\text{health expenditure per capita}) = -5.08 + 1.26 * \text{LN}(\text{GDP per capita});$$

$$\text{R squared} = 0.91 \text{ t:}(-665) (1653).$$

Source: OECD, Health data, 2004.

Public health expenditure growth has accelerated recently in Belgium. Whereas the average real growth rate was equal to 3.5% for the past ten years, it reached 4.3% on average during the past five years (1999-2003). In the middle of the nineties, the Belgian government introduced restraints on volumes and prices and caps on health budgets in order to keep expenditure growth under control in the run-up to the euro. As has been the experience in other countries, such measures are only effective in controlling expenditure for a limited period of time, and then give way to a period of buoyant growth as a result of catching up with unsatisfied demands. The current government has agreed to cap real growth of the public health budget at the high rate of 4.5% annually until 2007. It is very important that this period of relative budgetary slack be used to get an agreement on and, if necessary, finance for one-off measures that facilitate the introduction of efficiency-enhancing structural reforms,³ given that the pressure on expenditure growth is likely to remain strong in the future, with population ageing and technological progress both contributing towards strong growth in the demand for health care services. Moreover, analysis by the Ageing Commission has shown that the estimated costs of ageing are very sensitive to health expenditure growth rates, with continued high growth resulting in unsustainable public finances (see Chapter 2).

The Belgian government expects to be able to restrain growth in the medium run by continuing its policy of gradual reform aimed at raising the efficiency of the system. To achieve this goal, it relies on raising the responsibility (*responsibilisation*) of all actors, peer pressure on providers and control measures. Some specific recommendations with respect to these policies are summarised in Box 3.1. Radical reforms are currently not on the political agenda because, in contrast to some other countries, Belgians are satisfied with their public health-care system. It needs to be noted that the system has been successful in achieving universal and broad coverage with a relatively high degree of horizontal equity, providing quality services at a reasonable price, minimising waiting lists and offering patients a free choice of insurer and care providers.

Factors driving high growth

Excess supply and supply mismatches

There is evidence of excess supply of human resources in some segments of the health care sector. Most striking is the high density of practising physicians in Belgium – 3.9 per 1 000 inhabitants – relative to the OECD average of 2.9 (Table 3.1). This can be attributed to an exceptionally high density of general practitioners according to international norms, which has continued to grow during the last decade. There is also an abundant supply of dentists and pharmacists in Belgium. To the extent that health care expenditures are shaped by the amount of installed capacity as supply may induce demand, the existing dense networks of physicians, dentists and pharmacists are a source of cost pressure.

On the other hand, nurses are in short supply, with their number of 5.6 per 1 000 inhabitants well below the average of 8.0 for all OECD countries (Table 3.1). The current shortage of nurses is costly because several studies have shown that there is a positive relationship between nurse staffing ratios on the one hand and the reduction in patients' mortality and medical complications on the other hand (OECD, 2004). There are different policies through which the shortage of nurses could be addressed: wage increases, improved working conditions for nurses, better education and access to continued education, campaigns to attract young people into the profession, or selective

Box 3.1. **Constraining public health expenditure growth: policy recommendations**

Policies affecting the level of aggregate health-care spending

- The Belgian government employs an aggregate budgetary cap to determine the global budget for health care expenditure and relies on regular monitoring and automatic corrective mechanisms to enforce budgetary discipline. However, in view of recurring budgetary overruns, the government should step up the frequency and nature of monitoring* and/or further improve the corrective mechanisms.
- In order to contain spending on pharmaceuticals, the government should not reimburse the price difference between registered and generic drugs as long as they are medically equivalent to the registered drugs they substitute for that are no longer protected by current patents. This can be done by setting the reference price equal to that of the (cheapest) generic. The latter measure should not be too harmful to incentives to develop new medicines given that Belgium is also liberalising licensing policies for new drugs. In addition, the government should reassign drugs which tend to be consumed in excessive amounts to lower reimbursement categories, and periodically review its reimbursement policies in view of the medical evidence, as intended.
- The authorities should be vigilant that restrictions on entry to medical school don't result in shortages of medical professionals in the longer run, when demand for their services will increase as a result of ageing, increases in per capita income, new technologies and reforms aimed at improving the performance of the system by making more use of the cheaper general practitioner services.

Policies improving cost efficiency at the micro level

- Benchmarking against peers is a proven technique to improve performance. The already existing process for general practitioners could be augmented by including benchmarks against evidence-based standards, and should be extended to other medical professions. Stakeholders outside of the medical profession should be included in the development of benchmarks.
- With the introduction of case-related payment systems for the 26 most frequent surgical interventions, the government aims to increase the financial responsibility of hospitals. The cost of a treatment will only be fully reimbursed if it does not exceed 1.2 times the nationwide average cost. This policy could be tightened. Moreover, the move to case-related payment systems requires regular monitoring by the government to avoid cost-induced deteriorations in the quality of hospital services.
- General practitioners currently open and maintain medical files for patients upon their request. Further efficiency gains could be obtained from the planned development of complete and up-to-date electronic medical files, which will be available for consultation by medical practitioners for all patients.
- The government should strongly encourage patients to consult their general practitioner first as a general rule (except for emergencies) by not reimbursing medical expenses for patients not referred by their GP (gatekeeper).
- More attention should be paid to the administrative burden imposed by new regulations in the healthcare sector.

Policies improving access to health care and its outcomes

- The implementation of the maximal medical bill, which introduces an upper-limit on annual out-of-pocket spending on healthcare by households, may offer the government some scope for selective increases in co-payments, reducing the budgetary impact of this measure.
- In order to arrive at a more integrated approach towards the treatment of patients with a chronic disease or a need for long term care, the government should not only promote the role of the general practitioner as a gatekeeper, but also provide them with technical support in the form of best practice guidelines for the treatment of specific chronic diseases.

* In November 2004, the government decided that measures will be taken to ensure better expenditure monitoring. An audit will be conducted into the mechanisms involved in drawing up the budget, the control of spending and the evaluation of measures taken with respect to compulsory health care insurance. There will be in-depth revisions of spending control and warning light triggering procedures within sickness insurance.

Table 3.1. **Indicators of supply in the health sectors**Per 1 000 inhabitants, 2002¹

	Practicing physicians	General practitioners	Practicing specialists	Practicing dentists	Practicing pharmacists	Practicing nurses
Belgium	3.9	2.1	1.8	0.8	1.1	5.6
France	3.3	1.6	1.7	0.7	1.1	7.2
Germany	3.3	1.1	2.3	0.8	0.6	9.9
Netherlands	3.1	0.5	1.0	0.5	0.2	12.8
United Kingdom	2.1	0.6	1.5	0.4	0.5	9.2
United States	2.4	0.8	1.6	..	..	7.9
Average EU15 ²	3.2	1.1	1.9	0.7	0.8	8.9
Average OECD ²	2.9	0.8	1.7	0.6	0.8	8.0

1. 2001 for the United States, for the Netherlands: 2001 for. Practicing specialists, pharmacists and nurses; for United Kingdom 2001 for dentists.

2. Unweighted average of data for the last year with numbers.

Source: OECD Health Data 2004, 2nd edition.

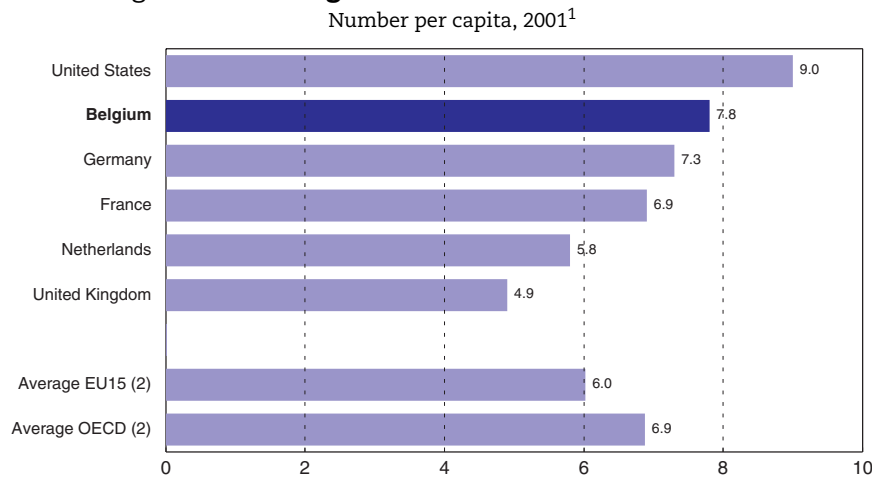
immigration. During the previous government, wages of nurses have been allowed to go up by 10% in real terms over 4 years and wage conditions for different nurses have been harmonised, as the density of nurses in institutional care for the elderly was particularly low and even declining because nurses in these institutions were lower paid than nurses in hospitals. However, as long as shortages persist, wage pressures are likely to remain strong and it may take some time for the supply of nurses to increase.

The Belgian authorities also see an excess supply of hospital beds in acute care and a shortage of beds in elderly care homes. There are no recent data available to support this assessment but an earlier OECD survey (OECD, 1999) found that the number of hospital beds per inhabitant and the average length of hospital stay were broadly in line with international norms, whereas the number of long-term care beds⁴ in Belgium was among the lowest in the OECD. Such supply mismatches reduce the ability of the health care system always to provide treatments at the lowest cost, as elderly persons who suddenly lose their ability to live independently are admitted into hospitals for care they could receive more cheaply in an institution for elderly people. As a consequence, there are waiting lists for admission into institutions for long-term elderly care, although the extent of the problem is possibly exaggerated by the fact that some elderly people sign up early as a precaution.

Excessive consumption on healthcare services

Excess consumption of health services, pharmaceutical products and medical aids is a classical distortion in a public health insurance scheme, arising from asymmetry of information concerning the exact medical necessities between service providers on the one hand, and patients and their insurers on the other hand. In addition, demand is not very sensitive to price developments because consumers only pay a fraction of the total cost of a medical service, with the public insurer covering most of the costs.

Compared to the averages in the OECD and the EU15, Belgium is characterised by a high number of doctors' consultations (7.9 consultations per person per year in 2002, Figure 3.2). Institutional arrangements have contributed towards excessive consumption of doctors' services. First of all, physicians in Belgium are paid on a fee-for-service basis.⁵ This payment system is known to give physicians an incentive to inflate volumes by providing

Figure 3.2. **Average number of doctors' consultations**

1. 2000 for Germany and United Kingdom.
2. Unweighted average of the last year available.

Source: OECD Health database 2004.

unnecessary services and prescriptions and to make insufficient use of secondary providers (Docteur and Oxley, 2003). The incentives are aggravated by the high density of practicing physicians in the population. Secondly, general practitioners don't play a gate-keeping role and patients can visit specialists and take tests as frequently as they want at no penalty, resulting in an inappropriate use of medical resources because patients are not systematically directed towards the cheapest treatment options.

An earlier OECD Survey (OECD, 1999) showed that total expenditure on pharmaceuticals per capita⁶ was also well above the average in the EU and OECD. Expenditure on pharmaceuticals has also grown more rapidly than public expenditure on health care⁷ during the period 1993-2003, and its share reached 17.6% of total health care spending in 2003 (National Bank of Belgium, 2004a) The relatively high consumption of pharmaceutical products, and in particular of antibiotics, can be attributed to several factors. First of all, doctors have a general tendency to prescribe large amounts of medicine. Second, there are large differences in the prescription practices by hospitals and physicians, suggesting that some of them prescribe irrational amounts. Third, there is generally insufficient information about the health risks associated with over-consumption of medicine. Fourth, the share of generics in total pharmaceutical prescriptions is very low in Belgium, only 1.9% in 2001 whereas it reached 40% or more in the Netherlands, Germany, the UK and the US (European Generics Medicine Association). However, since then considerable effort has been made to encourage the use of generic medicine. According to a recently published study,⁸ the share of generic medicine rose from 1.9% of all ambulant medicines in 2001 to 10.3% at the beginning of 2004. It is expected that the share of generics in prescriptions, which is currently still lower in Belgium than in other European countries, will increase to make up 30% of the total volume of prescriptions when the new reference payment principle will be applied.

Insufficient attention to prevention

Lifestyle and poor dietary habits are responsible for the rapid spread of certain diseases, such as diabetes, heart diseases, cancers, and other ageing-related diseases. The

dietary habits of Belgians, characterised by a rather high calories intake, a rather low protein intake, very high butter and sugar consumption, and an about average intake of fruits and vegetables relative to OECD averages, could be improved (Table 3.2). At the moment, about one third of the population is considered to be overweight and 12% obese. These numbers are slightly below the averages for the OECD and EU15 countries. If trends in other countries are anything to go by, the proportions of overweight and obese persons in the Belgian population are likely to rise further as obesity is more widespread among younger cohorts. Alcohol and tobacco consumption are around the averages for the EU15 and OECD, though considerably higher than in the US (Table 3.2).

Table 3.2. **Indicators of lifestyle habits**

	Dietary intake ¹					Tobacco consumption ²	Alcohol consumption ³	Overweight population ⁴	Obese population ⁴
	Calories (capita day)	Protein (Grammes/capita/day)	Butter (capita kilos)	Sugar (capita kilos)	Fruits and vegetables (capita kilos)				
Belgium	3 682	105.3	6.1	44.8	224.4	29.0	9.6	32.7	11.7
France	3 629	118.4	8.7	33.5	227.2	28.6	10.5	28.1	9.4
Germany	3 567	98.2	6.5	36.0	212.3	24.3	10.4	36.3	12.9
Netherlands	3 282	109.5	2.0	42.1	219.0	34.0	9.8	35.0	10.0
United Kingdom	3 368	100.7	3.3	34.2	180.9	27.0	11.1	38.0	22.0
United States	3 766	114.5	2.1	30.0	237.9	18.4	8.3	35.1	30.6
Average EU15 ⁵	3 530.1	110.1	3.5	34.7	238.2	27.7	10.6	34.4	12.2
Average OECD ⁵	3 378.9	103.8	3.1	34.5	220.1	26.6	9.4	33.8	13.6

1. 2001.

2. Percentage of population daily smokers 2002. 2001 for the Netherlands and United Kingdom, 2003 for Germany.

3. Liters per capita (15+) 2002; 2001 for France and United States.

4. Percentage of total population 2002.

5. Unweighted average of data for the last year with numbers.

Source: OECD Health Data 2004, 2nd and 3rd edition.

In Belgium, only 0.5% of the public health care budget is currently devoted to public health care prevention, although this figure may be the result of inadequate data on resources allocated. This suggests that there is scope to improve the performance of the health care system by re-balancing expenditure more in favour of prevention. However, the division of responsibilities between the different levels of government has resulted in a misalignment of incentives. Health education and disease prevention are mainly competencies of the Communities, implying that it is financed from their budgets, whereas the federal social security system reaps most benefits from effective health campaigns and disease prevention resulting in a better health status of the population on average. There also appears to be some concern that the efforts undertaken by the different Communities are not sufficiently coordinated. It is important that the federal government and the Communities work out some arrangements for cost-sharing and a better coordination of prevention campaigns (as was successfully done for breast cancer).

Productivity growth and technological progress

Price increases in the medical sector tend to exceed the inflation rate for the total economy, and this difference has contributed on average almost 1 percentage point to the real growth of health care expenditure during the period 1991-2000 (National Bank of Belgium, 2001). The main factor explaining the increases in the relative prices of medical

goods and services is the relatively low productivity growth in this labour-intensive sector. Technological progress and automation provide more scope for productivity gains in capital-intensive industries than in the medical sector. However, wage developments in the medical sector follow those in the total economy, implying that they outpace productivity growth in this sector and raise the cost of service provision (Baumol effect).

Technological progress is very important in the medical sector though. Rather than taking the form of labour-saving technological progress, it often takes the form of quality improvements and new treatments, made possible through expensive new medical procedures, products and drugs. Over time, the cost of medical technologies declines, but this is often more than offset by the rise in the demand for these treatments, which are paid for by the public insurer. Hence, the interplay between technological progress and the principle of “free, equal and high quality health care for all” exerts a strong upward pressure on the health care budget.

Consequences of ageing

Although spending on long-term care in nursing homes and nursing care received at home currently makes up a modest share of total spending on health care – about 9% of public spending on health⁹ in 2003 (National Bank of Belgium, 2004a) and in line with international comparisons¹⁰ – it has been growing at higher rates than public spending on health care during the period 1993-2003.

In addition, elderly people demand more health care: they visit their general practitioner more regularly, they are more likely to be admitted into hospital for longer stays and they consume more drugs. This trend is expected to continue in the view of population ageing, implying that its impact on health expenditure growth, which has been estimated to contribute 0.5 percentage point to average growth between 1993 and 2003, will get stronger (see estimates in Chapter 2). The projections are based on the currently observed consumption levels of the elderly relative to a person of age 35. Expenditure growth could be higher than projected if factors, such as higher unit-cost increases or reduced family care, create higher demand than currently from these age groups. The projected increase could also be lower if very elderly people in the future enjoy better health and lower levels of disability.

Policy responses: already initiated and desirable reforms

Policies affecting the level of aggregate health-care spending

Budgetary caps

The Belgian government employs an aggregate budgetary cap or a “growth norm” to determine the global budget for health care expenditure, complemented by budgetary targets for sub-sectors. The real growth norm was initially set at 1.5% in 1994, and revised upwards to 2.5% by the previous government in 1999 and once more to 4.5% by the current government in 2003. With the exceptions of 1994, 1997 and 2002,¹¹ the norm has not been respected and the budgetary overruns were usually substantial, in particular for pharmaceutical products and to a lesser extent ambulatory care. This outcome is not unusual: growth norms are only an instrument to temporarily control health care cost and need to be complemented (or replaced) by structural reforms that impact on the efficiency and effectiveness with which services are provided. Another drawback of growth norms is

that providers have an incentive to spend to the limit, so generous norms are likely to generate more spending.

However, the introduction of a growth norm has also contributed towards a better monitoring of spending and has prompted initiatives to claw back some of the excess spending. Monitoring takes place on a quarterly basis in all sub-sectors, and corrective measures – such as the adjustment of fees and reimbursement rates – are taken when there appears to be a risk of a target overrun in one or more sub-sectors. In the sub-sectors of clinical biology and medical imaging, a system has been put in place that allows for the exact realisation of the allocated budgets, with a triggering of consolidation measures if spending exceeds its limit and measures to allocate the margins if spending remains below its limit. However, the norm allows for a certain degree of flexibility in total spending, for instance, it excludes some exceptional or specific expenditure, such as a part of the increases in salaries granted to health care personnel, and epidemics. In addition, some of the corrective measures taken do not necessarily result in a respect of the norm within the year itself because of time lags in the decision-making and implementation. For instance, an agreement with the pharmaceutical sector was concluded in 2001 which stipulates that the pharmaceutical industry will share in the burden of any budgetary overrun by paying back at most 65% of the excess spending through a turnover tax in the following year. Nevertheless, given the persistence of large budgetary overruns – the estimates for the year 2004 are around € 600 million – it may be worthwhile to step up the frequency of monitoring and/or to improve the mechanism further.

Controls on wages, prices and health-care productive resources

Several initiatives have recently been taken with respect to pricing and reimbursement rates of pharmaceutical drugs in an effort to generate savings. In Belgium, the price of all drugs introduced on the market is set by the Ministry of Economic Affairs after consulting the Price Commission. In addition, for drugs approved for reimbursement, the price is also reviewed by a technical committee of the INAMI (*Institute National d'Assurance Maladie Invalidité*) and made known to the pharmaceutical firm. For reimbursement purposes, drugs are divided into six categories, with reimbursement rates of 100, 75, 50, 40, 20 and 0% respectively. Until 2001, reimbursement was based on the administrative price of the drug. For drugs with a high reimbursement rate, the system provided no incentive to buy a cheaper alternative to a brand drug. Hence, a system of reference pricing was developed in 2001, and entered into effect at the start of 2003 as the basis for reimbursement. In a number of well-defined cases, the reference price is lower than the administrative price:

- If a generic drug or a copy for the original specialty drug exists and qualifies for substitution,¹² the reference price of the latter will be 26% lower than its actual price. This difference will be raised to 30% as of 1 July 2005, after a study of the micro-economic impact.
- A drug whose active component has been reimbursed for 15 years, receives a reference price that is 14% below its current price. The reference price drops by another 2% after 17 years of reimbursement. However, the exception system for the price reduction of medicines in an innovative galenic form that are older than 15 years will become redundant when the new system of reference pricing enters into effect in July 2005.

In this new set up, the patient pays the fraction of the reference price that is not reimbursed as well as the full difference between the reference price and the actual price paid. This raises the out-of-pocket payment for the consumer buying the original, inducing him to prefer the generic instead. The introduction of reference pricing has also stimulated the supply of generics, which used to be very limited before 2001. As a consequence, the market share of generics increased to 10% by the beginning of 2004. International comparisons suggest that a further expansion of the market for generic drugs could be expected if inertia in prescription practices of physicians can be overcome. The reluctance to change practices can partly be explained by a lack of objective information about the quality and effectiveness of generic substitutes as a counterbalance to the information distributed by the pharmaceutical industry which has no strong interest in the promotion of generics. The government could promote the use of generics by information campaigns and by setting the reference price equal to the price of the (cheapest) generic, implying that the difference in price between registered and generic drugs will no longer be reimbursed. The latter will be achieved by a recent decision to extend the reference payment system¹³ by stipulating that the presence of a generic for the active substance of a registered drug implies that all the pharmaceutical forms, dosages and packagings are included in the reference refund. To compensate the producers of registered drugs and new medicine, the government has also taken measures to liberalise licensing policies for new drugs.

In addition, the government has periodically reassigned drugs to a lower (and occasionally higher) reimbursement category in view of the medical evidence and in an attempt to reduce excessive consumption. It intends to review its reimbursement policies for a broad range of antibiotics, which are currently reimbursed generously and without limits because Belgians are heavy consumers of antibiotics whereas the medical evidence points to some dangers associated with over-consumption of antibiotics, such as reduced resistance.

Financial instruments to control the supply of hospital beds in acute care have been used for over a decade now. Public funding of hospital budgets is based on a standard *per diem* rate combined with overall budgets based on capacity levels, as measured by the number of recognised hospital beds.¹⁴ As a result, the government could induce hospitals to get rid of excess beds and transform them into long-term care beds by limiting the number of recognised beds. In addition, the government – in cooperation with Regional and Local authorities – controls the capacity of hospitals through the financing of investment in this sector. Centralised investment budgets, combined with a policy which encourages cooperation and specialisation may be helpful in avoiding a wasteful duplication of expensive medical technologies and services, which is common in a system with more open competition between hospitals (Docteur and Oxley, 2003). The government intends to further strengthen the specialisation and cooperation between hospitals by programming the supply of hospital services per healthcare zone (*bassin de soins*).

Limits on entry to medical schools (*numerus clausus*) and on the annual accreditation of physiotherapists by INAMI are used as an instrument to reduce the density of medical professionals in Belgium.¹⁵ The limits certainly provide savings for the education system, but its impact on the number of practising physicians may be limited in the face of larger migration flows of professionals within an enlarged European Union. In the longer run, the authorities should also be vigilant that entry restrictions don't result in future shortages when demand increases as a result of ageing and other reforms aimed at improving the

performance of the system by, *inter alia* initiatives giving general practitioners greater responsibilities.

Policies improving cost efficiency at the micro level

Efficiency-enhancing changes in payment systems

Countries' experiences have revealed that simple payment methods for physicians can often provide adverse incentives (OECD Health Project, 2004). A fee-for-service payment system for providers, combined with no controls on the services actually delivered, may result in high rates of unnecessary service utilisation and rising expenditures. A capitation payment system may induce physicians to under-serve their patients, to increase the rates of referrals or to select people with fewer health risks ("cream-skimming"). In response to the shortcomings of both payment systems, some countries have moved towards more complicated payment systems that combine a fixed component (either capitation payments or a salary) with fee-for-service payments for specific interventions, possibly supplemented by caps on expenditure, control of fee levels and health-care utilisation reviews. In Belgium, the traditional fee-for-service payments for general practitioners have been complemented by fixed payments per maintained medical record on a patient's request (global medical file) and per night during which the GP is on duty to respond to medical emergencies.

In addition, the previous government encouraged GPs to compare their prescription behaviour with that of other colleagues on a voluntary basis. LOKs (Local Quality Groups) of GPs were created for this purpose. Each GP must seek accreditation with one LOK, and each LOK is required to hold a limited number of meetings each year to review and discuss prescription behaviour. The government could consider strengthening this peer review process by referring to external benchmarks rather than average prescription practices by also benchmarking Belgian physicians against evidence-based standards and practices. This initiative has been taken one step further by a new law¹⁶ which allows for the possibility that a national agreement between doctors and health insurers makes the payment of certain pre-specified budgetary amounts conditional upon the achievement of well-defined performance objectives, such as restrictions on the volumes of medical services provided or on medical prescriptions. The dates on which the conditional amounts will be paid out, as well as the date by which a specific objective must be achieved, are set by the Insurance Commission and made known beforehand. The current agreement for 2004 and 2005 between GPs and insurers reflects this new law by stipulating that the release of € 40 million will be conditional on the realisation of a clear break with past prescription behaviour with respect to antibiotics and medication against hypertension. A first evaluation of the extent to which a significant break with past prescription behaviour has been achieved has unfortunately been postponed from September 2004 until April 2005 because it was felt that more time was needed to give this experiment a real chance. If successful, the government should consider raising the share of performance-linked payments by extending the number of performance objectives. With this in mind, the National Commission has been asked to propose other measurable indicators of quality and performance that can be used in peer comparisons. Similar procedures are expected to be elaborated for the other medical professions. One weakness of this approach is that the National Commission is not independent from the doctors' association and the resulting indicators are likely to reflect their self-interest and may therefore not represent the best choices from the perspective of health gains, patient

values and potential efficiency improvements. Inclusion of other stakeholders in the development and selection of performance indicators is needed to improve the outcomes of the process.

For over a decade, policy-makers have taken measures to limit the supply of hospital beds in acute care by reducing the average length of an acute-care hospital stay with some success. This process is likely to be reinforced by the introduction of case-related payment systems for the 26 most frequent surgical interventions. To be fully effective, economic theory suggests that the case-related payment needs to be set at levels that just cover the average cost of treatment by an efficient provider. This is extremely difficult to achieve in practice, and the national average¹⁷ cost of treatment has been used as a norm rather than a fixed payment. In fact, hospitals are reimbursed for the full cost of treatment as long as it does not exceed the norm by more than 20%, but they are financially responsible for any over-run of the upper-limit. The government could consider raising the financial responsibility of hospitals by reducing the margins and by referring to external, evidence-based benchmarks. As international evidence has shown that activity-based payments provide hospitals with an incentive to increase volumes, the Belgian government (like the Austrian government) has attempted to resolve this problem by imposing an overall budget, with the budget envelope allocated to individual hospitals based on their activity levels over the budgetary period. At the same time, the evidence points to a risk that hospitals may have an incentive to lower the quality of service provision under an activity-based financing system, implying that the Belgian government should focus more on quality control mechanisms. This new financing system was introduced in 2002, and the results of a first evaluation are due in 2005. The government intends to include the prescription of medication in the cost calculation, which should help in reducing the existing large variations in prescription behaviour between hospitals. It also plans to extend this system of financing to one-day hospitalisations and physiotherapeutic treatments in long-term care institutions.

Incentives to consumers to use health-care resources more rationally

Belgian patients can freely choose any doctor, including any specialist they want to see at no penalty. The co-payment (*ticket modérateur*) equals 25% of the fee, but low-income groups benefit from a reduced co-payment. The financial incentives to see a general practitioner first are not very strong and, as a consequence, some patients consult a specialist or an emergency ward in a hospital for ailments that could be treated more cheaply by a GP or for conditions that are not very urgent. In order to combat this problem, the previous government introduced the global medical file, which gives the patient an opportunity to keep a medical record with a general practitioner of his choice at no cost to him. By doing so, the patient engages himself morally to consult his doctor first about his medical problems before seeing a specialist and benefits from a 30% reduction in the co-payment. As a compensation for keeping the file, the general practitioner receives an annual flat fee of € 18 per patient from the government, as the measure is meant to be free to the patient. The next steps will be first to transform the global medical file into an electronic medical file and second, as soon as the supporting IT technologies are sufficiently developed and privacy concerns adequately dealt with, to come to an electronic exchange of information by giving all providers access to the electronic records (BE-Health project). The development of such IT projects should be a high priority as centralised access to patient's medical records would reduce the number of wasteful tests

and medical complications resulting from inappropriate prescriptions, as well as facilitating the move towards a more integrated medical service.

The current government also intends to strengthen the financial incentives to consult the general practitioner first by changing the co-payment structure. In particular, the combination of a visit to the general practitioner in combination with a referral to a specialist or an emergency ward should cost no more to the patient than a single visit to a specialist without referral. This implies that the co-payment on a visit to a specialist should be differentiated depending on whether the visit was made after referral or not. In addition, this policy will be accompanied by measures to raise the accessibility to general practitioners “on duty”. The problem with this policy, as with any policy that raises co-payments, is that the penalty in the form of a higher co-payment in some cases must be significant in order to bring about a change in behaviour. Ideally, the government should not reimburse medical expenses for patients not referred by their gatekeeper. However, the group of low-income patients, which have on average also higher health risks, is protected against excessive spending on health care by the maximum medical bill (see further) and reduced co-payments. Equity concerns would suggest that these people pay a reduced penalty, reflecting their lower purchasing power, in the event that they make inappropriate use of scarce health care resources, assuming that all barriers of access to a general practitioner have been removed for this group. At the same time, the general practitioner needs to be financially rewarded for the greater responsibilities he assumes under a gate keeping system.

Efficient use of technology

The rapid pace of innovation and publication of new studies result in decision makers having difficulties in keeping up with the large volume of evidence on the impact of new technologies. The federal government has created the Federal Centre of Expertise within the Ministry of Public Health in order to provide technical and scientific analysis in support of decision-making. It became operational in 2004. The centre will facilitate a more systematic use of health technology assessments, a tool which also allows for a better planning of supply. In addition, it is hoped that the accumulation of knowledge by this centre will prepare the way for evidence-based medicine, evidence-based clinical practice guidelines and the development of performance benchmarks, all of which can be used to raise efficiency in health-care delivery. However, a greater focus on quality and outcomes will create new demands for the generation of additional information by providers.

Administrative simplification

There is some potential for cost savings through administrative simplification. The multiplicity and rapid introduction of new standards currently imposes a heavy administrative burden on all medical professions. Moreover, the expected cost to providers of compliance with newly proposed norms and standards is rarely estimated before their implementation, a problem which has contributed to the current public funding crisis in hospitals. The current government considers the problem important enough to ask two working groups to look into possibilities for administrative simplification and to investigate the coherence and the pertinence of the whole set of existing norms, standards, procedures and legislation with respect to health care. In addition, all organisations, services and consultative bodies falling under the supervision of the federal health ministry will be asked to draw up an inventory with proposals for simplifications in

administrative procedures, regulations and legal aspects. This approach has been used in other countries, for instance the Netherlands, to tackle the administrative burden on industry. In order to be effective, there needs to be some empirical estimate of the administrative burden and its distribution between the different actors, combined with a quantitative target for reductions and regular evaluations of the extent to which the set objectives are being reached. Experience in other countries as well as in Belgium has shown that lasting results can only be obtained if new legislative proposals are systematically subjected to an analysis of their expected impact on the administrative burden and if these cost estimates are included in a broader cost-benefit analysis.

Policies improving access to health care and its outcomes

Preservation of horizontal equity in access to health care

Horizontal equity in access to all health care services is a legitimate concern because it fosters a better health status for the weaker groups in society, improving their possibilities for participation and inclusion. The maximal medical bill, introduced by the previous government, is a measure that improves the financial accessibility to health care for all by capping annual family expenditure on health care services¹⁸ as a function of net annual family income before taxation. Once spending on health care services has exceeded its income-dependent ceiling, the difference between the actual co-payments and the ceiling is fully reimbursed within the same year by the insurance company for low-income groups and with a delay of 2 years by the personal income tax administration for higher income groups. The introduction of the maximal medical bill may offer the government some scope for selective increases in co-payments – an option that the current government has stated that it will not pursue – because people are protected against unexpectedly large medical expenditure (large risks), but the impact of such measures will only be felt by the occasional consumer of health care services (small risks).

Some corrective measures appear necessary to ensure that all hospitals can continue to provide high quality services, regardless of the socio-economic characteristics of their patients. The structural under-funding of hospitals¹⁹ has led them to increase the supplements on the *per diem* rate paid by patients (or their private insurance) wishing to receive care in a double room or a single room – a triple room being the standard. In addition, the Belgian law allows physicians to charge such patients supplements on the services they provide, which are subject to a splitting arrangement with the hospital. Physicians have been under pressure from the hospital management to lower their personal share in the supplements. However, not all hospitals have been equally successful in attracting additional private funding this way. Due to their location, some hospitals receive mainly patients from a less favourable socio-economic background who cannot pay for more comfort, so they resolve their budgetary problems either by contracting loans (some hospitals have high debts) or by cutting services. The government feels that this trend jeopardises the quality of service provision in some hospitals, and intends to study how it can change the distribution of public funding between hospitals such that the social environment in which a hospital operates is taken into consideration. This should be achieved at the lowest overall cost to the budget.

Integration of medical services

The health care system in Belgium is characterised by a high segmentation of health care markets, implying that different professionals operate as separate entities without the

benefit of complete information about the patient's conditions, medical history, services provided in other settings or medication prescribed by other providers. This mode of operation is not only costly and wasteful, but it also raises the probability of medical errors. In addition, it is very unsatisfactory for elderly persons needing long-term care at home and patients with chronic conditions, who will find that the delivery of health care is often not well coordinated and communication between care professionals in different sectors insufficient. Hence, there is a need to move towards a more integrated system of health care provision. In its current plan, the government intends to give the general practitioner a pivotal role in the management and coordination of the long-term care process. The GP will also be the prime source of contact for the patient and his family. The government should also provide technical support to general practitioners in the form of best practice guidelines for the treatment of specific chronic diseases. Closer integration could in addition be facilitated by the transformation of the global medical file into an online available electronic file and IT software which allows for the secure electronic exchange of information.

Assessment

Some of the measures that the current government is considering – larger budgets for prevention and for hospitals, higher wages for nurses to induce a supply response, the investment in IT projects and the development of expertise necessary to support decision-making and to monitor performance – do justify a temporary increase in the annual growth of health care budgets. However, the current high growth norm of 4.5% per year can only be maintained over a short period of time because it also fuels demands for wage increases in the entire sector and for more public coverage of new treatments and medications. Such measures increase spending growth in the short run and raise the costs associated with ageing, but hold no promise for savings in the medium run. As a consequence of general wage pressures and excessive consumption of pharmaceutical products, spending has grown rapidly in 2004 and another budgetary overrun of an estimated € 640 million is likely to occur. This is a sign that the pace of structural reforms needs to be stepped up.

The structural reforms that are in the process of being implemented offer significant potential to contain expenditure growth temporarily (as they have done in other countries, for example Germany). There is still plenty of scope to increase cost savings by extending some reforms to other sub-sectors of health care and by intensifying them when initial evaluations of new policies are positive. The containment of health spending through structural reforms should be a top priority because it will help to keep the costs of ageing at moderate levels.

Greater use of IT should be strongly encouraged. IT can play an important role in the development of new information and methods geared at cutting waste, reducing medical errors, improving the cost-effectiveness of service provision and raising transparency. Comprehensive electronic records on the prescription behaviour and medical practices of different groups of health care providers would allow the government to track best and worst practices and make peer comparison significantly more effective. Plans to monitor health-care quality, such as developing tools like clinical practice guidelines and performance benchmarks that promote the practice of evidence-based medicine should be given a high priority because accurate and reliable information is badly needed to make payment systems more responsive to performance. Electronic medical records for patients

facilitate a closer integration of medical services, which in turn improves the quality of treatment of patients with chronic conditions or the need for long-term care.

It is impossible to assess whether the implementation of the structural reforms described earlier will be sufficient to bring down the real growth rate in public healthcare outlays to 2.8% on average over 2008-30. In addition, the impact technological progress, which is very important in the medical sector, on public outlays is also difficult to predict, and there is a risk that it may be stronger than expected. Should public healthcare spending continue to grow at rates well above 2.8%, driving up age-related costs and jeopardising the sustainability of public finances, future governments will be faced with difficult choices. Assuming that they honour the commitment to reducing the tax burden on labour, one option would be to re-consider the public share of healthcare expenditure. Another option would consist of shifting resources from other public spending programs to public healthcare.

Notes

1. The Belgian Ministry of Social Affairs is currently running a pilot implementation of the System of Health Accounts (SHA). Preliminary results suggest that the data on total and public expenditure on health as currently presented in OECD Health Data might be underestimated at least by 10%. This is mainly due to methodological differences between SHA and SNA.
2. Unweighted average, includes all available countries.
3. For example, the introduction of financing on the basis of Diagnosis Related Groups would raise the efficiency in the hospital sector, but this sector currently feels that it is under-funded. Therefore, a one-off increase in public funding to hospitals may help in overcoming their resistance to the introduction of a new financing system. The government has decided to improve the funding of hospital care, more particularly by increasing the budget of hospitals by a total amount of € 100 million over a period of three years. Refunding focuses on items which represent a significant objective cause of underfunding.
4. Belgium had 1.1 long-term care beds per 1 000 inhabitants relative to an OECD average of 4.4 in 1997, the most recent year for which there are Belgian data.
5. The fee schedule – the so-called nomenclature – is negotiated each year in a system of medical consultations (*concertations*) between representatives from the health-care purchasers (*mutualités*) and the medical profession. All agreements need to be approved by the government, which also has the power to set the fees in case no agreement between the bargaining parties can be reached. Fees are the basis for calculating the reimbursements, generally 75% implying that the patient pays 25% out of his pocket. The fees constitute a price floor, but general practitioners and specialists are free to charge higher prices and top-ups (paid entirely by the patient) are commonly applied by specialists.
6. Converted into US dollars at purchasing power parity exchange rates, per capita expenditure on pharmaceuticals equalled \$306 in Belgium in 1996, compared to an average of \$227 for the OECD and \$230 for the EU.
7. Public expenditure on healthcare is defined more narrowly in this study as all expenditure incurred by the national social security office INAMI (*Institut National d'Assurance Maladie Invalidité*). Public spending on health care according to the national accounts will be higher as it includes spending by the federal government (co-financing of the standard cost per day of hospitalisation), regions and communities (health prevention and financing of health services benefiting persons with a disability) and the local government (providing access to healthcare to social welfare recipients). Spending by INAMI makes up 88% of total public expenditure on healthcare.
8. See Landsbond der Christelijke Mutualiteiten, “Naar een prijsbewuster geneesmiddelenvoorschrift? Generische geneesmiddelen in een ruimer kader”, 15 July 2004.
9. Again defined as total spending on healthcare by INAMI.
10. For example, long term care accounted for 10.7 and 11.5% of total health expenditure in respectively Germany and the Netherlands in 2002.

11. Expenditure was exceptionally low in 2002 because providers had accelerated their billing procedures at the end of 2001 to avoid the conversion into euro of a large number of bills in 2002.
12. In order to qualify for substitution and as a consequence to be eligible for reimbursement, a generic must be at least 26% (soon to become 30%) cheaper than the original.
13. Until now, the Belgian government has applied the reference payment principle in a strict sense: a registered drug has been classified for reimbursement according to the reference payment principle only if there exists a generic which is identical in terms of active substances, dosage, pharmaceutical form and mode of intake. Under the new system, which will enter into effect in July 2005, the presence of a generic for the same active substance will be a sufficient condition for a registered drug to become classified for reimbursement under the reference payment principle. This implies that the list of registered drugs for which a generic equivalent exists will be significantly longer and include almost all registered drugs, making the exception system redundant.
14. The number of recognised beds is based on the number of admissions, the mix of treatments and the length of stay for each treatment according to best practices.
15. It should be noted that the *numerus clausus* is only applied in Flanders. In the Walloon Region, another quota scheme is in operation which evaluates students after three years (the bachelor years according to the new Bologna criteria) to decide who and how many may continue their studies to become a doctor (Master in medical science).
16. *Loi-programme du 22 décembre 2003*, published in *le Moniteur belge* of 31 December 2003.
17. For each APR-DRG (All Patient Refined Diagnosis Related Group), data are taken from the national MKG-MFG databank (minimal clinical data and minimal financial data) to calculate the average cost. The costs considered are mostly related to clinical biology, imaging, and other tests performed in preparation of a surgical intervention.
18. Not all medical expenditure is eligible for inclusion in the maximal medical bill. Included are all co-payments and supplements paid for a consultation with a doctor, physiotherapist, nurse, paramedical specialist, the costs of technical provisions, the co-payments on drugs that qualify for (partial or total) reimbursement, the personal contribution in the *per diem* rate during hospitalisation, and the personal share in endoscopic materials and materials for viscerosynthesis.
19. Funding shortages in the hospital sector have been estimated at around € 400 million by some independent studies. However, the Federal Centre for Expertise came up with an estimate between € 112 million and € 295 million. Hence, the government will raise public funding by € 100 million during the next 3 years.

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Chapter 4

Increasing the employment rate

This chapter discusses ways of increasing the low employment rates among older workers and youngsters and lowering the high structural unemployment rate, which account for most of Belgium's labour under-utilisation. While generous routes to early retirement built into the social security and tax systems (unlimited duration of unemployment benefits, pre-pensions; "Canada Dry" arrangements; early legal pension; generous time-credit schemes) depress labour supply of the elderly, the growing disconnection between wages and productivity due to seniority-based pay scales and low participation in training and life-long learning hampers labour demand. The high structural unemployment rate in the Walloon and Brussels Regions are related to late profiling and advice by the public employment service; poor enforcement of job-search and commuting requirements; and ineffective use of active labour market policies. A specific unemployment trap (allocation d'attente/wachttuitkering) exists for younger workers whose school-to-work transition suffers from quality problems in vocational education and strict employment protection legislation.

Belgium has considerable scope to stimulate GDP growth and welfare by increasing labour utilisation. At 59.7% in 2003, the employment rate was the sixth-lowest in the OECD and fell considerably short of the Lisbon target of 70% to be reached by 2010. The main challenge consists in increasing the employment rate for older workers (see Chapter 1). This chapter argues that the main policy response to this challenge should lie in gradually closing the various fiscally encouraged routes to early withdrawal from the labour market (Box 4.1). Belgium also underperforms in bringing unemployed persons back into employment fast enough to avoid losses in human capital and skills as is shown in the high incidence of long-term unemployment throughout the country and the persistently high rates of structural unemployment in the Walloon and Brussels Regions. The third large pool of under-utilised labour is the group of younger workers, pointing to problems in the quality of education and vocational training, missing opportunities to combine schooling with working, and unemployment traps.

Keeping older workers in employment longer

The employment rate for older workers has increased very slowly and is still very low...

The employment rate for persons aged 55-64 was 28% in 2003, the second lowest in the OECD, though it has increased by almost 6 percentage points during the decade ending in 2003. There is still some way to go to reach the European target of an employment rate of 50% for older workers that would allow for an increase in total employment by almost 7% by 2010 and prevent total employment from falling below its current level between 2010 and 2030 (Table 4.1). By contrast, if the employment rate for the elderly stayed at 28%, total employment would slightly decline by 2010 already and fall dramatically thereafter. Another salient feature is the already significantly lower employment rate in the age group 50-54 (65%) compared with that for prime-age (25-54 years-old) workers as a whole (77%). While this gap has been halved since the early 1990s, this reflects exclusively the soaring female employment rate. While the employment rate of women has also increased faster than that of men in the 55-59 age group, it remains extremely low for women aged 60-64 (about 7% in 2003), reflecting that the upward shift in life-time labour force participation of women has not yet reached the oldest cohorts (see Chapter 1) but also that age-specific incentives to withdraw from the labour market are not very different by gender.

... reflecting a number of exit routes attractive to employees and employers...

The main exit routes from the labour market before age 65 are: unemployment benefit (UB) with exemption from job search, which is known as the older unemployment scheme – it is often associated with (partly tax-sponsored) top-up payments by individual employers; pre-pension arrangements attached to collective agreements at sector level; early uptake of the legal pension; and disability (Figure 4.1). The UB system, in combination with pension rules, is key to the premature exit of older workers. Based on the unlimited duration of the UB, sector-specific pre-pension arrangements agreed upon in (legally extended) collective agreements consist of exempting the beneficiary from job-search

Box 4.1. Increasing employment: policy recommendations

Increasing employment of older workers

- The age of eligibility for the old-age supplement to the unemployment benefit (UB) should be set to 58 for new inflows to unemployment, harmonising it with the age for the exemption from job-search, and this age should then be gradually raised.
- Job search requirements for the unemployed aged 50 and over no longer exempted from job search obligations should be enforced vigorously. Therefore the age-group 50-57 should be included into the new procedure as soon as possible.
- To increase the incentive for older workers to stay in employment, all top-up payments to regular UB (i.e., the benefit top-up for the older unemployed, pre-pension, and Canada-Dry arrangements) should be taxed in the same way as regular labour earnings for persons who cease to be available for the labour market. This requires that the special tax reduction on the regular UB be abolished for this group of beneficiaries. Moreover, the accumulation of pension rights while receiving UB should be limited to active jobseekers, thus excluding pre-pension and equivalent spells. As to the top-up payment itself, it should either be subject to full social security contributions or not lead to pension entitlements. The introduction of full social security contributions on “Canada Dry” payments would therefore be welcome.
- The generosity of the time credit scheme needs to be reduced. More generally, the government should ensure that collective arrangements increasing generosity over and above the legal standard (e.g. the extension of time-credit from one year to five years) be financed by the sector itself.
- Both the career requirement for pre-pensions and the minimum age should be gradually but significantly tightened. The government should also stop making discretionary use of pre-pension in collective redundancies and enforce the respect of the general access conditions to pre-pension without exceptions. These measures amount to phasing out the pre-pension scheme by merging it with that for the early legal pension.
- The incentives to retire early built into the first-pillar pension should be reduced by making the retirement decision actuarially neutral, i.e. by sharpening the reduction (increase) in the pension benefit in case of retiring earlier (later) than the legal pension age and/or accumulating less (more) contribution periods than a full career. The adjustment factor may account for the fact that prolonged physical work under difficult conditions is likely to impinge on the remaining life expectancy at the moment of retiring.
- The inflow into disability schemes should be closely monitored as other schemes become less attractive as this will increase the demand for using such schemes.
- The government should promote a culture of lifelong learning/continuing training and raise awareness with the social partners of the adverse effects of seniority-based pay scales on employment prospects for older workers. Such measures would help to keep wages closer to productivity.

Reducing structural unemployment

- The local Public Employment Services (PESs) should insist that jobseekers react to vacancies in a wide area, including at least the commuting area, even when part of this area is situated in one of the other regions.

Box 4.1. Increasing employment: policy recommendations (cont.)

- Given the high cost of direct job creation in the public sector and the low probability for their holders of finding lasting employment in the first labour market, the regions should reduce their reliance on subsidised direct job creation in the public sector. The federal government should lower the rate of subsidisation of the service voucher system, which appears to be unnecessarily generous.
- To increase the efficiency of active labour market policies, (re-) training measures should play an increasing role in addressing skill and knowledge deficiencies and short-term bottlenecks in low-to-medium skill functions. A consistent and seamless reintegration trajectory needs to be elaborated on a case-by-case basis early in the process. “Pre-qualification” training should be kept to the necessary minimum and targeted to the most difficult cases and should immediately be followed by directly job-related training in companies. The latter should co-determine training contents, thereby increasing their commitment to providing subsequent job opportunities.
- Enhancing the efficiency of public expenditure on training requires a well-developed database on jobseekers’ trajectories before entering and after leaving unemployment and regular benchmarking of local PESs. The regional governments should enhance the dissemination of best practices by budget allocation incentives such as sunset clauses to new and success-based extension of existing programmes.
- The incentive to earn income from work should be strengthened by shifting the calculation of accruing pension rights from the former work income to the actual UB received after some time. Furthermore, partner-income testing should be considered after a prolonged period of UB.

Combating unemployment and fostering employment of youngsters

- Barriers to flexible forms of employment should be reduced and working time should be made more flexible so as to reduce the risk of hiring younger workers.
- The authorities should consider a more extensive use of internships as part of the regular curriculum in post-secondary and applied tertiary education.
- The government should emphasise job-search requirements and closely monitor search efforts for persons without a work record. More emphasis should also be given to active measures during the school-to-work transition. If all these measures fail to increase employment of younger age groups, the UB for persons without a work record (waiting allowance) should be abolished.

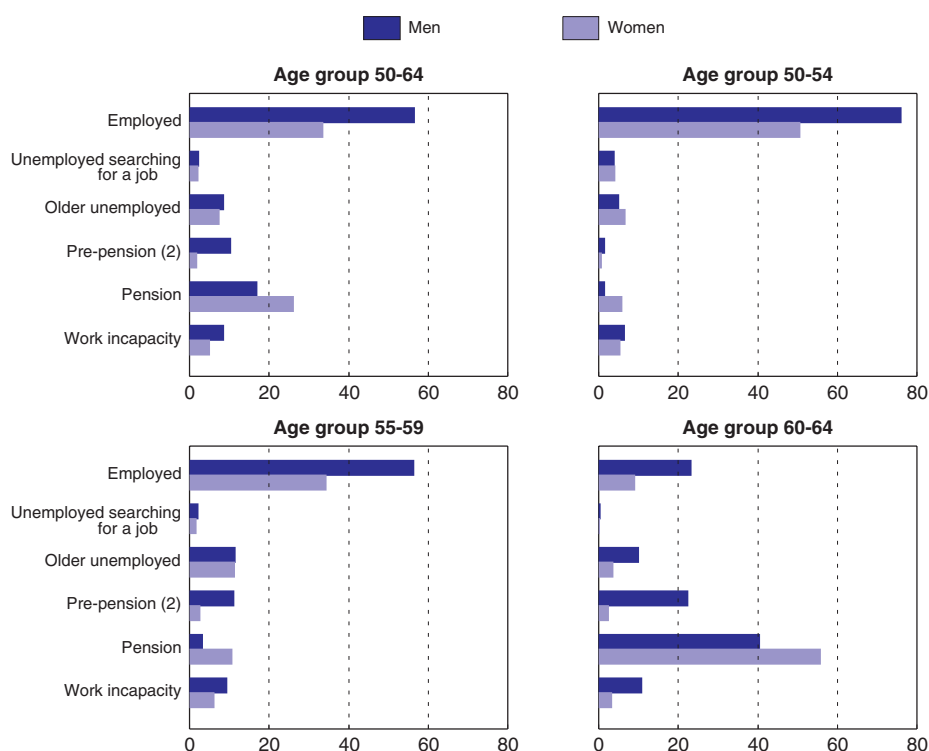
obligations and topping up the UB (Box 4.2). Some sectors have set up a fund to finance these payments, providing the individual employer with an incentive to use it (OECD, 2003a, p. 75). As not all companies and sectors are covered by pre-pension arrangements, partial compensation has been in place since 1985 whereby older unemployed are exempted from job-search obligations and receive a seniority top-up to UB from social security as of the second year of unemployment. A number of very popular private arrangements known under the name of “Canada Dry” are also based on this unlimited, topped-up UB without job-search obligations. No empirical information is available on the relative importance of these arrangements within the overall “older unemployed” scheme.¹ Overall the pre-pension and generous provisions for older unemployed persons dominate as reasons for inactivity in the age group 50-59. Given the discretion left to the minister, within the regulatory framework, to allow for lower age and career conditions for

Table 4.1. The combined influence of ageing and alternative employment rate hypotheses for the age group 55-64

	2003	2010	2030
Population of working age (level in thousand)	6 790.8	6 953.5	6 579.5
Share of the 55-64 year-old	16.2	18.9	
Total employment (in thousand)	4 026.6		
Change in total employment from 2003 (in %)			
Case 1: unchanged employment rate (28.2%)		-0.7	-7.3
Case 2: reaching the Lisbon target (50%)		6.7	0.9
Case 3: employment rate equal to 50-54 age group (65%)		11.8	6.2
Overall employment rate (% of working-age population)	59.3		
Case 1		57.5	56.8
Case 2		61.8	61.7
Case 3		64.7	65.0

Source: High Employment Council (2004), *Rapport 2004*, Chapter 2; own calculations.

Figure 4.1. Labour market status of persons aged 50-64¹
% of population, 2003



1. The labour market statuses listed are neither exhaustive nor mutually exclusive. For men the sum of percentages may exceed 100, for women it is smaller than 100 as persons without work or benefit income are not shown.

2. Including temporary non-employment under the time-credit scheme (full-time).

Source: Eurostat New Cronos (population), Federal Planning Bureau (2004) based on administrative data.

workers of restructuring companies, the use of mutually agreed redundancy arrangements removing older workers from the labour market once and for all is a means of downsizing at low points of the business cycle that probably contributes to the partial reversal of increases in the participation rate of older male workers during better times (Figure 4.2)²

Box 4.2. Major routes to early withdrawal from the labour market

Unemployment benefit for older workers: The beneficiary is exempt from job-search obligations if he is older than 57 years and has at least 38 years of work history. As of the second year of unemployment, unemployed persons aged 50 or more with 20 years of salaried work receive a seniority supplement to their unemployment benefit (UB) that increases the UB depending on age (ranging from close to 10% for breadwinners aged 50-64 and singles aged 50-54 to 20% for singles beyond age 55 and 40% for unemployed secondary earners aged 58-64). Once granted, the status of older unemployed is not withdrawn, even for spouses/second-wage earners for whom a duration limit exists in the ordinary UB scheme. If eligible, the beneficiary may switch to an early legal pension at 60. Earnings ceilings for occasional or supplementary work income are higher than in the ordinary UB scheme.

Sector-level pre-pension arrangements (*prépension conventionnelle*): The employer makes the older worker redundant and tops up his UB by at least half of the difference between the UB and the former compensation (capped at about 1¼ times the pay of the average production worker [APW]), less social security contributions varying between 3.5 and 6.5%. The worker has to be covered by a collective agreement, which may provide for lowering the minimum age fixed by the law (60 years) to 58. The minimum career required is 25 years. In principle the employer has to replace the older worker with a younger worker. In practice, however, many companies granted discretionary exemptions from this requirement as well as from the age and work history conditions, especially firms undergoing economic difficulties and/or major downsizing. A significant share of new entries into the scheme is only between 50 and 54 years old (22% from January to August 2004). As a result, new pre-pensioners are often only 50 years old. The beneficiary stays in the scheme until age 65 and is exempt from job search obligations. Pre-pensions also exist as part-time work arrangements but these are practically not used as they more or less duplicate a more attractive and flexible time-credit model.

“Canada Dry” arrangements:* These are top-up payments to the unemployment benefit paid outside the official pre-pension framework with the conditions of redundancy being freely negotiated between the employer and the (group of) workers concerned, with no age, career or replacement requirement. They tend to be cheaper than the pre-pension because there are no social contributions, the payment just has to cover the period until the employee qualifies for an early legal pension, and the unemployed person does not need to declare the top-up to social security, which helps to explain the lack of data on the use of the scheme (OECD, 2003a, p. 81). The conditions of use may be combined with other programmes, e.g. subsidised time-credit arrangements or use of the strongly tax-favoured second-pillar capital as a financing source. The latter has become impossible before age 60 for new contracts since 2003 (Complementary Pensions Law). All these advantages make greater side-payments affordable for employers, explaining the use of Canada Dry arrangements for white-collar workers.

Legal pension (first pillar): Three different systems exist for private-sector employees, self-employed and civil servants. As to the former, the statutory age is 65 for men and 63 for women, rising to 64 in 2006 and 65 in 2009. A full career consists of 45 years of contribution (43 for women, rising to 45), with each year of contribution adding 1/45 to the final benefit. The reference salary is the average of all inflation-adjusted annual income amounts during the career, which are capped at about 120% of APW pay. The gross replacement rate applied to that reference is 75% for a head of household and 60% a single or spouse. Unlike benefits, contributions are not capped. Recognised imputed periods

Box 4.2. Major routes to early withdrawal from the labour market (cont.)

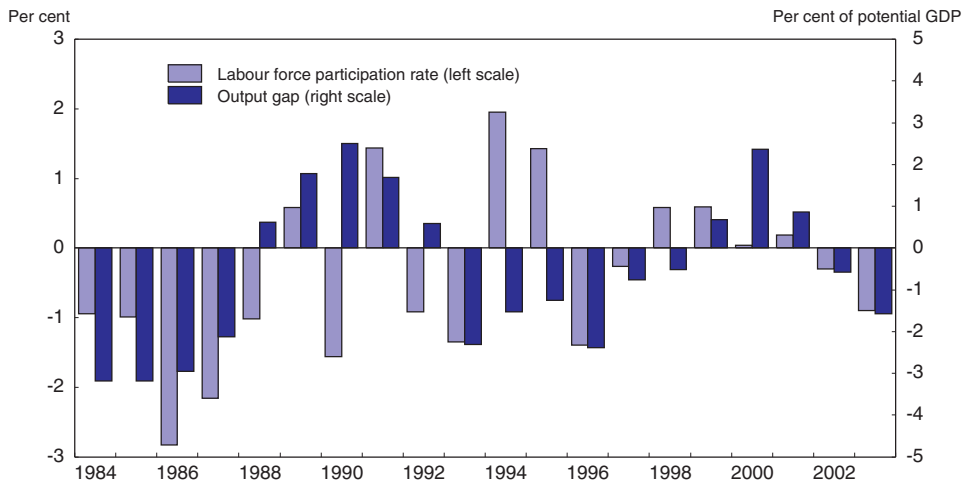
mainly include all periods on unemployment benefit, pre-pension, sickness and disability, and subsidised part-time reductions in working time for which the basis remains the previous work income. Imputed years of full-time education as of age 20 can be acquired in exchange of paying an amount of € 1 075 p.a. The legal pension can be taken as of age 60 but since the pension reform of 1997 this is subject to a minimum career of 20 years that was increased to 30 years in 2002 and will gradually rise to 35 years starting in 2005. Retiring early entails no loss in benefit over and above the 1/45 per year missing to a full career for employees. By contrast, a 5% penalty for each year retired before 65 still applies to self-employed persons with an incomplete career. Such a system was abolished for dependent private sector workers in 1991. The pension in the civil service amounts to (n/y) times the reference salary, (i.e. the average of emoluments over the last five years), with n being the number of years of service and y a number generally equal to 60 (50 or 55 for teachers, 30 for university teachers and judges). The pension may be taken as of age 60. Since 2001, staying employed has been made more attractive by raising the pension by 1.5% for each year of service beyond age 60 and by 2% for each year beyond age 62 (up to a ceiling equal to 75% of the reference salary). The real pension benefit is periodically adjusted to increases in the wage level, which is not the case for private sector pensions.

Long-term sickness and disability benefit: As of the second year of work incapacity, persons employed in the private sector are entitled to a disability benefit (DB) equal to 65 (family dependence), 50 (single) or 40% (spouse/partner) of the income lost, up to a ceiling. Work incapacity is monitored by a doctor assigned by the worker's health insurer during the one-year sickness benefit period and by the social security administration thereafter, but the DB becomes permanent after three years in most cases. Above 65% of income loss, all benefit years count for the calculation of the legal pension. The total number of beneficiaries today is only slightly higher than it was 20 years ago, reflecting the low relative attractiveness of the scheme and reintegration efforts. About two-thirds of beneficiaries are aged 50-64. For the self-employed, access conditions to DB are generally tighter than for employees and the replacement rate lower. Civil servants may be declared permanently disabled and put on a full civil service pension after a sick-leave period dependent on seniority. Work injuries and occupational diseases are subject to separate regulations with most beneficiaries suffering a limited loss in work capacity and staying in the labour market. A third type of benefit is social assistance for handicapped persons.

* The name of the "Canada Dry" arrangements alludes to the advertising slogan for a beverage of the same name: "It's got the colour of whisky but it isn't whisky". By analogy, the scheme resembles the pre-pension although legally it is an UB topped up by some form of voluntary redundancy pay.

In the 60-64 age group the (early) legal pension becomes dominant because the loss from not achieving 45 years of pension contributions is far smaller than the actuarial neutral adjustment, implying a high implicit tax rate on continuing to work (Duval, 2003). The disincentive to continue to work also results from the fact that replacement incomes are subject to no ("Canada Dry") or very limited (pre-pension) social security contributions and benefit from tax rules eliminating the tax bill for persons exclusively living on UB and granting a tax reduction on the benefit part for total taxable incomes up to € 35 000.³ Therefore net replacement rates in the main exit schemes are much higher than gross replacement rates (Table 4.2).⁴ However, they strongly decline with rising levels of income due to a relatively low income ceiling for the calculation of UB (see Section on structural unemployment below). Accordingly, employment rates are higher for 50-64-year-old

Figure 4.2. **Change in labour force participation rate of 45-59 year old males and level of the output gap**



Source: OECD Economic Outlook, No. 76 database and OECD Employment Outlook (2004).

persons with high (as compared with low) education attainment (e.g., 62.2 versus 29.6% in 2002).

The employment rate declines nevertheless beyond age 55 and slumps beyond age 60 even for medium-to-high income earners, reflecting, *inter alia*: i) the use of “Canada Dry” arrangements, often in combination with premature access to second-pillar pension capital (effective taxation of which is negative [OECD, 2003b]);⁵ ii) the income cap in the calculation of the first-pillar pension, implying that missing years to a full career (45 years) lead to a smaller loss in pension revenue (as a percentage of work income) for incomes beyond the cap; and iii) the relatively small difference retiring early makes to the high net replacement rate for civil servants across the entire income range. However, the 1997 pension reform introduced a gradual increase in the career requirement for access to the early legal pension. Indeed, the number of beneficiaries of early legal pensions was already significantly lower in 2000 than at the beginning of the 1990s but continued to rise strongly in the public sector, with the total effect being a modest decline in the total number of early pensions (OECD, 2003a, p. 68).

... but also a lack in demand for older workers

Beyond the attractiveness of early retirement schemes for the employee, the reasons for their widespread use are also to be found on the demand side. Seniority-based wage increments are very high in Belgium as shown by the steep age-related increase in average compensation per employee per 5-year cohort (Figure 4.3). These pay policies are rooted in the collective bargaining process (HEC, 2004a, pp. 134-139). Depending on the type of bargaining unit,⁶ the average difference between the highest and the lowest compensation in a given function amounts to 9 and 37%, respectively, for workers (*arbeiders/ouvriers*, mostly blue collars) and to 35 and 47%, respectively, for employees (*bedienden/employés*, mostly white collars). Moreover, age is often a factor in moving up to higher functions during the career, with older employees being over-represented in the highest paid functions.⁷ While the influence of age on productivity is surrounded with empirical uncertainty,⁸ it is likely that strongly rising wages get increasingly disconnected from

Table 4.2. **Income replacement rates in various exit schemes depending on income levels and family situation, 2003¹**

In % of previous work income

Level of previous work income	Gross replacement rates			Net replacement rates		
	Statutory minimum wage	Average production worker (APW) pay	Double of APW	Statutory minimum wage	Average production worker (APW) pay	Double of APW
Single						
<i>Private sector employee</i>						
Older unemployed	71	39	19	89	66	39
Pre-pension	67	49	26	84	70	43
Early legal pension at 60 (incomplete career)	62	41	27	78	66	45
Legal pension with full career	70	44	29	88	67	46
Early pension at 60 with second-pillar pension	–	70 ²	70 ²	–	88 ²	81 ²
Disability pension	67	50	25	84	75	45
<i>Civil servant</i>						
Early pension at 60 (incomplete career)	– ³	67	67	– ³	83	76
Early pension at 65 (incomplete career)	– ³	73	73	– ³	87	81
Full pension	– ³	75	75	– ³	89	83
With dependent spouse/partner						
<i>Private sector employee</i>						
Older unemployed	78	42	21	87	64	39
Pre-pension	73	54	29	81	76	48
Early legal pension at 60 (incomplete career)	62	41	27	87	75	54
Legal pension with full career	70	44	29	98	78	56
Early pension at 60 with second-pillar pension	–	70	70	–	90	83
Disability pension	83	65	33	93	89	54
<i>Civil servant</i>						
Early pension at 60 (incomplete career)	– ³	67	67	– ³	85	79
Early pension at 65 (incomplete career)	– ³	73	73	– ³	89	83
Full pension	– ³	75	75	– ³	91	85

1. Main assumptions: Male with homogenous career (with respect to income and contribution periods); based on annual work and replacement income, respectively, which is supposed to be the only source of income; municipal income tax increments set at 7%, the national average.
2. Defined benefit scheme ensuring a 70% combined gross replacement rate, which is on the generous side among the arrangements currently in place.
3. Irrelevant because the minimum wage in the public sector is much higher (€ 1 455) than the statutory minimum wage (€ 1 186).

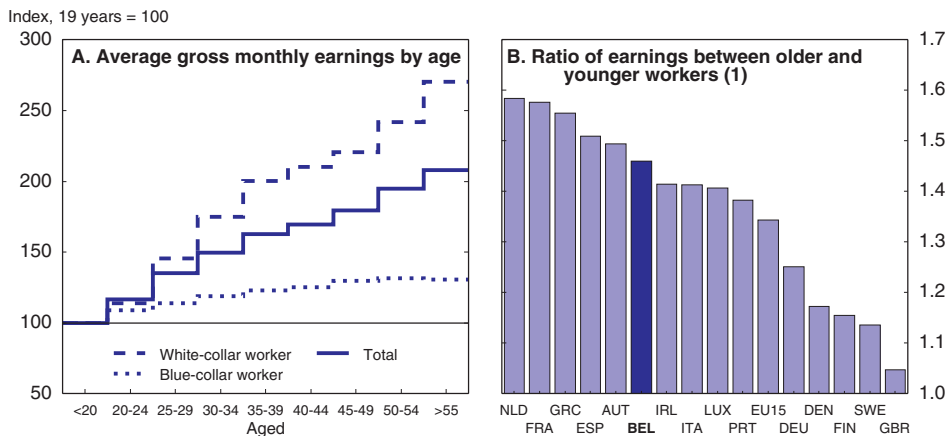
Source: High Employment Council (2004), *Rapport 2004*, Table 43.

productivity for older cohorts. This provides employers with scope to lower the wage bill with no or only limited losses in output by substituting younger for older workers, and to partly compensate the latter. While Belgium is not the only EU country to suffer from this problem, age-related wage increments are above the EU average.

Only small employment effects are expected from recent measures for older workers *Reforming provisions for older unemployed and cutting back on the use of Canada Dry arrangements is welcome*

An important step to avoid permanent inactivity of unemployed older workers became effective in mid-2002 when the eligibility age for the status of older unemployed was raised from 50 to 57 for new inflows, becoming 58 in mid-2004. Workers with 38 years of work history are eligible earlier. This measure is nominally increasing participation of older workers as inflows into ordinary unemployment are increasing while those into the older unemployed scheme are decreasing. However, the seniority supplement on UB

Figure 4.3. Wages increase steeply with age



1. Ratio of average gross monthly earnings of workers aged over 55 and average gross monthly earnings of workers aged 25-29.

Source: HEC (2004), Rapport 2004, pp. 140 and 144, based on Eurostat (1995) and Institut national pour la Statistique (1999), Enquêtes sur la Structure et la répartition des salaires.

remains applicable as of age 50 and job-search requirements have not been enforced by the public employment service (PES) so far, reducing the scope for increasing the employment rate. Nevertheless, the measure sends a discouraging signal to the use of “Canada Dry” arrangements, especially in combination with the 2003 Complementary Pensions Law (*loi Vandebroucke*) that prevents access to second-pillar savings before the age of 60 for new contracts. Moreover, the government announced in October 2004 that Canada Dry amounts exceeding € 7 437 per year will be subject to the same social security contribution as pre-pensions (still at a rate much lower than that on wages) until the beneficiary finds a new job. In turn, the beneficiary will be allowed to keep the advantage when resuming paid work.

Finding and accepting a new job when on unemployment

The government also wants to make employers responsible for finding a new job for the older workers they make redundant and to facilitate the hiring of unemployed persons in the second half of their career. Upon request by a former worker aged over 45, the employer has to finance one year of placement services or, alternatively pay € 1 500 to a public fund. As this outplacement obligation may represent a barrier to hiring workers over 45, the UB has been partly transformed into a temporary wage subsidy for hiring among this target group since 2002 (*Plan Activa*), which has encountered success especially in the age group 45-54.⁹ Also since 2002 employers’ social security contributions have been reduced by an annual € 1 600 per full-time contract upon hiring a worker aged 58 or older (57 years as of 2004), with the duration of the measure depending positively on the new worker’s previous unemployment spell.^{10, 11} In addition, the regions sometimes provide financial support to companies undertaking efforts to keep older workers employable (*e.g.* the diversity plans favouring training and internal mobility of older workers in the Flemish Region). The economy-wide collective agreement 2003-04 (*Accord interprofessionnel*, AIP) contains a target spending level on continuing training of 1.9% of the wage sum, with a specific share dedicated to groups at risk. Surveys suggest that the share of 55-64 year-olds participating in training measures over the past four weeks has more than doubled

since 1999, reaching 6.3% of the employed older workforce in 2003. However, the more detailed agreements at the sector level do not include older and low-skilled workers in the definition of a risk group.

To be effective, these measures require that unemployed persons are willing to switch from unemployment back to paid work. To facilitate this decision a fixed work resumption supplement of € 159 per month for at least one year has been paid to the older unemployed since 2002. In addition, a general income-dependent credit on personal social security contributions will be phased in from 2005 to 2007 for incomes up to € 1 956 per month.¹² This will have a small stimulating effect on older workers whose negotiated wages lie above the current ceiling (€ 1 509) in most sectors. Furthermore, in the Flemish Region, where labour shortages occur more often than elsewhere, the PES started including the 50-58 year-old in their enhanced policies towards new inflows into unemployment (see Section on unemployment below), though their share in the total number of individual plans does not yet match their share in registered unemployment.

Increasing the flexibility to reconcile work and private life

Reducing employees' desire to retire early by increasing their flexibility in reconciling work and private life has been a long-standing objective of the authorities. In 2002 a series of measures of subsidised reductions in work time (*Crédit-temps*) replaced earlier provisions in the private sector.¹³ At any age an employee may either reduce his working time by half or stop working altogether for a total period of one year over the whole career, a maximum that social partners are allowed to extend to up to five years by collective agreement. To partly compensate the loss in earnings the employee receives a transfer from social security dependent on the reduction in working time and seniority.¹⁴ Alternatively, the working time may be reduced by one-fifth during up to five years, in which case the social transfer is proportionately higher. Workers above age 50 with at least 20 years work experience may use the time credit (50% and 20%, respectively) until retirement and receive a significantly higher social transfer (respectively € 385 and € 179). In spring 2004, about 30 000 persons older than 50 participated in time-credit schemes, representing about 4% of total employment of the age-group 50-64, with the four-day week being particularly appreciated by men. Apart from their ambiguous effect on total hours worked (OECD, 2003b), the time-credit arrangements have increasingly come under debate as being probably too generous since it was discovered that they could serve as a bridge to retirement in combination with other schemes starting at age 45. Indeed, some sectors (e.g. financial services) have extended the maximum leave time to five years, combining five years of time-credit with ten years of older-worker UB with Canada Dry top-up, followed by early retirement at age 60. The government recently declared its intention to fight the abuse of the scheme, consisting of private top-up payments that have no counterpart in terms of hours worked,¹⁵ and is considering levying social security contributions on these top-up payments after a certain period so as to avoid time credit being used as a disguised redundancy.

Announcement of a general overhaul of the approach to life-time employment in 2005

In October 2004 the government announced the broad policy guidelines underlying the tripartite negotiation, to be held in spring 2005 that will take major decisions to reform the conditions governing the end of career. A three-pronged strategy will be followed consisting of: i) stimulating and helping the employee to stay active longer; ii) stimulating

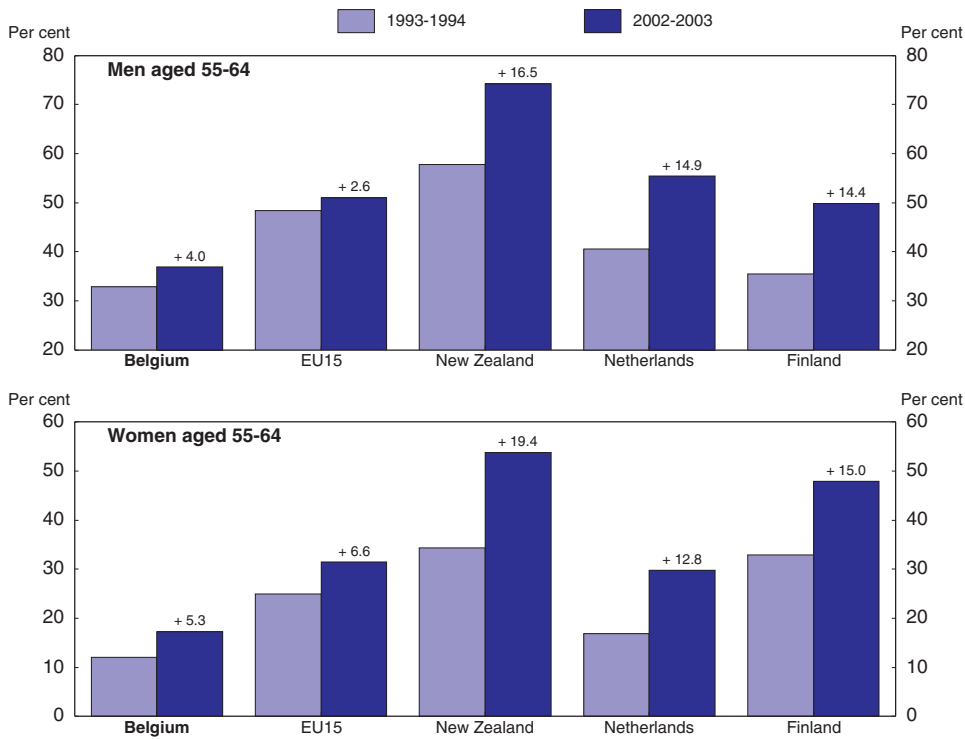
the employer to keep older employees longer; and iii) making early exit through existing schemes less attractive for both. Concerning the employee, the authorities want to step up continuing training and improve the portability of skills acquired in the workplace through certification for which the necessary institutional framework has been created by the regional authorities; give employees greater time flexibility in general (individualised career time accounts) and the choice of swapping extra pay and age-related wage increments for free time in particular; stimulate work after the legal retirement age; and replace sector-based seniority criteria for the take-up of pre-pensions by criteria that do not imply barriers to inter-industry mobility of workers. The broad guidelines to increase demand for older workers include: the replacement of seniority pay rises by other criteria; better enforcement of anti-discrimination laws for older workers; better targeting of reductions in social contributions to older workers; avoiding firms hiring older workers being confronted with high fixed pre-pension costs a little later; and sharing temporarily workers between companies to prove their usefulness outside their usual environment in case of a redundancy. Finally, to reduce the attractiveness of early-exit routes, the government wants to: change the parameters of pre-pensions and “Canada Dry” arrangements (strengthen or introduce age and career requirements, reduce generosity); let an age-responsible human resource management be reflected in social security contributions; lower the tax expenditure on second-pillar savings during voluntarily inactive periods; and delay any access to the capital while still on UB.

More needs to be done to stimulate employment of older workers

Closing fiscal incentives to early retirement is a major driving force in increasing the employment rate for older workers. Those countries that achieved substantial increases in employment rates of their older workers – sometimes starting from similarly low levels as Belgium (Figure 4.4) – took relatively sharp measures as the examples of Finland, New Zealand and the Netherlands illustrate (Box 4.3). Finland is an interesting case in point as the main exit route from the labour market long before age 65 consists of the succession of unemployment benefits with exemption from job search, an early pension and the legal pension, like in Belgium. The minimum age for the older unemployment scheme was increased without exception and search requirements strictly enforced, with the result that the employment rate for the age-group of those concerned fully converged to that of the neighbouring younger age group.

The Belgian government has also been active and taken a considerable number of measures that tend to favour remaining employed rather than retiring (or being made redundant) early. However, as many of the measures imply new tax expenditures, they are likely to increase the tax wedge on wages, which is already among the highest in the OECD (Carey and Rabesona, 2002), for non-target groups, thereby reducing their labour supply.¹⁶ Moreover, the differential treatment of unemployed persons aged over 50, which is at the root of most early-withdrawal arrangements, still persists and needs to be addressed more thoroughly. The objective for the government should be to keep the older unemployed available for the job market just as every other unemployed person. The old-age supplement to the UB lowers the financial cost for employers of making older workers redundant at the taxpayer’s expense. Therefore the age of eligibility for the old-age supplement to UB should be set to 58 for new inflows to unemployment, harmonising it with the age for the exemption from job-search, and this age should then be gradually raised. More importantly, job search requirements for the unemployed aged 50 and over

Figure 4.4. **Progress in raising the employment rates of older workers has been slow¹**



1. The number above the second bar of each country indicates the change in the employment rate in percentage points.

Source: OECD Labour Force Statistics.

should be enforced vigorously. The government should commit itself as soon as possible to including the 50-57 age group into the new follow-up procedure for unemployed persons (see Section on unemployment) in order to be more effective in discouraging private early retirement payments masked as redundancy pay (“Canada Dry” arrangements). These private payments should either be subject to full social security contributions or not lead to pension entitlements. Moreover, the UB part of the personal income of persons with a pre-pension or “Canada-Dry” top-up should not lead to pension entitlements as these persons are not active jobseekers. As long as the special older unemployed status (with exemption from job-search) exists, these top-up payments should also be taxed in the same way as regular labour earnings rather than at preferential rates or not at all, as is currently the case. This requires giving up the special tax reduction on UB income, which reduces the marginal tax rate on the top-up payment. Furthermore, the surge of long-lasting take-up of time-credit in some sectors suggests that the generosity of the scheme needs to be reduced. More generally, when introducing new tools of flexibility or improvements in working conditions that imply social security expenditure, the government should ensure that collective bargaining arrangements increasing generosity over and above the legal standard (e.g. the extension of time-credit from one year to five years) be financed by the sector itself to better control the budget costs of such measures.

If a reduction in the use of Canada Dry arrangements can be achieved, this will probably increase the demand for pre-pensions under collective agreement as long as pay scales

Box 4.3. Measures to increase the employment rate for older workers in Finland, New Zealand, and the Netherlands

Over the past decade Finland, the Netherlands and New Zealand were the three best performers in terms of increasing the employment rate for persons aged 55-64. While demographic effects and/or improved employability through higher attainment levels were forces at play and macro-economic conditions were favourable, especially in Finland and the Netherlands, these countries also undertook significant steps to reform labour market and social security rules, thereby stimulating labour supply and allowing the economic expansion to become more employment-intensive. They were particularly active in the area of older workers, as suggested by the high scores they earned in the recent quantitative assessment of the implementation of the OECD *Jobs Strategy*. Finland and the Netherlands pursued a comprehensive reform strategy, thereby using synergies across policy fields and avoiding singling out a specific group of losers from the reform. Notably, they increased job search incentives and obligations for unemployed persons in general; re-directed active labour market policies (ALMPs) from subsidised jobs towards more job counselling and training; reduced taxes on labour income; and eliminated remaining disadvantages in working conditions for part-time workers. There is also more training for older workers than in Belgium.

Finland: The most significant steps focused on the old-age pension system, the “unemployment tunnel” to retirement (unemployment benefits without job search, followed by an unemployment pension and finally the old-age pension), and disability-related early pensions. The accrual rate for delaying retirement after 60 was increased in 1997 and will be further increased sharply after age 62 in 2005 in the context of introducing a flexible retirement age (62-68 years) linked to the evolution of life expectancy. In 1997 the minimum age for the unemployment pension was raised to 60 and that for entering the unemployment tunnel from 53 to 55 (becoming 57 in 2005). In 2000 the generosity of the unemployment pension was lowered, employers’ contributions increased and the possibility of accumulating old-age pension rights while on the unemployment pension suppressed for new pensioners. The minimum age of eligibility for an individual early retirement (a disability-related pension with lower medical criteria for workers with a long career) was gradually increased from 55 to 60, starting in 1995, and work incentives for persons on disability benefits strengthened in 1999. Since the 1997 rise in the eligibility age for the unemployment tunnel from 53 to 55, the characteristics of the group aged 53-54 have fully converged to those of the 50-52 year-old as the risk of unemployment fell, unemployment durations became shorter, and exit rates to employment rose; the isolated effect on unemployment benefit outlays of the fall in the inflow probability of the 53-54 year-old is estimated at 0.1% of GDP for each of the two cohorts (Kyyrä and Wilke, 2004). Over and above the sharp drop in the probability of becoming unemployed for the 53-54 year-old, this probability also fell in the age group 55-64.

Netherlands: Various measures have been taken since 1994 to make complete withdrawal from the labour market via the disability benefit (DB) scheme less attractive. The stabilisation of the total number of beneficiaries as a share of the working age population results from a significant increase in the number of partial DB recipients, who often work part time, and a corresponding decrease in the number of full DBs. The age structure of new entrants also changed, reflecting particular efforts to curb the automatic uptake of full DB by the traditionally most important group of older blue-collar workers. More recently inflows started falling significantly, reflecting stricter gate-keeping, experience-rating in contributions to the public disability scheme and stronger mutual sickness reintegration obligations. In the area of early retirement, social partners have started transforming the sectoral pay-as-you-go schemes into actuarially neutral pre-pension schemes. On the labour demand side, a gradual reduction in the difference between legal and negotiated minimum wages agreed by social partners may have alleviated the wage-productivity gap. The wide acceptance of part-time work in the Netherlands may also have supported labour force participation of the elderly.

New Zealand: The country still benefited from the far-reaching reforms to social benefit systems undertaken during the 1980s. The most important policy measure during the 1990s was the gradual increase in the statutory retirement age from 60 to 65, boosting the employment rate in this age group by 30 percentage points. The fiscal incentive to retire before age 65 is very small (Duval, 2003). Moreover, eligibility to sickness and invalidity benefits was tightened in 1995, sickness benefits were aligned with the lower unemployment benefit in 1998 and the income threshold for the disability allowance was raised in 2001.

Source: OECD (2004a), *Assessing the OECD Jobs Strategy: Past Developments and Reforms*, ECO/CPE/WP1(2004)8.

remain as strongly influenced by age and seniority as they are today. Therefore the government should gradually but significantly tighten both the career requirement for pre-pensions and the minimum age. This would still allow blue-collar workers who started their career early in life and have worked under difficult conditions to retire long before the legal retirement age. Moreover, there is an urgent need to reduce the automatic recourse to pre-pensions in case of company restructuring and downsizing with discretionary agreement by the minister who may allow for lower age and career requirements, thereby making a significant share of redundancies endogenous and putting progress in participation by older workers at risk during every economic downturn. The government should therefore end the practice of discretionary use of pre-pension in collective redundancies and enforce the respect of the general access conditions to pre-pension without exceptions. Taken together, these measures concerning pre-pensions would come down to phasing out this scheme by eventually merging it with that for the early legal pension.

While “Canada Dry” and pre-pension arrangements are the most urgent fields of action, the age-group 60-64 represents an important employment potential that should be stimulated by further pension reform. The incentives to retire early built into the first-pillar pension should be reduced by making the retirement decision more actuarially neutral, *i.e.* by sharpening the reduction (increase) in the pension benefit in case of retiring earlier (later) than the legal pension age and/or accumulating less (more) contribution periods than a full career. The adjustment could allow for social class differences in remaining life-expectancy at the moment of retiring, using the detailed information available in the life-insurance industry.

As the routes to tax-subsidised early withdrawal from the labour market become narrower, the inflow into disability schemes needs to be closely monitored as the demand for the scheme is likely to increase. Indeed, some OECD countries that closed routes to inactivity experienced huge increases in the number of disability benefit (DB) recipients. In Australia, for instance, stricter access rules to the Wife Pension and the Widow Pension partly explains the sharp increase in the number of DB recipients during the 1990s (OECD, 2003c, p. 99). In the United States, DB tended to become a “catch-all” scheme as of the early nineties as the long-term UB was abolished and access to social assistance made more difficult (OECD, 2003c, p. 62). The experience in the Netherlands shows that even with DB reforms it may be difficult to even stabilise the number of DB recipients when the overall number of applications increases (OECD, 2004b).¹⁷ Erroneous inclusion into the DB scheme occurs frequently as suggested by the fact that about 30% of all DB recipients do not consider themselves as being disabled, a share that is even higher in Belgium (43%) (OECD, 2003c, pp. 43-44 and 202). Reasons for these errors include capture of general practitioners by applicants in systems where the GP has a great influence on the DB decision and the failure of many DB systems to account for evolutions in beneficiaries’ health status, underlining the importance of retesting. In Belgium, retesting is rare and for most recipients the provisional DB is transformed into an indefinite pension after three years. A close eye needs to be kept on the parameters of the contributory DB scheme such as rejection and appeal rates, retesting and gate-keeping design should the number of DB applicants increase.

A significant increase in the average age of withdrawal from the labour market would extend the time available to amortise human capital investment, making it likely that both supply of and demand for continuing training programmes will increase for workers in the second half of their careers. The government should promote a culture of lifelong learning/continuing training and raise awareness (*e.g.* in negotiations with the social

partners) of the adverse effects of seniority-based pay scales on employment prospects for older workers. Such measures would help to keep wages closer to productivity.

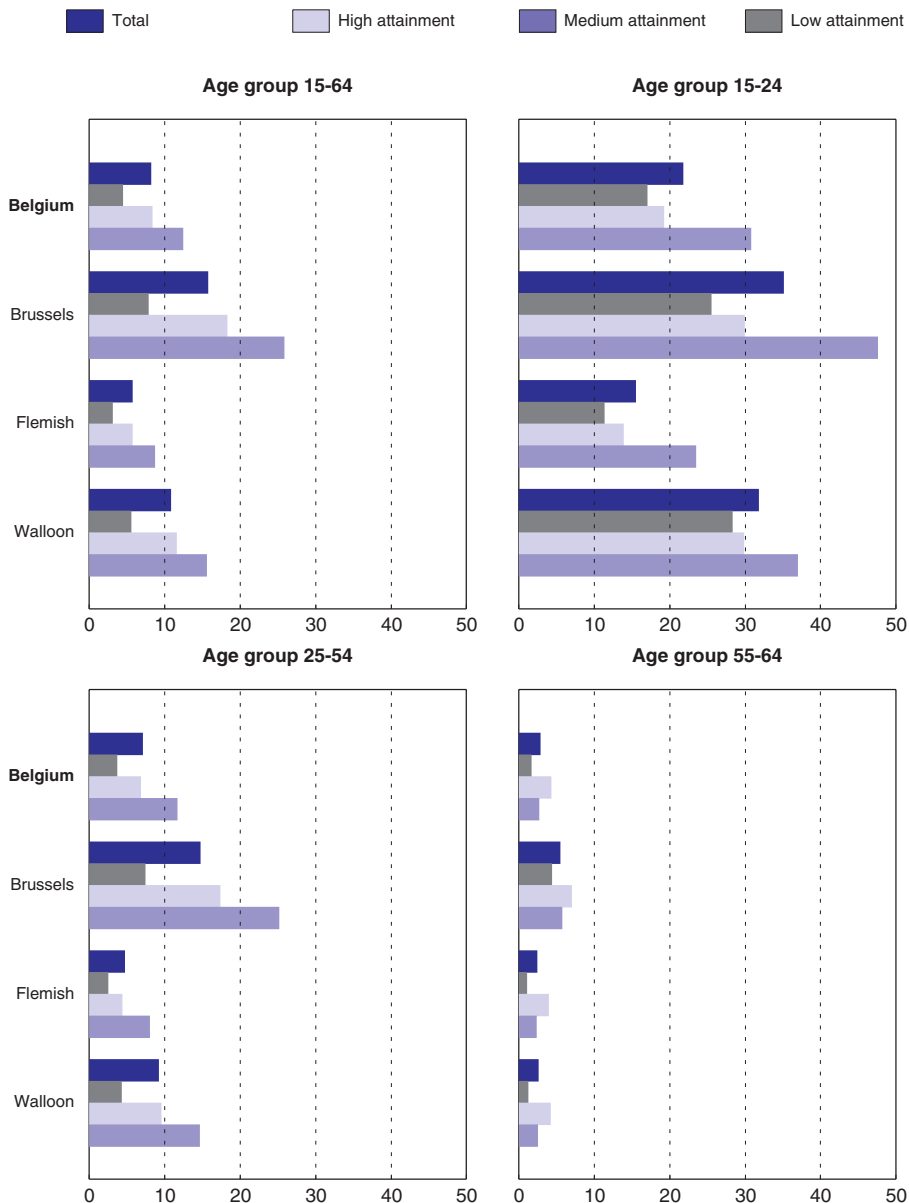
Reducing the high structural unemployment rate

Unemployment duration is long and the unemployment rate persistently high in some regions

Reducing structural unemployment, which is particularly high in some regions, would be another important source for employment growth (Figure 4.5). The major challenge consists of bringing persons back to work more quickly given the high incidence of long-

Figure 4.5. **Unemployment rate by region, age and attainment**

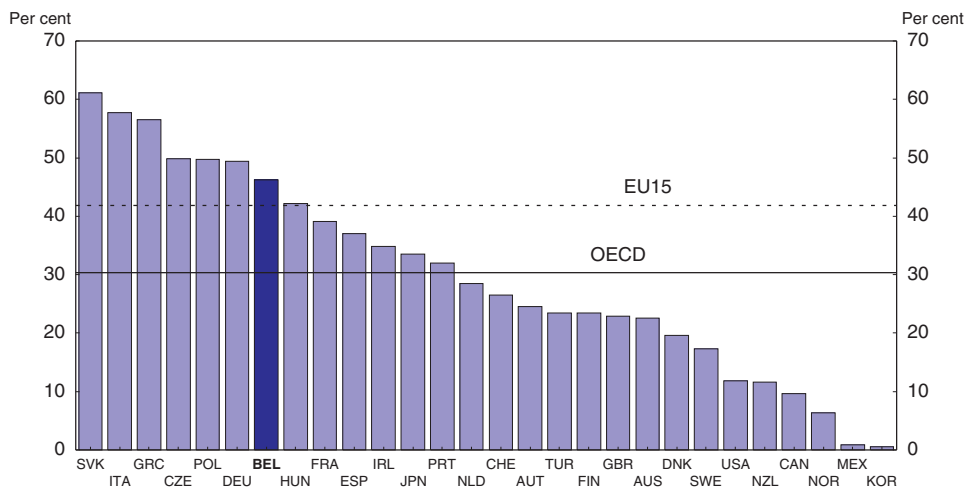
% labour force, 2003



Source: Eurostat Database, Regional unemployment – LFS adjusted series.

term unemployment (Figure 4.6). The sharp differences in regional average unemployment rates between the north and the south of the country mask the fact that the average duration of unemployment is high in all of the 30 sub-regions, ranging from 16 months for up to 35 year-old men in Arlon to 66 months for women aged over 46 in Mons.¹⁸ Interregional differences are also small for registered unemployment of the 50-64 years-old, which is low because many unemployed at this age are still exempt from job search. As mentioned above, the registered unemployment rate will increase with the increase of the minimum age for this exemption to 58 for new inflows. Despite its much tighter labour market, the Flemish region does not perform significantly better than the Walloon Region in the area of older unemployment.¹⁹

Figure 4.6. **Incidence of long-term unemployment**¹
As a percentage of total unemployment, 2003



1. 12 months or more.

Source: OECD Employment Outlook (2004).

The benefit and placement systems do not encourage enough searching for, and accepting a job

The policy towards the unemployed population combines two features that both reduce incentives for work resumption: the generosity of the UB; and poor enforcement of job search conditions by placement services. While access conditions to the ordinary UB²⁰ and gross replacement rates²¹ are in line with international standards, net replacement rates are high towards the lower end of the wage distribution (Table 4.3), reflecting the preferential income tax treatment of benefit income and the high tax wedge on labour (OECD, 2003b). Moreover, there is no duration limit for receiving the ordinary UB, and neither the main nor the spouse UB is means-tested. Only the spouse UB may be ended after a duration of between 4 and 8 years (equivalent to 1½ times the sub-regional average duration mentioned above) and only if the beneficiary fails to prove sufficient efforts to find a job.²² As a consequence net replacement rates hardly decline over time (Table 4.4). High benefit replacement rates increase the unemployment rate and have a negative effect on the employment rate across countries and time even after controlling for very different designs in active labour market policies (ALMPs) and other control variables (Boone and van Ours, 2004).²³

Table 4.3. **Net replacement rates in the initial phase of unemployment, 2002**
%

	67% of APW income			100% of APW income		
	Single person, no child	Lone parent, two children	Two-earner married couple, two children	Single person, no child	Lone parent, two children	Two-earner married couple, two children
Australia	46	61	65	32	54	54
Austria	55	75	85	55	71	81
Belgium	87	82	93	66	66	80
Canada	63	67	87	64	75	85
Czech Republic	50	55	78	50	54	74
Denmark	84	95	93	59	75	78
Finland	78	90	87	64	83	81
France	80	91	91	71	76	82
Germany	63	90	99	61	83	96
Greece	64	74	77	46	50	62
Hungary	61	71	82	44	55	71
Iceland	66	80	87	49	65	76
Ireland	40	60	79	29	54	67
Italy	50	54	81	52	60	76
Japan	73	81	88	63	74	81
Korea	53	54	77	54	54	73
Luxembourg	84	90	94	85	89	93
Netherlands	79	85	85	71	78	83
New Zealand	54	77	63	37	62	51
Norway	66	89	86	66	81	83
Poland	65	67	79	44	50	64
Portugal	85	85	92	78	76	87
Slovak Republic	69	76	83	62	69	82
Spain	76	77	89	70	76	87
Sweden	82	92	92	81	90	90
Switzerland	79	81	90	72	82	88
United Kingdom	63	47	73	45	46	61
United States	62	54	83	56	54	76

Source: OECD (2004), *Benefits and Wages*, Table 3.1.

The government has adopted a new way of addressing the unemployment trap that will become effective in 2005 and reach cruising speed by 2007, the in-work credit on personal social security contributions (*bonus crédit d'emploi*, see also Section on older workers above). This is a reduction in personal social security contributions that is phased out more gradually than the one existing today. The gross monthly wage, up to which (diminishing) cuts in contributions apply, will be gradually raised from € 1 509 to € 1 956, the same as for the structural reduction in employers' social security contributions. At the same time the in-work tax credit, introduced in 2002, is being abolished for wage earners. Moreover, the existing complementary benefit to unemployed persons accepting a part-time job is being transformed from a lump-sum monthly benefit into a per-hour wage supplement (ranging from € 1 for second-wage earners to € 2.5 for heads of household) and will not be available any more for jobs with less than 12 hours per week so as to increase the employment effect. The reform package aims to strengthen fiscal incentives, to make them more clearly visible on the monthly payroll and to attenuate the poverty trap. The budget allocation to it will increase from 0.05% of GDP in 2003 to about ¼ per cent of GDP in 2006. The measures add to the existing one-off in-work subsidy of € 744 for long-term unemployed lone parents

Table 4.4. Net replacement rates after 60 months of unemployment, 2002

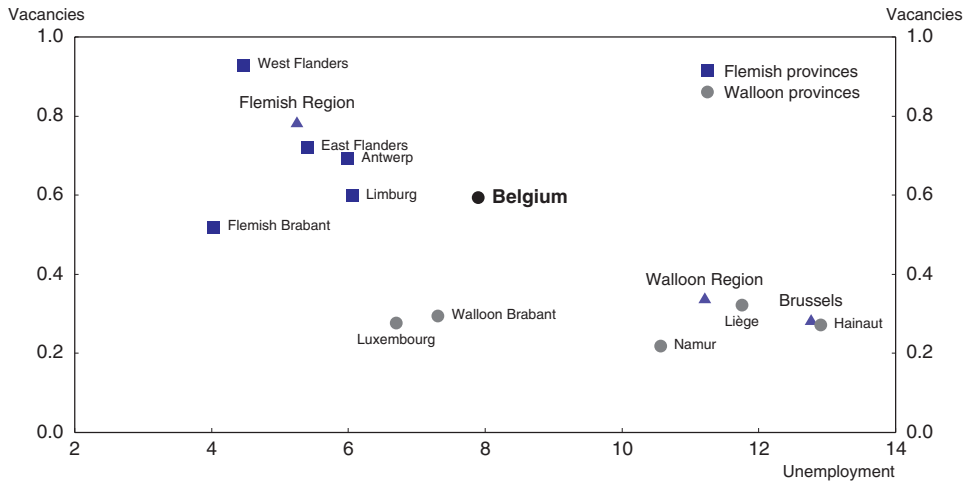
	%					
	67% of APW income			100% of APW income		
	Single person, no child	Lone parent, two children	Two-earner married couple, two children	Single person, no child	Lone parent, two children	Two-earner married couple, two children
Australia	46	61	65	32	54	54
Austria	64	82	71	51	68	68
Belgium	72	82	86	55	66	75
Canada	31	63	68	22	55	58
Czech Republic	45	77	60	31	59	51
Denmark	71	85	71	50	72	60
Finland	69	77	75	51	66	64
France	56	81	63	41	63	52
Germany	82	92	79	61	76	77
Greece	0	4	51	0	3	41
Hungary	33	41	58	24	31	49
Iceland	66	80	87	49	65	76
Ireland	71	66	63	51	59	54
Italy	0	0	61	0	0	53
Japan	50	92	63	34	74	52
Korea	25	58	50	17	39	40
Luxembourg	70	84	56	50	61	47
Netherlands	79	78	61	58	64	52
New Zealand	54	77	63	37	62	51
Norway	60	79	56	42	65	47
Poland	45	75	64	30	55	52
Portugal	34	61	77	24	50	64
Slovak Republic	62	91	71	42	68	60
Spain	37	54	53	27	38	44
Sweden	74	66	58	51	55	48
Switzerland	73	91	55	51	65	46
United Kingdom	63	66	71	45	64	60
United States	10	44	58	7	35	49

Source: OECD (2004), *Benefits and Wages*, Table 3.2.

accepting a job (at least half-time), which has existed since mid-2000, and to the additional one-off subsidy in case of long commuting time to the new job.

Individual job search and acceptance of a suitable job, the two major obligations of an unemployed person, have been poorly enforced so far.²⁴ According to the suitability definition in federal legislation, beneficiaries of UB have to accept any job corresponding to their professional, mental and physical aptitude, involving no more than four hours of daily commuting and earning a net salary at least equal to the UB after deducting commuting costs. In practice, however, placement services mostly refer to offers on the local labour market (mostly the area covered by the local PES office). By contrast, vacancies in neighbouring areas are hardly considered in the placement process and, insofar as they concern jobs in neighbouring regions, they are scarcely known by the local PES.²⁵ This adds an unnecessarily large geographical component to the regional mismatch between vacancies and unemployment, which is already large due to the linguistic divide of the country.²⁶ Under these conditions, district unemployment rates, which show a huge variance, especially in French-speaking provinces (Figure 4.7), are unlikely to converge although commuting distances are generally not large (Table 4.5).

Figure 4.7. **Unemployment and vacancies**
% of working age population, 2003



Source: National Bank of Belgium, Report 2003, Chart 38.

Table 4.5. **Road distance between provincial capitals**

Province	Flemish Region					Brussels	Walloon Region				
	West Flanders	East Flanders	Antwerp	Limburg	Flemish Brabant		Walloon Brabant	Hainaut	Namur	Luxembourg	Liège
from/to	Bruges	Ghent	Antwerp	Hasselt	Louvain	Brussels	Wavre	Mons	Namur	Arlon ¹	Liège
Bruges		52	107	184	130	98	134	131	171	294	198
Ghent			60	137	87	55	91	120	128	252	155
Antwerp				78	64	47	69	126	105	229	119
Hasselt					59	83	98	150	103	193	44
Louvain						29	23	96	61	185	74
Brussels							26	70	63	187	97
Wavre								83	40	164	89
Mons									71	206	130
Namur										131	63
Arlon											143
Liège											

1. Arlon is located at the extreme south-east of Belgium, close to the border with Luxembourg. Given its small size, it plays less the role of an economic centre of its province than the other cities in the table. Therefore the numbers overstate most of the economically relevant distances between the Belgian province of Luxembourg and other provinces.

Source: Itineraries suggested by www.mappy.fr.

Co-ordination between benefit payment and placement is being improved...

Co-ordinating UB payment, job counselling and training services was identified by the *OECD Jobs Strategy* (OECD, 1994) as one of the keys to fostering unemployed persons' reintegration perspectives. Over and above the incentive and enforcement problems just mentioned, the UB function used to be very poorly co-ordinated with the other functions. Although the institutional assignment of UB payment to the federal level and of placement and training to the regions precludes the execution of the three functions in a "one-stop shop", there is ample scope for better co-ordination. The government has recently undertaken a major step forward in this direction. In a co-operation agreement with the

unemployment benefit authority (ONEM) effective since July 2004, the regions and the German Community committed themselves to exchange information with ONEM on job-search behaviour of the unemployed and to minimum standards of service towards their clients. At the same time a Royal Decree made a first step towards sharpening the enforcement of job-search obligations, foreseeing a series of interviews at the ONEM 15 or 21 months after the start of the unemployment spell, with a view to evaluating the search efforts of the beneficiary and the possibility of benefit sanction (Box 4.4). Given capacity limits of the regional PES, the procedure is being implemented gradually, with priority given to the younger unemployed population.²⁷ No date for the inclusion of unemployed persons aged 50-57 into the control procedure has been announced yet.

Box 4.4. **The new procedure of following up on jobseekers' search efforts**

Under the new system, the PES provides the unemployed person with a placement or counselling within the first twelve months (six months for the less-than-25-year old). The client is briefed and screened, and an action plan for his reintegration is elaborated. The UB recipient either receives the ordinary vacancy information service or is offered a more intensive counselling/training package. In case of the former, a three-step control procedure follows. At the earliest, 21 months after becoming unemployed (15 months for the younger unemployed), the job-seeker is invited to an interview with the ONEM in which his job-search effort is evaluated.* If it is found to be insufficient, he has to sign a written contract specifying the concrete actions expected from him until the second interview four months later. If this second interview confirms the insufficiency of search, a more intensive action plan is signed and the UB is temporarily reduced to the level of social assistance (*revenu d'intégration*) or suspended (in the case of a young unemployed person without a work history). The third interview another four months later leads to the end of all UB entitlements if no change in attitude is observed. Any time ONEM finds that the search effort has become sufficient the procedure starts anew, with the new "first" interview scheduled for sixteen months later. More intensive assistance programmes (whether counselling or training) delay the procedure by up to twelve months.

* These delays follow the minimum requirements of the European Union's employment guidelines.

... but the effectiveness of the reform also depends on implementation in local labour offices

The new rules allow for a cautious step towards enforcing job search but their success is likely to depend on implementation within the Regions. The co-operation agreement would be ineffective if it were just fulfilled formally rather than installing a relationship of mutual obligations between the unemployed person and the PES as from the first month of registration. The decree is minimalist in its definition of more intensive service programmes (*accompagnement intensif*),²⁸ leaving it to the regional PESs to find the most effective way of increasing the job match probability. The Flemish VDAB's (*Vlaamse Dienst voor Arbeidsbemiddeling en Beroepsopleiding*/Flemish Office of Employment and Vocational Training) "comprehensive approach" (*sluitende aanpak*) is a promising initiative in this respect (Box 4.5). Another area where progress still needs to be made is networking of local PESs. The decree states that the relevant labour market on which the jobseeker is expected to search is not limited to the district of the labour office but covers the usual commuting area of employed

Box 4.5. **The Comprehensive Approach of the Flemish PES**

Over and above the obligations agreed upon in the inter-governmental co-operation agreement, the Flemish PES (VDAB) has determined two specific target groups on which it wants to apply a comprehensive approach (*sluitende aanpak*): Persons on UB for more than five years; and new inflows into the UB scheme. As to the latter, they are screened, at the moment of registration (“module 1”) by an agent who will accompany them for the whole duration of the unemployment spell. Together with the client, and based on his/her strengths and weaknesses identified in the screening, the agent elaborates a realistic and complete reintegration strategy (“module 2”) and is responsible for following up on the client’s success (“module 7”) after completion of its training elements (HEC, 2004b). If training elements are deemed necessary, they include any or all of the following modules 3 to 6: i) short-term training on job applications and interviews, and assistance with concrete applications; ii) recognised training within an educational institution; iii) training in personal skills, in most cases to improve proficiency in Dutch, ICT use, and communication; and iv) training in a work environment (in a company or social workshop, full-time or part-time, supplemented with some theoretical education). Although the client has a strong say in the elaboration of the strategy, with all four of these training types being voluntary, the idea is to obtain a personal commitment from the jobseeker to adhere to the strategy. The stages of this procedure are timed such as to allow for starting any of the specific training units within the first six months if the jobseeker is younger than 25 and the first nine months otherwise.

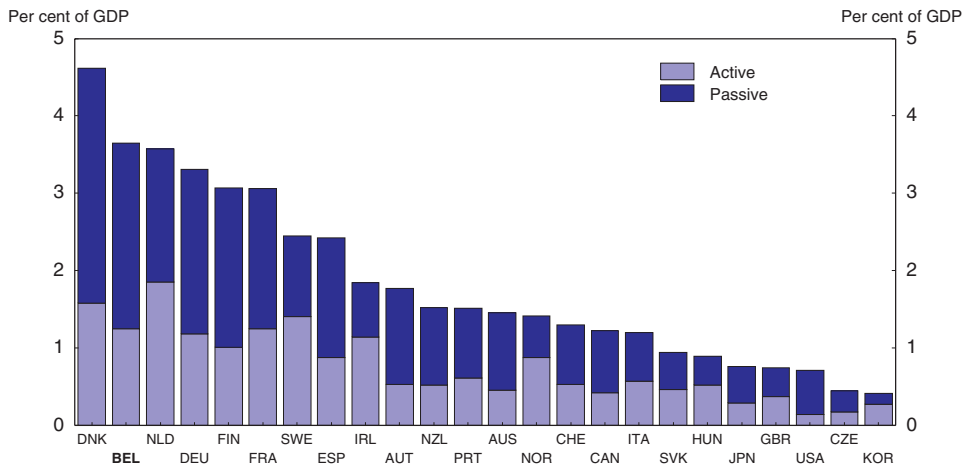
The jobseeker subscribes to the online service (if possible) at the moment of registration and receives job vacancy information concerning areas of competence right away on a weekly basis. The reactions to this on-line service are registered and serve as evidence later in the control procedure. Alternatively, the call centre of the VDAB contacts the jobseeker regularly to remind him or her about the offers received and to hear about the planned reaction to them. The ONEM only obtains information about carefully chosen elements of the personal (online) file that accumulates in this way over time as privacy rules are respected.

persons of his municipality. The PES should insist that jobseekers react to vacancies in a wide area, including at least the commuting area, even when part of this area is situated in one of the other regions. There is an urgent need to improve communication of labour market information across regions with a view to making each job vacancy published in one area available everywhere in Belgium in a searchable, user-friendly format. Apart from the obvious advantage of better service to the jobseeker, this would stimulate employers to notify their vacancies with the PES and help to overcome skill mismatches.²⁹ Moreover, it would enhance the credibility of the new follow-up procedure because the client is likely to have come across more offers up to the day of the interview than is currently the case, reducing the risk of capture of local PES agents by their clients and ensuring that the information exchange between the PES and the ONEM actually takes place.³⁰ In this respect more automatic exchange of information on jobseekers’ reactions to vacancies, as implemented by the Flemish Region, would certainly be helpful.

Active labour market policies should be refocused from subsidised jobs...

Belgium is the country with the second highest expenditure on labour market policies in the OECD (Figure 4.8). The absolute amount spent on active labour market policies

Figure 4.8. **Public spending on labour market measures**
2002¹



1. 2001 for Australia, Canada, Ireland, Mexico; 2000 for Denmark and Portugal.

Source: OECD Employment Outlook (2004).

(ALMPs) is also high, even though at one-third, their share in total expenditure is relatively low (OECD average: 45%). ALMPs pursue important welfare-enhancing functions (increasing employment, reallocating labour between sub-markets, and alleviating the moral-hazard and incentive problems built into UB systems; see Calmfors, 1995) but may also cause negative side-effects such as displacement effects, deadweight losses, and a higher tax burden (notably on labour) induced by their financing (Calmfors, 1994). Accordingly, empirical studies find that ALMPs lower the unemployment rate but are not unanimous on the existence of positive effects on the employment rate.³¹ To ensure positive net effects in terms of employment, unemployment, and welfare, the experience of OECD countries with the four broad types of ALMPs suggests that: i) search assistance, the least expensive ALMP, needs to be linked to job-search control; ii) training programmes, which are very resource-intensive and have met mitigated success in general, should be closely targeted and evaluated, with unsuccessful programmes being closed; should result in a certified qualification valued by the regular labour market; and should have a strong on-the-job component; iii) subsidised employment involves large deadweight losses and substitution effects; and iv) direct job creation in the public sector is expensive and of no use in making the beneficiaries able to reintegrate into the regular labour market. A recent panel data study for twenty OECD countries (including Belgium) over the period 1985-99 finds that training measures lower the unemployment rate and increase the employment rate, whereas subsidised jobs have no effect on either unemployment and employment (Boone and van Ours, 2004).³² The effect of training is stronger in countries with high UB replacement rates, in line with the theoretical prediction of training and follow-up as a substitute to weak reintegration incentives (Nickell and Layard, 1999).

The structure of ALMP expenditure suggests that Belgium still focuses too strongly on the least promising types of measures. At 0.6% of GDP, spending on subsidised jobs (excluding jobs for handicapped persons)³³ is the highest in the OECD. Direct job creation in the public sector amounted to 60% of this spending in 2002. The Flemish Region has slightly reduced the number of directly created jobs since 2001 and is currently pursuing a policy of transforming the labour market status of beneficiaries into an ordinary

employment contract. By contrast, the Brussels Region wants to increase the number of subsidised jobs in the period 2004-07. Given the high cost of these public sector jobs and the low probability for their holders of finding lasting employment in the first labour market, the regions should reduce their reliance on subsidised direct job creation in the public sector because these schemes are unlikely to make the beneficiary durably independent from social transfers. The Walloon Region has undertaken a promising first step by simplifying its ALMPs and creating a clearer distinction between the objectives of sustainable labour market integration of unemployed persons on the one hand and direct job creation, often motivated by local social and community needs, on the other (FPS Employment, 2004b). It should now shift the policy focus from the latter to the former.

The area of subsidised private-sector and non-profit-sector jobs, on which Belgium spent ¼ per cent of GDP in 2002 (ranking second in the OECD), has recently received increased attention.³⁴ In particular the federal government decided to simplify and extend the use of the service voucher system (*titres-service*), which has taken off very successfully, reflecting a net subsidisation rate of about 50%.³⁵ While the government is expected to come close to its job creation target of 25 000 new jobs, only a very small fraction of it should reflect net job creation due to deadweight losses and displacement from the already existing informal market for household services to the official market (FPB, 2004, p. 55). The federal government should lower the rate of subsidisation of the service voucher system, which appears to be unnecessarily generous.

... to training

The focus on subsidised jobs comes at the expense of training measures, which have an accordingly low relative importance. Nevertheless, public expenditure on labour market training in absolute terms has been increasing steadily over recent years, reaching 0.3% of GDP, the third-highest share in the OECD (together with Germany, Finland, and Sweden) after Denmark and the Netherlands (0.9 and 0.6% of GDP, respectively). Two-third of the budget is devoted to training unemployed persons; the remainder is spent on training measures for members of groups at risk of losing their jobs. During the year 2002, 7.2% of the unemployed population aged 25-64 followed a training measure (2.1% in the Brussels Region, 6.2% in the Walloon region, and 8.7% in the Flemish Region [HEC, 2004b]). Persons with some recent attachment to the labour market or at least a lower-secondary degree generally follow directly relevant job training, in public centres or companies, whereas members of the socially and educationally most disadvantaged groups first receive some “pre-qualifying” training, most often provided by subsidised private non-profit organisations, to ensure a minimum of social integration.³⁶

The limited available empirical evidence suggests a significantly increased likelihood of flowing out of UB after having completed a training programme involving internships in a company compared with a control group of non-participants (Vanderlinden, 2001). As far as employment duration and job stability are concerned, another study showed that almost half of the participants in European Social Fund projects in Wallonia and Brussels remained in unemployment most of the subsequent time (Conter *et al.*, 2003).³⁷ For the others the work history that followed tended to be the more scattered the lower the attainment level and the longer the preceding duration of inactivity; women appear to be more at risk than men of switching back and forth between training programmes and unemployment. Finally, drop-out rates from the training programmes were also dependent on personal characteristics, to the disadvantage of the most fragile groups.³⁸ It is therefore

not surprising that persons who did not complete secondary education are under-represented in regional training measures. It reflects self-selection into training resulting from its voluntary nature and the incomplete coverage of personalised reintegration plans. Access to continuing training for employed persons is also to the disadvantage of the low-skilled (Baye *et al.*, 2003). At the same time, however, continuing training increases the probability of staying in employment for participants with low attainment levels but not for the others (HEC, 2004b).

Training and retraining measures should play an increasing role in correcting skill and knowledge deficiencies and in addressing short-term bottlenecks in low-to-medium skill functions. However, the available evidence strengthens the case for close monitoring and case-management of unemployed persons, especially the more disadvantaged ones. A consistent and seamless reintegration trajectory needs to be elaborated early in the process, ensuring that “pre-qualification” training is kept to the necessary minimum, being closely targeted to the most difficult cases and immediately followed by directly job-related training, preferably in a company. New training programmes should be elaborated with a close view to market needs and should seek to include companies as co-operation partners so as to increase employer commitment to providing subsequent job opportunities. The targeting and thus the efficiency of public expenditure on training can only be enhanced if a well-developed database is established on jobseekers’ trajectories before entering and after leaving unemployment, allowing for benchmarking local PESs. The regional governments should enhance the dissemination of best practices by budget allocation incentives such as making extensions of existing programmes contingent on success and subjecting new programmes to a sunset clause. These improvements are necessary to mitigate the expected increase in administrative costs of the PES in the context of implementing the new placement and control strategy.³⁹

The incentives to take up employment need to be strengthened further

With the enhanced follow-up on jobseekers’ actual search efforts and the co-operation agreement between ONEM, VDAB, FOREM, ORBEM and Arbeitsamt, the authorities have laid the cornerstone of a most welcome change in mentality towards a direct link between the right of receiving UB and professional placement help on the one hand and the obligation of getting back to work as quickly as possible on the other. However, the new arrangement does not *per se* ensure that this two-way engagement is felt throughout the unemployment spell. There is a risk that these measures intervene too late in the unemployment spell to effectively prevent newly unemployed persons from becoming long-term unemployed. The follow-up and control procedure is seen as a sequential substitute to enhanced placement and training services. However, it would be more promising to have a process that could rely on the two catalysts, highly professional placement services and strong economic incentives, earlier in the unemployment spell, as in other countries.⁴⁰ Therefore the regional PES should strengthen their efforts to establish a mutually binding personal relationship with their clients earlier in the unemployment spell, involving the client’s active co-operation in the screening process and an individualised reintegration strategy worked out by the PES. When evaluating the new control procedure in mid-2007, the authorities should particularly focus on analysing to what extent it has boosted jobseekers’ willingness to search actively at early stages, with a view to holding the control interview with the UB authority earlier than after 15 or 21 months.

As far as personal economic incentives are concerned, the net UB replacement rate is high for low-wage earners and two-earner couples with children and only declines mildly over time, representing an unemployment trap. This needs to be addressed over and above the social security subsidies granted to individuals, which alleviate the problem but are necessarily limited in scope due to budget constraints and the risk of a poverty trap. The government has explicitly ruled out limiting the duration of the ordinary UB for persons fulfilling their job-search obligations, notwithstanding reforms in neighbouring countries, which have recently reduced the maximum duration of UB (Germany, France) or integrated the systems of unemployment and social assistance, mostly at the level and conditions of the latter (Germany, the Netherlands). However, given that paid work is the most powerful vehicle of social inclusion, the government should exploit other options to increase work incentives in the UB system. The incentive to earn income from work should be strengthened by making the special tax reduction on UB contingent on being an active jobseeker (see Section on older workers above). The accumulation of pension rights while receiving UB should also be limited to active jobseekers, thus excluding UB-based early-retirement spells. Moreover, the calculation of accruing pension rights should switch from the former full-time work income to the actual UB received after some time so as to further lower the life-time-adjusted net replacement rate over time. Finally, partner-income testing should be considered after a prolonged period of UB because the unlimited receipt of spouse UB constitutes an unemployment trap for second wage-earners as suggested by the labour market response of persons whose spouse benefit was ended.⁴¹

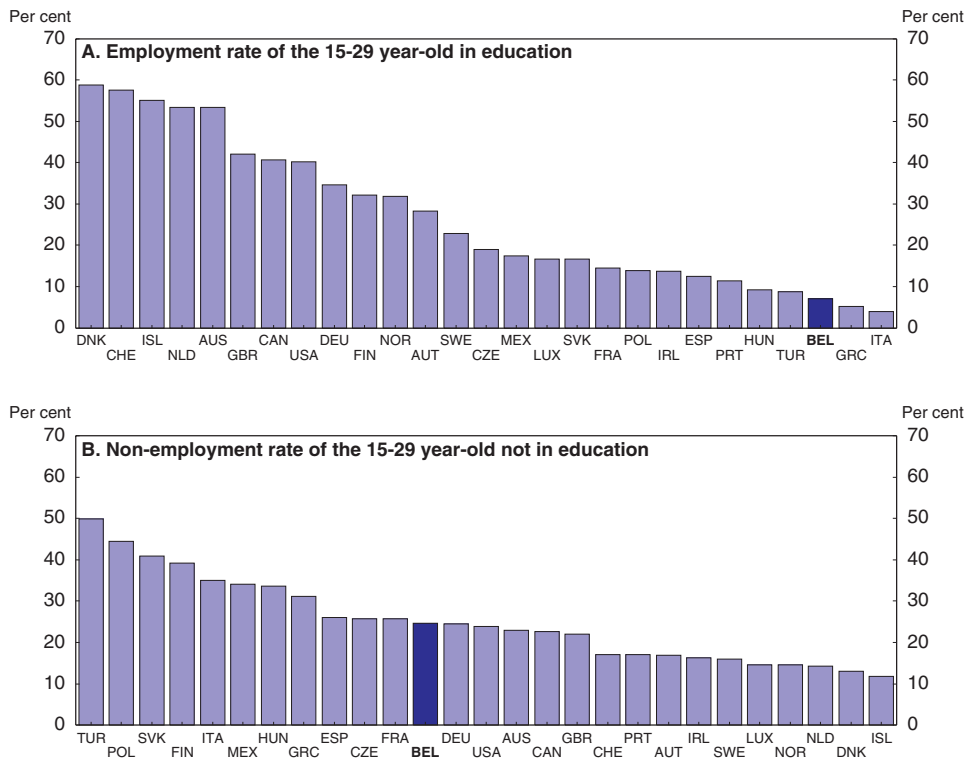
Combating unemployment and fostering employment of youngsters

The school-to-work transition is painful

With one person out of five unemployed in the age-group 15-24, youth unemployment is high throughout the country (see Figure 4.5 above).⁴² At the same time the employment rate is the fifth-lowest in the OECD, reaching 27% in 2003. While the time spent in education by the 15-29 year-old⁴³ population (6½ years) is comparable with that in other OECD countries with similarly high or higher tertiary attainment levels (OECD 2004c, p. 326), students in Belgium rarely combine education and employment, unlike those in many other OECD countries, where participation in education appears not to be an obstacle to employment (Figure 4.9).⁴⁴ Conversely, among the persons not in education, almost one-quarter is not employed. A 15-year-old in Belgium can be expected to spend 2.1 years outside education but not in employment up to the 30th birthday.⁴⁵

The school-to-work transition for persons without a degree from upper secondary education is more difficult in Belgium than in many other OECD countries. Having such a degree increases the likelihood of being employed by 26 percentage points (from 53 to 79%) for a 20-24 year-old (OECD average: 19 percentage points) and almost halves the likelihood of unemployment (OECD 2004c, p. 322 and p. 347). One major reason for this is the insufficient skill level of those who do not finish upper secondary education. It is urgent to reduce drop-out rates, which – while lower than the EU average – are particularly high in the French Community where overall unemployment is already high. Moreover, drop-outs there appear to signal a particularly strong risk of lacking basic knowledge and skills due to the streaming and sorting process inside the school system (Chapter 6). Even at higher attainment levels the school-to-work transition is not smooth. A longitudinal study for the Walloon Region found that about half of all upper-secondary degree holders stayed in uninterrupted unemployment or inactivity during the first year after the end of education,

Figure 4.9. **Few students work and many non-students do not work**
2002¹



1. 2001 for United States.

Source: OECD, *Education at a Glance* (2004).

compared with close to 70% for those without a degree (Vanheerswyngheles, 1998). Tertiary degree holders find a stable job in half of all cases, with the other half falling equally into persons going back and forth between employment and unemployment and those being unemployed throughout.⁴⁶ Recent actions taken by the French and Flemish communities to improve the situation focus on a better definition of job profiles in co-operation with social partners of various economic sectors and on the modernisation of the technical equipment of learning centres, implying substantial increases in the budgetary means devoted to them (see Chapter 6 and HEC, 2004b, pp. 55-56).

Reducing barriers to flexible combinations of education and work

Combining education and some form of paid work appears to be a promising way of smoothing the school-to-work transition.⁴⁷ Those 18 OECD countries where the unemployment rate for the 15-29 year-old not in education is lower than the 6.3% observed for Belgium in 2002, include each of the twelve countries that combine medium-to-long durations of education with paid work. This takes the form of institutionalised work-study programmes in Germany, Austria and Switzerland (“dual system”)⁴⁸ but even more often represents a spontaneous labour market outcome. Especially in the Netherlands, most of the English speaking countries and, to a lesser extent, Norway, many 15-24 year-old students take on paid work out of school – with no apparent undesirable side-effect on the duration or quality of their education (OECD, 2004c, pp. 319-320 and 336-337).

Labour markets need to be sufficiently flexible to absorb the additional part-time and/or temporary labour supply, raising the question of the strictness of employment protection legislation (EPL) and other barriers to flexible work arrangements. While the effect of strict EPL on the overall structural unemployment rate is under debate,⁴⁹ there is a large body of empirical literature showing that strict EPL is found to jeopardise the employment perspectives of fragile groups such as younger workers and the low-skilled.⁵⁰ A number of restrictions apply to temporary employment, making Belgium the seventh most restrictive OECD country in this respect according to a recent OECD evaluation of EPL (OECD, 2004d). Especially the use of temporary work agencies is heavily regulated although these agencies play an important brokerage role in a market of flexible and/or part-time work and contribute to the labour market integration of the population aged less than 30, which represents two-third of all temp-workers (Peeters and Van Pelt, 2004). Employers in some sectors are excluded from using temporary work and in others they have to prove a valid reason for doing so (replacement of a permanent worker; peak in work load; or exceptional work), with the number of renewals and maximum duration depending on the reason given. While regulation of regular employment contracts was found to be relatively light overall,⁵¹ there are specific aspects that make employment more difficult for labour market entrants such as the relatively strong increase of notice period rights early in the employment relationship. Collective agreements often extend employment protection beyond the legal minimum and remain relatively restrictive in terms of working time flexibility (OECD, 2003b). They also have installed the general practice of limiting probationary periods to only two months, requiring very careful (and costly) screening of job applicants.⁵²

Fiscal and social security disincentives constitute another important barrier to student work. While a student's personal income tax threshold is not different from that of any other taxpayer (€ 5 660 in 2004), the student ceases to be fiscally dependent on parents as soon income exceeds € 2 490 per year (€ 3 590 in case of single parent), with all sources of income counting against this limit. Moreover, employers and students are subject to the full contribution rates for any form of part-time contract outside holiday periods,⁵³ making regular work, *e.g.* in a field closely related to the content of studies, unattractive for both employers and students. The government should further reduce barriers to the use of flexible forms of employment and allow for more flexibility in working time, notably by phasing out fiscal and social-security advantages of working students and their parents more gradually so as to allow students to accumulate relevant professional skills during their studies and reduce the risks of hiring younger workers for employers. The authorities should also consider a more extensive use of internships as part of the regular curriculum in post-secondary and applied tertiary education, which favours the transition from education to (stable) work according to a study for the French labour market (Bédoué and Giret, 2000). It would also help students to make contacts with the labour market and probably also to make more informed specialisation choices in the course of post-secondary education.

Specific youth unemployment traps and barriers to mobility should be removed

Unemployed young persons who do not meet the work record requirements of UB have access to an alternative benefit paid by social security, the so-called waiting allowance (*allocation d'attente*), as of six months, nine months or twelve months after the end of their formal education, depending on age. If a student carries on working on a

student work contract after the end of his/her studies, this period is not recognised as a qualifying period, providing the former student with an incentive to stop working altogether.⁵⁴ The amount of the benefit is similar to that of social assistance or somewhat lower in some cases (*e.g.* single younger than 21) but the benefit is unlimited in time and not means-tested. The only limitation to enter the system is reaching age 30. While the duties in terms of job search are the same as for other unemployed persons, the regional placement agencies are generally more concerned with accompanying and training this target group (see Section on unemployment above). This arrangement constitutes another unemployment trap and makes young jobseekers less willing to extend the geographical and skill range of their job search to speed up the integration into the labour market. It also reduces the “sense of urgency” of making contacts with the labour market during education. The government therefore needs to emphasise job-search requirements and closely monitor search efforts for persons without a work record. More emphasis should also be given to activation measures during the school-to-work transition (*e.g.* in-work benefits). Should all these measures fail to decrease youth unemployment and to increase employment in the younger age group, the waiting allowance should be abolished.

Notes

1. The group of beneficiaries of “Canada Dry” arrangements is likely to be considerably more heterogeneous than that of pre-pensioners.
2. For older women, the rising trend dominates cyclical influences on participation for the age group shown in Figure 4.2.
3. Payments by the former employer in the context a pre-pension are exempt from income tax up to a cumulated UB-pre-pension income of € 11 850.
4. Moreover, the salary received in the former job remains the basis for the pension calculation, which may further discourage older unemployed persons from accepting a new job with a lower wage. Specific measures taken in 2000 and 2001 addressed the additional employment trap due to the pension calculation. Above age 50 an unemployed person accepting a lower-paid or part-time job receives the UB based on the earlier salary if he becomes unemployed again and qualifies for the old-age supplement without the usual one-year waiting period. During the work episode and the new unemployment spell, the former salary is taken for the calculation of legal pension entitlements.
5. Premature access to second-pillar pension capital has recently been restricted (see below).
6. Mixed blue- and white-collar units have higher seniority-related wage increments than “pure” units.
7. Moving from the lowest-paid function at young age to the highest-paid function at an advanced age would almost triple the contractual wage for white-collar workers and multiply it by 2.5 for blue-collar workers (HEC, 2004a, p. 138).
8. Reviewing the empirical literature on how the evolution of cognitive abilities influences individual job performance, Skirbekk (2004) finds reductions in productivity, which are strong for work tasks where problem solving, learning and speed are needed, whereas in jobs where experience and verbal abilities are important, older individuals maintain a relatively high productivity level. However, the finding of productivity for older workers being lower than that of their younger colleagues could be biased in several ways, *e.g.* the fact that older workers tend to work in less productive firms belonging to declining industries and need more time to adjust to productivity shocks. When correcting for bias, estimations for France suggest that productivity rises until age 40 and does not change significantly thereafter, although standard deviations are high, reflecting uncertainty (Aubert and Crépon, 2003). Another bias that goes into the opposite direction stems from the high likelihood of early withdrawal from the labour market to be concentrated among the least productive workers (selection bias).

9. The employer receives € 500 per month during 5 years for hiring a person unemployed for at least 6 months on a full-time basis and a prorated share of it for part-time contracts. In early 2004 a total of 8 600 contracts were benefiting from the subsidy.
10. Furthermore, interest subsidies on loans are granted to persons aged over 50 who want to create their own business. The maximum loan was increased to € 37 500 in 2002.
11. More recently, the Experience Fund (*Fonds de l'expérience professionnelle*), which finances targeted measures within firms to improve working conditions for workers as of age 55, became operational in spring 2004 with a view to making working longer more attractive for older workers (FPS Employment, 2004a).
12. In-work benefits that are independent from age are discussed below (Section on unemployment).
13. The existing system of "career interruption" remained in place in the public sector as did the specific leave schemes in case of birth of a baby, long-term and intensive-sick care of a household member. In the public sector the rules were adjusted to match those prevailing in the private sector without, however granting more generous leave conditions for employees over 50.
14. The transfer is one-third higher for employees with at least five years with the current employer, bringing the transfer to € 516 for a full-time time credit (HEC, 2003, pp. 372-373). Half the amounts apply for taking a half-time credit.
15. In some cases employees stay at home altogether during five years while officially using a 50% time-credit. Employers supplement the income (half the salary plus the social security allowance) with an incentive pay covering (part of) what is missing from their former full net salary.
16. The overall volume of labour supply will only increase if the target groups have a significantly greater elasticity of labour supply than non-target groups at current replacement rates.
17. During the 1990s job-search requirements for persons on UB and social assistance were sharpened, leading to an increase in DB applications, which offset the increase in DB rejection rates and the impressive fall in the rate of successful appeals against rejection.
18. The average sub-regional duration of unemployment of persons younger than 36 lies between 16 and 27 months for men and 22 to 49 months for women. It increases to 28-41 months (men) and 30-66 months (women) in the age group above 46, with the 36-46 year-old taking an intermediate position. For most of these groups minimum average durations are observed in Arlon, whereas most maxima are observed in Hasselt or Gent. Very long average durations hit Flemish, Walloon and Brussels sub-regions alike.
19. In 2003, 57.5% of all 50-64 year-old unemployed persons exempt from job-search obligations were registered in the Flemish Region, compared with 32% for the Walloon Region, in line with the respective regional shares in labour supply and population of that age. Flanders has, however, a higher share of pre-pensioners aged 50-64 (67%).
20. Only involuntary unemployment qualifies for UB. The number of days required for the ordinary UB corresponds to one year of work during the past 1½ years until age 36, 1½ years of work during the past 2¼ years for persons aged 36-49, and to two years of work during the past three years as of age 50.
21. During the first year, an unemployed person receives 60% of the former gross wage (slightly less for a spouse/second wage earner). This wage is capped at € 1 643 per month, making the cap binding already at about two thirds of the APW pay. The replacement rate is kept at 60% for a breadwinner but is reduced to 50% for a single and 40% for a spouse / second wage earner beginning with the second year of unemployment. After a time period depending on the length of the work history, the UB is reduced further for spouses with less than 20 years of work history.
22. Enforcement of job-search requirements for former second wage earners is not systematic. In 2003 about 8 400 persons were excluded from continued UB payments (43% in the Flemish, 46% in the Walloon and 11% in the Brussels-Capital Region).
23. The panel regressions in Boone and van Ours (2004) alternatively refer to the unemployment rate and to the employment rate as the dependent variable.
24. Concerning unemployed youngsters, specific reintegration efforts were agreed between the social security authority and the regions in 2000.
25. Also, the small number of spouse UB withdrawn due to excessive duration were based on insufficient search efforts on the local labour market.

26. This linguistic divide does not, however, hinder considerable employment in the other parts of the country (OECD, 2003b, p. 121). In particular it should be of only limited concern for labour flows between Brussels and either the Flemish or Walloon region.
27. The procedure started for unemployed persons younger than 30 in July 2004 and will be extended to those aged 30-39 in July 2005 and those aged 40-49 in July 2006. An evaluation is scheduled for mid-2007.
28. One contact between the jobseeker and the PES is sufficient to satisfy the condition of an intensive service.
29. The Brussels authorities are concerned with the low reporting of job vacancies by employers and attribute this attitude to large skill mismatches.
30. Even before the inter-governmental co-operation entered into force, the regional PESs communicated non-compliance to the benefit authority (ONEM). In 2003 the VDAB (Flemish Region) reported 6 736 cases, the ORBEM (Brussels) 3 158 and the FOREM (Walloon Region) 596. However, most of these transmissions were related to jobseekers having found a job or address changes.
31. While Scarpetta (1996) finds significant effects on both the unemployment and the employment rate, Elmeskov *et al.* (1998) and Nickell and Layard (1999) do not find any effect of ALMPs on the employment rate.
32. PESs influence the unemployment rate but no significant effect is found on the employment rate. However, when disaggregating by sex, they have a positive influence on the employment rate of men. Gender-specific effects are also found in other categories of ALMPs.
33. ALMP spending for disabled persons accounted for 0.13% of GDP in 2002, reflecting subsidised jobs. The OECD database distinguishes between five spending categories: i) placement activities; ii) labour market training; iii) specific youth measures; iv) job subsidisation; and v) measures in favour of handicapped persons. Only ii) and iv) are discussed in this section. Specific youth measures were negligible according to the data as the young beneficiaries of labour market training measures are counted under ii) (OECD, 2004d).
34. The Employment Conference between the government and social partners in October 2003 fixed the objective of creating 25 000 additional jobs in household services and 12 000 more subsidised jobs in the non-profit sector.
35. The household buys a service voucher for € 6.20 and uses it to pay for one hour of service provided by a professional household service company. Moreover, the household obtains a tax return of 30%, reducing his own contribution to € 4.34. The company cashes the service voucher in and receives a subsidy of about € 13 per hour worked to finance gross wages, social security contributions and capital services. Accounting for personal income tax and social security contributions paid by the employee, as well as the tax expenditure for the household, the net subsidy falls to some € 7.
36. There were almost as many participants in pre-qualification measures as beneficiaries of job training measures in the French-speaking areas. In the Flemish Region, “module 6” (assisted learning on the workplace), the only one containing pre-qualifying (but also directly qualifying) elements, was the second-most demanded training module.
37. The observation is in terms of “trajectories”, *i.e.* aggregating the observations over time until 2 years after the training ended. A similar share of trainees on unemployment was observed for the Flemish participants six months after completing the training (Struyven *et al.*, 2000).
38. The drop-out rate is lower the higher attainment and age, the shorter the duration of non-employment, and in cases where the personal motive of the participant truly consisted in finding a job as opposed to using his time usefully (Conter *et al.*, 2003).
39. Spending on public placement services, the third most important ALMP category, accounted for 0.2% of GDP in 2002. The Flemish Government has increased the placement budget by € 33 million in 2004 and another € 33 million in 2005 to absorb the growing number of persons falling under the job-search follow-up procedure.
40. In Austria, refusing a job offer that matches the jobseeker’s profile may entail UB sanctions whenever this job offer is made. In Germany and the United Kingdom, the jobseeker signs a contract of mutual obligations that makes simultaneous use of the “stick” and the “carrot”. In the Netherlands, the jobseeker’s scope for refusing a job offer without being punished gets more and more narrow as the duration of unemployment increases.

41. A recent study finds that the exhaustion of unemployment benefits of long-term unemployed female workers has an important significant positive impact on the probability of employment (Cockx and Ries, 2004). The probability of employment rises from virtually zero at the moment of notification (three months before expiration) to about one-quarter 14 months after the end of the entitlement period, with most of the effect occurring within a few months around the expiration date. Given the restriction of the sample to spouses whose UB was actually terminated, this probability underestimates the true effect of limiting the duration of UB on the inflow into employment. The findings by Cocks and Ries (2004) on the only group of unemployed persons with limited UB duration in Belgium are in line with the empirical evidence found in other countries on the effectiveness of benefit sanctions (see e.g. Abbring et al., 2000 for the Netherlands and Jensen et al., 2003 for Denmark) and strong increases in the employment probability towards the end of the entitlement period (e.g. Bratberg and Vaage, 2000 and Roed and Zhang, 2003).
42. While regional differences are large in absolute terms (one out of three persons in Wallonia and Brussels compared with one out of six for Flanders), they are negligible in relative terms as the risk of being unemployed is about three times as high for youngsters as for the remaining working age population throughout the country.
43. The simultaneous breakdown of the younger population into labour market and educational status across countries is only available for the age-group 15-29.
44. With 45% of the 15-29 enrolled in education, raising the employment rate among these persons to the non-weighted OECD country mean (26.5%) would raise the employment rate by about 9%.
45. While 2.1 years of non-employment outside education corresponds to the non-weighted OECD country mean, the latter is influenced by the observations for Turkey, Mexico and the Central European OECD members (except the Czech Republic) with non-employment durations of 3 years or more.
46. Similar studies for Flanders suggest that the problem of transiting to work is more closely linked to low attainment. Close to 11% of the youngsters finishing education in 2001 were unemployed one year later (half of them without any work experience in between). More than one-third of them were without a diploma from upper secondary education. Another study found the average time to find one's first job to be 4 ½ months (HEC, 2004b, pp. 57-59).
47. For the French labour market, Bédoué and Giret (2000) find that i) regular or frequent employment during education greatly helps young persons at all attainment levels to find their first stable jobs; ii) internships beyond some minimum duration favour the transition; but that iii) occasional work (e.g. a holiday job) does not speed up the school-to-work transition, possibly because the link to education and training curricula is generally looser. The indicators chosen in the assessment of school-to-work transition are the time needed to find the "first" (stable) job, the ability in obtaining an indefinite-term contract and the salary at the start of the career (Cahuzac and Giret, 2001). The OECD will probably study the school-to-work transition in depth for a number of member countries starting in 2005.
48. The applicability of the dual system appears to be very limited in the Belgian context. Several work-study programmes exist (e.g., *apprentissage de professions de salaires*, *formation en alternance*, *Convention emploi-formation* in the French Community; *Alternerend leren voor leerplichtigen* in the Flemish Community, see HEC, 2003). However, enrolment in these programmes is low. In most cases they provide an early way out of formal full-time education for 16-year-old students with learning difficulties rather than representing a deliberate choice and insofar suffer from a negative selection bias. Moreover, they do not mimic the advantageous aspects of the German system, i.e. nationwide definition of job profiles with required competencies being controlled in a final exam, and involvement of companies in the modernisation of the curricula.
49. See, however, contributions pointing to harmful EPL effects on structural unemployment in the Belgian institutional context of above-average union coverage (Belot and Van Ours, 2004) and an intermediate level of wage bargaining (Elmeskov et al., 1998).
50. For an overview see OECD (1999 and 2004d). Heckmann and Pagès (2000) find that strict EPL reduces youth employment more strongly than overall employment. Scarpetta (1996) detects stronger effects of EPL on youth unemployment and non-employment rates than on overall unemployment and non-employment rates. Strict EPL reduces inflow and outflow from unemployment while increasing job-to-job mobility (Bertola and Rogerson, 1997). The fact that quits occur less frequently and are often not refilled further reduces outsiders' chances of finding a job (Boeri, 1999). As a consequence, the incidence of long-term unemployment increases (Nickell and Layard, 1999).

51. Belgium came out as the eighth-least restrictive OECD country in the field of regular employment contracts (OECD, 2004d, p. 112).
52. The fact that requirements in job vacancies are often tied to specific diplomas is an indication of employers' risk-aversion in hiring young staff. As these specific codified qualifications are not always available, the perceived skill shortage is greater than it would be under more flexible hiring conditions.
53. By contrast, a generous regime applies for student work during up to 23 working days in the summer months for which the employer and the employee social security contribution is only 5% and 2.5% of the gross salary, respectively.
54. Moreover, the former student's parents lose their dependent child allowance if the monthly salary exceeds € 424.

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Chapter 5

Enhancing the economic impact of migration

This chapter looks at measures to enhance the economic impact of migration in Belgium. Migrants come not only from other EU countries, but also from Northern Africa, Turkey and Central Africa (former Zaire) and Asia. More recently migration is mainly driven by family re-union (also helped by a regularisation programme) and asylum seekers. The economic integration of foreigners from non-EU countries is very weak. Employment rates among women are particularly low while men suffer from exceptionally high unemployment rates. The PISA study finds educational achievements of foreign children to be poor. Insufficient language capacity is generally thought to hinder foreign children in acquiring the relevant skills at school. There is some research evidence for discrimination and Belgium has an explicit government strategy against discrimination in place.

For nearly a century Belgium has been a destination for many migrants for a wide variety of reasons and from a wide variety of origins. However, the foreign-born labour force is on average contributing less to economic activity, as is the case in many other OECD member countries. Although employment rates have been increasing, foreigners have a lower rate of labour force participation, higher unemployment rates, lower educational attainment and may face discrimination. The phenomenon is complex, as are the interactions with other fields, in particular concerning the labour market including the social benefit system and education. The main challenge for the authorities is to find a way to enhance the economic impact of migration. This chapter examines two possible obstacles which have to be overcome in this respect, discrimination and insufficient education. Further policy recommendations to some extent also rely on efforts to improve the functioning of the labour market and business environment in general. Box 5.1 summarises the recommendations aiming at enhancing the economic impact of migration.

Box 5.1. **Recommendations to enhance the economic impact of migration**

- It is essential that foreigners command an appropriate amount of language capacity. Children of foreign-born parents should receive the amount of language training making it possible for them to successfully participate in a school career that endows them with labour market relevant skills. Foreigners should be offered opportunities to acquire language capacity sufficient to set up a business or engage in self employment and job search.
- Measures already in place to tackle discrimination should be evaluated in terms of outcomes. Measures to strengthen entrepreneurship should be used to mobilise the economic potential that is wasted by discrimination.
- Efforts to improve the employability of groups with a low attachment to the labour market (see Chapter 4) should also be specifically targeted at the foreign labour force and adapted where needed. These measures include enforcing job search requirements and increasing in-work benefits.
- Communication and co-ordination among the various involved government units should be improved in order to avoid disruptions of some specific labour markets (in particular construction) through the substitution of contract forms, which is motivated by different treatment of work permits and trade licenses.
- More efforts should be undertaken to improve statistical information about foreign-born resident family members and their economic activities. Without proper information about the characteristics and needs of the resident foreign population, it is not possible to properly target programmes. Survey information should not only include participation in government schemes, like active and passive labour market programmes, but also allow to link sociological characteristics and economic activity to be linked. Such information should be collected – as is internationally usual – in anonymous forms in order to meet privacy concerns.

One of the main difficulties with data for analysing immigration in Belgium (as well as other European countries¹) is the fact that, in almost all cases,² the classification of people's origin is based on nationality rather than birth. Thus foreign nationals are not necessarily immigrants, because they may have been born in Belgium to foreign parents. Belgian nationals may be immigrants if they have obtained Belgian citizenship, which is the case for large numbers of people over the last two decades; this gives rise to the paradox that despite continued net immigration since 1990, exceeding the rate of natural population increase, the share of non-nationals in the population is lower now than in 1990. Some interesting information is available but is tantalisingly incomplete. For example, in Flanders (but not in other regions) the employment service has collected data on the educational characteristics of the unemployed according to their origin, with the latter measured alternatively by nationality or by country of birth; but corresponding data are not available for the employed, or the labour force as a whole, so the interesting differences revealed in these two approaches cannot be properly interpreted. Another example is PISA data on educational performance, which includes analysis of the results according to the country of birth of the child, whereas a corresponding analysis using national data is not possible. To some extent this situation is explained by historical experience of misuse of personal data in the mid-twentieth century; even where this is still felt to be relevant today, it may be possible to use a sample survey approach to gather indicative data in certain areas, without arousing fears of misuse of linked centralised data files. This might be thought to be particularly useful to gather evidence against which the extent of discrimination problems (which are certainly based more on origin by birth than current nationality) can be measured, and the overall efficacy of anti-discrimination measures can be judged.

Migration is an important phenomenon for Belgium and numbers lie above the average for the EU.³ Over 8% of the Belgian population, or some 850 000 people⁴ out of 10.4 million, do not have Belgian nationality. Around 70% of these are EU nationals⁵ and most come from one of five regions: – EU-neighbours (France, Netherlands, Germany), EU-Mediterranean (Italy, Spain, Greece, Portugal), Non-EU Mediterranean (Turkey, Morocco, Tunisia), Central Africa (Democratic Republic of Congo) and EU-East (Poland) (Table 5.1). Belgium belongs to those countries where a natural increase of the population goes together with positive net migration.⁶

This pattern has its origin in five different kinds of movement since the First World War (WW I):

- The first wave of migrants from neighbouring countries, plus Poland and Italy (about 170 000 persons) joined the booming Walloon coal based heavy industries after WW I. The Great Depression stopped the relatively liberal attitude of the authorities and a basic legal framework for granting work and residence permits was introduced.
- The second wave arrived after the end of WW II and comprised mainly workers recruited abroad to provide labour in mining and heavy industries and later to an increasing number of Flemish industrial centres. These were mainly from the European and Non-European Mediterranean.⁷ These migrants filled the demand for cheap labour of industries and occupations, which were not attractive for locals, and may have contributed to a slowdown of restructuring in these industries, which were later forced into mass layoffs.

Table 5.1. **Shares of foreigners in population, main nationalities in 2002**

	%	
Total resident population	10 356 000	100.0
<i>of which</i>		
Belgian nationality	9 506 000	91.8
Foreign nationality	850 000	8.2
EU15	567 000	5.5
Italy	187 000	2.4
France	113 000	1.1
Netherlands	97 000	0.9
Other EU15	170 000	1.6
Non-EU15	283 000	2.7
Morocco	84 000	0.8
Turkey	43 000	0.4
Democratic Republic of Congo	14 000	0.1
United States	12 000	0.1
Poland	10 000	0.1
Other non-EU15	122 000	1.2

Note: Figures are based on population registers, and are rounded to the nearest 1 000.

Source: OECD, *Trends in International Migration* (2004).

- The third movement has been of migrants from EU countries, partly from immediate neighbours, but also from other member countries and in large part to staff international institutions.⁸ The early immigration from Spain and Greece occurred before these countries were EU members, and that from Italy before the freedom of movement for labour within the European Union was fully established. There is currently an inflow from Eastern Europe although some restrictions on the free movement of labour still apply.
- The fourth wave of migrants consists of political refugees asking for asylum in Belgium. While visa-policy (the possibility to enter a country with any kind of visa) certainly plays a role for the destination choice of an asylum seeker it is more language capacity, presence of compatriots, colonial bounds and the kind of support (financial or material) which determine where a foreigner is applying for asylum.⁹
- A special case is the migration from Central Africa, where a former colony is located. Many of its inhabitants carry Belgian passports, allowing for a rather free movement in and out.

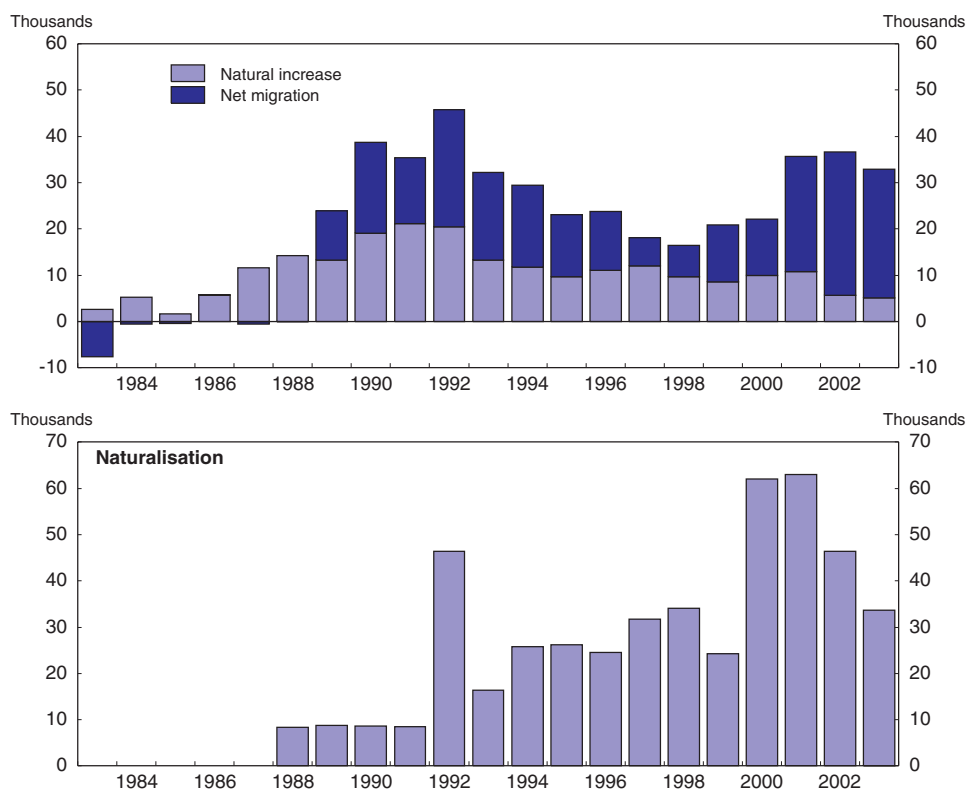
In many cases migrants first come alone, but family members follow later on. Current inflow rates are somewhat above ½ per cent of the population, which is of similar magnitude as in other smaller EU15 countries. Outflow rates are much smaller and net migration inflow amounts to somewhat less than ½ per cent of total population.

The main policy instrument regulating migration was a series of bilateral agreements, beginning with Italy in 1946, and continuing with Spain (1956), Greece (1957), Morocco (1964), Turkey (1964), Tunisia (1969), Algeria (1970), and Yugoslavia (1970). The tight labour market of the 1960s provoked a relaxation of the otherwise quite strict legislation governing immigration. This allowed a large number of foreigners to enter with tourist visas while actually looking for work and contributed to the presence of a large number of foreigners without proper papers.

The share of foreigners in the total population declined somewhat during the 1990s, having earlier been 9% or higher. This is despite a positive net inflow of migrants in every year since 1984, an inflow which for most of the 1990s exceeded the natural increase of the population.¹⁰ That this did not result in an increase in the share of foreigners is due to a considerable number of foreigners obtaining Belgian citizenship, which typically exceeded net immigration for nearly all of the 1990s¹¹ (Figure 5.1). Once obtaining citizenship, immigrants cease to be visible as foreigners – there are few data on the population by place of birth, mostly by nationality.¹² Some indirect indication on the number of immigrants in the country compared with the number of people of foreign nationality can be found in data collected for the PISA study on comparative educational performance. Thirteen per cent of Belgian children in this study (representative for lower secondary students) were born in Belgium to parents of foreign origin, 5% were themselves born outside Belgium.

Figure 5.1. **Population movement: natural increase, net migration and naturalisations**

1983-2003

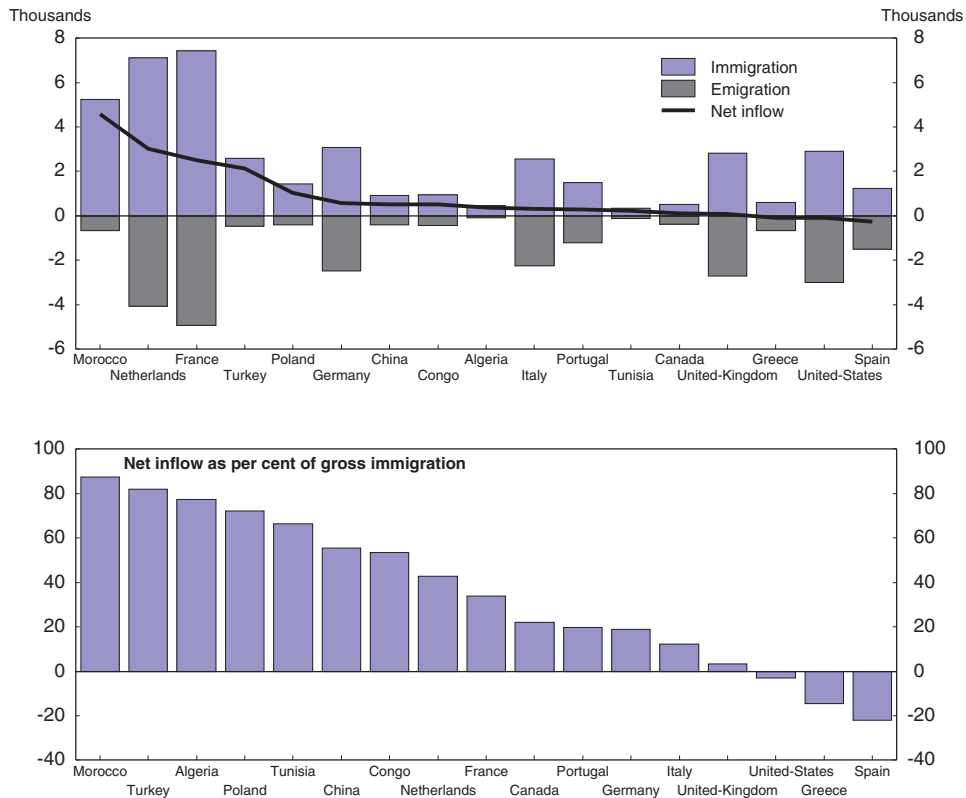


Source: National Institute of Statistics.

It is notable that for nationalities where the barriers are low, there are quite large flows in both directions, with net immigration rather low relative to gross inflows. This concerns mainly EU15 countries and Democratic Republic of Congo, a former Belgian colony.¹³ For other countries, such as Poland, Morocco, Turkey and Tunisia, the flows are predominantly in one direction (Figure 5.2). About 50 000 Belgian residents are cross-border workers; nearly half of these work in Luxembourg, one third in the Netherlands, and the rest about

Figure 5.2. **Migration flows by nationality, gross and net**

Average, 1995 – 2002



Source: National Institute of Statistics.

equally in Germany and France. Belgians and resident foreigners working in international organisations and diplomatic missions are also counted as cross-border workers in the country of origin.

Foreigners have on average a lower level of educational attainment and a different age structure than that of Belgian nationals, and EU foreigners are different from non-EU nationalities (Table 5.2). While non-EU foreigners are younger than Belgians, EU foreigners are on average older, or at least they are more concentrated in the prime working age. Non-EU foreigners clearly have lower average levels of education, but so, perhaps surprisingly, do EU nationalities, who constitute, however, a rather heterogeneous aggregate of low and high qualified workers.

Regional differences within Belgium are also replicated for foreigners and appear somewhat more accentuated for non-EU citizens (see later Table 5.3). The average unemployment rate in Belgium was 4.4% for Belgian citizens in 2002; in Flanders it was 3% and Wallonia 6%. For non-EU citizens the corresponding figures are 16.6%, 12.7% and 20.9%. However, while the absolute differences are larger, in proportionate terms the relative levels are similar. But Brussels-capital is the region with the highest unemployment rate for Belgians, while for foreigners the rate there is less than in Wallonia. Thus, foreigners share the large regional differences in labour market performance even on top of their higher level of unemployment.

Table 5.2. **Labour market status, age and education: Belgians and foreigners, 2003**

	Total	<i>Of which:</i>		
	Distribution in %	Belgian	Other EU	Non-EU
By labour market status				
Employed	59.3	60.6	54.4	30.7
Unemployed	5.0	4.5	7.1	15.2
Inactive	35.7	34.9	38.5	54.1
By gender				
Women	49.6	49.9	45.5	49.4
Men	50.4	50.1	54.5	50.6
By age				
15-24	18.4	18.8	9.9	23.2
25-54	65.3	64.7	72.9	70.9
55-64	16.2	16.6	17.3	5.9
By education level				
Low skilled	40.6	39.4	52.1	54.4
Medium skilled	34.8	35.4	28.7	26.4
High skilled	24.6	25.1	19.3	19.2

Source: Eurostat; LFS.

Immigration policy

For people from most countries – other than the European Economic Area, Bulgaria and Romania – an entry visa is required and all people from non-EU countries require a residence permit for a stay longer than three months. In general, the residence permit is subordinate to the work permit (Box 5.2): a work permit is required to legally stay in the country. However, those people that for specific reasons are legally allowed to stay in Belgium, such as asylum seekers or those having migrated within the framework of family reunification, can obtain access to the labour market and therefore can get a work permit on the basis of their residence permit. The federal government issues all residence permits and the regional governments issue all work permits on the basis of the federal legislation. Along with many other European Union countries Belgium has introduced transitional arrangements for new EU members under which they will continue to be treated as non-EU countries for immigration and work permit purposes (except for entrepreneurs, see below) for at least two years.

Most permits issued are temporary. Thus, in the period 2000-02 the regional administrations issued about 32 000 A and B permits, of which only about 4 000 were permanent (type A). Type C permits didn't exist yet in this period. In turn, most of the temporary permits were issued for highly skilled or other special categories of students, researchers and sportspeople.

Partly because of family reunification, as well as dependants accompanying work permit holders, total gross immigration by far exceeds the number of work permits issued, and in recent years has shown rather less variation. For example, although the number of work permits issued (not including renewals) declined considerably between 1993-94 and 1996-97, before increasing somewhat again, immigration declined by rather less, but soared in 1999-2000 as a result of the large number of asylum seekers¹⁴ (Figure 5.3). Over the same time period the number of successful asylum requests increased but has remained low compared with migration inflows.

Box 5.2. Work permits in Belgium

Work permits themselves can be distinguished according to the kind of job and whether the applicant has already worked for 4 years or more in Belgium. For most kinds of job, a permit is given only if no suitable person can be found already on the Belgian labour market; this labour market test does not apply for certain kinds of employment: skilled or management positions, sports people, artists and *au pairs*, for example.* If the person has worked in Belgium for less than four years, then (provided the other conditions are satisfied) a permit valid for at most one year, and a specific employer, is given (known as a “B” permit). After four years an “A” permit is given which is of unlimited duration and for any kind of job.

People wishing to enter as entrepreneurs (including self-employed workers) need to apply for a “*carte professionnelle*,” which is issued by the Federal Public Service Economy, SME’s, Self-employed and Energy, but this requirement was not applied to people from Central and Eastern Europe who had association agreements with the EU (this includes those who are new EU members, plus Bulgaria and Romania). The main criterion for issuing the *carte professionnelle* is that it be in the “economic interest” of Belgium.

A third class of work permit – “C” – is available for special categories such as asylum status seekers whose request is admissible until the final decision, victims of human trafficking or students. It is valid for up to one year and can be renewed. Since 2003, students with a residence permit and being registered with a full time study programme in Belgium can apply for a temporary and renewable work permit while being in the country.

In all cases the Federal Ministry of the Interior retains discretion on issuing a residence permit, even when a work permit is available, although if the conditions for family reunification are met, a residence permit is automatic. Once a residence permit is granted, holders are entitled to the full range of social, national and medical insurance benefits.

* Democratic Republic of Congo (former Zaire) and other former colonies barely figure in statistics of foreign population by nationality. Up to 1960, Congolese carried Belgian passports and were not distinguished from Belgian citizens in Belgian statistics. Prior to 1994 they did not need work permits.

Regularisation

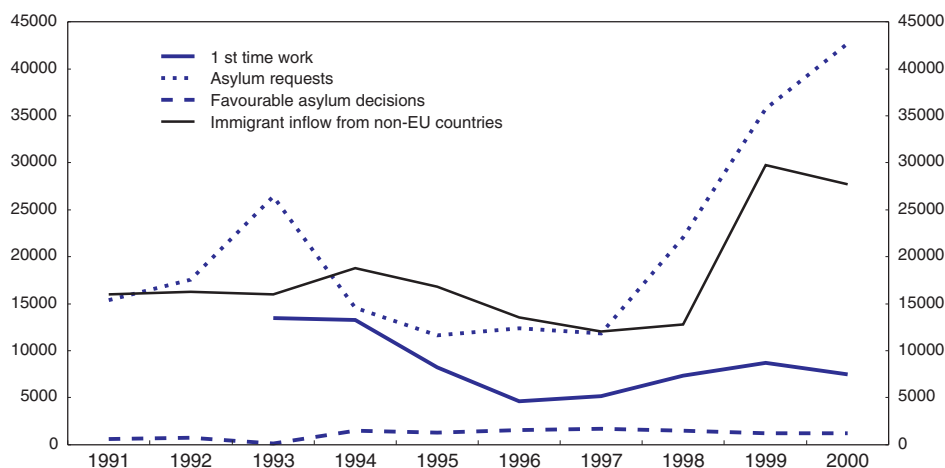
In 1999 the government announced a regularisation scheme for the “*sans papiers*”, foreigners illegally in Belgium without residence permits, the first such scheme since 1974. Implemented in 2000, it gave residence to about 40 000 people (out of 50 000, in 38 000 applications),¹⁵ about three quarters of whom were accepted on the grounds of having formed strong and long-lasting social attachments in Belgium; other criteria were on grounds of grave illness, where return to their country of origin would be dangerous, or where an application for refugee status had been pending for more than 4 years (3 in the case of families with school-age children). Based on administrative figures at the end of 2004, Congolese (17.5%) and Moroccan (14.1%) nationalities together accounted for almost one third of the total number of regularised applicants. Immigrants from Yugoslavia and Poland accounted for another 6% each, followed by Turkey (4.1%) and Pakistan (3.6%).

Immigrants in the labour market

One of the most striking observations about the Belgian labour market is the high unemployment rate among people with non-OECD nationalities; furthermore, their participation rates tend to be low, although more recently employment rates have been

Figure 5.3. **Belgium, recorded immigration, asylum seekers, and work permits issued**

1991-2000



Source: SOPEMI, *Trends in International Migration*, 2001.

increasing. Belgian statistics unfortunately provide remarkably little information on what characteristics – such as age and education level – distinguish immigrants from the Belgian-born, and Belgians from non-Belgians. These difficulties are compounded by the fact that, following naturalisation, some Belgian citizens may be immigrants while some non-Belgian citizens (if they have not been naturalised) may have been born and brought up in Belgium. Nonetheless, the indications (including parallels drawn from other countries' experience) are that the tendency for certain immigrant groups, or groups of immigrant origin, to have high unemployment rates is strongly related to their concentration in relatively low-skilled jobs, often due to linguistic difficulties or to low levels of educational attainment; discrimination in the labour market is also a factor. A particular feature in the Belgian case could also be the high concentration of foreigners in declining sectors like coal mining and steel.

It is not just the status of foreigner or immigrant that leads to high unemployment. On average, the unemployment rate of male foreigners has been two to three times that of Belgian males through the 1990s, and in 1999 the figures were 19% and 7½ per cent respectively. The rate for females is higher in both cases and the average for males and females together in 1999 were 22.8% and 9.8% for foreigners and Belgians respectively. In 2001, according to census data, the average unemployment rate for foreigners was just over twice that of Belgian nationals (Table 5.3). But there were wide variations among different nationalities: that for EU citizens was 16%, including quite high rates for Germans and French (who one might expect to be relatively high-skilled) and well as Portuguese (who in Luxembourg form a relatively low-skilled group), and lower rates for British and Irish; but for Congolese, Moroccans and Turks the rate is over 40%. It seems that those features, which slow down the reallocation of job-seekers into employment (see Chapter 4) are particularly at work for foreigners. In absolute terms the number of jobs for foreigners necessary to bring down their unemployment rate to the level of locals is 38 000,¹⁶ or 0.7% of the labour force, which is one of the highest rates among EU countries.

As Table 5.3 shows, there is equally wide variation across nationalities in the overall employment and participation rates. Generally Belgians, Dutch and Italians are among the

Table 5.3. Labour market indicators by nationality, 2001

	Belgium	<i>of which</i>		<i>of which</i> EU15	<i>Memo</i>	Variations by region and nationality ²			
		Belgians	Foreigners			Lowest	Highest		
Employment rate ¹	38.3	38.8	32.7	38.6	Congolese: 17.2 Turks: 19.4 US citizens: 21.3 Dutch: 44.7	Wallonia/Turks: 15.0 Wallonia/Moroccans: 15.6	Flanders/Dutch: 45.1 Flanders/Italians: 44.3		
Participation rate	68.9	70.4	55.5	60.5	Turks: 44.8 Moroccans: 44.8 Congolese: 45.2 Italians: 62.3	Wallonia/US citizens: 20.5 Wallonia/Moroccans: 42.9	Flanders/Belgian: 71.7 Flanders/Dutch: 67.4		
Unemployment rate	10.7	9.7	21.8	15.7	Congolese: 49.7 Moroccans: 41.7 Italians: 21.0 Dutch: 7.0	Flanders/Belgian: 6.3 Flanders/Dutch: 6.6	Wallonia/Congolese: 55.0 Wallonia/Turks: 52.9		
Over 18 and in education as a percentage of working age population	5.5	4.2	5.7	3.1	Italians: 2.2 US citizens: 2.9 Moroccans: 6.9 Congolese: 15.1	Brussels-Capital/US citizens: 1.4 Brussels-Capital/Dutch: 1.9	Wallonia/Congolese: 17.9 Wallonia/Moroccans: 9.7		

1. Employment as per cent of total population.

2. Only nationals of the following countries were considered: Belgium, Congo (Republic), France, Germany, Greece, Italy, Morocco, the Netherlands, Portugal, Spain, Turkey, United Kingdom and the United States.

Source: Institut National de Statistiques, Census data.

most successful in the labour market, Africans and Turks the least successful.¹⁷ Variation across the different regions does not change this conclusion: although the labour market situation is much more favourable in Flanders than elsewhere for Africans and Turks, their unemployment rate is still three to four times that of Belgians in the same region.

There are equally large differences in the categories into which unemployed foreigners and Belgians fall. Over 80% of Belgians who are “unemployed and seeking work” are receiving unemployment benefit (a similar figure applies to EU nationals), whereas this is true of only about 50% of non-EU foreigners (who receive more often lower and means tested social assistance). Nearly 30% of unemployed non-EU citizens are looking for work as self-employed (the rate is less than 10% for Belgians). It is likely, therefore, that the typical unemployed Belgian receives somewhat more public support than an immigrant.

Differences can be observed in educational levels of unemployment among young Belgians and foreigners which also suggest that different factors are at work. According to 1991 census data (2001 data are not yet available), only 20% of unemployed Belgians under 25 had completed only lower secondary education, whereas this was true for two thirds of Moroccans and Turks. However, according to Van Den Gruyce (2000), the impact of more education on the probability of an unemployed person getting a job was much greater for Belgians than for these foreigners i.e. although the much higher unemployment rates among non-OECD foreigners can be partly explained by their relatively low education or skill levels, educational achievement among foreigners is less highly valued by employers, possibly because of discrimination.

High unemployment among the foreign labour force from outside the EU is a widespread phenomenon, although differences exist. In some countries that have labour market institutions which are conducive to low unemployment for nationals (Austria, Portugal, United Kingdom), the unemployment rate among non-EU foreigners is only around 10%, while it is above 20% for others (Germany, Spain, France, Finland).¹⁸ Obviously country specific factors –among them the nature of labour market institutions – can make a difference.

Poor labour market performance: discrimination or bad education?

An important aspect of the immigration process is the degree to which immigrants become integrated into the host economy. This may be measured initially by looking at unemployment rates among recent migrants, then how this may decline with length of stay. In the medium term the question may be whether immigrants are in jobs appropriate to their skills and how their earnings compare with otherwise similar natives, while in the longer run these same questions may be asked of the first and second generation descendants of immigrants. Unfortunately, adequate measures of these characteristics are not available for Belgium. On the evidence available, it does seem possible to say that full “statistical” integration does not occur in the sense that initially poor labour market characteristics of quite large groups of immigrants and their descendants do not converge over time on the average for Belgian citizens. This appears to be due to a combination of unfavourable labour market institutions, the reciprocal link between low labour market status and relatively poor school performance, and to some extent also labour market discrimination against non-European immigrants. Discrimination not only hinders labour market performance of immigrants, but by decreasing returns to human capital lowers their incentive to invest in host-country-specific human capital, which in turn results in lower labour market performance.

Because most Belgian data record nationality but not place of birth, analysing unemployment data for immigrants has to be done largely indirectly by considering that for foreigners, even though some immigrants have become naturalised and so are no longer foreigners in the data and some people born in Belgium have foreign nationality.¹⁹ As far as discrimination is concerned, and as might be expected from Table 5.3, there is substantial research evidence of labour market discrimination against foreigners, or people who look or sound like foreigners.²⁰ Belgium has an explicit government strategy against discrimination in place. However, the impact of the many measures undertaken is hard to find, because of the lack of data.

This does not mean that poor labour market performance is entirely due to discrimination – not even approximate estimates are available of its quantitative contribution. Non-EU groups, with certain exceptions such as North Americans, clearly tend to be in low-skill occupations and have low levels of educational attainment. With Belgian labour market institutions already unfavourable for these groups, it is not surprising that they would have poor labour market outcomes, even without discrimination against them.

The PISA results for Belgium show that the education system largely reflects this disadvantage, with some uncertainty as to whether it may even amplify it. There is a very large gap between educational attainment of foreigners, or those with foreign parents and native Belgians; but poor educational attainment in Belgium is highly correlated with social and labour market status, and some studies show that the gap is entirely explained by this (see Lafontaine, 2003), while others find that such factors explain a large part but not all of the gap.²¹ Other results of this analysis are intriguing but with no obvious conclusion: in Wallonia the gap between natives and first generation immigrants is the same as between natives and immigrant children; in Flanders the gap is *larger* for children born in Belgium of immigrant origin than for immigrant children. Overall, the gap in the PISA results that is attributable to the foreign origin of children is about the same as for the EU average. Therefore the above average gap for Belgian (91 points on the reading literacy scale, compared with 60 for the OECD country mean) foreign born children seems to come from an interaction with poor social status. Nevertheless, language might also play an important role as 8% of children speak a foreign language at home, of which 5.5% a non-EU 15 language.

The authorities are aware of the potential dangers of perpetuating or reinforcing social disadvantages through the education system and have some measures in place. In Flanders, under provisions introduced in 1994, children of newly-arrived immigrants are able to attend reception classes for one year, in which they learn Flemish and also learn about the Flemish education system in order to help them integrate into the mainstream system. The French Community education system appears to have a different approach where extra resources are targeted on schools in areas of socio-economic deprivation (low incomes, high unemployment), less specifically on children of immigrants; direct support to help immigrant children integrate dates from 2001. In Flanders there are plans to use such deprivation indicators to allocate resources to (mainly primary) schools. The French community also has programmes with countries of origin to encourage children's awareness of their parent's cultural affiliation. There seem to be no studies available on how successful all these different programmes have been.

More recently the skill structure of immigrants started to improve somewhat, especially concerning other EU immigrants²² (Table 5.4). But skilled workers from non-European countries represent less than 1% of the total highly-skilled in Belgium, much below the share of foreigners in the Belgian labour force overall.

Table 5.4. **Skill structure of the Belgian population aged 25-64 (average 1996-2002)**

	% of the population				% of group		
	Low	Medium	High	Total	Low	Medium	High
National	87.7	92.7	93.5	90.8	40.6	32.3	27.1
EU	7.6	5.7	5.0	6.3	50.5	28.5	21.0
Including recent immigration	0.8	1.0	1.8	1.1	29.6	28.3	42.1
Other countries	4.7	1.6	1.4	2.9	68.7	18.1	13.2
Including recent immigration	1.1	0.6	0.8	0.9	54.1	22.9	23.0
TOTAL	100.0	100.0	100.0	100.0			

Note: Recent immigration = less than 11 years of residence.

Source: Debuissson M. et al. (2004).

Sectoral employment patterns

While foreigners can be found in all sectors of the economy,²³ there is a considerable degree of concentration of certain nationalities in certain sectors, in many cases corresponding to the degree to which low-skilled labour can be used in them. Thus, while less than 1% of Belgians work in agriculture, 15% of Bulgarians and between 5 and 7% of Africans and Asians do so (Table 5.5).²⁴ Heavy industry and construction employ a lot of immigrants, but there are rather few in many services sectors though catering, transport and cleaning services are important exceptions. Large numbers of some nationalities working in public sector services are mainly accounted for by the health service. Nationals of neighbouring countries have a pattern of employment quite similar to that of Belgians.

Table 5.5. **Employment by sector and nationality**

% of Belgian share in each sector

	Neighbouring countries	Southern Europe	Turkey, Bulgaria, Romania	Asia	Northern Africa	Other African countries
Agriculture	17	-33	2 417	1 083	717	833
Food, textiles	14	-2	74	-23	42	-42
Wood and graphical	5	-11	-58	-79	-42	-63
Chemicals, metals, etc.	0	74	8	-47	-14	-68
Construction	8	140	225	-77	64	-62
Catering and distribution	48	45	-36	157	25	30
Transport and communication	-10	-40	-64	-36	-31	-41
Company services	60	-9	-9	29	31	82
Industrial cleaning	44	178	1 367	89	1 333	267
Other services	43	186	-29	343	0	29
Public services	-44	-61	-81	-61	-65	-10

Note: Shows the relative proportion of each nationality in each sector, i.e., the proportion of North Africans who work in agriculture is eight times the proportion of Belgians in agriculture, while the proportion of Asians in construction is only 23% of the proportion of Belgians in construction. Shaded areas show sectors where particular nationality groups are under-represented.

Source: KSZ Datawarehouse Arbeidsmarktgegevens (Bewerking Steunpunt WAV).

Some nationalities also have a much greater tendency to be registered as self-employed although the statistics cannot distinguish between entrepreneurs and those who may be working as independent workers but in fact doing low-skilled work (such as on construction sites) (Table 5.6).

Table 5.6. **Registered independents by nationality, 2002**

Country of origin	Number of independents ¹	Number of inhabitants in Belgium ²	Enterprise rate ^{1, 2} %
Poland	1 197	25 753	4.6
Switzerland	299	1 995	15.0
Former Yugoslavia	150	6 364	2.4
India	472	3 589	13.2
Japan	329	3 691	8.9
China	478	4 472	10.7
Israel	248	1 602	15.5
Pakistan	437	2 016	21.7
Turkey	1 451	45 866	3.2
Congo	364	12 974	2.8
Morocco	1 557	90 642	1.7
Tunisia	155	3 324	4.7
United States	592	11 814	5.0
Canada	129	2 413	5.3
USSR	68	2 930	2.3
Romania	277	3 135	8.8
Total (above countries)	8 203	222 580	3.7
Belgium	795 257	10 309 725	7.7

1. Institut national d'assurances sociales pour travailleurs indépendants (2002).

2. Institut national de Statistique – population étrangère au 1 janvier 2002.

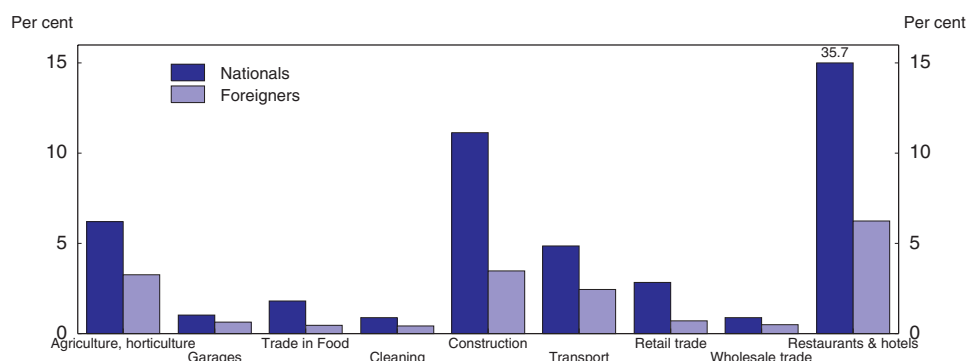
Source: Institut national d'assurances sociales pour travailleurs indépendants; Institut national de Statistique – population étrangère.

It is noticeable that immigrants from a number of regions tend to be concentrated in sectors often associated with employment of illegal immigrants,²⁵ such as agriculture, construction, hotels and catering. Little information is available concerning the economic activity of illegal immigrants in Belgium and there are no serious estimates even of how many there might be.²⁶ The 1999 regularisation covered only those (40 000) who could demonstrate a close social connection with Belgium. It is unlikely that many people with more tenuous links in the labour market were able to take advantage of it, so it might be reasonable to suppose that there were at least as many who did not benefit from it as those who did: that is, there are probably more than 40 000 present altogether.

Some further information is available in figures reporting prosecutions of employers employing workers irregularly (i.e. without proper contracts, or avoiding paying social contributions, or violating aspects of labour or safety legislation). These figures report the number of employees concerned in such prosecutions and whether they are Belgian or foreign nationals, but do not distinguish EU from non-EU foreigners. Foreigners represent nearly a quarter of this sample (whose representativeness is of course highly uncertain), nearly three times their share in the working population as a whole. Their distribution across sectors is not enormously different from that of Belgians (Figure 5.4). They are somewhat over-represented in agriculture, transport, garages and cleaning, under-represented in hotels and catering.

Figure 5.4. **Prosecutions for irregular employment by sector**

2001-03



Note: The figure shows, for example, that of a total of 11 294 employees concerned by prosecutions in the period 2001-03, 1 258, or 11.1%, were Belgians in the construction industry, whereas 276, or 2.4%, were foreigners in transport. The data cover 5 422 prosecutions concerning 8 663 Belgians and 2 631 foreigners. One third of all employees involved were Belgians in hotels and catering, the figure truncates this data point to render others more visible.

Source: Federal Public Service Employment, Labour and Social dialogue.

There has recently been a rapid increase in the number of independent “entrepreneurs”, with the number from Poland, for example, rising from 938 in 2001 to nearly 1 200 in 2002 and 1 732 in 2003 with larger proportionate (though smaller absolute) increases for Bulgarians and Romanians. There are reports that in the construction industry increasing numbers of such workers are doing jobs that would normally be done by dependent workers without any real entrepreneurial element, but without being subject to some of the employment protection and social security requirements that would apply to dependent employees; this would somewhat undermine the transitional arrangements for new EU members, under which Poles would normally require a work permit for such jobs (unlikely to be given, because of the labour market test).²⁷ This is an option theoretically open to Belgian workers but it is presumably not attractive, whether because of lower earnings or lower social security and pension entitlements.

The fiscal impact

With the fiscal position of most European countries under threat in the medium term from the impact of population ageing, the potential contribution of immigration to easing fiscal constraints is frequently discussed. The fiscal impact of immigrants is closely related to their labour market experience, with immigrants in employment likely to be making a net contribution to public finances unless they have dependants receiving public transfers such as education or health care, though considerable variation may be expected according to their income levels, with highly-skilled migrants likely to make a much more positive contribution because of their higher earnings when employed, and higher probability of being employed. Although no comprehensive studies of fiscal effects²⁸ are available specifically for Belgium, low participation and high employment among the low-skilled (both foreign and Belgian), and the high proportion of low-skilled among the non-EU immigrants in Belgium, imply that these groups are likely to have a negative net impact on public finance. Against this, relatively high incomes and low unemployment among the more numerous immigrants from EU countries, many of whom are highly-skilled, mean that these groups will have a positive impact. There is also the caveat that it seems that

unemployed foreigners are less likely than unemployed Belgians to be on full unemployment benefit and so an unemployed non-EU migrant may “cost” less than a corresponding unemployed Belgian. Overall, resident foreigners taken together may well represent a potential net gain for public finance, provided that ways can be found to increase further the employment rate of foreigners.

As regards quantification of the public finance implications, illustrative calculations for immigrants in the Netherlands, where labour market experience for foreigners is not dissimilar to that in Belgium, may give some idea of possible orders of magnitude. Roodenburg *et al.* (2003) look at the impact of immigrants of different origins and nationals on the budget in a generational accounting framework, *i.e.* considering the impact over the whole lifetime of the migrant, not just the impact effect. On this basis, the net fiscal contribution of a “non-western” immigrant – *i.e.* a person who had the lifetime labour market characteristics of the average current non-western immigrant in the Netherlands – entering at age 25 would be € –43 000; for a baby the figure would be € –95 000, though the figure for a Netherlands-born baby is also negative (€ –38 000). Using such figures Roodenburg *et al.* (2003) calculate that a permanent increase in the net inflow of “non-western” immigrants equivalent to 0.05% of the population would require an increase in the overall tax burden of about 0.3% of GDP to give an unchanged debt/GDP ratio in the long run, whereas a similar number of “highly-performing” immigrants with higher employment rates and earnings prospects, would allow a reduction in the tax burden of 0.2% of GDP.

Figures for Belgium would probably be of a similar order of magnitude. Since non-western immigrants are probably fewer in number²⁹ than immigrants from EU and other OECD countries, the overall long-run budgetary impact of immigration flows in Belgium maybe quite close to zero, although the potential for a positive contribution is there. Unfortunately, this analysis, being based on long-term results, does not allow a judgement on the effect of migration on current public finances.

Assessment

Belgium’s large foreign born labour force, to a considerable extent naturalised, is less integrated in economic activity in terms of participation and employment than nationals and foreigners in some other EU countries, partly because the reason for being in Belgium is not primarily economic, as is evident for the large share of asylum seekers. Discrimination seems to play some role in establishing barriers for recorded economic activities of foreigners. There may also be some overlap of the considerable size of the grey economy in Belgium and the involvement of foreigners, particularly the still large number of foreigners without appropriate papers. However, not much information is available about various characteristics of the foreign-born labour force and its economic activities and participation in government programmes. The main challenges for the Belgian authorities to improve the economic impact of its foreign labour force can be summarised as follows:

- The educational attainment level of foreigners is considerably below that of nationals. There are also signs that this might be carried on to second and third generation immigrants. While social status obviously plays a role, the lack of language competence is the main obstacle in this respect, which can be addressed by policy measures. It should therefore be ensured that children of foreign-born parents receive the

appropriate amount of language training, to make it possible for them to successfully participate in a school career that endows them with labour market relevant skills.

- Measures already in place to tackle discrimination should be evaluated in terms of outcomes. Effective discrimination means that viable economic activity is not taking place, because of non-economic considerations, which would suggest that strengthening entrepreneurship should help to improve the situation for the foreign labour force. Initiatives to reduce the burden to set up a business and to reduce the economic costs of complying with government regulations are under way and should also benefit the foreign labour force (see Chapter 7). These programmes could be made more effective by better targeting on the specific needs of the economically active and entrepreneurially minded foreign born population in terms of language and cultural habits.
- Efforts to improve the employability of groups with a low attachment to the labour market (see Chapter 4) can also be expected to benefit some part of the foreign labour force. The policy measures suggested are therefore also particularly relevant for improving the economic impact of the foreign born labour force. These measures include enforcing job search requirements and increasing in-work benefits. Specifically targeted implementation of such measures should pay attention to the heterogeneity of the foreign born population.
- There is some lack of coherence between the process of granting work permits (exposed to a labour market test and rather restrictive, issued by the regions) and trade licenses (issued by federal authorities) for independents. Recent observations suggest that there is some substitution of work done by employed residents through services provided by foreign self-employed. Hence, communication and co-ordination among the various government units involved should be improved in order to avoid disruptions of some specific labour markets (in particular construction) through the substitution of contract forms, which is motivated by different treatment of work permits and trade licenses.
- More effort is required to improve statistical information about foreign-born Belgians and their economic activities. This should not only include participation in government schemes, like active and passive labour market programmes, but also offer a better picture about the interaction between sociological characteristics and economic activities of foreigners.

Notes

1. See Salt (2003), p. 9.
2. The General Social and Economic Survey, which takes into account place of birth, is an exception to this rule.
3. See Muus (2001), who describes the broad pattern of migration in and out of the EU.
4. This figure is that from population registers and includes no estimate for illegal immigrants, some 40 000 of whom benefited from a regularisation exercise in 2000. Some argue that there are still several tens of thousands of illegally resident foreigners in the country (Lennert, 2001).
5. The large share for EU-foreigners has also to do with the location of European institutions in Brussels.
6. See Salt (2003).

7. For a comprehensive description of flows and policies up to the early 1970s, see Martens (1975). It is interesting to note that in the early 1960s, immigration was thought to be necessary to improve the demographic structure of the population as well as to fill specific labour shortages.
8. Belgium is host to a number of international organisations. These do not figure in the data in Table 5.4, since they are not counted as part of the Belgian economy, though their foreign employees are counted in the population. There are probably 20 to 30 000 Belgian residents working for various European and other institutions. Of these, three quarters are likely to be foreigners. With some half a million EU nationals resident in Belgium, the direct impact of employment in European institutions (including the families of the employees) may thus account for between 10 and 15% of this figure, with some further indirect effect from private sector organisations that locate in Belgium to be near to the European institutions.
9. See Salt (2003), p. 28.
10. It was also the case in the early 1980s that the natural increase among Belgian nationals was negative, just offset by an excess of births over deaths among foreigners. By the end of the 1990s, however, natural increase among nationals exceeded that among foreigners.
11. Naturalisation also increased in other European Union countries in the course of the nineties mainly due to cohort effects from the long term presence of a foreign labour force, but also links with former colonies. Belgium is among the countries with a high naturalisation rate (see Garson and Loizillon (2003, p. 6).
12. This does not necessarily mean that the share of non-Belgian nationals is lower than would be the share of non-Belgian born. While naturalisations tend to reduce the former figure relative to the latter, the application of *jus sanguis* prior to 1984, and the fact that obtaining citizenship was relatively difficult prior to that year, means that many people born in Belgium to non-Belgian parents are still recorded as foreigners.
13. The Democratic Republic of Congo (former Zaire) and other former colonies barely figure in statistics of foreign population by nationality. Up to 1960, Congolese carried Belgian passports and were not distinguished from Belgian citizens in Belgian statistics. Prior to 1994 they did not need work permits.
14. With 2.2% of the population in 1998 the share of asylum seekers was one of the highest in the EU. Their origin is more widely dispersed than in other countries, although the largest group – as in many other EU countries – comes from former Yugoslavia (Muus, 2001). The rate of successful applications (27 in 2001) is in the upper-middle range of OECD countries (see Garson and Loizillon, 2003, Table 1).
15. Compared with other recent regularisation programmes in the EU, the Belgian programme is relatively small. The Greek 1997/98 programme included about 375 000 applications, Italy (1998/99) aimed at including some 300 000 illegally present foreigners, while Spain (1991 and 1996) involved 108 000 and 21 000 persons.
16. See SOPEMI, p. 55.
17. The analysis behind Table C is not very sophisticated. Nationalities with very small numbers of people, such as Chinese, were not included. Even some nationalities mentioned represent rather small numbers of people (US, for example), and may not be reliably representative. Differences in age and sex structure among nationalities were not taken into account.
18. See Muus (2003), Table III, showing a comparison of unemployment among nationals, other EU and Non-EU.
19. The number in this latter group is probably declining quite rapidly, however, since the first changes in nationality law in the 1980s. But this same change, and subsequent further relaxation of naturalisation procedures, means that the former group may actually be increasing.
20. See Arrijm et al. (1997), Van den Cruyce, 2000. Much research on discrimination in recruitment is done using names as an indicator of origin, where the employer can only presume as to the nationality or ethnic origin of the person.
21. Lafontaine (2003) used regression analysis – controlling for social origin and the socio-economic status of the school, for example, along with 13 other factors. The influence of nationality on the PISA combined literary score was minimal. However, one of the other controlling factors was the school year of the student; since immigrant and ethnic minority students have a higher probability of having to repeat at least one year, this might hide some influence properly attributable to nationality. Furthermore, the analysis was by nationality and not by immigrant status or by

- language spoken at home, and did not look at the PISA scores on mathematical or scientific attainment.
22. See OECD (2004), *Policies for Developing Highly-Skilled Workers for Belgium*, DSTI.
 23. Indeed, the sectoral distribution of employed foreigners converged towards that of nationals (see Garson and Loizillon, 2003).
 24. Some of the very large figures in Table D reflect relatively small numbers of people. For example, the very high figure for Turks, Bulgarians and Romanians in agriculture represents the fact that 8% of employees in agriculture come from these countries, but only 0.4% of all employees.
 25. Employment of foreigners without proper papers was tolerated during the 60s in order to reduce labour market shortages.
 26. Press reports have referred to estimates of 50 000 illegal workers from eastern Europe in the construction industry, which would be equivalent to one third of the recorded employed workforce. This seems improbably high, even keeping in mind the apparent lack of enforcement in earlier decades.
 27. Note that this is not the same phenomenon as that of foreign workers working for foreign companies providing services in Belgium. These would come under the so-called Mode 4 of the General Agreement on Trade in Services which provides for such – temporary – workers being given short-term permits outside the general system.
 28. Simonis-Lambrecht (2001) investigate this subject through the problematic of enlargement. The authors find a small positive fiscal effect of migration from new EU member states (amounting to about 12000 additional labour force), mainly because of the larger participation rate of the relatively younger immigrant population.
 29. Only “probably” because non-EU immigrants appear more likely to acquire Belgian citizenship and thus not be visible as immigrants in population statistics.

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Chapter 6

Raising achievement in secondary education¹

This chapter discusses ways of improving poor secondary education achievement and reducing drop-out rates, especially in the French Community where sorting into schools along socio-economic lines, excessive grade repetition and early streaming lead to poor educational prospects for students, especially in technical and vocational branches. The authorities are trying to increase the quality and attractiveness of these branches and to refocus school curricula on core skills. There is a need to use the education budget more efficiently by reallocating means to where they are most needed and strengthening schools', teachers' and students' incentives to achieve the highest possible outcomes. This requires reconsidering budget allocation processes, teacher hiring and compensation rules, performance certification standards, student admission policies and counselling services to families with a view to making the best possible use of the principle of free school choice.

Among the reasons for the high youth unemployment rate, especially in the French Community and among foreign-born children (see Chapter 5) are the relatively large share of school drop-outs (persons leaving compulsory education without an upper-secondary degree) and the low level of knowledge and skills of these persons, as mentioned in Chapter 4. This is reflected in the large variation in Belgian students' reading and mathematical literacy, as measured by the Programme of International Student Assessment (PISA 2003), which is the highest in the OECD.² As in the Flemish Community and unlike most other OECD countries, the larger part of the variation is attributable to differences in average performance between schools (as opposed to differences between students within a given school). Nevertheless, the Flemish system achieves high average performance, with the Flemish PISA participants scoring highest in mathematics and third-highest in reading (Table 6.1).³ In stark contrast to the Flemish results, the relatively homogeneous school populations apparently do not allow for faster overall learning progress in the French Community where the average student achievement in reading and science is among the lowest in the OECD despite major recent progress in science (see below). More encouraging average results are achieved in mathematics, with French-speaking Belgians coming close to the OECD average and having improved between 2000 and 2003.⁴ When also taking into account evidence from another important international assessment, the Third International Mathematics and Science Study (TIMSS), French-speaking students do slightly better than the country mean. This chapter describes some of the mechanisms that lead to the loss of both equity and efficiency in the French Community and discusses ways of reducing drop-out rates and stimulating overall performance (Box 6.1).

Over and above the marked differences in macroeconomic developments to the advantage of Flanders, the High Employment Council has identified four hypotheses to explain the divergence between the Flemish and French Communities both in terms of average performance and in terms of equity: i) different pedagogical strategy choices made since the regionalisation of 1988; ii) the use of grade repetition in dealing with learning difficulties; iii) the reputation of vocational branches; iv) the extent and use of school autonomy (HEC, 2004).

School access, streaming and grade repetition are the major selection mechanisms

Since the institutional reform of 1988, education is a matter for the language communities (French, Flemish and German). As the separation is rather recent, the basic structure of compulsory education – six years of primary, followed by two plus four years of secondary education, completed by another year to complete professional qualifications or obtain a second chance of accessing university (Box 6.2) – has remained similar in both the Flemish and the French Communities. However, the French Community implemented the principles of renewed education (*enseignement rénové*), resulting in a reduction of instruction time for core subject matters. This may explain part of the average

Table 6.1. **Performance in reading, mathematical and scientific literacy in secondary education**^{1, 2}

Country	PISA 2003			Rank in PISA ³	TIMSS 1995		Rank in TIMSS ⁴
	Reading	Mathematics	Science	Mathematics	Mathematics	Science	Mathematics
Finland	543	544	548	1-3	–	–	–
Korea	534	542	538	1-4	607	565	1
Belgium (Fl.)⁵	530	553	532	–	565	550	3
Canada	528	532	519	4-7	527	531	12
Australia	525	524	525	7-9	530	545	11
New Zealand	522	523	521	7-10	508	525	17
Ireland	515	503	505	15-18	527	538	13
Sweden	514	509	506	12-16	519	535	15
Netherlands	513	538	524	1-5	541	560	7
Belgium	507	529	509	4-8	–	–	–
Norway	500	495	484	18-21	503	527	19
Switzerland	499	527	513	4-9	545	522	6
Belgium (Ger.)⁵	499	515	492	–	–	–	–
Japan	498	534	548	2-7	605	571	2
Poland	497	490	498	19-23	–	–	–
France	496	511	511	11-15	538	498	9
United States	495	483	491	22-24	500	534	21
Denmark	492	514	475	10-14	502	478	20
Iceland	492	515	495	10-13	487	494	22
Germany	491	503	502	14-18	509	531	16
Austria	491	506	491	13-18	539	558	8
Czech Republic	489	516	523	9-14	564	574	4
Hungary	482	490	503	19-23	537	554	10
Spain	481	485	487	22-24	487	517	23
Luxembourg	479	493	483	19-21	–	–	–
Portugal	478	466	468	25-26	454	480	25
Belgium (Fr.)⁵	477	498	483	–	526	471	14
Italy	476	466	486	25-26	–	–	–
Greece	472	445	461	27	484	497	24
Slovak Republic	469	498	495	16-21	547	544	5
Turkey	441	423	434	28	–	–	–
Mexico	400	385	405	29	–	–	–
United Kingdom ⁶	m	m	m	–	506	552	18

1. The listing of countries in this table corresponds to the rank of their mean performance on the PISA 2003 reading literacy scale, except for the United Kingdom (see footnote 6). See footnote 3 for a caveat on country rankings.
2. PISA (Programme of International Student Assessment) assesses the ability of 15 year-old students whatever their grade, TIMSS (Third International Mathematics and Science Study) assesses that of 7th- and 8th-graders at different ages. The assessments are therefore complementary rather than directly comparable. Moreover, within the TIMSS results some caveats apply as to the direct comparability of scores between countries meeting and those not fully meeting the guidelines for sampling, response rate and selection of participants (NCES, 1996).
3. Rank of 29 PISA countries shown in this table. Strictly speaking, it is not possible to report rank order positions for countries, since data are based on samples. Following OECD (2004a), the column therefore reports the range of ranks within which the country mean lies with 95% likelihood.
4. Rank of 25 TIMSS countries/regions shown in this table.
5. Belgium (Fl.): Flemish Community; Belgium (Ger.): German-speaking Community; Belgium (Fr.): French Community.
6. The United Kingdom had a too low response rate to ensure comparability of results in PISA 2003 after having scored seventh on the combined reading literacy scale in PISA 2000 (OECD, 2001, Figure 2.4). In TIMSS 1995 England and Scotland participated separately, with similar results in mathematics and an advantage to England in science.

Source: OECD (2004a), *Knowledge and Skills for Life: First Results from PISA 2003*, Paris; National Center for Education Statistics (NCES) (1996), *Pursuing Excellence*, Washington, D.C.

**Box 6.1. Raising achievement in secondary education:
policy recommendations**

- Instruction time devoted to core subjects should be increased at the expense of the large share of time spent on optional courses and compulsory flexible curriculum elements.
- To improve the quality and attractiveness of technical and vocational branches, the recruitment process into them needs to be changed by reducing the occurrence of grade repetition, especially in the French Community. The authorities should also aim at abolishing streaming already at the beginning of lower secondary and should guarantee the same content of education until the 8th grade.
- The government of the French Community should pursue its efforts in making technical professions more attractive. Curricula should be updated periodically to make them respond better to the needs of the labour market. The newly created Carrefour centres should be developed further and become a systematic contact point between students and companies.
- The government should make the level of school subsidies dependent on the economic, cultural and social conditions (ECSC) of their students to strengthen the incentives of accepting pupils from disadvantaged family backgrounds. To strengthen this incentive further, the current separation between wage costs (directly paid by the government) and operational costs (covered by a subsidy) should be dropped. Schools should receive a total budget envelope on a per-student basis, corrected for differences in ECSC, and be given freedom to allocate it on equipment and teaching time.
- Schools' performance in improving the initial conditions of their students should also become a criterion of the budget allocation. This requires complementing the welcome *ex-ante* evaluations of students' abilities with year-end/end-of-cycle examinations based on quantifiable performance standards set outside the school, in order to get information about the value added by teachers, classes and schools. Publishing the results of these examinations would reduce the information costs for outsiders, thereby enabling parents to make better school choices.
- Access to schools with excess demand should be made fairer by making admission criteria more transparent than today. While the Flemish authorities recently enacted a decree on equal opportunities in education, action still needs to be taken in the French Community. The authorities should also raise awareness among parents from disadvantaged milieus of the importance of education and improve counselling on the various pedagogical approaches on offer.

performance gap of the French Community relative to the Flemish Community. One feature of the reform introducing renewed education (1971 law relative to the general structure and organisation of secondary education) was to delay the moment of selection into different streams by two years from the end of primary to the end of the first cycle of secondary education. Yet the objective of guaranteeing the same standard of education for everyone up to age 14 has not been met fully due to the creation of special classes for weaker students, making it easier for the school to manage the skill diversity of the student population. However, in most cases being placed in such a “light” class is particularly stigmatising given the exceptional nature of the class and implies giving up as early as of age 12 or 13 the prospect of obtaining access to higher education for a significant share of the student population (about 10% of all seventh-graders, compared with 25% of seventh-graders choosing the vocational branch before 1988).

Box 6.2. Main features of the non-tertiary education system in the French Community

Most Belgian children attend pre-primary school as of age 3. Primary school starts at age 6 and lasts six years. In the French Community most students then move on to the first cycle of general secondary education (*premier degré commun de l'enseignement ordinaire*), which lasts for two years (*Première A* and *Deuxième C*). However, a bit more than 10% of the population, those with poor prior achievement, follow a “light” version of lower secondary (*premier degré différencié de l'enseignement ordinaire*, i.e. *Première B* and *Deuxième P*), with a small chance of switching to the first year of the general cycle after one year.

Upper-secondary education includes the four years from the 9th grade (*Troisième*) to the 12th grade (*Sixième*). It falls into four streams. About half of all students start in the general stream (*Général*), a smaller number of students (less than 10%) attend a more practically oriented version of it (*Technique et artistique de transition*), with achievement levels still supposed to be close to those of the general stream. The remaining two branches, in descending order of prestige, are respectively technical (*Technique et artistique de qualification*) and vocational (*Professionnel*). Completion of secondary education is certified by three types of qualification. The CESS (*Certificat d'enseignement secondaire supérieur*) is the most prestigious of them. It provides direct access to higher education and may be gained through any upper-secondary education stream except the vocational stream. The other two qualifications are, by decreasing order of reputation, the *Certificat de qualification* (CQ) and the *Certificat d'Études* (CE).

Those who complete secondary education without getting the CESS may obtain access to higher education via a specific one-year post-secondary programme (*7^e année de l'enseignement professionnel secondaire*). The other post-secondary programmes on offer include a technical 13th grade, a vocational 13th grade, and a three-year programme of supplementary vocational education. Enrolment into post-secondary non-tertiary education is relatively low compared with Flanders, and only about one-third of these students follow programmes qualifying for university (roughly 80% in the Flemish Community). Programmes of social advancement (*Enseignement de promotion sociale*), specifically designed for part-time attendance, provide adults, notably those without upper secondary education, with a second chance.

Source: OECD (2004b), *Handbook of Internationally Comparable Education Statistics*, pp. 202-209.

School choice is another driver of heterogeneity without necessarily sparking performance in the current context. Since 1959, parents and students have had free school choice but given that capacities are fixed, schools with a good reputation have long waiting lists, which are not managed in a transparent manner. *De facto*, schools with a good reputation choose their intake and strongly concentrate on children from favourable socio-economic backgrounds while reallocating the waiting lists over the district in co-operation with the other schools. As this practice has been in place for quite some time, the result is a sorting of students into different schools along socio-economic lines, partly achieved through waiting lists, partly through self-selection. An additional way of keeping out weaker students consists in not offering the lighter stream of lower secondary education. Positive and negative peer effects imply that the school's average socio-economic and cultural background strongly predetermines school performance.⁵ This situation sharply contrasts with that observed in Australia, New Zealand, the United Kingdom, Norway and Sweden, where overall variation in student performance is also large but between-school

variation is limited. These countries all achieve performance at or above the OECD average (Lafontaine, 2003, p. 170), suggesting a more heterogeneous socio-economic intake would benefit weaker students without harming the achievement of stronger students.

In the Flemish Community, too, between-school variation in student performance is large, also pointing to the possibility of sorting effects. Nevertheless, the Flemish school system performs better in correcting for initial differences between students and ensures a higher minimum level of performance among the weakest students.⁶ One reason may be that more effort is devoted to avoid grade repetition, which in the French Community is used as an additional systematic means of managing student diversity. Being in a technical or vocational branch often reflects having failed at one of the previous grades rather than a deliberate choice of a future in a more manual or technical occupation. The diminishing shares of students with no years lost over the secondary school career shows that students systematically start in the highest-ranking branch and then may either repeat a grade or move on to the next grade in the lower-ranking branch, or both. The lower the branch, the higher the number of years lost in education (Table 6.2). Comparing the French with the Flemish Community reveals that: i) the legacy from primary education in terms of years lost is heavier; ii) selection takes place in every single school year whereas in Flanders there is major reshuffling between lower and upper secondary, but repeating is less frequent between years within lower and upper secondary; and iii) stability is greatest within the vocational stream of upper secondary education, which is supposed to host the weakest students. As a result, a Flemish student is expected to lose between 0.2 and 0.9 years until reaching the end of secondary education, depending on the branch, whereas the loss amounts to between 0.3 and 1.7 years for a student in the French Community.⁷ The much lower share of students in the vocational branch of the French Community obtaining the highest or even second highest upper-secondary degree corroborates the disconnection of vocational students from upper-secondary curricula (Table 6.3).

Table 6.2. **Proportion of pupils with no year lost in the French and Flemish communities, 2001-02**

Years	First	Second	Third	Fourth	Fifth	Sixth
French Community						
1st A and 2nd C	78.6	73.0				
1st B and 2nd P	26.5	31.3				
General	–	–	75.3	71.8	69.4	70.9
Transitional						
technical/artistic	–	–	48.8	42.8	37.4	38.8
Applied						
technical/artistic	–	–	34.5	30.5	24.9	26.5
Vocational	–	–	25.3	22.8	18.7	18.1
Flemish Community						
Stream A	85.1	84.1	–			
Stream B	45.5	44.4	–			
General	–	–	90.4	88.4	84.8	83.4
Technical	–	–	67.0	63.8	55.7	54.9
Artistic	–	–	55.6	49.6	43.2	43.6
Vocational	–	–	42.8	42.9	39.9	41.3

Source: HEC (2004), *Rapport 2003*, Table 11.

Table 6.3. **Rate of degree achievement by branch of education**¹

Type of diploma ²	French Community			Flemish Community		
	CESS	CQ	CE	CESS	CQ	CE
General	94.0	–	–	96.8	–	–
Transitional technical/artistic	88.2	–	–	–	–	–
Applied technical/artistic	85.2	55.7	–	–	–	–
Technical	–	–	–	92.4	–	–
Artistic	–	–	–	92.7	–	–
Professional (6th year)	–	60.9	77.8	–	–	91.9
Professional (7th year)	59.3	42.7	–	89.8 ³	–	–

1. At the end of school year 2001-02.

2. CESS = Certificat d'enseignement secondaire supérieur, CQ = certificat de qualification, CE = certificat d'études.

3. Proportion of students obtaining both the CESS and the CQ.

Source: HEC (2004), *Rapport 2003*, Table 12.

Refocusing curricula on core skills and marketable competencies

The authorities of the French Community have recognised that moving away from core subjects was an error. Consequently, they want to increase instruction time on core subjects, not only in secondary education. As outlined in the recent policy strategy paper (*Contrat stratégique pour l'enseignement en Communauté française*), the government intends to overhaul primary education where it wants to put learning French and reading at the centre of the curriculum. While this step is welcome, reading literacy should not be perceived as something achieved during the first years of primary school only but should be considered as an ongoing challenge that needs practice and deepening – especially the aspect of interpreting and commenting on texts, which seems to be still insufficiently developed (Lafontaine, 2003, pp. 194-195). Mathematics and science also need increased attention. As shown in the last *Survey*, teaching time on these subjects is scarce in the French Community (OECD, 2003a, Figure 37). This mainly reflected a number of hours in science well below the OECD average. The importance of scientific subjects was increased between 2001 and 2002, which may account for the impressive progress made in average science literacy as assessed by PISA 2003 compared with PISA 2000.⁸ But at 9% of total teaching time,⁹ there is still some way to go to reach the OECD average of 12%. The French Community has an unusually high percentage of time devoted to compulsory flexible curriculum reflecting the high number of optional courses. Instruction time devoted to core subjects should be increased at the expense of these options. This would leave more time for practising and exercises, which are a crucial determinant of proficiency in these subjects as underlined by recent research evidence on institutional factors of student success in mathematics as measured by TIMSS.¹⁰

Another key objective outlined in the “strategic contract” consists of revaluing technical and vocational branches of education. A necessary condition for this is reducing the negative selection bias these branches are currently suffering from. Reducing the occurrence of grade repetition should be seen as one major instrument to achieve this goal and schools should be geared towards using repetition only as a solution of last resort. Based on the conviction that weak students and/or those from disadvantaged family backgrounds need more specific help rather than easier programmes, the authorities should also aim at abolishing streaming already at the beginning of lower secondary and should guarantee the same content of education until the 8th grade, as in those countries that score highest in the PISA ranking. Students are probably more able and willing to make

an informed choice about their professional future at age 14-15 than at age 12-13, so keeping all options open until then would increase the likelihood of a technical class being chosen by predilection rather than by the absence of better alternatives. Over and above cultural differences between the Communities, the much lower number of years lost in technical-vocational secondary education may – together with better educational outcomes documented by PISA – explain the better reputation these education branches enjoy in the Flemish Community.

Improving the quality and attractiveness of technical and vocational education

The government should also pursue its efforts to make technical occupations more attractive to young students. Since 1995 the Community Commission of Professions and Qualifications (CCPQ) has been evaluating the secondary education system's ability to meet the requirements of technical jobs. It has redefined these requirements, emphasising the "competencies" to be acquired. Some of the lessons from this exercise have been used to change technical and vocational curricula. A similar exercise in the Netherlands gave up the traditional, purely attainment-based approach in favour of profiles based on competencies in a broader sense, i.e. knowledge, skills and behaviour, with an explicit view of making the student fit for more than one function in professional life, thereby increasing inter-job mobility and reducing skill mismatches. The government should continue the efforts along these lines and update the curricula periodically to make them respond better to the needs of the labour market. More recently the government has set up two public funds for financing technical school equipment in Wallonia and Brussels. It has also created two non-profit organisations, one of them (*Zénobe Gramme*) collecting written-off but technologically still relevant machinery and equipment from firms and the other one creating specific centres equipped with modern ICT in order to familiarise students with their use and ensure a sufficient amount of continuing training for teaching staff (*Carrefour Économie-Technologie-Enseignement*). Consideration should be given to using these centres as a contact point between students and companies, for example by organising workshops with company workers and managers to explain the use of the machines, thereby providing students with a contact with the labour market before the end of their upper secondary education.

Reallocating resources to where they are most needed

If the system's ability to correct initial differences in background conditions is poor, it is also because the allocation of financial and human resources has not focused on the greatest needs. So far school budgets have been only determined by school size insofar as the total sum of teacher time- beyond degree-specific minima – has been based on the number of students enrolled and the operating subsidy has also been a function of this number. In the future the increases in this operating subsidy will take the socio-economic intake of schools into account. Schools are free in allocating total teacher time to the broad areas of compulsory subjects, optional courses, modern foreign languages, differential teaching and combating drop-out. Overall the allocation of total teacher time is generous enough to ensure class sizes and student-to-teacher ratios below the OECD country mean.¹¹ These arrangements imply, however, that extra efforts to combat drop-out come at the expense of overall classroom teaching. The High Employment Council has proposed to make the level of operational subsidy to schools dependent on the socio-economic composition of its student intake (HEC, 2004, p. 10). Stronger incentives for schools to

increase their economic, social, cultural and ethnical diversity would indeed be welcome (see below).

Over and above teacher pay and working time, recruitment of teachers is also more or less strictly regulated, with some nuances pertaining to school ownership.¹² At equal formal qualifications, the hiring criterion is seniority or the number of applications received in community schools. Provincial and municipal schools may choose freely between equally qualified young teachers (up to one year of service) but only if no candidate with greater seniority applies. Even in the subsidised free school network, the only one where the school (or the non-profit organisation owning it) acts as a direct employer, a pecking order was introduced in 1993. Among all candidates for a post, those with at least 240 days of work with the same employer have priority, followed by all candidates with 480 days of work record with another employer of the same “type”¹³ in the free network (Dupriez and Zachary, 1998).

Apart from the quantity of teaching resources, their academic and pedagogical qualification is a key determinant for educational outcomes. The possession of a university degree in the subject matter taught is associated with higher student achievement (OECD, 2001; Wößmann, 2003; Lafontaine, 2003), especially when associated with subsequent teaching-specific training (Jürges and Schneider, 2004). In Belgium the share of teachers with a university degree in their specialisation is only one-third, compared with two-thirds in the OECD on average (Lafontaine, 2003, p. 176). Moreover, the schools with the richest socio-economic intake manage to hire them: Belgium, like Germany and Luxembourg, is characterised by a very close relationship between teacher’s academic qualifications and the school’s index of economic, social and cultural status (ESCS). For individual teachers, the substantial investment needed to obtain such a degree may not pay off given that the evolution of salary is strongly influenced by seniority, as in many other countries.

Fostering teacher and student performance: striking the right balance between central regulation and autonomy

The sheer amount of financial resources devoted to school systems is not a predictor of their performance across countries (Wößmann, 2003, p. 119, and OECD, 2003b, Figure 17). Moreover, the strong increases in public expenditure on schooling have mainly resulted in price increases, while the productivity of schooling fell (Gundlach et al., 2001). The economic hypotheses possibly explaining this phenomenon hinge on the fact that most systems are tax-financed and lack clear performance benchmarks and, in many systems, competition (Gundlach and Wößmann, 2001). The established institutions and policies may create incentives for students, teachers and the school administration to use resources in ways that maximise the individual utility of these actors subject to the constraints they face, and this may conflict with the aim of yielding the highest possible educational outcome for the young generation. Sound school policies and practices are crucial since they tend to reinforce the effect on learning success of a school’s socio-economic context.¹⁴ Even though education is not a normal economic sector, there is a need for using the budget as efficiently as possible, requiring changes to some of the incentives the actors are facing.

Giving schools incentives for diversifying their intake and achieving maximum value added

As mentioned above, the current sorting of the student population is socially undesirable as it lowers the average performance of the school system and contributes to the failure in providing all young persons with equal opportunities. The government should therefore make the level of school subsidies (not only future increases) dependent on the ECSC of their students to strengthen the incentives for accepting pupils from disadvantaged family backgrounds. This effect would be much more powerful if the current separation between wage costs (directly paid by the government) and operational costs were dropped. Rather, schools should receive a total budget envelope on a per-student basis corrected for the socio-economic environment, i.e. the difficulty of the task to be fulfilled, that it would then be free to allocate on equipment and teaching time. This would provide schools with a stronger incentive to allocate their human resources in the way that best fits the needs of their students. It would also overcome the current combination of financing rules irrespective of educational needs and the unnecessary central regulation of hiring rules and working conditions (see above) as these make it impossible to reward talented hard-working teachers who create a particularly high value added, i.e. achieve good educational outcomes under challenging conditions. Within a reformed framework, schools should be free to reward excellent teaching performance by a premium on the salary or a reduction in working time.¹⁵

Setting a reliable framework for the measurement of value added in secondary education

When increasing the resources devoted to schools that most need them, the government needs to ensure that the additional budget is actually conducive to higher educational value added. External evaluations are a means of achieving such a quality control. However, they need to be made transparent (to avoid collusion between the evaluator and the evaluated unit) and in a way that is understood by the public. This is why many countries use centralised exit examinations to spur the ambition of both teachers and students, which in some studies is found to have a positive effect on the system's performance (Wößmann, 2003). So far the French Community has been using *ex-ante* evaluations of students' abilities at the beginning of the first, third and fifth school years in secondary education in order to help teachers to determine their pedagogical needs. To get information about the value added by individual teachers, classes and schools, this important exercise should be complemented by end-of-year or end-of-cycle examinations. To be comparable, the latter would need to fulfil standards set outside the school and their results would preferably be quantifiable and made public as this reduces the costs for outsiders of getting information about the school.¹⁶ The extent to which schools improve their students' initial conditions (rather than only the absolute level of performance) should become an additional determinant in the budget allocation alongside the "need" component.

Giving a meaning to free school choice: Making access fair and helping parents to make informed decisions

Competition between schools is sometimes criticised on equity grounds as it would be the most privileged parents who would be able to exploit the advantages of competition best and place their children in the best schools. Undoubtedly the ability to make informed pedagogical choices increases with the own level of educational attainment. However,

clear signals about schools' value added, as they result from the centralised standards suggested above, would alleviate this problem and make the system much fairer than today where this information is indirectly available at best. A necessary condition for this is to make the rules for access to schools with a good reputation fairer and more transparent than today. The Flemish authorities recently enacted a decree on equal opportunities in education that tries to meet this objective and could provide some guidance as to how to improve fairness in school access also in the French Community. At the same time, the French Community should raise awareness among parents, especially in socio-economically disadvantaged areas, of the crucial importance of education in the knowledge society and improve counselling services to help them in making the best individual choice among the various pedagogical approaches on offer.

Notes

1. Most of the analysis and recommendations in this chapter refer to the French Community of Belgium. However, some of the equity issues in the access to education also apply to the Flemish Community, requiring that some Flemish developments and initiatives be reported, too. The German-speaking Community of Belgium, which organises its own circuit of compulsory education and vocational training, combines above-OECD-average reading, mathematical and scientific performance of the 15 year-old with below-average variance (HEC, 2004, pp. 30-32) and is therefore not further analysed.
2. The variance of reading literacy is much greater in the French Community (15% above the OECD average) than in the Flemish Community, where it is the same as in the OECD as a whole. By contrast, the performance variance in mathematics is comparable across communities.
3. Most other best-performers in PISA have a low share of between-school variation even though overall variation in student performance is not always low.
4. The mean scores on the combined mathematics scale improved from 491 to 498 for the French Community and from 543 to 553 for the Flemish Community (OECD average: 500). The scores are not directly comparable between PISA 2000 and PISA 2003 because PISA 2003 assessed two more performance areas ("quantity" and "uncertainty") than its predecessor. But in the areas already assessed in 2000 ("space and shape" and "change and relationship"), Belgium as a whole made substantial progress (OECD, 2004a, pp. 62-74 and pp. 342-347).
5. PISA illustrates both the sorting and its strong repercussions on performance (OECD, 2001, p. 311). In 2000 the inter-quartile range of schools' mean index of economic, social and cultural status (ESCS) was 0.97 for Belgium, the fourth-highest after Italy, Brazil and Mexico. Moving from a school at the 25% line to one at the 75% line of the performance distribution coincides with a fall in the (standard-normally distributed) ESCS by almost 2 index points on average, i.e. a change in the ESCS environment from, say, the richest one-sixth to the poorest one-sixth. The estimated effect on student performance of moving to a school with an average ESCS index 1 point higher is much stronger for Belgium than for the OECD on average. It amounts to 112 points in reading (OECD, 2001, p. 311) and 97 points in mathematics (OECD, 2004a, p. 401).
6. The reading literacy of a Flemish student with the poorest socio-economic and cultural status tends to be as high as that of a French-speaking student with an average status.
7. The greater propensity for letting pupils fail is documented for Belgium as a whole in the PISA result on teachers' pass/fail threshold, which is above the OECD average both for reading (28% compared with 11% of students in a class) and mathematical literacy (21% as against 16%) (OECD, 2001, pp. 258-260).
8. The mean PISA score in science rose from 467 to 483 in the French Community.
9. Total intended instruction time for all subject matters taken together cannot explain the shortfall in student achievement in the French Community as it is above the OECD average up to age 15. It is also higher than in the Flemish Community (OECD, 2004c, p. 364).
10. The practice mentioned in the text refers to math homework. Having or not having math homework makes a significant difference in performance across all student performance levels, with the complete absence of such homework being particularly penalising and every-day homework being particularly rewarding (Jürges and Schneider, 2004, p. 365).

11. The average primary class size in the French Community is 20.4 pupils (OECD: 21.8). In lower secondary this number rises to 21.1 for public institutions (OECD: 23.6). At 9.3 the student-to-teacher ratio, which is only published for Belgium as a whole, is way below the OECD country mean of 13.6 (OECD, 2004c, pp. 376-377).
12. Three different school networks coexist in primary and secondary education. Schools are either run by the government of the French Community, or by some lower level of government (provincial, municipal), or by non-profit organisations. The last of these accounts for about 60% of enrolment in secondary education, compared with 25% for French Community and 15% for provincial/municipal schools. Independently from ownership, schools are subsidised by the French Community so that enrolment is free for everyone.
13. This means that a denominational school has to prefer a teacher coming from another denominational school rather than another private school if these two are the only candidates.
14. While the effect of the interaction of socio-economic background and school policies and management practices accounts for 15% of the between-school variance of student mathematics performance for the OECD as a whole, it is found to be about 35% in Austria, Belgium, and the Netherlands (OECD, 2004a, p. 430). The areas of school autonomy that are found to be positively correlated with mathematics performance are: Appointing teachers; dismissing teachers; deciding on budget allocations within the school; and deciding which courses are offered (OECD, 2004a, p. 427).
15. The High Employment Council has recommended rewarding outstanding teaching performance (in the sense of high value added) by a reduction in working time (HEC, 2004, p. 10). However, only reducing the best teachers' working time would lower the overall teaching performance. Moreover, the reward should not be irreversible.
16. The PISA 2003 questionnaire collected information on a broad range of schools' performance assessment methods. The methods that are particularly scarcely used in Belgium compared with the OECD average are: i) Comparing the school with other schools or the district/regional performance; ii) monitoring schools' progress from year to year; iii) and judging teachers' effectiveness (OECD, 2004a, pp. 422-424).

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Chapter 7

Increasing productivity growth

This chapter discusses reforms to raise productivity growth. It identifies barriers to the profitable use of ICT in the finance and distribution sectors that need to be removed to stimulate productivity growth. Next, ways in which product market competition more generally could be strengthened are discussed, drawing on the main conclusions from the OECD International Regulation Database. Reducing the administrative burden on businesses, liberalising regulation of some professional services and increasing competition in the electricity sector would also contribute to strengthening product market competition. Moreover, the authorities want to strengthen the National Innovation System by stimulating R&D spending and patenting. Attention should also be paid to innovation in services, which often takes the form of organisational change. Finally, universities are facing the risk of declining attractiveness as the increasing globalisation of tertiary education is putting financing arrangements under stress.

Productivity growth has fallen to relatively low rates by historical comparison and is lower than in a number of OECD countries including the productivity leader, the United States. Whereas productivity growth has surged in the United States (and a number of other countries) since the mid-1990s in ICT-using service sectors, accounting for much of the overall increase in productivity growth, this has not occurred in Belgium. Removing the barriers to the profitable use of these universally available technologies in these sectors is one of the major challenges facing Belgium in its quest to increase productivity growth and hence attenuate the adverse economic effects of population ageing. Increasing product-market competition more generally would also tend to strengthen productivity growth by improving the efficiency of resource allocation and increasing incentives for most firms to innovate. There is also scope to increase productivity growth by improving education outcomes and the functioning of the national innovation and tertiary education systems. With the exception of improving education outcomes below the tertiary level, which was covered in Chapter 6, these routes to increasing productivity growth are discussed in the remainder of this chapter. The main policy recommendations are summarised in Box 7.1.

Removing barriers to higher productivity growth in ICT-using sectors

Low growth in labour productivity in Belgium since the mid-1990s relative to that in the United States (and some other OECD countries; but similar to the Euro area average) is mainly attributable to ICT-using service sectors, notably distribution and finance (see Chapter 1). There are factors in the Belgian environment that have limited the profitable use of ICT, which is universally available, relative to what has occurred in the United States and a number of other countries. In particular, there are barriers to achieving economies of scale and scope in the main ICT-using service sectors, including a lack of required skills in the labour force.

Financial sector policies in European countries limit integration of retail financial services

In the finance sector, markets are less integrated across the European Union than they are across the United States. However, progress is being made towards financial market integration in Europe. This is most evident in wholesale financial markets (EC, 2004a). Where integration has occurred, it has been stimulated by market forces leading to the establishment of common pan-European infrastructures, global trends, the search for consolidation-based efficiency gains and the early stages of the implementation of the Financial Services Action Plan (FSAP)¹ (*ibid*). The creation of the euro seems to have accelerated these changes (ECB, 2004). Little integration has occurred, however, in retail banking services – *i.e.*, services for consumers and SMEs (EC, 2004). Greater integration of these services will occur to some extent through market developments, notably consolidation of trading and settlement infrastructure. However, policy actions will also be required, in particular implementation of the FSAP and the extended application of the four level “Lamfalussy framework”.² In this context, it will be important that European

Box 7.1. Increasing productivity growth: policy recommendations

Removing barriers to productivity growth in ICT-using service sectors

- To remove barriers to integration of retail banking across Europe, the Belgian authorities and their European counterparts should fully implement the Financial Services Action Plan and apply the four-level “Lamfalussy framework”.
- To reduce the barriers to greater use of ICT to raise productivity in the Belgian distribution sector, the government should monitor the effects of the new law that reduces regulatory barriers for large stores to enter the market or expand from July 2005 and should ease zoning restrictions if the new law does not result in significantly higher entry or expansion of large stores. The government should seek an agreement with social partners, as it is doing, on cutting back on strict and complex rules on overtime and on easing regulation of temporary work contracts. The government should also make shop opening hours more flexible.

Strengthening product market competition more generally

- To reduce recourse to command and control regulations, regulators should be required to assess alternative policy instruments (regulatory and non-regulatory) before adopting a new regulation and guidance should be issued on using alternatives to traditional regulation to achieve policy objectives. In addition, the government should continue to evaluate the need for remaining price controls and abolish them where they are no longer warranted.
- Product market competition should also be strengthened by reducing barriers to entrepreneurship. In this regard, the burden imposed by systems for licenses and permits should be reduced by introducing a “silence is consent rule” (i.e., a rule that stipulates that licences are issued automatically if the licensing office has not acted by the end of the statutory response period) and by creating single contact points (“one-stop shops”) for issuing or accepting notifications for licenses.
- Concerning sector-specific measures to increase competition, the laws and regulations that restrict the number of competitors in rail freight transport, rail passenger transport, and urban-, suburban- and inter-urban transport, the provision of rail infrastructure and in ground handling at the airports should be abolished or adapted. In the rail industry, the legal splitting of the state-owned NMBS/SNCB into an infrastructure company and a transport service provider, with both companies being part of a new holding company, should be monitored closely to ensure that non-discriminatory access to infrastructure for other transport service operators is achieved. If it is not, the infrastructure manager should be more tightly regulated or, better still, the holding company should be broken up, ending ownership links between the incumbent’s infrastructure- and transport service companies.
- Competition should be increased in the electricity sector by auctioning a greater proportion of the incumbent’s production capacity, increasing interconnection capacity, facilitating the granting of electricity production operating licences and by better monitoring of the respective markets in which the vertically integrated incumbent operates to reduce its scope to abuse its market power.

Innovation policies

- The government should ensure non-discriminatory access to the new wage tax reduction for private companies co-operating with public research institutions by including co-operation with research institutions based abroad so as to increase the possible number and the quality of public-private matches. Moreover, the effects of the measure need to be closely monitored in view of the potentially high deadweight losses.

Box 7.1. Increasing productivity growth: policy recommendations (cont.)

- Innovation policies should be refocused to encourage more investments in organisational change.
- To speed up the adoption of new technologies, the ICT-using competencies of persons with lower intermediate skills and low education attainment should be enhanced.

Tertiary education

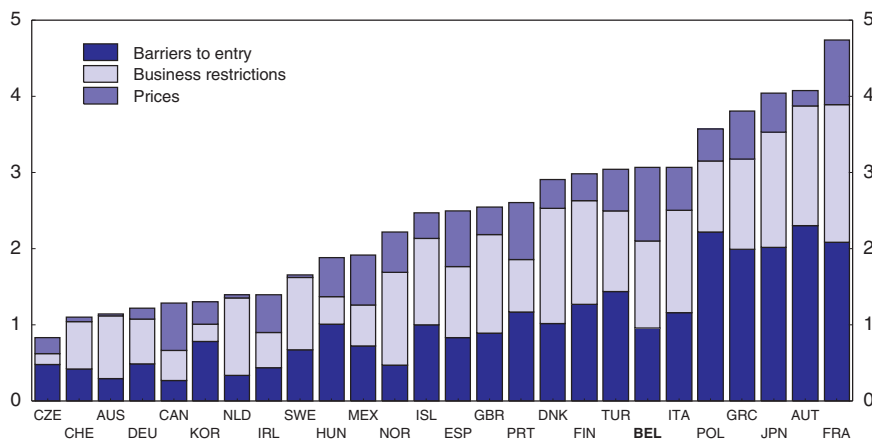
- The Communities should further increase the share of competitive funding and make quality indicators as widely accessible as possible in order to stimulate the performance of universities.
- To meet the additional funding requirements resulting from the growing share of graduates in the labour force and the ongoing internationalisation of tertiary education markets, the share of private funding should be increased, especially for long university studies (ISCED 5A and 6) that are characterised by high private returns, notably by raising student fees and giving students loans with income-contingent repayments. At the same time, universities should be given more freedom to determine the level of student fees.

governments do not stand in the way of retail banking consolidation across national borders in the name of defending national champions.

Aspects of regulation limiting economies of scale and scope in distribution

Belgium has one of the more restrictive regulatory environments for retail distribution in the OECD area (Figure 7.1). This regulatory framework is intended to restrain development of large format retail outlets so as to preserve smaller outlets and maintain activity in city centres, and to limit pressure on retail employees to work unsocial hours. All three categories of regulation used to construct the indicator on which this conclusion is based – barriers to entry (formalities that have to be completed to start a business, authorisations required to sell certain products, and restrictions on large stores), business

Figure 7.1. **Summary indicators of regulation in retail distribution**
1998¹



1. The scale of indicators is 0-6 from least to most restrictive.

Source: Boylaud (2000).

restrictions (opening hours, involvement of industry bodies, local monopolies), and price regulations – are relatively restrictive. Concerning entry barriers, special regulations over and above urban planning regulations apply to retail premises (Boylaud and Nicoletti, 2001, p. 261); zoning regulations, which are a major barrier to the development of large format stores in Belgium, are not taken into account in this indicator. Such regulations mainly concern large stores. The threshold floor area above which restrictive regulatory requirements apply is relatively low (1 000 square metres) in Belgium (*ibid.*, p. 262). In addition, the statutory period during which the authorities must process an application is relatively long (six months). Such restrictions limiting the development of large stores slow down consolidation and modernisation in the retail sector (Hoj *et al.*, 1995), reducing efficiency gains from exploiting economies of scale and scope (Boylaud and Nicoletti, 2001, p. 262). The main constraints on business operations concern shop opening hours, which are also relatively restrictive.³ This limits cost efficiency improvements in large retail outlets from a better exploitation of economies of scale, reduces the range of products available to consumers and protects product and labour market rents (*ibid.*, p. 264). Concerning price regulation, all aspects of promotional activities are regulated, which represents a more restrictive stance than in many other countries. Overall, this regulatory environment has succeeded in limiting the development of large format retail outlets. The average number of employees per retail firm is low by international comparison and outlet density is high.⁴

A new law will come into effect in July 2005 aimed at reducing barriers to entry or expansion in the retail sector. Municipalities will have the final say on whether to accept or refuse the arrival or expansion of a large store. Up until now, authorisation from many parties was required, including the socio-economic committee for distribution.⁵ This committee studied supply in the area where the applicant wanted to enter or expand and would refuse authorisation if this risked undermining what it considered to be an acceptable balance of small-, middle- and large-sized retail outlets. In addition to making authorisations more transparent, the new law cuts the delay in responding to an application in half. While this law represents an important step in reducing entry barriers for large stores, it remains to be seen whether it permits a significant increase in entry or expansion of large format retail outlets. If it does not, it will be necessary to ease zoning restrictions if such an expansion, and its associated increase in productivity, is to be realised. The government is also discussing with the retail sector the possibility of liberalising shop opening hours. These discussions cover both the daily restrictions on opening hours and the requirement for a weekly closure, as well as regulation of tourist areas and night-time retail activities.

Employment protection legislation (EPL) for temporary employment contracts (*i.e.*, fixed-term contracts and temporary-employment-agency contracts) is relatively strict in Belgium compared with other OECD countries (see Chapter 5). In addition, working-time rules are strict, as in other European countries, and are perceived as being complex. These factors reduce the profitability of maintaining long shop opening hours and accordingly, reduce the profitability of investments in the retail sector, including in ICT. The government has asked the social partners to negotiate a new framework on working time that would enable enterprises with peaks in activity more easily to reach an agreement with employees wishing to work extra hours. An important point to achieve in such negotiations would be the right for workers wanting to work extra hours for extra pay to be able to do so – currently, they are obliged to compensate for the extra hours by working less

hours later in the year. The government has also asked the social partners to recognise temporary agency work as an instrument to respond to sudden increases in labour demand and to give young workers their first job experience. In addition, the government would like such contracts to be permitted in all sectors and for open-ended contracts with temporary employment agencies to be possible.

Increasing product-market competition more generally

Ensuring that the competition authorities and network-sector regulators have adequate resources

The competition authorities are being remodelled to enhance their effectiveness and to cope with the extra competencies they took over from the EC (control of market power abuses and cartels) in May 2004. An autonomous and independent organisation is being created comprising an investigative branch (Competition Service) and a decision-making branch (Competition Council), with reporters ensuring the liaison between the two parts of the organisation. At the same time, the way in which market concentration is regulated is being revised so that it will be less resource-intensive for the competition authorities. Nevertheless, the increase in staffing from 23 persons to 39 is unlikely to be sufficient to carry out these responsibilities adequately – such staffing levels are very low by international comparison.

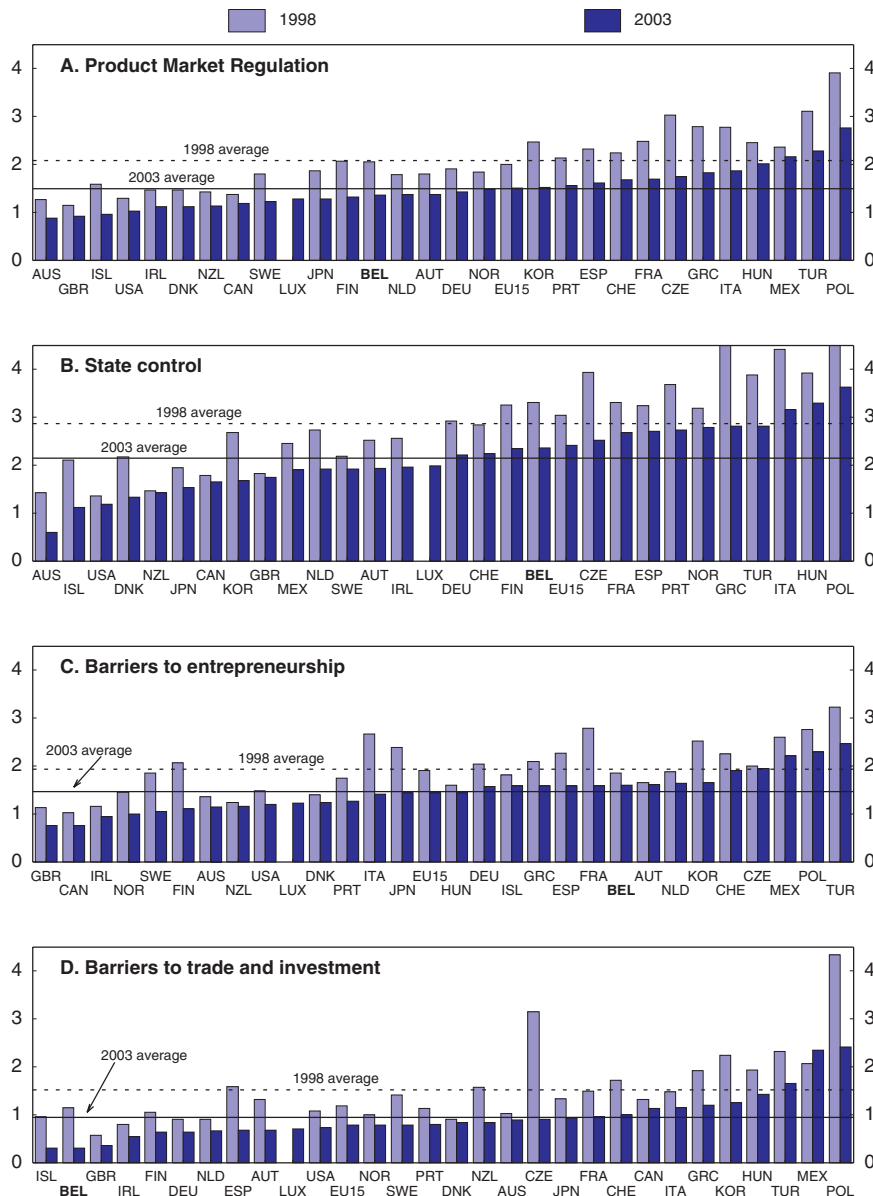
There are also sector regulators in network industries that are charged with increasing competition. Their main role in this regard is to ensure that incumbents do not take advantage of their dominant position to limit market entry of new competitors both in the market itself and in upstream- and downstream markets. An important aspect of this mission is to regulate infrastructure connection prices proposed by the incumbent where they are considered to be excessive (as the electricity regulator did when it imposed cost-based prices for access to the transmission network). Under-staffing of sector regulators in areas where technical skills are very important, such as in telecommunications and electricity, limits regulators' capacity to carry out their missions well.

Reforming regulation to strengthen product-market competition

The impact of regulation on product market competition in Belgium in 2003 is slightly less than the average for OECD countries according to the *OECD International Regulation Database* (Figure 7.2) nevertheless leaving scope for improvement to reach best practice. The components of the product market regulation (PMR) indicator system are outlined in Box 7.2 together with a description of the low-level PMR indicators. Regulatory reform has increased product market competition since 1998, as in most other countries. The average impact of regulation on product market competition reflects the offsetting effects of worse than average scores on state control and barriers to entrepreneurship and a very good score on barriers to trade and investment. Progress in reducing state control has been better than the OECD average while progress in removing barriers to entrepreneurship has been relatively slow, with the result that such regulation is now more restrictive than the OECD average.

Reducing state involvement in business operations

Higher than average state control in Belgium is mainly attributable to high state involvement in business operations – public ownership is near the OECD average (Table 7.1). Belgium scores badly on one of the low-level indicators that feed into state

Figure 7.2. **Product market regulation**¹

1. Sorted by 2003 values. The scale of indicators is 0-6 from least to most restrictive.

Source: Conway, Janod and Nicoletti (2005, Annex 1).

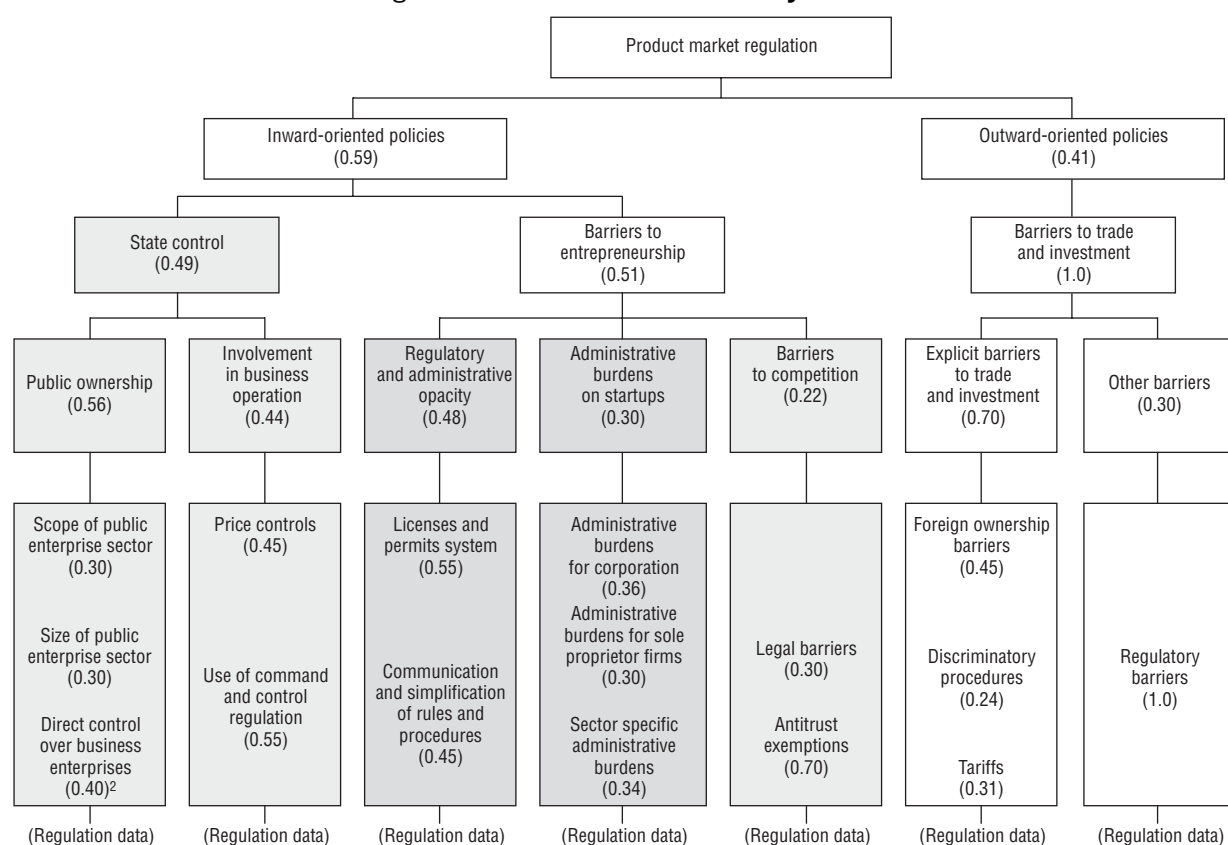
involvement in business operations – the use of command and control regulations; the price controls score is average (Table 7.2). To reduce the use of command and control regulations, Belgian regulators should align their practices with those in most other OECD countries by being required to assess alternative policy instruments (regulatory and non-regulatory) before adopting a new regulation and by being given guidance on using alternatives to traditional regulation to achieve policy objectives. Concerning price controls, the public authorities have legal powers to determine price increases for a limited number of goods and services, the most important of which are: medicines (prescription and over-the-counter); medical consultations; fees for long-term residential care for the

Box 7.2. The product market regulation (PMR) indicator system

There are 16 low-level indicators in the PMR system. These indicators cover a wide range of product market policies. This box gives a brief description of each low-level indicator.

- **Scope of public enterprises:** this indicator measures the pervasiveness of state ownership across business sectors as the proportion of sectors in which the state has an equity stake in at least one firm.
- **Size of public enterprise:** reflects the overall size of state-owned enterprises relative to the size of the economy.
- **Direct control over business enterprises:** measures the existence of government special voting rights in privately-owned firms, constraints on the sale of state-owned equity stakes, and the extent to which legislative bodies control the strategic choices of public enterprises.
- **Price controls:** reflects the extent of price controls in specific sectors.
- **Use of command and control regulation:** indicates the extent to which government uses coercive (as opposed to incentive-based) regulation in general and in specific service sectors.
- **License and permit systems:** reflects the use of “one-stop shops” and “silence is consent” rules for getting information on and issuing licenses and permits.
- **Communication and simplification of rules and procedures:** reflects aspects of government’s communication strategy and efforts to reduce and simplify the administrative burden of interacting with government.
- **Administrative burdens for corporations:** measures the administrative burdens on the creation of corporations.
- **Administrative burdens for sole proprietors:** measures the administrative burdens on the creation of sole proprietor firms.
- **Sector-specific administrative burdens:** reflects administrative burdens in the road transport and retail distribution sectors.
- **Legal barriers:** measures the scope of explicit legal limitations on the number of competitors allowed in a wide range of business sectors.
- **Antitrust exemptions:** measures the scope of exemptions to competition law for public enterprises.
- **Ownership barriers:** reflects legal restrictions on foreign acquisition of equity in public and private firms and in the telecommunications and airlines sectors.
- **Tariffs:** reflects the (simple) average of most-favoured-nation tariffs.
- **Discriminatory procedures:** reflects the extent of discrimination against foreign firms at the procedural level.
- **Regulatory barriers:** reflects other barriers to international trade (e.g. international harmonisation, mutual recognition agreements).

elderly; taxi rides; water; electricity; stamps; and railway tickets. Control of bread prices, which was limited to a certain kind of loaf, was abolished in July 2004. The government is examining remaining price controls with a view to abolishing them where they are no longer justified by social interests or a lack of competition.⁶ Along the way, it may also be possible to improve the controls so long as they are justified.⁷ Where competition is feasible, social interests should not stand in the way of removing price controls – such

Figure 7.3. **The PMR indicators system**¹

- Economic regulation
 Administrative regulation

- Weights which are shown in brackets were derived from a principal components analysis performed separately on regulatory data entering each of the main domains of regulation (state control, barriers to entrepreneurship, barriers to trade and investment, economic regulation and administrative regulation). A similar principal components analysis was also performed on the domains entering the indicator of inward-oriented policies (state control and barriers to entrepreneurship), and the summary indicator of regulation (inward- and outward-oriented regulations). The principal components analysis was based on the original 1998 data.
- Two indicators from the 1998 version of the PMR indicators (“Special voting rights” and “Control of public enterprise by legislative bodies”) have been combined into this indicator.

Source: Conway, Janod and Nicoletti (2005, Annex 3).

concerns can be met more efficiently by making transfers from general government revenues rather than by distorting the market concerned. Removing price controls in these circumstances would increase supply (assuming that the price controls were binding) and consumer choice. The government should also reconsider the extent to which the restrictions on promotional sales serve consumer interests.

Reducing regulatory and administrative opacity

The slightly higher than average barriers to entrepreneurship in Belgium reflect regulatory and administrative opacity; administrative burdens on start-ups and barriers to competition are less than the OECD average (Table 7.3). This comes from the licence and permits system rather than from the category on the communication and simplification of rules and procedures (Table 7.4). To reduce regulatory and administrative opacity, a “silence

Table 7.1. **State control: country scores by domain and sub-domain**

	Domain		Sub-Domain			
	State control		Public ownership		Involvement in business operation	
	1998	2003	1998	2003	1998	2003
Australia	1.4	0.6	1.1	0.8	1.9	0.3
Austria	2.5	1.9	2.7	2.2	2.3	1.6
Belgium	3.3	2.4	2.8	2.2	4.0	2.6
Canada	1.8	1.7	1.8	1.7	1.8	1.5
Czech Republic	3.9	2.5	4.8	3.0	2.9	1.9
Denmark	2.2	1.3	2.2	1.7	2.1	0.8
Finland	3.3	2.3	3.7	3.2	2.6	1.3
France	3.3	2.7	3.5	3.3	3.0	1.9
Germany	2.9	2.2	3.0	2.8	2.9	1.5
Greece	4.5	2.8	4.2	2.4	4.9	3.3
Hungary	3.9	3.3	4.5	3.8	3.3	2.6
Iceland	2.1	1.1	2.4	1.8	1.8	0.3
Ireland	2.6	2.0	2.5	1.8	2.7	2.1
Italy	4.4	3.2	5.1	3.8	3.6	2.3
Japan	1.9	1.5	0.9	0.8	3.3	2.4
Korea	2.7	1.7	3.0	1.8	2.2	1.5
Luxembourg		2.0		2.6		1.2
Mexico	2.5	1.9	2.5	2.3	2.3	1.4
Netherlands	2.7	1.9	3.3	2.5	2.0	1.2
New Zealand	1.5	1.4	1.5	1.9	1.4	0.8
Norway	3.2	2.8	3.7	3.5	2.5	1.8
Poland	4.6	3.6	5.3	4.2	3.6	2.8
Portugal	3.7	2.7	3.6	3.1	3.8	2.2
Slovak Republic		1.4		1.9		0.8
Spain	3.2	2.7	3.0	2.7	3.5	2.7
Sweden	2.2	1.9	2.7	2.2	1.5	1.6
Switzerland	2.8	2.2	2.7	2.4	3.0	2.1
Turkey	3.9	2.8	3.7	3.1	4.1	2.5
United Kingdom	1.8	1.7	1.8	1.9	1.8	1.6
United States	1.4	1.2	1.3	1.2	1.4	1.2
Average ¹	2.9	2.1	2.6	2.1	2.8	1.9

1. Average of above countries with data in 1998.

Source: Conway, Janod and Nicoletti (2005, Annex 3: *The OECD PMR Indicators*).

is consent rule” (i.e., a rule that stipulates that licences are issued automatically if the licensing office has not acted by the end of the statutory response period) should be introduced, as in most other OECD countries, and single contact points (“one-stop shops”) should be created for issuing or accepting notifications for licenses, again, in line with international best practice. Although administrative burdens on start-ups are below the OECD average, steps are being taken to reduce them further (Box 7.3).

Reducing legal barriers to entry

Product-market competition could also be strengthened by reducing legal barriers to entry, which are above the OECD average; this does not result in a below average score in the “barriers to competition” category that feeds into “barriers to entrepreneurship” in the PMR indicators system because the effect is more than compensated by the absence of anti-trust exemptions (see Table 7.4). Based on the practice in other countries, there is scope to reduce legal barriers to entry by abolishing laws and regulations that restrict the

Table 7.2. **State control: values of the low-level indicators**¹

	Scope of public enterprise sector		Size of public enterprise sector		Direct control over business enterprise		Use of command and control regulation		Price controls	
	1998	2003	1998	2003	1998	2003	1998	2003	1998	2003
Australia	2.8	2.8	0.8	0.1	0.0	0.0	1.9	0.4	2.5	0.0
Austria	5.0	3.5	4.3	4.0	0.0	0.0	2.4	2.2	2.7	1.3
Belgium	2.3	1.8	3.3	3.3	2.6	1.5	4.7	4.5	4.0	1.0
Canada	2.8	2.8	2.1	2.1	0.8	0.8	1.2	1.3	2.9	2.0
Czech Republic	4.5	3.8	4.5	3.2	5.3	2.3	2.3	2.3	2.5	1.3
Denmark	3.0	2.5	2.3	2.3	1.5	0.8	3.9	1.4	0.3	0.0
Finland	3.5	3.5	4.2	3.2	3.6	2.9	2.9	1.4	1.8	0.3
France	5.0	4.5	4.3	4.1	1.9	1.9	4.4	3.0	1.7	0.3
Germany	3.5	3.3	3.4	3.2	2.3	2.3	3.3	1.8	2.5	0.5
Greece	3.3	3.0	4.4	3.8	4.6	0.9	5.3	5.1	4.7	2.3
Hungary	4.5	3.5	3.4	3.0	5.3	4.8	2.3	2.3	3.5	2.0
Iceland	2.8	2.3	3.3	2.8	1.4	0.7	2.5	0.0	1.0	0.3
Ireland	3.0	2.5	3.3	2.6	1.5	0.8	3.8	3.8	1.8	0.8
Italy	5.3	4.5	4.2	3.7	5.6	3.5	3.4	1.9	2.8	2.0
Japan	2.0	2.0	0.0	0.0	0.6	0.6	3.9	3.0	3.9	2.5
Korea	2.3	2.0	3.4	2.8	3.4	1.0	1.0	1.1	3.3	2.0
Luxembourg	1.9	3.5	1.2	1.2	1.3	2.9	2.0	1.5	1.2	0.0
Mexico	3.5	3.0	3.7	3.6	1.1	0.9	2.1	1.7	3.0	1.0
Netherlands	3.0	2.8	3.2	2.8	3.8	2.0	1.8	1.7	1.3	0.3
New Zealand	1.5	2.3	1.0	0.8	2.0	2.6	1.5	0.8	1.0	0.0
Norway	4.8	4.8	4.6	4.0	2.4	2.4	2.2	2.2	2.7	0.8
Poland	6.0	5.8	5.4	4.6	4.9	3.0	4.5	3.5	1.8	1.6
Portugal	3.9	3.8	2.5	1.7	4.2	3.8	3.5	2.0	4.0	1.8
Slovak Republic	–	1.6	–	0.0	–	3.5	–	0.0	–	0.4
Spain	4.5	3.5	2.7	2.5	2.3	2.3	4.5	4.4	2.7	0.8
Sweden	3.7	3.7	3.2	2.7	1.8	0.7	1.5	2.3	1.0	1.0
Switzerland	3.8	3.8	0.9	0.9	3.4	2.6	1.4	1.2	4.7	2.6
Turkey	4.8	4.8	4.5	4.3	2.4	1.0	5.1	4.4	3.5	0.6
United Kingdom	0.8	0.8	1.7	1.6	2.6	2.9	1.9	2.3	1.6	0.4
United States	2.8	2.5	0.6	0.6	0.8	0.8	1.5	1.5	1.4	0.8
Average ²	3.4	3.1	3.0	2.5	2.5	1.9	2.9	2.2	2.5	1.0

1. Italic = estimated indicator due to missing data points.

2. Average of above countries with data in 1998.

Source: Conway, Janod and Nicoletti (2005, Annex 3: *The OECD PMR Indicators*).

number of competitors in: rail freight transport; rail passenger transport; urban, suburban and inter-urban transport; the provision of rail infrastructure; and in ground handling at the airports.

Reducing the administrative burden on businesses

In addition to raising costs, high administrative burdens on businesses discourage market entry, especially for small firms, for whom the administrative burden tends to be greatest, reduce competition and incentives to innovate and hence the prospects for long-term growth. Given that employment legislation has been identified as representing almost three quarters of the total administrative costs for companies (Joos and Kegels, 2004, p. 15), administrative simplification can lower the cost of labour in the same way as tax cuts can, stimulating enterprise growth and employment creation. Such simplification would also tend to benefit low-skilled workers most. Reducing the administrative burden,

Table 7.3. **Barriers to entrepreneurship: country scores by domain and sub-domain**

	Domain		Sub-Domain					
	Barriers to entrepreneurship		Administrative burdens on start ups		Regulatory and administrative opacity		Barriers to competition	
	1998	2003	1998	2003	1998	2003	1998	2003
Australia	1.4	1.1	1.1	1.0	1.5	1.2	1.8	1.5
Austria	1.7	1.6	2.6	2.8	0.6	0.4	1.0	0.8
Belgium	1.9	1.6	1.3	1.7	3.3	2.2	1.0	0.6
Canada	1.0	0.8	1.4	0.9	0.6	0.5	0.7	0.7
Czech Republic	2.0	1.9	2.2	2.3	2.7	2.3	0.6	0.5
Denmark	1.4	1.2	0.5	0.5	2.4	2.1	2.1	1.7
Finland	2.1	1.1	2.0	1.3	3.2	1.2	0.7	0.4
France	2.8	1.6	3.4	1.9	2.7	1.3	1.5	1.4
Germany	2.0	1.6	2.4	1.6	2.6	2.2	0.4	0.5
Greece	2.1	1.6	3.0	2.6	1.7	0.6	0.6	0.5
Hungary	1.6	1.4	2.4	2.3	0.4	0.4	1.5	1.1
Iceland	1.8	1.6	1.7	1.4	2.7	2.4	0.8	0.7
Ireland	1.2	0.9	0.9	0.5	2.2	2.1	0.2	0.3
Italy	2.7	1.4	4.6	2.4	0.7	0.4	1.0	0.6
Japan	2.4	1.4	2.1	1.9	3.8	1.2	1.0	0.6
Korea	2.5	1.7	2.2	2.2	3.8	1.2	1.3	1.0
Luxembourg	–	1.2	–	1.8	–	1.1	–	0.1
Mexico	2.6	2.2	3.2	3.1	2.4	0.4	1.4	2.9
Netherlands	1.9	1.6	1.8	1.6	2.4	2.5	1.2	0.6
New Zealand	1.2	1.2	1.0	0.8	2.2	2.2	0.4	0.4
Norway	1.5	1.0	1.8	1.0	1.3	1.2	0.8	0.6
Poland	2.8	2.3	3.8	3.7	2.0	1.5	1.6	0.3
Portugal	1.8	1.3	2.1	1.7	1.8	1.2	1.0	0.5
Slovak Republic	–	1.2	–	1.9	–	0.7	–	0.3
Spain	2.3	1.6	3.5	2.8	1.6	0.4	0.5	0.4
Sweden	1.9	1.1	1.1	1.2	3.5	1.1	1.3	0.6
Switzerland	2.3	1.9	2.2	1.7	3.4	3.1	0.8	0.7
Turkey	3.2	2.5	2.7	2.7	4.1	3.4	3.2	0.5
United Kingdom	1.1	0.8	1.0	0.7	1.7	1.2	0.7	0.4
United States	1.5	1.2	0.9	1.0	2.3	1.3	1.5	1.5
Average ¹	1.9	1.5	2.1	1.8	2.4	1.5	1.1	0.8

1. Average of above countries with data in 1998.

Source: Conway, Janod and Nicoletti (2005, Annex 3: The OECD PMR Indicators).

especially insofar as it concerns labour-market regulations, also lowers incentives for economic activity to occur in the shadow economy. The government has embarked on a programme of administrative reform aimed at achieving the objectives of regulation at a lower cost to the private sector and should pursue this programme as rapidly as possible.

National bi-annual surveys on the administrative costs for enterprises indicate that the administrative burden is gradually being lowered; this corroborates the finding in the *OECD International Regulation Database* that the burden imposed by the licences and permits systems is declining (see Table 7.4). The administrative burden is defined as the total cost of the resources used for compliance with and management of all regulatory requirements related to employment, taxation, and the environment (including health and safety). A first survey, which served as a benchmarking exercise, estimated the administrative burden on businesses at € 8.6 billion (3.5% of GDP) in 2000, with € 6.3 billion (2.6% of GDP) for

Table 7.4. **Barriers to entrepreneurship: values of the low-level indicators**

	Licence and permits system		Communication and simplification of rules and procedures		Administrative burdens for start ups – corporations		Administrative burdens for start ups – sole proprietor firms		Sector-specific administrative burdens		Legal barriers to entry		Antitrust exemptions	
	1998	2003	1998	2003	1998	2003	1998	2003	1998	2003	1998	2003	1998	2003
Australia	2.0	2.0	0.8	0.2	1.0	1.3	2.0	1.3	0.2	0.3	1.9	1.6	1.9	1.5
Austria	0.0	0.0	1.1	0.5	2.8	3.0	2.5	2.5	2.4	3.4	3.5	0.3	0.0	1.0
Belgium	6.0	4.0	0.5	0.3	1.5	1.8	1.0	1.5	1.3	1.7	1.4	1.6	0.7	0.0
Canada	0.0	0.0	1.2	1.0	1.5	0.8	1.5	1.3	1.5	0.9	<i>0.8</i>	0.9	0.6	0.6
Czech Republic	4.0	4.0	1.2	0.5	3.0	3.0	2.0	2.0	1.7	2.2	1.6	1.4	0.0	0.0
Denmark	4.0	4.0	0.7	0.0	0.5	1.0	0.3	0.0	0.2	0.3	2.3	1.4	2.1	1.9
Finland	4.0	2.0	2.6	0.3	1.5	1.3	2.8	1.8	1.8	1.1	1.6	1.4	0.0	0.0
France	4.0	2.0	1.1	0.3	3.3	2.0	3.8	2.0	3.6	1.6	2.0	2.2	1.2	1.1
Germany	4.0	4.0	1.0	0.3	2.3	2.3	3.3	1.3	2.1	1.4	1.1	1.4	0.0	0.0
Greece	2.0	0.0	1.2	1.1	3.0	2.3	3.3	3.3	3.2	2.9	1.6	1.6	0.0	0.0
Hungary	0.0	0.0	0.5	0.5	2.3	2.3	3.0	3.0	2.2	2.0	2.7	1.6	1.0	0.9
Iceland	4.0	4.0	1.3	0.7	1.3	1.3	<i>1.9</i>	<i>1.3</i>	<i>1.9</i>	<i>1.6</i>	2.3	2.3	0.0	0.0
Ireland	4.0	4.0	0.3	0.2	1.5	0.8	0.8	0.3	0.5	0.3	0.6	0.9	0.0	0.0
Italy	0.0	0.0	0.9	0.5	5.5	2.8	4.3	2.8	4.7	2.1	3.3	1.9	0.0	0.0
Japan	6.0	2.0	1.5	0.3	2.3	1.5	2.3	<i>2.3</i>	1.8	<i>2.3</i>	2.2	1.4	0.3	0.3
Korea	6.0	2.0	1.5	0.0	2.7	2.7	2.3	2.3	1.6	1.9	2.5	1.9	0.7	0.6
Luxembourg	<i>0.2</i>	2.0	<i>0.4</i>	0.0	0.8	2.5	0.3	3.0	<i>0.1</i>	<i>0.3</i>	–	0.3	–	0.0
Mexico	4.0	0.0	0.5	0.3	3.3	3.3	3.3	3.3	3.9	3.2	2.2	1.9	0.9	3.5
Netherlands	4.0	4.0	0.6	0.9	2.0	2.0	1.8	1.3	1.6	1.3	2.2	1.9	0.8	0.0
New Zealand	4.0	4.0	0.4	0.3	1.0	1.0	1.0	0.8	1.0	0.8	0.3	0.3	0.3	0.4
Norway	2.0	2.0	0.4	0.2	1.9	1.0	1.9	1.0	1.7	0.9	2.7	2.2	0.0	0.0
Poland	2.0	2.0	<i>1.9</i>	0.8	4.3	4.3	3.3	3.3	4.1	4.1	<i>1.6</i>	0.6	1.5	0.0
Portugal	2.0	0.0	1.5	2.6	2.8	1.5	1.8	1.8	1.8	1.8	1.2	1.4	0.8	0.0
Slovak Republic	–	0.0	–	1.4	–	2.0	–	2.3	–	1.9	–	0.6	–	0.0
Spain	2.0	0.0	1.0	0.6	3.5	2.8	4.0	4.0	3.5	2.4	1.4	1.1	0.0	0.0
Sweden	6.0	2.0	0.9	0.0	1.3	1.0	1.0	1.8	0.8	0.9	2.0	2.0	0.9	0.0
Switzerland	6.0	6.0	0.5	0.0	3.3	2.3	3.3	1.8	0.0	0.8	2.5	2.2	0.0	0.0
Turkey	6.0	6.0	2.1	0.5	2.3	2.3	3.0	3.0	2.9	3.2	2.2	1.4	3.7	0.0
United Kingdom	3.0	2.0	0.4	0.2	0.8	0.8	1.3	0.5	0.8	0.6	1.4	1.4	0.3	0.0
United States	4.0	2.0	0.4	0.4	0.5	0.8	1.5	1.3	0.8	1.0	1.1	1.4	1.8	1.6
Average ¹	3.3	2.2	1.0	0.5	2.2	1.9	2.2	1.9	1.9	1.6	1.9	1.4	0.7	0.4

Note: Italic = estimated indicator due to missing data points.

1. Average of above countries with data in 1998.

Source: Conway, Janod and Nicoletti (2005, *Annex 3: The OECD PMR Indicators*).

Box 7.3. Administrative burden on start-ups

It took 56 working days in 2002 to complete all mandatory procedures for registering a limited liability company. This is viewed as being a major obstacle to entrepreneurship. Consequently, the government set itself the ambitious target of bringing down this number to 3 days by 1 July 2005 and has developed a broad-based strategy to reach this goal. The creation of one-stop shops where entrepreneurs can fulfil their administrative formalities related to the start-up of a business through a unique starters form and the creation of unique enterprise identification numbers together with the Crossroads Bank for Enterprises has brought down the registration time to 34 days since January 2004. The integration of the VAT-registration into the formalities that can be completed on-line via the business one-stop shops has reduced the average start-up time further to 27 days as of October 2004. A simplification of procedures regarding the incorporation of the company as a legal entity, culminating in the possibility to complete the act of incorporation completely electronically as of mid-2005, should reduce the time it takes to establish a limited liability company to just 3 days.

enterprises⁸ and € 2.3 billion (0.9% of GDP) for self-employed persons. The same survey repeated in 2002 found that the administrative burden on businesses had gone up to € 9 billion in absolute terms, although it had fallen in relative terms to 3.4% of GDP; the administrative burden for enterprises remained at € 6.3 billion but rose for self-employed persons to € 2.7 billion. Within the group of enterprises, the administrative burden is particularly high for the smallest firms; increasing the hourly labour cost by € 4.2 in a small enterprise (employing less than 10 persons), by € 1.21 in a medium-sized enterprise (employing between 10 and 50 persons) and by only € 0.3 in a large company (Joos and Kegels, 2004, p. 17). Finally, the qualitative part of the survey indicated that enterprises and self-employed persons are more satisfied with their contacts with the government administration than with the regulation itself. With respect to the latter, both groups are most critical about the lack of coherence and flexibility in the regulation, which makes it hard to adapt to different circumstances. They also feel that the regulation is often difficult to understand.

Administrative simplification remains a priority for the government. An Agency for Administrative Simplification was created in 1999 with a mission to develop a strategy and to coordinate the process and a State Secretary was appointed in 2003 to stress the political importance of achieving tangible progress in this area (*secrétariat d'État à la simplification administrative*, 2003). E-government is expected to make a major contribution through several applications. More specifically, the creation of the Crossroad Bank for Enterprises (BCE) means that each company deals with only one point of contact to complete all formal processes in setting up a business; each company has a single number for all its government contacts (as opposed to over 70 types of identification numbers in the past), and each company has to provide its entire basic identification data to the government only once and not repeatedly to different government bodies. It is now mandatory for employers to declare new employees electronically, and the information is entered into a database (DIMONA). Information about tax legislation is now available online (FISCONET), tax forms can be obtained electronically (FINFORM) and direct taxes and VAT declarations can be filed electronically (TAX-ON-WEB, INTERVAT). In addition, one-stop shops that

support companies in meeting their administrative requirements have been created throughout the country.

A package of simplification projects has been selected from the input deriving from the *Kafka*⁹ contact point (a website where enterprises, citizens, organisations and civil servants were able to report on burdensome regulation and procedures between December 2003 and March 2004). Moreover, a *Kafka* clause was introduced in October 2001, obliging Ministers to test their policy proposals for the impact on the administrative burden for citizens, companies, organisations and the public sector and to present the results to the Ministerial Council. This clause was replaced by the *Kafka* test as of October 2004: a more focused approach and supporting materials (reporting templates, manual) have been issued recently to boost the effectiveness of the impact analysis. Ideally, the *Kafka* test should become embedded in a broader cost-effectiveness analysis for each new legislative proposal. Existing legislation should also be subject to a periodic evaluation to make sure that outdated laws are removed in a timely manner. This procedure has enabled Australia to reduce the number of applicable laws by half.

Complex and burdensome administrative procedures and frequent regulatory changes are also the result of regulation being issued in an uncoordinated fashion by different levels of government (European, federal, regional) which often share responsibilities in the most important policy area. To ensure a closer coordination of legislative initiatives and a streamlining of administrative procedures, a cooperation agreement on simplification was signed by all governments in December 2003. Belgium also intends to join other European countries in the effort to elaborate a common methodology for the evaluation of the administrative burden caused by new European Directives. The Belgian government should also consider the transposition of all European legislation into national law without any further additions of regulatory requirements at the federal (regional) level.

Liberalising regulation of professional services where that would serve consumer interests

Regulation of professional services is warranted to correct for market failures arising from asymmetric information between suppliers and customers – suppliers know more about the true quality of the services they offer than do their clients, especially when the supplier provides the service to the customer for the first time. In the absence of regulation, there could be moral hazard problems, with suppliers inducing patterns of demand that are not in fact efficient for customers, and adverse selection problems, with quality driven out of the market by consumers' inability to judge the quality of professionals. On the other hand, restrictive regulatory frameworks and self-regulation by professional bodies can also be used against the interests of consumers to capture economic rents. There is international empirical evidence that suggests that the latter objective tends to dominate in practice (Nguyen-Hong, 2000; OFT, 2001; and Paterson *et al.*, 2003).

According to a recent European Commission study (Paterson *et al.*, 2003), Belgium has a middle-ranking degree of regulation intensity over the professions on average relative to the group of countries included in the study (Table 7.5). Regulation intensity is high for accountants and pharmacists and medium to low for the other professions. While regulation intensity is also high for pharmacists in most of the other countries, this is not the case for accountants. Restrictive regulation of entry and conduct in all liberal

Table 7.5. **Regulation indices in professional services**¹

	Accountants	Legal	Architects	Engineers	Pharmacists
Austria	6.2	7.3	5.1	5.0	7.3
Belgium	6.3	<i>4.6</i>	<i>3.9</i>	1.2	5.4
Denmark	<i>2.8</i>	<i>3.0</i>	0.0	0.0	5.9
Finland	<i>3.5</i>	0.3	1.4	1.3	7.0
France	5.8	6.6	<i>3.1</i>	0.0	7.3
Germany	6.1	6.5	<i>4.5</i>	7.4	5.7
Greece	5.1	9.5	n.a.	n.a.	8.9
Ireland	<i>3.0</i>	<i>4.5</i>	0.0	0.0	<i>2.7</i>
Italy	5.1	6.4	6.2	6.4	8.4
Luxembourg	5.0	6.6	5.3	5.3	7.9
Netherlands	<i>4.5</i>	<i>3.9</i>	0.0	1.5	<i>3.0</i>
Portugal	n.a.	5.7	<i>2.8</i>	n.a.	8.0
Spain	<i>3.4</i>	6.5	<i>4.0</i>	<i>3.2</i>	7.5
Sweden	<i>3.3</i>	2.4	0.0	0.0	12.0
United Kingdom	<i>3.0</i>	<i>4.0</i>	0.0	0.0	<i>4.1</i>

1. The higher the degree of regulation (intensity), the higher the respective figure (within a range from 0 to 12). All the regulation indices with a value of 5 or higher are bolded, indices between 2.5 and 4.9 are in italics, and, those below 2.5 are in normal typeface.

Source: Paterson et al. (2003).

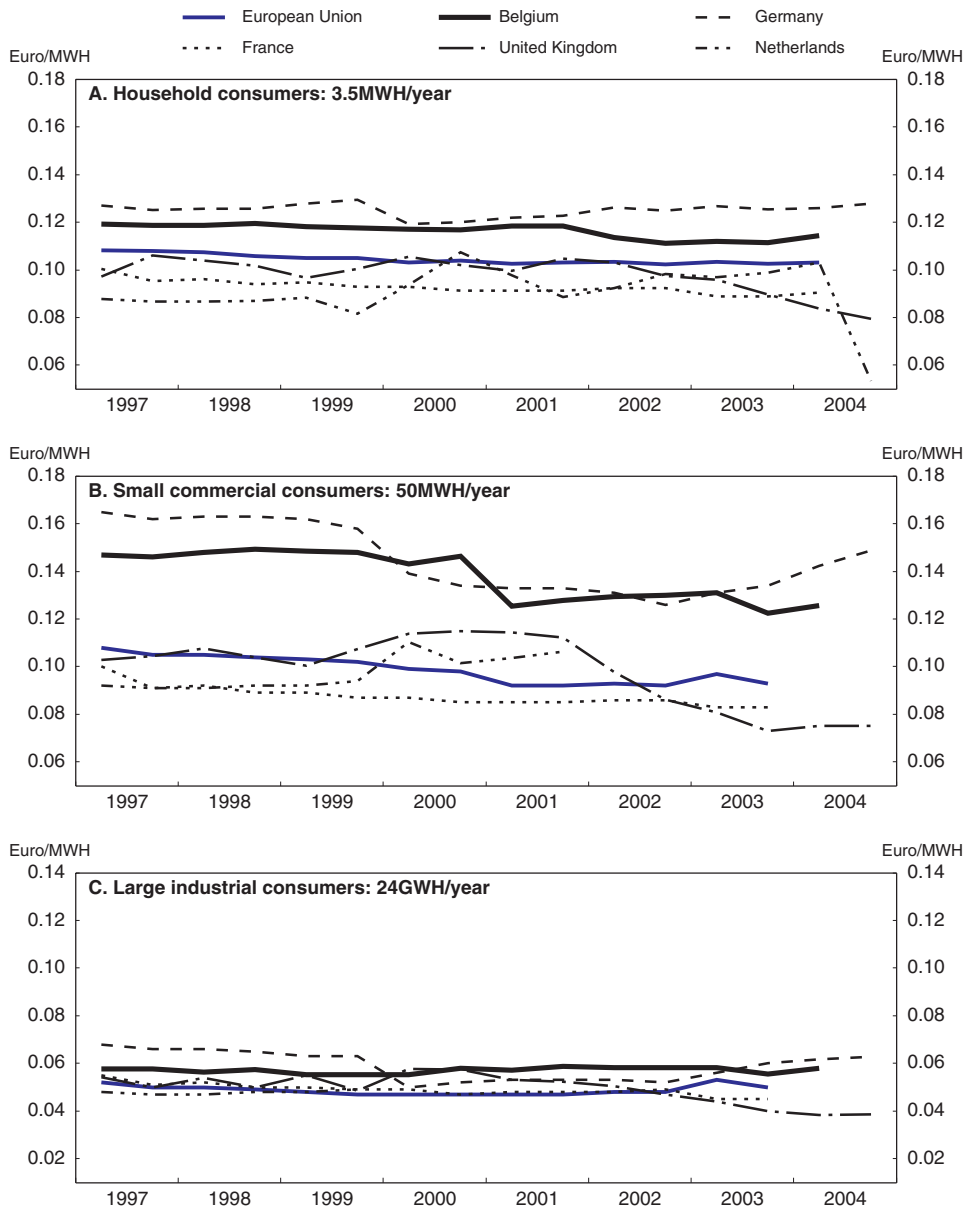
professions should be re-examined to see whether it really is in the best interests of consumers, with such a review of the accounting profession being a matter of priority.

Increasing competition in the electricity sector

Electricity prices (excluding taxes) are high relative to the EU average, although the gap was significantly reduced for households in recent years by a regulated reduction in prices (Figure 7.4). The high prices reflect high production costs, high balancing costs/capacity payments and high charges for accessing the network (EC, 2004b); however, it should be noted that transport tariffs decreased in 2003 and 2004 as compared with 2002. One of the factors that contribute to high production costs is a lack of competition; the others are high capital costs for nuclear energy and prices being based on full generating costs rather than marginal costs. Market concentration is high, with the largest generator (Electrabel) accounting for 59% of capacity after taking account of imports compared with an EU (14)¹⁰ average of 37% (*ibid*). Insufficient interconnection capacity is a barrier to market entry as are the administrative costs of obtaining operating licences. The high balancing charges are also unfavourable for market entry.

Increasing interconnection capacity, notably at the border with France where congestion is frequent, is vital for increasing competition in electricity production. Such an increase is planned by the network owner. The first phase of the planned investment started in November 2004 and should be completed by the end of 2005. A second phase should start in 2005 and be completed in 2006. It should be noted that the increase in trans-border interconnection capacity planned in Europe in the context of electricity market liberalisation necessitates a significant strengthening of national transport networks in centrally located countries such as Belgium through which much electricity transits; in this case, most transit traffic is from France to the Netherlands. The national transport network has not kept pace with the growth in transit traffic, a factor which almost resulted in a blackout in early 2004. More co-ordination of infrastructure development at the European level would contribute to strengthening competition while preserving supply security. The

Figure 7.4. Electricity prices excluding taxes



Source: Eurostat Database.

most efficient solution in the long term could be to put in place a manager for the whole European network.

The network managers are also studying the possibility of using market signals (e.g., auctions) to allocate access to the network so as to use it more efficiently. The introduction of a spot electricity market, as in France and the Netherlands, is also being studied. These measures would be effective in increasing competition as they would give market entrants access to cheaper sources of supply than Electrabel. As a temporary measure, Electrabel has been obliged to put up for auction a small proportion (10%) of its production capacity annually from 2004 to 2008. Given that the production mix of this

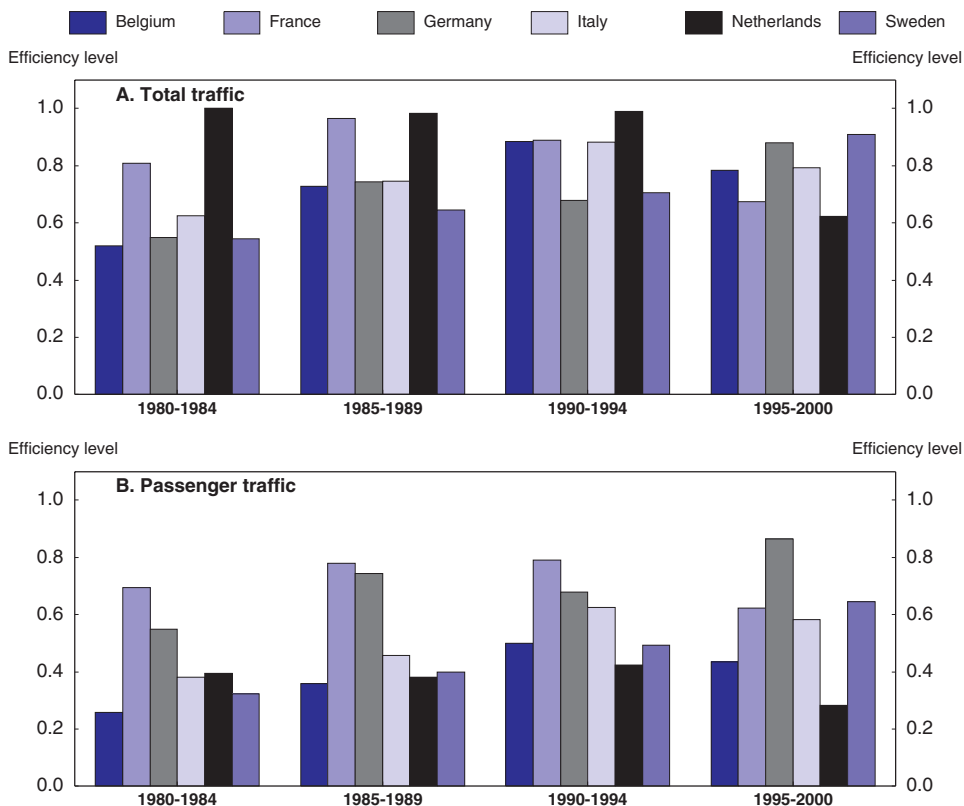
virtual capacity is the same as for the incumbent, the impact on competition is rather limited. Instead, the main effect of the measure is to increase market liquidity. This measure would be more effective if the administrative charges borne by purchasers at each auction were lower.

A proposal to shift to multi-year tariffs for access to the transport network was approved by the Council of Ministers in December 2004. Transport tariffs will apply for four years from 1 January 2006, compared with only three months presently. This measure will reduce uncertainty for network users (concerning prices) and for the network manager (concerning the coverage of operating costs and depreciation). It will also reduce administrative costs for the regulator and network manager. In view of these benefits, the measure should encourage investment in the transport network, hence adding to security of long-term supply. The authorities should also simplify the administrative procedures to obtain an operating licence to increase entry of new producers.

Increasing efficiency in rail freight

According to a recent study (Friebel, Ivaldi and Vibes, 2004), the efficiency of Belgian railways relative to the most efficient railways among 11 European countries rose from around 50% cent in 1980-84 to almost 90% a decade later but has since declined by about 10 percentage points (Figure 7.5). The relative efficiency of passenger services followed a similar path but remains relatively low. The decline in relative efficiency since the

Figure 7.5. **Relative efficiency in railways**

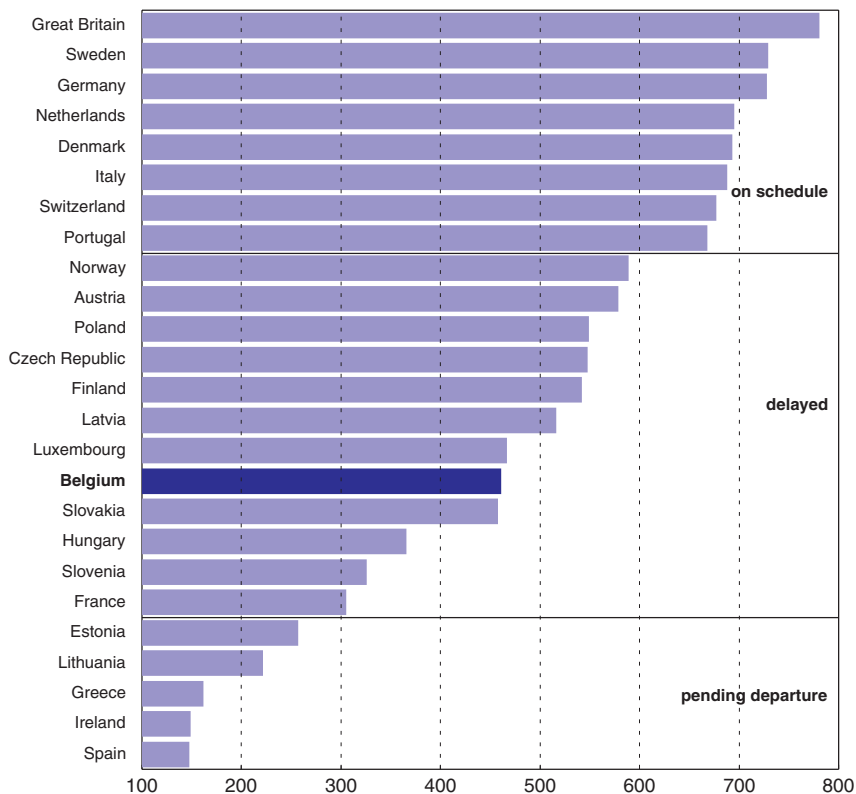


Source: Friebel, Ivaldi and Vibes (2004).

mid-1990s mainly reflects more rapid progress in raising efficiency in other countries, notably Germany and Sweden.

There has been a series EC Directives since 1991 aimed at improving performance in the rail sector. A key feature has been the requirement for legal separation of infrastructure management and provision of rail transport services and the creation of a sector regulator to ensure non-discriminatory network access to competitors. Such a structure is aimed not only at increasing competition in the provision of transport services, but also at increasing network owners' incentives to develop interoperability with other national networks.¹¹ There are also Directives requiring open access to be gradually extended to the whole freight network – enforced by European competition policy – and promoting interoperability through harmonisation and standardisation.¹² While Belgium has made progress towards achieving a more competitive market for rail transport services, such progress has been more rapid in many other European countries, including Sweden and Germany (Figure 7.6). Despite transposing the first EU Infrastructure Package into national legislation in 2003, there remained many barriers to market entry by potential competitors of the NMBS/SNCB as of spring 2004 (IBM Business Consulting Services and Kirchner, 2004). In terms of the legal framework, the main weaknesses were that the NMBS/SNCB business

Figure 7.6. Rail Liberalisation Index
2004



1. Countries with 600 or more points are classified as being “on schedule”. These countries have a competition friendly legislative basis and fair and objective market access conditions. The second group – “delayed” – comprises – countries with scores between 300 and 600 points. These countries have made substantial less progress than in the first group in opening up their rail transport markets. The countries with less than 300 points – “pending departure” – have made very little progress in opening up their rail transport markets.

Source: IBM Business Consulting Services and Kirchner (2004).

units of infrastructure and transport were separate only in terms of accounting and that the freight and passenger transport divisions were not yet separate. Foreign passenger train operating companies without a domestic licence had access rights only as part of international groupings and the domestic passenger market was not open to NMBS/SNCB competitors. More importantly, there remained considerable non-legislative barriers to competition. There were long delays (approximately two years) for potential competitors to obtain all the necessary certificates; approval of rolling stock which has already been in use in various EU members was an especially time-consuming and high-cost barrier to new providers of rail transport services. And operating licences and safety certificates were then only valid for five and three years, respectively.¹³

In conformity with the Directive on unbundling railway services, the Federal Government has passed a law changing the structure of the incumbent (NMBS/SNCB) so that from January 2005 it consists of two public limited liability companies that are independent of each other within the framework of a holding company (NMBS/SNCB-holding): the railway infrastructure manager (Infrabel); and the railway operator (NMBS/SNCB). A new regulator has been created, which is under the authority of the minister in charge of rail regulation. Infrabel is supposed to offer access to the network on non-discriminatory terms and the regulator to ensure that this occurs.¹⁴ A number of features of the new setup increase the likelihood that non-discriminatory access and significantly greater interoperability will be achieved.¹⁵ If this does not happen, however, the infrastructure manager should be more tightly regulated or, better still, the holding company should be broken up, ending ownership links between the incumbent's infrastructure and transport service companies.

Strengthening the national innovation system

Fostering the environment for innovation through R&D

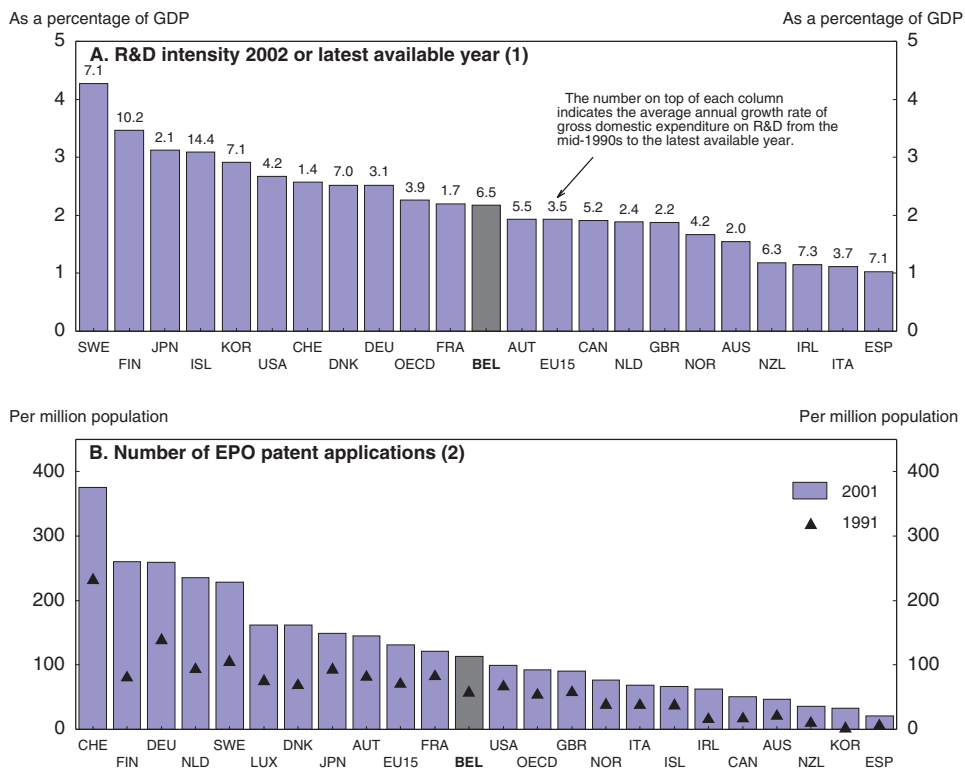
R&D spending and patenting are close to the EU average

Total domestic expenditure on R&D is comparable with the EU average and amounted 2% of GDP in 1999, rising to 2.2% in 2001 (Figure 7.7). Two-thirds of it is financed by the private sector, one-third by the public sector. This intermediate position is matched by an intermediate position on the output side as measured by patent applications to the European Patent Office (EPO).¹⁶ Patenting activity is close to the EU average and exceeds the OECD average after having grown strongly during the 1990s. Patents are, however, less numerous in high-tech industries, reflecting Belgium's traditionally weak share of high and medium-to-high technology industries in manufacturing. International R&D flows are an important element in the increase of R&D intensity during the 1990s. From 1993 to 2001 R&D investment by foreign companies in Belgium grew by 22% per year on average, raising the share of foreign firms in private domestic R&D expenditure from 3 to 9%. At the same time, foreign R&D investment by Belgian firms grew less rapidly and their share in overall R&D expenditure by Belgian firms remained stable at 48%. Many multinationals have R&D affiliates that co-operate with universities and SMEs.

The federal government, the Regions and the Communities each have a role in the NIS

With the federal government being the main tax authority, the Regions being competent for economic policies and the Communities in charge of education, each authority has its stake in the NIS. In general, direct funding of research has been the

Figure 7.7. R&D spending and patenting are close to EU averages



1. 2000 for Australia, Switzerland; 2001 for Belgium, Greece, Ireland, Italy, Mexico, Netherlands, Sweden.
2. European Patent Office.

Source: OECD Main Science and Technology Indicators (2004/1) and Patents Databases.

preferred instrument of the authorities for encouraging private sector R&D. In each region, the two major tools are: i) subsidies for pre-competitive industrial research; and ii) funding for pre-competitive projects aiming at developing commercially viable products, most often taking the form of reimbursable loans in case of success. In addition, the Flemish region has put a particular accent on stimulating R&D in SMEs (e.g. by grants for feasibility studies).

The regions deliberately encourage knowledge spillovers through cluster policies. In the Flemish Region, this is mainly through the Flemish Cooperative Innovation Networks. The Walloon Region favours the formation of technological clusters lending financial support to common co-operation projects assembling researchers from different firms and institutions. Moreover, SMEs receive a financial stimulus when they manage to participate in European or international research projects.

New tax incentives for R&D are being introduced

Tax incentives for investment in R&D have traditionally been very limited as measured by the OECD B-index (OECD, 2003b).¹⁷ So far, companies recruiting additional R&D staff have obtained a flat rate deduction from taxable profits in the first year.¹⁸ With a view to speeding up R&D investment in the public and the private sectors and meeting the Barcelona objective of raising R&D expenditure to 3% of GDP by 2010, the government has extended the use of tax instruments. Since October 2003 public research institutions

(universities, schools for higher education and national scientific research funds) have benefited from a 50% reduction in the personal withholding tax on their researchers' incomes. In July 2004 the measure was extended to 72 other scientific organisations. The government has decided to further extend it to private companies that collaborate with a public research institution as of October 2005 (Belgian Progress Report, 2004, p. 15). The initial plan to limit this facility to co-operation with national institutions has been given up and the geographic range of eligible public sector research institutions extended to the whole European Economic Area, which is welcome because it increases the possible number and the quality of public-private matches. Indeed, given that the specialisation pattern of the private sector may differ from that in public research institutions, it is important to grant the same tax rules to all companies in order to allow for unbiased technological development in the private sector. However, the effects of the measure need to be closely monitored and the importance of (unavoidable) deadweight losses assessed with a view to ending the measure should it fail to encourage the total volume of private R&D investment.¹⁹ Deadweight losses may be large as there is already a considerable amount of private-public co-operation, mainly between MNCs and universities.

Fostering investment in organisational change would strengthen the innovative capacity in service sectors

Existing innovation policies tend to focus on the invention of new technology and the creation of new products with high technology content. Service sectors appear to display a different innovation pattern in which organisational change plays a much greater role (Van Ark *et al.*, 2003). As a consequence R&D expenditure in service firms reflects the innovative activity only incompletely (Flikkema and Jansen, 2004). Moreover, the option of patenting is unavailable for many service activities where innovation cycles are shorter than in manufacturing and service processes are less standardised, *e.g.* professional services (Kox, 2003). There is some empirical evidence pointing to innovation processes being long and costly and possibly being imitated at lower cost by competitors (spill-over effects), thereby reducing private incentives to implement productivity-enhancing service innovation (Van Dijk, 2002). To design appropriate policy responses to this potential problem, the focus of innovation policies should be extended to the non-technological aspects of innovation and the government should improve the statistical basis of service innovation patterns.

Recent research has identified five different types of service sector innovation²⁰ but found it hard for most service sectors to allocate them to a single dominant type of innovation due to large within-sector heterogeneity (Van Ark *et al.*, 2003). Different types of innovation require different policy instruments. For example, supplier-dominated innovations, which may originate in manufacturing, would benefit from extending technology diffusion programmes to service firms and service functions to ensure that new goods are matched by new services where necessary. Innovation within services may benefit from more traditional tools such as the already existing tax incentive for hiring R&D personnel but may need to be adjusted to the needs of service firms so as to avoid foregoing potential innovations in service activities for tax reasons (see OECD, 2000). These two examples show the desirability of improving the service sensitivity of existing policies. Client-led innovations are best served by the policies fostering product market competition described above. Indeed, intensive competition empowers consumers to claim a better fit between their needs and the services supplied either directly or indirectly (through switching suppliers). Removing barriers to market entry in knowledge-intensive business

services is also warranted, especially when innovations occur *through* services as these service providers (e.g. business consultants) often act as facilitators of change and have considerable expertise on best practices (Van Ark et al., 2003).

Other framework policies, which are not specifically targeted on service sectors but would boost productivity through service sectors' role in diffusing knowledge, should be designed so as to minimise barriers to change. First, continuing training and lifelong learning, notably to improve the ICT-using competencies of persons with lower intermediate skills and low education attainment, are important both from an employability perspective (see Chapter 4) and from a productivity perspective. Indeed, the transatlantic productivity growth gap appears to be particularly large in industries that use ICT intensively and have a high share of employment with lower intermediate skills (O'Mahony and van Ark, 2003). Improving the quality of secondary education would also improve the absorptive capacity of this segment of the workforce (see Chapter 6). Second, the remaining barriers to services trade should be lowered, e.g. by supporting the EU initiative to complete the single market for services and assessing in which areas national regulations and standards should give way to EU-wide rules, to foster international competition and cross-border knowledge spillover on best service practices. Finally, the government has an important role to play in providing efficient and innovative public services, both with a view to lowering the administrative burden for businesses (see Section on Increasing product market competition above) and to stimulating a culture of change throughout society.

Developing human resources in science and technology

Expected shortages in high-skilled jobs...

With seven researchers per 1000 persons employed, the share of researchers is relatively high by international standards. However, based on the experience of countries with high R&D intensities, such as Japan, Sweden and Finland, where this share is at or above 10 per 1000, the authorities are concerned that recent and ongoing increases in R&D intensity will lead to a shortage of knowledge workers. Typical bottleneck professions are positions for engineers, qualified technicians and IT specialists. Recent declines in tertiary enrolment to science and engineering studies have added to the fear of a structural supply shortage. This fear is particularly pronounced in Flanders where the ageing process is further advanced, the level of R&D spending is higher and public research budgets set to rise particularly strongly over the coming years. Specialisation mismatches are another source of concern: Science and engineering degrees, accounted for 22% of new degrees in 2000, around the OECD but well below the EU average. The fact that salaries in private sector R&D jobs are much higher than in the public sector, creating substantial one-way mobility from the public to the private sector, may be one indicator for the tightness in specific segments of the labour market. It could also point to limited attractiveness of university research careers in Belgium, as is also seen in the rather low share of PhD degrees (0.8% of the population of typical age).

... are being alleviated through greater mobility at the national and international level

The authorities have identified greater job mobility as one answer to the risk of labour market shortage as this would reduce labour market mismatches while at the same time raising the attractiveness of science and engineering professions. The Flemish Region has made mobility one of the criteria for direct support to firms in its SME-programmes of

promoting R&D. It has also promoted access to universities by facilitating the recognition of competencies acquired elsewhere – be it abroad or at ISCED 5B-type institutions (e.g. *les écoles supérieures/hogescholen*) – thereby providing a second chance for tertiary-B degree holders. The regions are also encouraging partnerships between industry and universities through the creation of industrial and technological research centres. The authorities of the Walloon Region promote programmes in which PhD students and researchers combine their work for a public laboratory with research stays in companies or other public institutions abroad. They have also facilitated the creation of spin-offs.

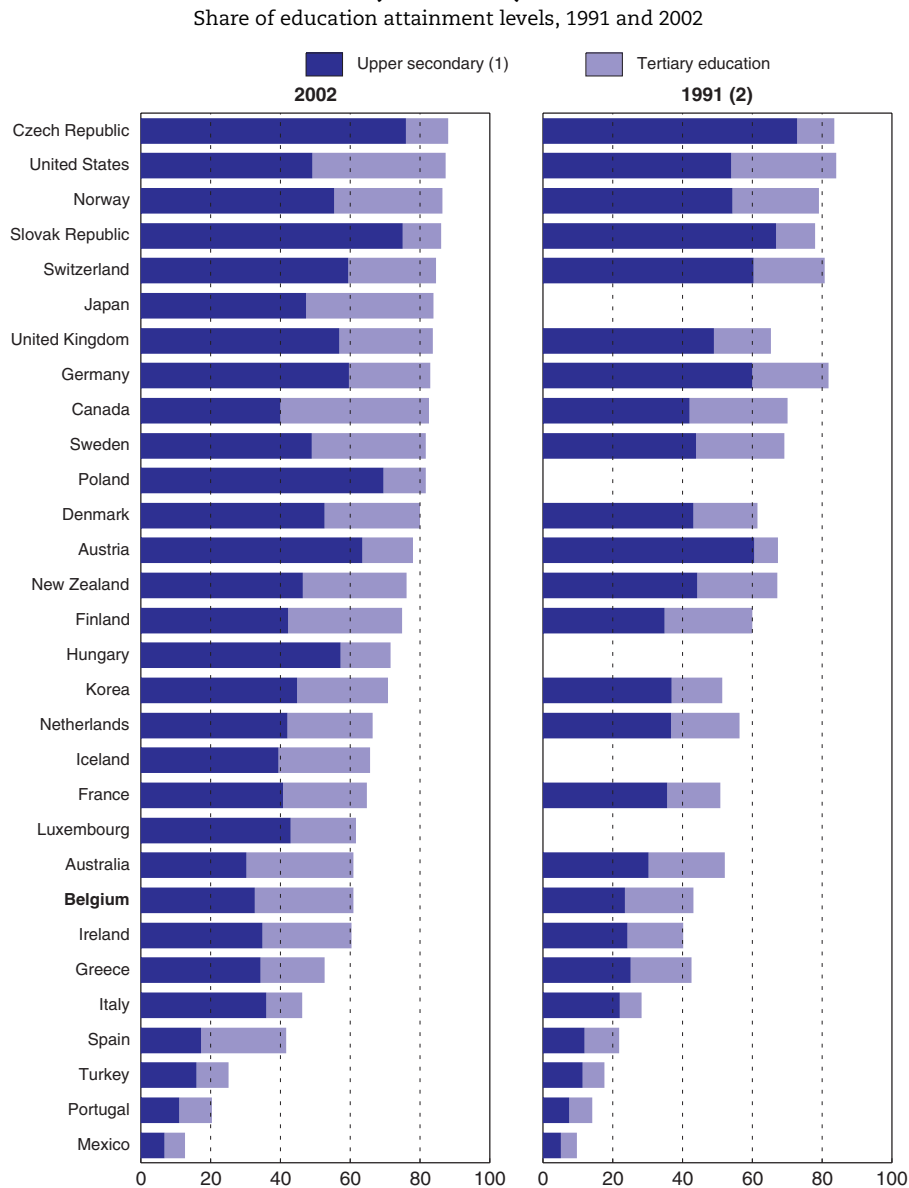
Promoting inflows of knowledge workers from abroad is the other strategy pursued. Belgium has a relatively good starting position as the share of non-nationals in HRST at 5½ per cent is already the third-highest among the EU15-countries, albeit high-skilled workers are under-represented compared with their less-skilled counterparts (see Chapter 4). The government has recently decided to offer return grants to Belgian researchers working abroad, notably in the United States. It would be more promising, however, if the government made this financial incentive independent from the nationality of the researcher, which is irrelevant for the knowledge transfer to the Belgian economy. Hosting foreign graduates with a view to employing them in Belgium is another way of securing supply of human resources in science and technology. With more than one-third, the share of non-nationals among PhD students is one of the highest in the OECD (OECD, 2003b), suggesting that the supply has been adapted to the needs of the international graduate community. The government has recently eased the delivery of work permits to these students once they have obtained their degree. The government should continue to lower administrative burdens to the entry of high-skilled workers, thereby making Belgium still more attractive as a R&D location and creating the opportunity of attracting more FDI inflows in the area of R&D. Such a policy would be greatly facilitated by improving the funding base for universities (see below).

Strengthening the tertiary education system

Tertiary education attainment has increased rapidly, a trend that is likely to continue...

The level of education of the population employed is an important indicator of the technological and knowledge absorption capacity of the economy. While Belgium has still scope for raising attainment and achievement in secondary education (see Chapter 6), tertiary education attainment has registered impressive increases and amounted to almost 30% of the population aged 25-64 in 2002 (Figure 7.8). At 38%, tertiary attainment among the 25-34 year-olds was higher, falling into academic and advanced research programmes (ISCED levels 5A and 6) and more occupationally-oriented programmes (ISCED 5B) at roughly equal shares. This share is comparatively high by international comparison, reflecting compulsory education up to age 18, a relatively high share of persons obtaining the qualifying degree for university and low access cost and high female participation (HEC, 2004, p. II-12).²¹ Unrestricted subsidised access has, however, contributed to labour market mismatches, materialising in wide cross-sector variation of the employment rate of recent graduates (OECD, 2004c). Employment growth was particularly significant in ICT services, whose share in business sector employment reached around 6% in 2000, as in the Netherlands and the United Kingdom (OECD, 2004c), whereas political and social science majors encountered significant unemployment problems, as did graduates from psychology, history and philosophy.

Figure 7.8. **Educational attainment of the 25- to 64-year-old population (1991-2002)**



1. Upper secondary and post secondary non tertiary.

2. 1995 for Czech Republic, Mexico and Slovakia.

Source: OECD, *Education at a Glance* (2004).

... putting university financing systems under stress

The high mobility from public sector research institutions to the private sector but not in the opposite direction and the relatively low total number of PhD students enrolled raise the question whether universities are under-funded. Belgium spent \$11 589 (PPP) per student in tertiary education in 2001, thereby taking the eighth position among OECD countries. While the Flemish government will increase public expenditure on tertiary education over the coming years, budgetary margins are not as easily available in the French Community. Further increases in funding for universities are likely to be required in

the future to enable them to cope with a growing share of graduates in society and growing internationalisation in tertiary education markets. Universities will need to attract top-level national and international staff to remain competitive in the fields of research and higher education. Given severe ageing-related budget constraints ahead and the need to lower the high tax burden to stimulate employment, the scope for increases in public funding will be limited in the medium term. Moreover, increasing mobility of tertiary students and degree holders implies a growing disconnection between the tax entity that finances tertiary education and the entity that benefits from the resulting human capital, making the traditional financing “contract” (free education exchange of higher taxes for high-income earners) less and less sustainable (Vandenberghe, 2004).²² Increasing the efficiency in the use of existing means and raising more private funding sources are more promising strategies of meeting the challenge of providing high-quality tertiary education in Belgium.

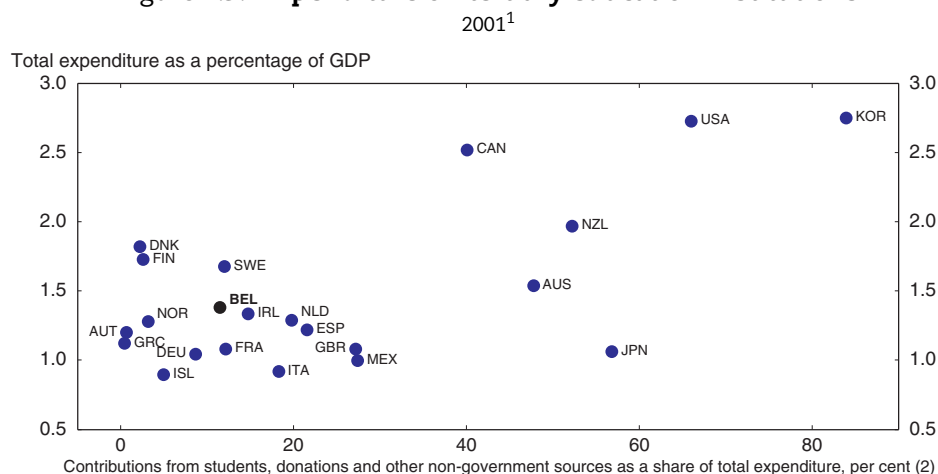
More inter-university competition would stimulate performance

The regional governments are undertaking efforts to increase the efficiency in the use of public funds to universities. Apart from the basic funding that covers 50% of the budget, universities in the Flemish Community are increasingly relying on research grants directly from the government or from public research councils. The former were recently made more competitive by adding a publications and citations criterion to the existing criteria (volume of basic funding, numbers of academic degrees and doctorates awarded) and increasing its weight from 10 to 30% between 2003 and 2005. Funds from research councils are subject to quality indicators and a system of peer reviews. The nine universities of the French Community receive virtually all their funds from the Community government on the basis of the number of students enrolled. A small share is covered by student fees (ranging from € 150 to € 200 for short studies and from € 100 to € 739 for long studies for the academic year 2004-05), as in Flanders. A quality agency is in charge of evaluating universities but the reports are meant to be an internal management tool for the university and therefore remain confidential. The Communities should further increase the share of competitive funding and make quality indicators as widely accessible as possible in order to stimulate the performance of universities through more intensive competition.

Additional funds should come from private sources

Additional funds in tertiary education will increasingly have to be raised from private sources. At the moment Belgium achieves its intermediate funding position with a very low share of non-public sources (Figure 7.9). The total level of spending on tertiary education tends to be higher in countries that have substantial contributions from students, donations and other non-government sources. Those countries that have been able to channel more than 2% of GDP into tertiary education – the United States, Korea, Canada and New Zealand – all raise a substantial share of funding from these alternative sources. As in most other European countries, the high subsidy level is beyond what may be warranted for economic reasons such as positive externalities, borrowing constraints for students and their risk-aversion against accumulating debt. It is also questionable for distributional reason given the strong correlation between secondary education achievement and social class, especially in the French Community (see Chapter 6).²³

An efficient way of fostering competition between universities and making the system more demand-driven would consist of allowing universities to set the tuition fees paid by

Figure 7.9. **Expenditure on tertiary education institutions**

1. 2000 for New Zealand.
2. Net of tuition fees paid by government.

Source: OECD, *Education Database* (2004).

students relatively freely and get financial autonomy over the funds raised, thereby reducing the share of direct subsidies in their budget. The remaining public subsidy should depend on performance criteria more strongly than they do today, for instance by increasing the share of competitive grants. Students would have a stronger incentive to vote with their feet, picking the universities that best fit their education needs and provide the best value for money. In addition, universities should be allowed to charge fees for tertiary education with a more consumptive character (evening and holiday classes for persons outside initial education). More competition would put pressure on universities to optimise curricula while higher fees would stimulate students' willingness to demand higher value for money. Competition would also be fostered if new universities could qualify for public funding under the same conditions as existing ones. Moreover, it would reinforce the already observable trend of universities raising funds from the private sector, *e.g.* through chairs, research contracts and Alumni associations, which the authorities would like to see being confirmed.

More reliance on tuition fees paid by students would, however, require removing liquidity constraints for students in order to preserve general accessibility of the tertiary education system. It would also require mitigating the risk of debt default for individuals investing in their own education. As there is generally no private market for student loans, the government would have to act as a lender. In view of the empirical findings that private returns to tertiary education are high and that the difference between social and private returns is much smaller in tertiary education than at earlier stages of education, extending repayable student loans would be an adequate way of increasing funding both on efficiency and on equity grounds. Making repayment contingent on graduate incomes would ensure that students do not have to worry about the risk of credit default due to circumstances beyond their control. The Australian experience shows that broad access to universities can be granted without expensive public support (Canton and Venniker, 2001). Applying this experience to other countries requires checking whether the wage distribution rewards the investment in tertiary education sufficiently to allow individuals to pay back their loans. Simulation results for the Netherlands, where the gross wage of persons with

tertiary education aged 30-44 is about 1.4 times that of upper-secondary and post-secondary non-tertiary degree holders show that an income-contingent student-loan system with a significant amount of risk-sharing is feasible and would remove obstacles for university access more efficiently than current arrangements (Jacobs, 2002). In Belgium gross wages of tertiary type-A degree holders aged 30-44 are even higher (reaching about 1.6 times the average of upper-secondary and post-secondary non-tertiary degree holders, see OECD, 2004d, p. 175). For tertiary type-B degree holders of the same age, however, the wage premium is much lower at about 20%. This relative wage distribution suggests that the degree of private financing should increase more strongly for higher levels of tertiary education.

Notes

1. The Financial Services Action Plan is a regulatory reform programme aimed at removing barriers to the integration of financial markets across the EU. Future priorities, in addition to implementing successfully what has already been agreed, include the rapid adoption by Parliament and Council of the 8th Company Law Directive on Statutory Audit and of forthcoming European Commission proposals for a third Money Laundering Directive and for a Directive on Capital Adequacy (European Commission Press Release IP/04/696, 1 June, 2004).
2. The Lamfalussy framework only applies to securities market regulation for the time being. The four levels of the framework are as follows:
 - The EC, in consultation with the European Parliament and European Council, reaches agreement on framework principles and the definition of implementing powers in the proposed Directive/Regulation.
 - The EC, after consulting with the European Securities Committee, requests advice from the European Securities Regulators Committee on technical implementing measures. This culminates in a proposal that is adopted by the EC if approved by the European Securities Committee.
 - The European Securities Regulators Committee works on joint interpretation recommendations, consistent guidelines and common standards (in areas not covered by EU legislation), peer review, and compares regulatory practice to ensure consistent implementation and application.
 - The EC checks Member State compliance with EU legislation and may take legal action against any member State suspected of breaching Community Law.
3. Shops are allowed to open from 5 am to 8 pm on both week days and weekends. An outlet may not, however, be open for more than 91 hours per week and must be closed for at least 37 days per year (Boylaud, 2000, p. 57).
4. There were 3.5 employees per enterprise in Belgium in 2000 compared with an EU average of 6.3 (Eurostat, New Cronos) and 15.3 in the United States in 1996-97 (Boylaud and Nicoletti, 2001, p. 256).
5. The socio-economic committee for distribution is a not-for-profit association aimed at enhancing the productivity and efficiency of consumer commerce. It includes representatives from all categories of retail distribution and works closely with the Ministry of Economic Affairs and the Ministry of the Middle Classes.
6. In this respect, a recent Federal Planning Bureau study (Huveneers and Verlinden, 2004) concluded that the market for over-the-counter (OTC) medicines cannot be considered as homogeneous – several different classes of medicine exist between which substitution is not possible. It is necessary to study price formation by class to see if there is sufficient competition to liberalise prices. The study also concluded that it is not clear what effect regulation has had on prices as they are less than in Germany but more than in France, markets in which OTC-medicine prices are not regulated.
7. In this regard, a recent Federal Planning Bureau study (Kegels, van der Linden and Verlinden, 2004) concluded that price controls were justified for long-term residential care for the elderly on the grounds that there was “asymmetrical information” and large public subsidies. However, the system could be improved by adopting a CPI-X rule for price increases, as in France, and making only one level of government responsible for price control.

8. For comparison, taxes on corporate profits yielded 3.2 % of GDP in 2002.
9. This clause is named after Franz Kafka (1883-1924) the writer who denounced the indifference of the state. Kafka describes the powerlessness of the citizen vis-à-vis the almighty power of the arrogant and inaccessible authorities, which were removed from reality.
10. Data were not available for the Netherlands.
11. A vertically disintegrated network owner maximises revenue from (regulated) user fees and therefore has an incentive to maximise traffic on the network. In a vertically integrated firm, such a strategy would cost market share to the transport services branch of the firm. Profit maximisation for the whole firm would entail making a trade-off between revenues from third-party access and losses in market share of transport services.
12. The European Commission's "first Railway Package" obliged network operators to give access to the Trans European Rail Freight Network for international services by 15 March 2003. The European Commission's "second Railway Package" requires access to be granted to the entire network for all types of freight services by 2006. By 2007, access must be granted for national services (cabotage). The other measures in this last Package aim at extending the inter-operability progress made on the high-speed network to the conventional network, finding a common approach to safety and creating a European Railway Agency to enhance mutual recognition of safety requirements.
13. At the moment, one other operator apart from the incumbent is active in the Belgian rail freight market (in casu Dillen and Le Jeune), even if some other firms have been granted licenses.
14. The tasks of Infrabel include:
 - Writing the network statement.
 - pricing of network access.
 - assigning capacity to railway operators; certifying railway undertakings' personnel and rolling stock, in the light of security; and
 - maintaining and managing the railway infrastructure.

The responsibilities of the regulator (*Dienst regulering van het Spoorwegvervoer- Service de Régulation du Transport ferroviaire*) include:

 - Controlling the network statement and network access.
 - Enjoining the railway infrastructure manager or the railway undertakings to conform with the legislation, and in the case of disrespect, imposing fines; and
 - Immediately referring to the Competition Council infringements of competition rules, of the Royal Decree of 12 March 2004, modified by the Royal Decree of 11 June 2004, or of the decrees and regulations adopted in the implementation thereof.
15. Features aimed at ensuring the independence of the infrastructure manager, Infrabel, include:
 - 80% + 1 of the voting rights in Infrabel are held by the State.
 - Five out of six members of the Board of Directors (including the Managing Director) are fully independent of the Holding.
 - The essential functions are exercised under the immediate authority of the Management Committee, and are subject to the obligation of professional secrecy, with the risk of criminal sanctions for breaches of this obligation.
 - The level and structure of track charges are published annually in the network's referential in a transparent, client-friendly way.
 - The non-discriminatory treatment of all operators will be defined by strict instructions in the management contract between the State and Infrabel – in case of competing demands, Infrabel will start negotiations with the candidates with the sole intention of reaching a satisfactory agreement with all parties involved; and
 - In accordance with European legislation, no discounts will be granted to operators who reserve track access in big quantities.
16. Several caveats apply to the use of patents as a measure for innovation output. First, many inventions are not patented or are patented by the mother firm in another country, and the propensity to patent differs across countries and industries. Second, differences in patent regulations among countries hamper international comparability. Third, changes in patent law

- may affect comparability over time. Finally, the value distribution of patents is skewed as many patents have no commercial application, while a few have great value (OECD, 2003b, p. 62).
17. For Belgium the B-index calculated for 2001 was close to zero. To make the cross-country comparisons possible, a number of simplifying assumptions need to be made. This is why a B-index close to zero does not automatically imply that the country has no R&D-specific tax rules at all.
 18. Firms generally consider this measure as being not very effective as the deduction granted (about € 10 000 per person hired) hardly compensates for the administrative costs and constraints imposed (only full-time appointments count, staff member must work full-time in the research department, advantage to be paid back when researcher leaves the company, etc.).
 19. In the Netherlands an evaluation of the WBSO scheme (tax deduction on wages for R&D workers of SMEs) found that for each € 1 of tax deduction, R&D expenditure increased by somewhat more than € 1, a result in line with the empirical literature on the subject that suggests that the expected net effect is not very strong (OECD, 2004b).
 20. These five innovation types are: i) supplier-dominated innovation; ii) innovation within services; iii) client-led innovation; iv) innovation through services; and v) paradigmatic innovations (affecting the whole value chain, e.g. triggered by technological revolutions).
 21. The share of women among all tertiary degree holders aged 25-64 was 51% in 2001, reflecting higher attainment levels for the younger generation and lower levels for the older generation. Accordingly, the employment rate of highly educated women comes closer to that of their male counterparts than in many other OECD countries.
 22. A shift in university financing and graduate income tax increments to the EU level does not seem to be a politically realistic response to the higher mobility.
 23. Recent decisions tend to further increase the amount of subsidisation. The Flemish Community has increased the amount of study grants and the French Community has made its grants renewable for students who fail to pass their first year at university.

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Glossary

ALMPs	Active labour market policies
APR-DRG	All Patient Refined Diagnosis Related Group
APW	Average production worker
BCE	<i>Banque Carrefour des Entreprises</i>
CCPQ	Community Commission of Professions and Qualifications
CPI	Consumers Price Index
DB	Disability Benefit
DLU	<i>Déclaration libératoire unique</i>
DRG	Diagnosis Related Groups (Payments for Hospitals)
EPL	Employment protection legislation
ESCS	Economic, social and cultural status
EU	European Union
FPB	Federal Planning Bureau
FSAP	Financial Services Action Plan
GP	General practitioner
HFC	High Finance Council
IALS	International Adult Literacy Survey
ICT	Information and communication technology
IT	Information technology
LOK	Local quality group
MFG	Minimum financial data
MFP	Multi-factor productivity
MKG	Minimal clinical data
NBB	National Bank of Belgium
ONEM	National Office of Employment
PISA	Programme for International Student Assessment
PMR	Product Market Regulation
PPP	Purchasing power parities
SHA	System of Health Accounts
SIID	Synthesis report in the framework of the project on Structural Information Provision on Innovation in Services
SME	Small and medium sized enterprises
SNCB/NMBS	National railway company
TIMSS	Third International Mathematics and Science Study
UB	Unemployment benefit
VAT	Value added tax

ANNEX A

Calendar of main economic events

2002

November

Appointment of five members of the board of the new Banking and Finance Commission (BFC) as of 1 November, as part of a move towards co-ordination of the bodies responsible for macro (NBB) and micro (BFC) prudential supervision. Two of the members are from the BFC, two from the NBB. The Commission is chaired by the chairman of the old BFC.

Launch of a federal government Internet gateway: belgium.be. Initially it will provide only non-dynamic information but is to begin handling on-line transactions in the course of 2003.

As part of a move to combat employment traps, the Council of Ministers approves a royal decree (A.R.) providing for a further reduction in personal Social Security contributions. For salaries of less than € 1 170.64 gross per month, the flat-rate reduction is set at € 95 per month and applied degressively on salaries up to € 1 509.17. This measure will affect 630 000 wage earners.

The Council of Ministers approves Belgium's stability programme for 2003-05. The downturn in economic growth forces the government to modify its targets: for 2003 the target is a balanced budget. Assuming an upturn in 2003 and that the underlying growth trend is maintained in the following years, the government wishes to build up a financial surplus of 0.5% of GDP in 2005.

December

Announcement of the launch of the business databank (Banque-carrefour des Entreprises, BCE) on 2 January. The BCE is to centralise the company data that firms need in their dealings with the federal administration. The year 2003 will be a transition year for putting the databank in place.

Parliament votes on a bill to set up a basic universal banking service for any customer with no requirements as to income for a maximum of charge of € 12 per year.

Parliament votes on a bill providing for the closure of nuclear plants that have been in service for 40 years (which will be between 2015 and 2025). The bill stipulates that no new plants are to be built.

Inauguration of the Liège-Louvain high-speed rail line.

Parliament votes on the reform of corporate taxation scheduled to take effect from 1 January 2003. The standard rate of tax is reduced from 39% to 33% (33.99% inclusive of the compulsory crisis contribution). At the same time a ruling system is introduced.

Intersectoral Agreement 2003-04. The guideline norm for salary increases is 5.4%.

According to the NBB, the impact of the changeover to the Euro on the increase in consumer prices over one year amounted to only 0.2%.

2003

January

All companies become eligible to choose their gas and electricity provider in Flanders. Liberalisation is to be extended to the general public on 1 July.

Legal working hours reduced to 38 hours/week.

The *Moniteur Belge* (Belgium's official journal) is now published only in electronic form.

The general government budget for 2002 showed a very slight surplus.

February

According to a Cap Gemini Ernst and Young study on electronic government services, the sophistication of online services improved by 24% in Belgium over the period October 2001 to October 2002, the largest improvement after Sweden. In terms of performance, Belgium is still below the average for the countries studied.

Budget audit. Estimated growth for 2003 is revised downwards, to 1.4% as opposed to 2.1% in the budget preparation phase. The budget balance is maintained.

Adoption by Parliament of framework legislation on electronic commerce.

Announcement of the end of the partnership between Electrabel and the public company, SPE, the two Belgian electricity generators.

March

Cross-border rail freight opened to competition on 15 March.

Definition of retirement scheme for managers in the public sector. They are to be subject to the same pension scheme as salaried workers and contribute to a supplementary pension scheme.

The Regulatory Commission for electricity and gas (*Commission de régulation de l'électricité et du gaz*, CREG) approves charges for the supply of electricity supply via high voltage lines.

As of 31 March, car licence plates can be ordered online.

For the first time since 1995 the health care budget showed a slight surplus in 2002. The estimated growth in outlays was 2.7%.

April

From 1 April, firms can file their quarterly declaration to the Social Security online.

Presentation of the Tax on Web system, which enables the return of personal income tax declarations via Internet.

According to Accenture, in one year Belgium moved up from 16th to 9th place in the ranking of the maturity of its e-government Internet services to citizens and firms.

Increase in the minimum pension for salaried employees, the self-employed and civil servants (+2%) and in the guaranteed income for older people (+3.4%).

The Council of Ministers adopts instruments for the creation of start-up funds (*Fonds Starters*) so that loans can be made available through the *Fonds de participation* to those setting up in business or who have been in business less than 4 years.

End of legislature.

Decision to shut down blast furnace operation at a steel plant in Liège (Cockerill-Arcelor) in 2009.

According to a study by the HIVA (*Hoger Instituut voor Arbeid-KUL*), at least 6% of salaries in Belgium are paid off the books.

May

Legislative elections.

The number of Belgian companies listed on the Stock Market (Euronext or Nasdaq Europe) fell from 172 in May 2001 to 151 in May 2003. In two years there has been only one new entry onto the Stock Market.

Decrees on the creation of private Pricafs are published in the *Moniteur Belge*. This new vehicle for unlisted shares ensures the spreading of risk and professional management as well as organised exits.

Approval by the CREG (*Commission de régulation de l'électricité et du gaz*) of charges for use of low and medium voltage distribution networks, to be effective from 1st June.

According to a study by KBC, 63% of Belgium's labour force considers that the retirement age (65 years of age) is too high. Sixty per cent would opt for early retirement, even if that meant a reduction in income.

June

The NBB starts up a "positive" central credit office, recording all credit extended to private individuals for private purposes in Belgium. It is intended as a proactive measure to guard against the risk of overindebtedness.

In its second report, the Ageing Study Committee estimates the budgetary cost of aging over the period 2002-30 at 3.1% of GDP.

Presentation of the annual report on the Ageing Fund (*Fonds de Vieillessement*), set up in September 2001. As at the end of April 2003, its reserves stood at € 1 507 million.

Budget audit. Without a change in policy, a deficit of 0.8% of GDP is projected for 2003.

July

The one-stop-shop system for business and the BCE business databank go on line on 1 July. System problems force the authorities to put an alternative in place on a temporary basis.

By the end of June 2003 the 10 year yield spread between Belgian government OLO bonds (3.94%) and their German equivalent had narrowed to only 4 basis points.

The new government takes office on 12 July.

Approval of a ratchet system, increasing excise duty on petrol and diesel for road transport if oil prices fall. Car registration tax is abolished. From now on vehicle use, not vehicle ownership, should be taxed.

The Financial Stability Committee is set up. Under the Chairmanship of the Governor of the NBB, it comprises members of the Board of directors of the NBB, the Banking and Finance Commission (BFC) and the Insurance Supervisory office (the *Office de Contrôle des Assurances*, OCA).

August

The Commission for the Regulation of Electricity and Gas (CREG) decides in favour of Fluxys monopoly on gas pipelines for as long as Fluxys is ready to invest sufficiently to respond to market demand.

September

Adoption of the national "social inclusion" Action Plan for 2003-05.

According to the Minister for Finance, Belgium's Tax on Web system for on-line personal income tax declarations, was used to file 56 746 declarations in its first year.

Agreement at ministerial level on a fiscal amnesty measure for undeclared capital held abroad (*Déclaration libératoire unique, DLU*) from 1st January to 31 December 2004.

The Conference for Employment opens.

Agreement on the involvement of the BIAC (manager of Brussels-national airport) and the Regions in pre-financing work to extend the capacity of the rail network. This system will help to speed up implementation of the projects concerned (Antwerp-Zaventem Diabolo link, services to the ports of Antwerp and Zeebrugge, the line to Luxembourg, etc.).

According to the BCE crisis management team, the alternative system put in place on a temporary basis is handling 95% of cases in under five days. The system is to stay in place until the end of the year.

October

As of 1 October entry into force of exemption from payment of half the wage tax for research assistants or post-doctorate staff employed by Universities and various higher education establishments.

Ford announces the loss of 3 000 jobs at its Genk plant by the end of 2004.

Announcement of an agreement to float Belgacom on the stock market and for the government to take over its pension fund.

Confirmation of agreements between Belgium and nine other countries to form an IMF constituency for a period of 10 years.

Agreement following the Conference for Employment. A range of measures are announced, including: further reductions in social charges (structural and low salaries), a commitment by employers to step up professional training and the introduction of restructuring preventive measures.

A balanced budget is tabled for 2004. Fiscal reform is to continue as programmed and the planned reduction in employers' contributions (structural, low salaries, highly skilled staff) is to be accompanied by a fiscal measure on night work and shift work. On the

spending side, apart from special priorities in health care (+4.5%), police and justice (+9.5%) and co-operation, all other areas remain subject to tight control.

The NBB's smoothed global synthetic curve, its business climate indicator, again shows an upturn.

Presentation of a project to refocus the Copernic plan for the reform of the civil service, placing the emphasis on training and skills development. The project should ease salary tensions between "top managers" and other staff.

November

The end of the Société Générale de Belgique. After merging with Tractebel, it becomes Suez-Tractebel.

A round-table with the self-employed begins. Topics on the agenda are improving social cover for the self-employed (strengthening the 1st pillar of the pension system, low-risk health care cover, etc.)

Under the terms of a collective bargaining agreement, the food sector becomes the first to introduce a social pension plan, as of 1 April 2004, in accordance with the law on supplementary pensions.

The Council of Ministers approves a draft royal decree (A.R.) providing for the transfer of Belgacom's pension liabilities to 31 December 2003 to the Ageing Fund.

Approval of the reform plans to improve access to the legal system.

Agreement on the reform of the Vouchers for Services system as of 1 January 2004. The system is designed to provide employment and social cover to people in difficulty and to combat illegal employment, initially in the household services sector. The target is to create, in all, 25 000 jobs with an average work week of 25 hours with 12 500 such jobs being created by the end of 2004. The cost of the services voucher to the user is € 6.2 per hour, but taking into account a tax deduction of approximately € 4 net, the real cost is € 19.47.

The Council of Ministers approves the 2004-07 stability programme. The programme sets out to maintain the general government budget in balance for 2004, 2005 and 2006 and to achieve a surplus of 0.3% of GDP in 2007. This would bring the debt ratio down to less than the 100% mark in 2004 and to 87% in 2007.

The board of the SNCB approves its investment plan. It is to invest € 5.8 billion over the period 2004-07, of which € 1.5 billion in 2004.

Definitive closure of Nasdaq Europe on 28 November.

December

Adoption of the Tax on Web II project which is to extend on-line filing of personal income tax to the self-employed in 2004.

The federal government and the Regions sign an agreement on administrative simplification.

A pilot electronic identity card distribution scheme is launched in eleven communes and should be extended country wide in 2007.

Health insurance agreement. Fees for medical consultations are to go up by 1.4% on 1 January 2004. The fee for a consultation with a general practitioner is to increase to

€ 20 on 1 December 2005 and to € 30 for a consultation with a specialist (€ 19 and 28 respectively on 1 October 2004).

According to a specialist lawyer (Th. Claeys), based on jurisprudence, the average notice period given to employees who are to be made redundant is steadily decreasing in Belgium (-7% from 1997 to 2003), chiefly because of a tendency for *de facto* ceilings on compensation to develop.

The reduced VAT rate of 6% for renovation and repair of housing that has been occupied for more than 5 years and for repairs to shoes, clothing, linens and bicycles is extended to 31 December 2005.

The Brussels stock exchange BEL 20 index rose 7% in 2003, after four years of decline.

2004

January

Entry into force on 1 January of:

- the new Vouchers for Services system;
- simplification of recruitment aid: alongside the structural reduction measures there are five other reduction measures targeting the young, the older unemployed, the low skilled, the long-term unemployed and job sharing.

Given the takeover of the Belgacom pension fund, the 2003 budget shows a slight surplus. Government debt stands at around 100% of GDP, i.e. at around 1982 levels.

The federal government announces that it wishes to reduce its share in the capital of BIAC to 30% (from 63%).

Extraordinary Council of Ministers in Gembloux to discuss socio-economic issues. Numerous measures are outlined, such as:

- to combat employment traps, the creation of an employment credit bonus or the reform of the guaranteed income allowance for job seekers who accept part-time work;
- preparation of a new follow-up system for the unemployed;
- other measures to simplify administrative procedures.
- The BCE business databank is fully operational.
- Inauguration of the Corporate Governance Commission, set up under the auspices of the Belgian Enterprise Federation, the Banking, Finance and Insurance Commission and Euronext, with the aim of drafting a reference code.
- Last regulated increase in the price of bread before the scheduled price liberalisation.

February

Agreement between the federal government and the social partners on the new follow-up system for the unemployed. The system is to be phased in: for the under 30s on 1 July 2004, the under 40s from 1 July 2005 and from 1 July 2006 for the under 50s.

According to the Minister for Employment, the new Vouchers for Services system enabled the creation of 3 180 jobs in just one month.

SNCB management and union agreement on reducing the number of full time staff from 40 800 to 38 000.

The Council of Ministers approves draft royal decrees to increase by 25% the authorised limits on working activity for pensioners retired from the private and public sectors and self-employment

March

The federal government and the regions agree on how to share out the commitments required under the Kyoto protocol.

The Financial Services Authority Supervisory Council is established, the last phase in the reform of the supervision of the financial sector.

The National Office of Employment (ONEM) presents its report for 2003. Every month 16.8% of people of working age are in receipt of benefits from the ONEM, of these only 45% are job seekers. These figures do not include those who are temporarily unemployed, some part-time workers or those benefiting from activation or working hour reduction measures.

The Council of Ministers approves a bill on the location of commercial centres. The bill is aimed at facilitating location procedures for centres larger than 400 m².

Extraordinary Council of Ministers in Ostend on social, family and environmental measures. Decisions taken or outlined at the Council meeting include: phasing in and financing the construction of a regional express network (RER) around the Brussels area; a whole series of fiscal measures aimed at reducing CO₂ emissions; a series of measures relating to social housing and housing in large cities; a series of decisions on pensions, including decisions to:

- involve the social partners from 2007 in the decision to adapt pensions to changes in welfare;
- set a new target of € 13 billion for the Ageing Fund reserves by 2007.

Following the introduction of Belgacom on the Stock-Exchange, the government holds 51.6% of the company's capital and the public 38.6%.

The Council of Ministers approves the SNCB's business plan for 2003-04 and 2005 and a draft royal decree reforming the structure of SNCB. The new structure will consist in an umbrella holding company with two subsidiaries, one responsible for managing infrastructure and one for rail operations. A separate entity is to be set up and will become the owner of SNCB infrastructure and property as well as taking over the historic debt of the SNCB.

Extraordinary Council of Ministers on justice and security.

April

Launch of a first issue of OLOs (Belgian government linear bonds) for the general public.

Budget audit. Economic growth (+2%) was slightly up on the 2004 pre-budget projections (+1.8%). The additional costs generated by the measures decided at the extraordinary meetings of the Council of Ministers (the Gembloux, Ostend and security Councils) were offset. The 2004 budget should again be in balance.

Decision to increase the minimum pension for the self-employed on 1 September 2004 and thereafter on 1 December each year from 2005 to 2007.

May

The Council of Ministers approves a preliminary bill transposing various European Union directives on telecommunications into domestic legislation. These are aimed at: increasing competition, simplifying market entry conditions, streamlining the regulations on and introducing competition into universal service provision. A reduction in the number of telephone kiosks will be authorised with the reduction depending on the increase in the penetration rate of mobile telephones: 4 000 of the existing 14 000 kiosks could be done away with.

The Ageing Study Committee presented its Report for 2004. The budgetary costs of ageing are an estimated 3.4% of GDP, i.e. a decline of 0.2% over the period 2003 to 2008 and an increase of 3.6% from 2009 to 2030.

According to the European Commission, Belgium is second in Europe after Denmark in its coverage of broadband internet access.

Presentation of the Kafka test. The test, which should come into effect on 1 October, is designed to avoid any added administrative burden by making sure that new policy measures do not involve unnecessary formalities (preventive approach).

June

1 June a maintenance payment recovery service is started up under the Ministry of Finance to recover payments from defaulters.

According to the Secretary for State for Administrative Simplification, it took an average of 56 days to complete all the formalities to start up a business in June 2003 and 34 days in June 2004.

Following a further budget audit, economic growth was revised upwards from 2 to 2.3%. The 2004 budget is set to show a very slight surplus.

The executives of the Communities and the Regions adopt an agreement on interregional mobility for job seekers, undertaking to improve communication of information on job offers and job seekers between regional job agencies. Language classes are to be encouraged. Trans-regional training is to be organised.

Regional and European elections.

July

1 July, gas and electricity markets opened to competition for business consumers in Wallonia and Brussels.

Simplification of VAT declaration system. More people who are subject to VAT are to be allowed to file quarterly as opposed to monthly returns and the limit for eligibility for flat-rate taxation is raised. A range of measures to prevent fraud were also taken.

According to the Minister for Employment, after 6 months in operation the Vouchers for Services system was employing 5 462 people in June (assuming an average working time of 80 hours per month).

According to a study by Mutualités Chrétiennes, the share of generic medicines consumed rose from 1.9% in 2001 to 10.3% in 2004. It is reported to be as high as 32.2% in categories of medicines for which a generic equivalent exists.

Approval by the Council of Ministers of a draft royal decree setting up and organising the Rail Transport Regulatory Authority.

August

The Minister for Public Enterprises requested the SNCB to find an alternative electricity supplier to Electrabel. Electricity for SNCB stations and administration buildings is supplied by the Dutch company Nuon.

Delhaize (distribution), Fortis (bank) and Press Shop sign a partnership agreement with the post office (*La Poste*) on a pilot scheme for off-premises distribution of basic postal products.

Belgacom cancels 70% of its treasury shares. The government now holds 55.3%.

October

Presentation of 2005 Budget. The general government budget will again be in balance in 2005. Debt should decline from 100% of GDP in 2003 to 96.6% in 2004 and 95.5% in 2005, despite the takeover of SNCB's debts (2.5%). On the revenue side, the main fiscal measures announced have been confirmed. New initiatives are planned in the security and justice fields and, for health care expenditure, the average growth rate of 4.5% is to apply.

DHL, the logistics operator, announced its intention of moving its business centre away from Brussels national airport in 2008.

December

The Belgian government approved the 2005-2008 stability programme. The norm for the general government budget will be a balanced budget for 2005-2006, followed by a 0.3% surplus in 2007, in line with the government agreement. For 2008, the target will be a surplus of 0.6% of GDP. This will enable Belgium to keep on track with the medium term course recommended by the High Finance Council. Debt should fall from 95.5 per cent of GDP in 2005 to 91.7% in 2006, 88.0% in 2007 and 84.2% in 2008.

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