

Share of business expenditures for R&D, by industry and selected country/economy: 2003 or 2004

(Percent)

| Industry | ISIC | Czech Republic | | | | | | |
|--|-----------------|----------------|------------------|----------------|---------------|--------|----------------|----------------|
| | | EU (2003) | Australia (2003) | Belgium (2004) | Canada (2004) | (2004) | Denmark (2004) | Finland (2004) |
| All business enterprise..... | na | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Manufacturing | 15–37 | 82.8 | 45.6 | 78.4 | 58.3 | 61.3 | 65.5 | 83.1 |
| Food products, beverages, and tobacco | 15–16 | 1.9 | 3.6 | 2.9 | 0.8 | 0.7 | 5.2 | 1.4 |
| Textiles, textile products, leather, and footwear | 17–19 | 0.5 | 0.5 | 1.1 | 0.7 | 0.9 | 0.1 | 0.3 |
| Wood, paper, printing, and publishing | 20–22 | 0.7 | 2.1 | 0.5 | 3.6 | 0.1 | 1.8 | 3.1 |
| Chemical, rubber, plastics, and fuel products | 23–25 | 22.5 | 8.1 | 39.7 | 11.3 | 8.5 | 30.6 | 9.1 |
| Coke, refined petroleum products, and nuclear fuel | 23 | 0.7 | 0.9 | 1.6 | 0.9 | 0.1 | 0.0 | 0.3 |
| Chemicals and chemical products | 24 | 20.0 | 6.4 | 35.7 | 9.8 | 7.0 | 29.2 | 7.3 |
| Chemicals excluding pharmaceuticals | 24 (minus 2423) | 6.5 | 2.7 | 13.1 | 1.4 | 2.7 | 4.8 | 4.9 |
| Pharmaceuticals | 2,423 | 13.4 | 3.7 | 22.5 | 8.3 | 4.4 | 24.4 | 2.4 |
| Rubber and plastics products | 25 | 1.8 | 0.8 | 2.4 | 0.6 | 1.5 | 1.4 | 1.5 |
| Other nonmetallic mineral products | 26 | 0.7 | 1.3 | 1.2 | 0.1 | 2.1 | 0.4 | 0.4 |
| Basic metals | 27 | 0.9 | 3.6 | 2.9 | 2.0 | 1.2 | 0.2 | 1.0 |
| Fabricated metal products (excluding machinery and equipment) | 28 | 1.1 | 1.2 | 2.9 | 1.7 | 1.7 | 0.4 | 2.3 |
| Machinery and equipment, instruments, and transportation equipment | 29–35 | 53.9 | 24.8 | 26.6 | 37.2 | 45.2 | 26.2 | 64.5 |
| Machinery and equipment nec | 29 | 7.8 | 3.4 | 5.0 | 2.5 | 6.9 | 8.9 | 6.2 |
| Office, accounting, and computing machinery | 30 | 2.0 | 0.7 | 0.4 | 2.9 | 0.2 | 0.8 | 0.1 |
| Electrical machinery and apparatus nec | 31 | 3.1 | 1.1 | 3.1 | 1.5 | 3.5 | 3.5 | 4.4 |
| Radio, TV, and communication equipment | 32 | 11.0 | 3.1 | 11.5 | 17.4 | 3.4 | 3.6 | 49.5 |
| Instruments, watches, and clocks | 33 | 5.4 | 4.6 | 2.3 | 2.0 | 1.6 | 9.2 | 2.8 |
| Motor vehicles | 34 | 16.9 | 10.0 | 2.2 | 3.8 | 26.2 | 0.1 | 0.2 |
| Other transportation equipment | 35 | 7.6 | 2.0 | 2.2 | 7.0 | 3.5 | 0.1 | 1.3 |
| Building and repairing ships and boats | 351 | 0.3 | 1.2 | 0.0 | NA | 0.0 | NA | 0.4 |
| Aircraft and spacecraft | 353 | 6.8 | 0.1 | 2.1 | 6.8 | 2.0 | NA | 0.4 |
| Railroad and other transportation equipment nec | 352+359 | 0.5 | 0.7 | 0.1 | 0.2 | 1.6 | NA | 0.5 |
| Furniture, manufacturing nec | 36 | 0.6 | 0.3 | 0.5 | 0.7 | 0.5 | 0.4 | 0.7 |
| Recycling | 37 | NA | 0.1 | 0.1 | NA | 0.2 | NA | 0.2 |
| Electricity, gas, and water | 40–41 | 0.7 | 1.0 | 0.7 | 0.9 | 0.1 | 0.1 | 0.6 |
| Construction | 45 | 0.4 | 1.8 | 1.6 | 0.3 | 1.2 | 0.4 | 1.2 |
| Services | 50–99 | 15.0 | 41.1 | 17.8 | 37.9 | 36.9 | 33.3 | 14.5 |
| Wholesale and retail trade, repairs | 50–52 | 0.8 | 4.4 | 0.8 | 4.8 | 2.2 | 0.9 | 0.2 |
| Hotels and restaurants | 55 | NA | 0.2 | 0.2 | NA | 0.0 | NA | NA |
| Transport and storage | 60–63 | NA | 0.5 | 1.1 | 0.3 | 0.3 | NA | 0.3 |
| Post and telecommunications | 64 | NA | 3.4 | 2.3 | 3.4 | 0.1 | 3.6 | 6.1 |
| Post and courier activities | 641 | NA | 0.3 | 0.0 | NA | 0.1 | NA | NA |
| Telecommunications | 642 | NA | 3.1 | 2.3 | NA | 0.1 | 2.5 | NA |
| Financial intermediation | 65–67 | NA | 8.6 | 0.7 | 2.1 | 1.1 | 7.7 | NA |
| Real estate, renting, and business activities | 70–74 | NA | 23.2 | 12.3 | 27.3 | 30.9 | 21.0 | NA |
| Computer and related activities | 72 | 5.6 | 10.1 | 7.1 | 9.3 | 8.6 | 14.0 | 6.2 |
| Software consultancy and supply | 722 | NA | 9.8 | 5.1 | NA | 6.5 | 12.9 | NA |
| Other computer and related activities nec | 72 (minus 722) | NA | 0.3 | 2.0 | NA | 2.1 | 1.2 | NA |
| R&D | 73 | NA | 6.4 | 0.1 | 14.1 | 18.9 | 0.0 | NA |
| Other business activities | 74 | 2.2 | 6.3 | 5.0 | 3.9 | 3.4 | 7.0 | 1.0 |
| Community, social, and personal services | 75–99 | NA | 0.7 | 0.5 | NA | 2.3 | 0.1 | 0.7 |

Share of business expenditures for R&D, by industry and selected country/economy: 2003 or 2004

(Percent)

| Industry | ISIC | France (2003) | Germany (2004) | Ireland (2004) | Italy (2004) | Japan (2003) | South Korea (2004) | Netherlands (2004) |
|--|-----------------|---------------|----------------|----------------|--------------|--------------|--------------------|--------------------|
| All business enterprise..... | na | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Manufacturing | 15–37 | 86.3 | 91.2 | 60.9 | 74.8 | 88.9 | 88.0 | 77.4 |
| Food products, beverages, and tobacco | 15–16 | 2.1 | 0.7 | 3.5 | 1.9 | 2.8 | 1.2 | 4.5 |
| Textiles, textile products, leather, and footwear | 17–19 | 0.6 | 0.4 | 0.5 | 1.4 | 0.3 | 0.5 | 0.4 |
| Wood, paper, printing, and publishing | 20–22 | 0.4 | 0.5 | 0.9 | 0.3 | 1.1 | 0.2 | 1.0 |
| Chemical, rubber, plastics, and fuel products | 23–25 | 24.5 | 18.3 | 20.8 | 15.8 | 17.9 | 8.9 | 25.7 |
| Coke, refined petroleum products, and nuclear fuel | 23 | 0.9 | 0.1 | 0.0 | 0.1 | 0.4 | 0.8 | 0.1 |
| Chemicals and chemical products | 24 | 20.1 | 16.4 | 19.1 | 13.2 | 15.1 | 6.8 | 24.9 |
| Chemicals excluding pharmaceuticals | 24 (minus 2423) | 6.3 | 8.0 | 1.8 | 5.2 | 7.6 | 5.0 | 14.8 |
| Pharmaceuticals | 2423 | 13.8 | 8.4 | 17.4 | 8.0 | 7.5 | 1.8 | 10.0 |
| Rubber and plastics products | 25 | 3.6 | 1.8 | 1.8 | 2.5 | 2.5 | 1.3 | 0.8 |
| Other nonmetallic mineral products | 26 | 1.0 | 0.9 | 0.9 | 0.8 | 1.0 | 0.7 | 0.6 |
| Basic metals | 27 | 1.1 | 0.8 | 0.1 | 0.5 | 2.2 | 2.0 | 1.0 |
| Fabricated metal products (excluding machinery and equipment) | 28 | 0.9 | 1.5 | 0.7 | 0.9 | 0.7 | 0.5 | 0.7 |
| Machinery and equipment, instruments, and transportation equipment | 29–35 | 54.8 | 67.8 | 32.6 | 52.4 | 62.0 | 73.7 | 43.2 |
| Machinery and equipment nec | 29 | 4.8 | 10.0 | 3.3 | 11.2 | 7.7 | 4.8 | 10.0 |
| Office, accounting, and computing machinery | 30 | 1.0 | 1.4 | 4.4 | 0.6 | 12.7 | 1.0 | 23.8 |
| Electrical machinery and apparatus nec | 31 | 3.7 | 2.8 | 8.2 | 2.2 | 8.4 | 1.4 | 1.4 |
| Radio, TV, and communication equipment | 32 | 12.8 | 9.2 | 6.1 | 9.8 | 13.1 | 47.4 | 1.8 |
| Instruments, watches, and clocks | 33 | 6.6 | 7.0 | 10.2 | 7.1 | 4.3 | 1.6 | 2.6 |
| Motor vehicles | 34 | 14.7 | 32.2 | 0.3 | 11.1 | 15.1 | 14.7 | 2.2 |
| Other transportation equipment | 35 | 11.1 | 5.1 | 0.2 | 10.4 | 0.7 | 2.9 | 1.4 |
| Building and repairing ships and boats | 351 | 0.2 | 0.1 | 0.0 | 0.2 | 0.1 | 1.5 | 0.1 |
| Aircraft and spacecraft | 353 | 10.5 | 4.5 | 0.2 | 9.3 | 0.5 | 1.2 | 1.2 |
| Railroad and other transportation equipment nec | 352+359 | 0.4 | 0.4 | 0.0 | 0.9 | 0.2 | 0.3 | 0.1 |
| Furniture, manufacturing nec | 36 | 0.9 | 0.2 | 0.9 | 0.7 | 0.8 | 0.2 | 0.2 |
| Recycling | 37 | 0.0 | 0.0 | NA | 0.0 | NA | 0.0 | 0.0 |
| Electricity, gas, and water | 40–41 | 1.8 | 0.2 | NA | 0.3 | 0.7 | 1.1 | 0.5 |
| Construction | 45 | 0.4 | 0.1 | NA | 0.1 | 1.2 | 4.0 | 1.3 |
| Services | 50–99 | 9.4 | 8.3 | 38.7 | 24.4 | 9.1 | 6.9 | 18.3 |
| Wholesale and retail trade, repairs | 50–52 | 0.0 | NA | 0.3 | 3.0 | 0.7 | 0.1 | 4.5 |
| Hotels and restaurants | 55 | 0.0 | NA | 0.0 | 0.0 | NA | 0.0 | NA |
| Transport and storage | 60–63 | NA | 1.1 | 0.0 | 0.3 | 0.2 | 0.0 | 0.6 |
| Post and telecommunications | 64 | 3.9 | NA | 1.3 | 2.2 | NA | 1.4 | 0.2 |
| Post and courier activities | 641 | NA | NA | 0.0 | 0.0 | NA | 0.0 | NA |
| Telecommunications | 642 | 3.8 | NA | 1.3 | 2.2 | NA | 1.4 | 0.2 |
| Financial intermediation | 65–67 | NA | NA | 0.0 | 2.5 | 0.0 | 0.0 | 2.8 |
| Real estate, renting, and business activities | 70–74 | 5.5 | 6.7 | 37.0 | 16.3 | 8.2 | 5.1 | 10.1 |
| Computer and related activities | 72 | 4.2 | NA | 35.2 | 3.5 | 2.1 | 3.6 | 3.3 |
| Software consultancy and supply | 722 | 3.8 | NA | 33.9 | 3.2 | NA | 3.1 | 3.0 |
| Other computer and related activities nec | 72 (minus 722) | 0.4 | NA | 1.3 | 0.4 | NA | 0.5 | 0.3 |
| R&D | 73 | NA | NA | 0.9 | 8.2 | 5.8 | 0.3 | 3.3 |
| Other business activities | 74 | 1.3 | NA | 0.9 | 4.5 | 0.2 | 1.3 | 3.5 |
| Community, social, and personal services | 75–99 | NA | NA | 0.2 | 0.1 | NA | 0.2 | 0.2 |

Share of business expenditures for R&D, by industry and selected country/economy: 2003 or 2004

(Percent)

| Industry | ISIC | Norway (2004) | Poland (2004) | Spain (2004) | Sweden (2003) | United Kingdom (2004) | United States (2004) |
|---|-----------------|---------------|---------------|--------------|---------------|-----------------------|----------------------|
| All business enterprise..... | na | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Manufacturing | 15–37 | 49.4 | 63.6 | 68.7 | 87.9 | 76.7 | 71.5 |
| Food products, beverages, and tobacco..... | 15–16 | 5.1 | 1.6 | 3.5 | 0.6 | 1.9 | 1.3 |
| Textiles, textile products, leather, and footwear..... | 17–19 | 0.6 | 1.1 | 1.8 | 0.1 | 0.2 | 0.3 |
| Wood, paper, printing, and publishing | 20–22 | 3.1 | 2.1 | 1.2 | 2.1 | 0.3 | 1.2 |
| Chemical, rubber, plastics, and fuel products..... | 23–25 | 9.1 | 17.3 | 19.6 | 21.8 | 30.6 | 20.4 |
| Coke, refined petroleum products, and nuclear fuel..... | 23 | 0.0 | 1.8 | 0.9 | 0.2 | 1.8 | 0.8 |
| Chemicals and chemical products..... | 24 | 8.6 | 13.4 | 16.8 | 21.1 | 28.2 | 18.8 |
| Chemicals excluding pharmaceuticals..... | 24 (minus 2423) | 4.9 | 4.0 | 4.7 | 1.6 | 4.2 | 3.6 |
| Pharmaceuticals | 2423 | 3.6 | 9.3 | 12.1 | 19.5 | 24.0 | 15.1 |
| Rubber and plastics products..... | 25 | 0.5 | 2.1 | 1.8 | 0.4 | 0.5 | 0.9 |
| Other nonmetallic mineral products..... | 26 | 0.5 | 1.0 | 1.5 | 0.3 | 0.5 | 0.4 |
| Basic metals..... | 27 | 2.7 | 1.1 | 1.8 | 1.7 | 0.3 | 0.3 |
| Fabricated metal products (excluding machinery and equipment)..... | 28 | 1.4 | 0.6 | 2.1 | 0.6 | 0.6 | 0.7 |
| Machinery and equipment, instruments, and transportation equipment..... | 29–35 | 25.9 | 37.5 | 36.0 | 60.4 | 42.1 | 41.8 |
| Machinery and equipment nec | 29 | 7.3 | 10.3 | 6.6 | 7.0 | 7.7 | 3.2 |
| Office, accounting, and computing machinery | 30 | 0.1 | 0.4 | 1.1 | 1.0 | 0.4 | 2.8 |
| Electrical machinery and apparatus nec | 31 | 2.0 | 6.1 | 4.6 | 2.1 | 3.1 | 1.3 |
| Radio, TV, and communication equipment..... | 32 | 6.2 | 2.6 | 2.8 | 22.1 | 6.0 | 13.0 |
| Instruments, watches, and clocks..... | 33 | 5.4 | 2.6 | 2.1 | 5.5 | 2.7 | 7.3 |
| Motor vehicles..... | 34 | 1.6 | 8.8 | 10.0 | 18.9 | 6.5 | 7.5 |
| Other transportation equipment..... | 35 | 3.2 | 6.6 | 8.9 | 3.8 | 15.7 | 6.9 |
| Building and repairing ships and boats..... | 351 | 2.8 | 0.9 | 1.3 | 0.1 | 0.7 | NA |
| Aircraft and spacecraft..... | 353 | 0.2 | 4.4 | 6.6 | 3.2 | 14.8 | 6.3 |
| Railroad and other transportation equipment nec | 352+359 | 0.1 | 1.3 | 1.0 | 0.4 | 0.2 | NA |
| Furniture, manufacturing nec..... | 36 | 1.0 | 1.0 | 0.9 | 0.3 | 0.3 | 0.2 |
| Recycling..... | 37 | 0.1 | 0.1 | 0.2 | NA | 0.0 | NA |
| Electricity, gas, and water | 40–41 | 1.6 | 1.1 | 1.2 | 0.7 | 0.3 | 0.1 |
| Construction | 45 | 1.7 | 3.4 | 2.1 | 0.2 | 0.3 | 0.7 |
| Services | 50–99 | 35.2 | 24.7 | 25.6 | 10.4 | 21.1 | 28.5 |
| Wholesale and retail trade, repairs..... | 50–52 | 4.1 | 2.6 | 2.3 | 0.0 | 0.9 | 14.9 |
| Hotels and restaurants | 55 | 0.0 | 0.0 | 0.4 | 0.0 | NA | NA |
| Transport and storage..... | 60–63 | 1.0 | 3.3 | 0.9 | 0.1 | 0.1 | 0.2 |
| Post and telecommunications..... | 64 | 3.6 | 3.2 | 5.6 | 1.5 | 4.6 | NA |
| Post and courier activities | 641 | 0.0 | 0.0 | 0.0 | NA | NA | NA |
| Telecommunications | 642 | 3.6 | 3.2 | 5.6 | NA | NA | 1.0 |
| Financial intermediation | 65–67 | 3.4 | 1.5 | 1.4 | 1.3 | NA | 0.8 |
| Real estate, renting, and business activities..... | 70–74 | 23.1 | 5.2 | 13.0 | 6.5 | 15.3 | NA |
| Computer and related activities..... | 72 | 12.2 | 2.8 | 6.6 | 2.6 | 8.2 | 13.5 |
| Software consultancy and supply | 722 | 9.2 | 2.8 | 5.6 | 1.6 | NA | 7.9 |
| Other computer and related activities nec | 72 (minus 722) | 3.0 | 0.0 | 0.9 | 1.0 | NA | 5.6 |
| R&D | 73 | 3.7 | 1.6 | 0.2 | 3.7 | 4.6 | 5.5 |
| Other business activities | 74 | 7.2 | 0.8 | 6.2 | 0.3 | 2.4 | 2.8 |
| Community, social, and personal services..... | 75–99 | 0.0 | 9.0 | 2.0 | 0.9 | 0.3 | NA |

na = not applicable; NA = not available

EU = European Union; ISIC = International Standard Industrial Classification; nec = not elsewhere classified; UK = United Kingdom

NOTES: Because Organisation for Economic Co-operation and Development (OECD) and National Science Foundation (NSF) adjust country data to achieve internationally comparable estimates, data may differ from individual countries' survey estimates. Detail may not add to total because of rounding.

SOURCES: OECD, ANBERD database, http://www1.oecd.org/dsti/sti/stat-ana/stats/eas_anb.htm, accessed 1 March 2007; and NSF, special tabulations.