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## Belgium

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## BELGIUM

Belgium's innovation system has some strong features: human resources in science and technology represent over 30% of total employment, and the number of science and engineering degrees as a percentage of all new degrees is around the OECD average. It is among the OECD leaders in terms of collaboration by large firms with partner organisations on innovation, with over 60% collaborating with another entity, more than 30% collaborating with higher education institutions, and around 20% collaborating with government institutions in 2002-04. Moreover, the innovation system is very open, with a considerable share of R&D financed by foreign sources and an above-average share of patents with a foreign co-inventor.

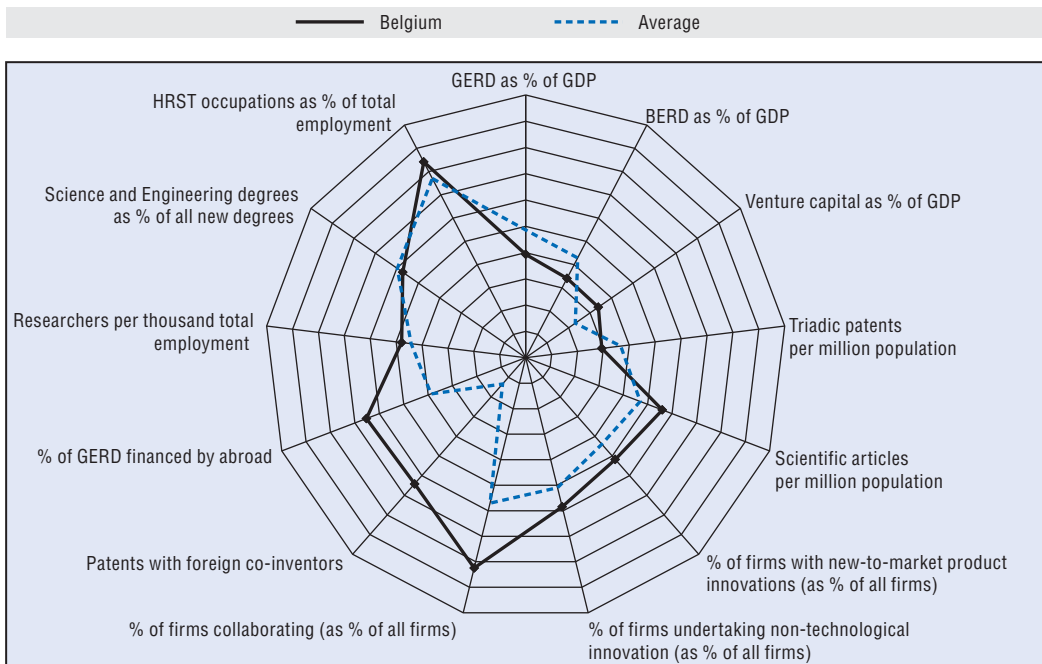
However, at 1.83% R&D intensity is below the OECD average of 2.26%, and venture capital markets are poorly developed. Business enterprise R&D fell from its 2001 peak of 1.51% of GDP to 1.24% of GDP in 2006, and is highly concentrated in a limited number of large (often foreign-owned) firms and sectors. In addition, the federal nature of Belgium, with competences shared among various levels of government, has led to some fragmentation in the governance of the system.

The economy, benefiting from a favourable international economic environment, has grown relatively strongly over the past few years. However, annual labour productivity growth from 2001 to 2006 was around 1.5%, below the OECD average of 1.8% and below its 1995-2000 level of 1.9%. Combined with some weaknesses in the innovation system, these trends have raised awareness of the need to boost innovation to ensure the country's future prosperity.

Research and innovation have become a top priority of the regional and federal governments. The federal government has continued to strengthen fiscal measures to foster R&D and investment in innovation, and the regions have developed and implemented a wide variety of programmes to foster science-industry linkages. The Brussels-Capital Region has launched a Regional Plan for Innovation (2007-13); Wallonia is implementing the Priority Action Plan for the Future of Wallonia 2006-09; and Flanders has approved an Innovation Policy Plan with nine action lines based on an integrated third generation innovation vision. Also, the already extensive horizontal IWT programme for R&D business support was recently expanded.

These initiatives have led to various measures, such as a decrease in the wage costs of researchers via tax deductions and the introduction of R&D tax credits. At the regional level, the Brussels-Capital Region has a public-private scheme for funding up to 75% of R&D activities, and the creation of innovative spin-off companies is encouraged. In Wallonia, five competitiveness poles trigger collaboration by the region's universities and companies; they address all aspects of R&D, industrial realisation, and training of the necessary workforce. In Flanders, ten sector-based competence poles have been established, aimed at co-operation between economic and knowledge actors. The Baekeland programme will set up public-private funded fellowships for PhD students as a way to facilitate knowledge transfer. In addition, the Hercules Foundation was created to support large research infrastructure.

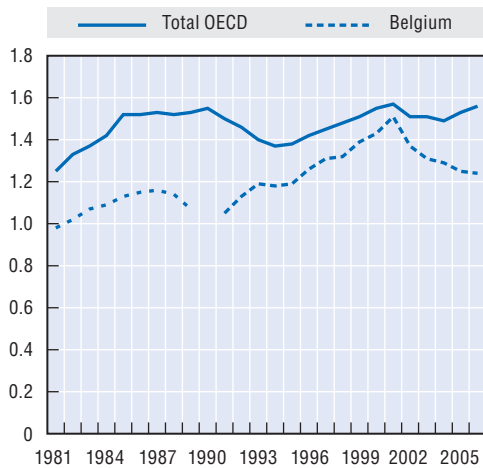
### Science and innovation profile of Belgium



StatLink <http://dx.doi.org/10.1787/451878235174>

### Business Enterprise R&D, 1981-2006

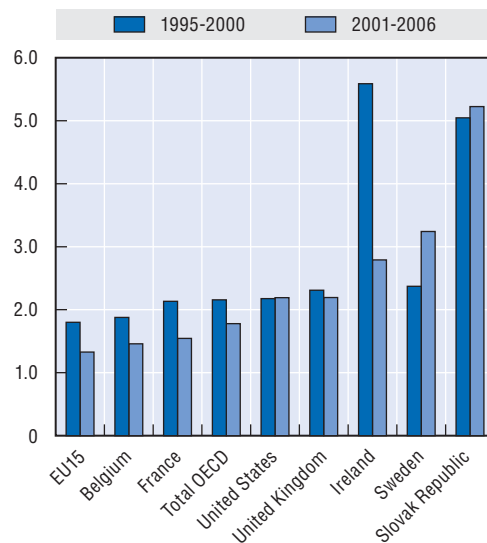
As a percentage of GDP



StatLink <http://dx.doi.org/10.1787/452062522875>

### Labour productivity growth, 1995-2000, 2001-06

Average annual percentage change



StatLink <http://dx.doi.org/10.1787/452064405713>

## Chapter 3

# Science and Innovation: Country Notes

*This chapter complements Chapters 1 and 2 by providing an individual profile of the science and innovation performance of each OECD country, as well as observers to the OECD Committee on Science and Technology Policy (Brazil, Chile, China, Israel, Russia and South Africa), in relation to their national context and current policy issues. The graphs enable countries to see some of their relative strengths and weaknesses as compared to other countries' performance.*

*The common indicators in the first (radar) graphs were selected on the basis of current policy issues. They focus on research and innovation inputs, scientific and innovation outputs, linkages and networks, including international linkages, and human resources. A standard set of indicators is used; however, when data are not available, alternative indicators may be applied. The annex provides a full list and description of the indicators, methodological notes and data sources.*

*For each indicator in the radar graph, the country with the maximum value is set at 100, taking into account all OECD and non-OECD countries with available data. The average is calculated by taking into account all OECD countries with available data (non-OECD countries are excluded from the average). The annex provides further details.*

*The radar graphs are accompanied by country-specific figures that further illustrate national characteristics and underpin policy-specific comments. The selection of comparator countries in these graphs aims to highlight the general position of the focal country and, in some instances, data on other countries may also be shown.*

## Table of Contents

<b>Executive Summary</b> .....	11
<b>Chapter 1. Global Dynamics in Science, Technology and Innovation</b> .....	17
Introduction .....	18
Drivers of economic growth .....	18
R&D dynamics: the changing landscape .....	20
Innovation in key technologies .....	33
Innovation performance varies across countries .....	37
Financing innovation .....	39
Patents and scientific publications surge .....	42
Demand for human resources accelerates .....	46
Summary .....	55
Notes .....	55
References .....	55
<b>Chapter 2. Main Trends in Science, Technology and Innovation Policy</b> .....	57
Introduction .....	58
National strategies for science, technology and innovation .....	60
Strengthening public research and public research organisations .....	71
Support for business R&D and innovation .....	77
Enhancing collaboration and networking among innovators .....	87
Globalisation of research and innovation .....	90
Human resources for S&T .....	93
Evaluating innovation policies .....	99
Outlook: future challenges .....	101
Notes .....	102
References .....	102
<b>Chapter 3. Science and Innovation: Country Notes</b> .....	103
Australia .....	104
Austria .....	106
Belgium .....	108
Canada .....	110
Czech Republic .....	112
Denmark .....	114
Finland .....	116
France .....	118
Germany .....	120
Greece .....	122

Hungary . . . . .	124
Iceland . . . . .	126
Ireland . . . . .	128
Italy . . . . .	130
Japan . . . . .	132
Korea . . . . .	134
Luxembourg . . . . .	136
Mexico . . . . .	138
The Netherlands . . . . .	140
New Zealand . . . . .	142
Norway . . . . .	144
Poland . . . . .	146
Portugal . . . . .	148
Slovak Republic . . . . .	150
Spain . . . . .	152
Sweden . . . . .	154
Switzerland . . . . .	156
Turkey . . . . .	158
United Kingdom . . . . .	160
United States . . . . .	162
Brazil . . . . .	164
Chile . . . . .	166
China . . . . .	168
Israel . . . . .	170
Russian Federation . . . . .	172
South Africa . . . . .	174
Annex 3.A1 . . . . .	176
Chapter 4. <b>Assessing the Socio-economic Impacts of Public R&amp;D: Recent Practices and Perspectives</b> . . . . .	189
Introduction . . . . .	190
Defining the impacts of R&D . . . . .	190
Key challenges for assessing the socio-economic impacts of public R&D . . . . .	192
Approaches to impact assessment of public research in OECD countries . . . . .	193
Impact assessment of research councils and public research organisations . . . . .	200
Impact assessment of research programmes . . . . .	207
Non-economic impacts . . . . .	211
Conclusions . . . . .	214
Notes . . . . .	216
References . . . . .	216
Chapter 5. <b>Innovation in Firms: Findings from a Comparative Analysis of Innovation Survey Microdata</b> . . . . .	219
Introduction . . . . .	220
Using microdata from innovation surveys . . . . .	220
Innovation indicators . . . . .	223
Technological and non technological innovation . . . . .	235

Innovation and productivity .....	239
Innovation and IPR .....	246
Final remarks .....	253
Notes .....	254
References .....	255
Annex 5.A1. Tables .....	257

## Boxes

1.1. Science performance and research intensity: PISA results .....	52
2.1. Recent research and innovation policy developments at European Union level .....	75
2.2. Recent research and innovation policy developments in the United States .....	78
2.3. Recent research and innovation policy developments in China .....	79
2.4. The SME offensive in the Netherlands .....	86
2.5. Life-cycle support of human resources in S&T (HRST) in Korea .....	96
2.6. International mobility policies of the European Commission .....	98
2.7. Evaluation of the impact of S&T and innovation policies in Portugal .....	100
4.1. Eleven dimensions of the impacts of science .....	191
4.2. The main challenges for analysing the economic and non-economic impacts of public R&D .....	193
4.3. Guellec and van Pottelsberghe de la Potterie's macroeconomic model .....	195
4.4. Capitalisation of R&D: methodological issues .....	197
4.5. Linking GBAORD data to publication and patent data sets: the example of human health .....	201
4.6. The Monash model .....	204
4.7. Reductions in the direct costs of illness through NIH medical research .....	206
4.8. The role of the NIH in reducing disease .....	206
4.9. The NEMESIS model .....	208
4.10. The Business Reporting System Survey .....	210
4.11. Swedish traffic safety research .....	213
5.1. Defining innovation .....	225
5.2. The model in a nutshell .....	240
5.3. Some measurement hurdles .....	243
5.4. The model .....	252

## Tables

1.1. Investment in intellectual assets in five OECD countries, by asset category .....	40
2.1. Revised or new national plans for science, technology and innovation policy in OECD countries and selected non-member economies 2008 .....	64
2.2. Targets for R&D spending .....	72
2.3. Recent or proposed changes in R&D tax incentives in OECD and selected non-member economies, 2008 .....	81
2.4. Recent or proposed changes in IPR-related policies in OECD and selected non-member economies .....	88



2.5. Recent policy changes to promote inward R&D and innovation investments through foreign direct investment. . . . .	92
2.6. Recent efforts to improve the development of human resources in science and technology (HRST). . . . .	95
3.A1.1. Radar graph indicators and values . . . . .	179
3.A1.2. Radar graph country data notes. . . . .	182
3.A1.3. Radar graph: country with maximum value . . . . .	185
3.A1.4. Radar graph data sources and methodological notes . . . . .	186
3.A1.5. Country-specific figures: data sources . . . . .	187
4.1. Public R&D budget shares by socio-economic objectives, 1995 and 2006 . . . . .	200
5.1. Which firms are more likely to be innovative? . . . . .	242
5.2. Which firms spend more on innovation? . . . . .	244
5.3. What is the impact of product innovation on labour productivity? . . . . .	245
5.4. Product innovation and labour productivity: robustness checks . . . . .	246
5.A1.1. Summary of findings from the factor analyses . . . . .	257
5.A1.2. Impact of the different modes of innovation on productivity. . . . .	258

## Figures

1.1. The sources of real income differences, 2006 . . . . .	19
1.2. Contribution to growth of GDP, G7 countries, 1985-2006 and 2001-06 . . . . .	20
1.3. R&D trends, 1996-2006. . . . .	21
1.4. GERD Intensity by country, 1996, 2001 and 2006 . . . . .	22
1.5. Business R&D spending by area, 1996-2006 . . . . .	23
1.6. BERD intensity by country, 1996, 2001 and 2006 . . . . .	24
1.7. Business R&D intensity and share of R&D performed by firms with 500 or more employees, 2005 (or nearest year). . . . .	24
1.8. Business R&D expenditures in services and manufacturing, 1995-2004 . . . . .	25
1.9. Government-financed R&D, 1996, 2001 and 2006 . . . . .	26
1.10. Change in government R&D budgets, 2002-07 (or latest available years) . . . . .	27
1.11. Direct and indirect government funding of business R&D and tax incentives for R&D, 2005 (or latest available year) . . . . .	28
1.12. R&D performed in higher education and government research institutes by area, 1996-2006 . . . . .	29
1.13. Higher education research and development, 1996, 2001 and 2006 . . . . .	30
1.14. Higher education research and development expenditure by field of study, 2005. . . . .	30
1.15. Share of higher education R&D financed by industry, 1996, 2001 and 2006 . . . . .	31
1.16. R&D funds from abroad, 1996, 2001 and 2006 . . . . .	32
1.17. R&D expenditure of foreign affiliates, 1995, 2000 and 2005 . . . . .	33
1.18. Total expenditure on biotechnology R&D by biotechnology-active firms, 2003 (or latest available year) . . . . .	34
1.19. Nanotechnology patents as a percentage of national total (PCT filings), 2002-04. . . . .	35
1.20. Countries' shares in environmental technology patents filed under the PCT, 2000-04 . . . . .	36
1.21. Renewable energy patenting, by energy source, 1990-2005 . . . . .	36

1.22. Share of turnover from new-to-market product innovations, by firm size, 2002-04 (or latest available years) . . . . .	37
1.23. Non-technological innovators, 2002-04 (or latest available years) . . . . .	38
1.24. Firms with foreign co-operation for innovation, 2002-04 (or latest available years) . . . . .	39
1.25. Venture capital investment, 2006. . . . .	41
1.26. Share of high-technology sectors in total venture capital, 2005 (or latest available year) . . . . .	42
1.27. Triadic patents, 2005 . . . . .	43
1.28. Annual growth rates of patenting, 1997-2004 . . . . .	44
1.29. Patents with foreign co-inventors, 2002-04 . . . . .	45
1.30. Scientific articles, 2005 . . . . .	45
1.31. Growth of scientific articles by area, 1995-2005 . . . . .	46
1.32. Growth rate of HRST occupations and total employment, 2000-06 . . . . .	47
1.33. Growth of HRST employees by industry 1995-2004 (or latest available years) . . . . .	48
1.34. R&D personnel, 2006 . . . . .	48
1.35. Growth of R&D personnel, 1996-2006 . . . . .	49
1.36. Women researchers by sector of employment, 2006. . . . .	50
1.37. Science and engineering degrees, 2005 . . . . .	51
1.38. PhD graduates in science, engineering and other fields, 2005 . . . . .	53
1.39. Distribution of foreign students by country of destination, 2005 . . . . .	54
1.40. Distribution of international and foreign students by field of education, 2005 . . . . .	54
2.1. Governance of S&T Policy in the Netherlands . . . . .	68
2.2. Civilian GBOARD by main socio-economic objectives, selected OECD countries, 2007 . . . . .	72
2.3. Tax treatment of R&D in OECD and non-member countries, 2008 . . . . .	83
2.4. Venture capital investment as a percentage of GDP, 2003 and 2006 . . . . .	84
4.1. Overall GBAORD by socio-economic objective, OECD countries, 2006 . . . . .	199
4.2. Evolution of global GBAORD by socio-economic objective, 1995-2006 . . . . .	199
4.3. Relationship between “enhanced” health GBAORD data and main health-related publications, 2004. . . . .	201
4.4. Relationship between “enhanced” health GBAORD data and health-related patents (PCT), 2004. . . . .	201
4.5. Framework for analysing the effects of research on well-being . . . . .	212
5.1. Firms having introduced a product or process innovation (as a % of all firms), 2002-04 (or closest available years) . . . . .	226
5.2. Firms having introduced a marketing or organisational innovation (as a % of all firms), 2002-04 (or closest available years) . . . . .	227
5.3. Share of turnover from product innovations (as a % of total turnover), 2002-04 (or closest available years) . . . . .	228
5.4. Output-based modes, all firms, 2002-04 (or closest available years) . . . . .	230
5.5. Output-based modes, all firms, employment weights, 2002-04 (or closest available years) . . . . .	231
5.6. Output-based modes manufacturing and services, 2002-04 (or closest available years) . . . . .	232

5.7. Output-based modes manufacturing and services, 2002-04 (or closest available years) . . . . .	232
5.8. Innovation status, all firms, 2002-04 (or closest available years) . . . . .	233
5.9. Share of firms collaborating on innovation, 2002-04 (or closest available years). . . . .	234
5.10. Share of firms collaborating on innovation, 2002-04 (or closest available years). . . . .	235
5.11. Patent families per million population . . . . .	248
5.12. Propensity to use IPR (patents and trademarks) . . . . .	249
5.13. Propensity to use IPR (patents and trademarks) . . . . .	249
5.14. Propensity to use IPR (patents and trademarks) . . . . .	250
5.15. Propensity to use IPR (patents and trademarks) . . . . .	250
5.16. Incentive effects of patents on firms' total innovative effort . . . . .	251
5.17. Incentive effects of patents on firms' R&D effort . . . . .	251