

Share of business expenditures for R&D, by industry and selected country/economy: 2001–03

(Percent)

Industry	ISIC	EU (2002)	Australia (2002)	Belgium (2002)	Canada (2003)	Czech Republic (2003)	Denmark (2002)	Finland (2003)
Total business enterprise		100.0	100.0	100.0	100.0	100.0	100.0	100.0
Manufacturing	15–37	82.9	47.3	82.3	60.1	63.6	59.4	84.0
Food products, beverages, and tobacco	15–16	1.9	3.9	2.4	0.7	0.4	4.4	1.3
Textiles, textile products, leather, and footwear	17–19	0.6	0.4	2.0	0.8	0.9	0.3	0.3
Wood, paper, printing, and publishing	20–22	0.6	1.9	1.1	2.7	0.3	0.6	3.3
Chemical, rubber, plastics, and fuel products	23–25	22.5	8.3	41.9	11.0	7.6	26.0	9.9
Coke, refined petroleum products, and nuclear fuel	23	0.7	0.8	0.9	0.6	0.0	0.0	0.4
Chemicals and chemical products	24	20.0	6.5	39.1	10.0	6.2	24.7	7.8
Chemicals excluding pharmaceuticals	24 (minus 2423)	6.8	2.7	15.8	1.4	3.1	2.5	5.4
Pharmaceuticals	2423	13.2	3.8	23.3	8.6	3.0	22.2	2.4
Rubber and plastics products	25	1.7	0.9	1.9	0.4	1.4	1.3	1.7
Other nonmetallic mineral products	26	0.8	1.4	1.5	0.1	2.9	0.2	0.5
Basic metals	27	1.0	4.6	2.5	1.6	1.0	0.3	1.2
Fabricated metal products (excluding machinery and equipment)	28	1.1	1.1	2.2	1.4	1.8	0.8	2.1
Machinery and equipment, instruments, and transportation equipment	29–35	53.9	25.3	27.8	41.3	48.1	26.0	64.6
Machinery and equipment, NEC	29	7.5	3.2	4.2	2.4	7.3	8.7	6.2
Office, accounting, and computing machinery	30	2.2	0.6	0.3	3.4	0.1	0.7	0.1
Electrical machinery and apparatus, NEC	31	3.1	0.7	2.2	1.3	3.3	3.5	4.1
Radio, TV, and communication equipment	32	12.2	3.5	15.2	22.2	3.7	4.5	49.8
Instruments, watches, and clocks	33	5.1	5.1	1.2	2.1	2.0	8.5	3.2
Motor vehicles	34	15.9	10.6	2.4	2.6	27.4	0.1	0.3
Other transportation equipment	35	7.9	1.7	2.4	7.4	4.3	0.1	0.9
Building and repairing ships and boats	351	0.3	1.0	0.0	NA	0.0	NA	0.3
Aircraft and spacecraft	353	6.8	0.0	2.1	7.3	2.5	NA	0.2
Railroad and other transportation equipment, NEC	352+359	0.8	0.7	0.2	0.1	1.7	NA	0.4
Furniture, manufacturing, NEC	36	0.6	0.3	0.7	0.5	0.4	0.8	0.4
Recycling	37	NA	0.1	0.1	NA	0.3	NA	0.2
Electricity, gas, and water	40–41	0.8	0.9	0.9	1.3	0.0	0.3	0.7
Construction	45	0.4	1.1	1.0	0.3	1.3	0.5	1.4
Services	50–99	14.8	42.2	14.5	35.8	34.6	39.7	13.4
Wholesale and retail trade, repairs	50–52	NA	7.2	1.0	5.1	2.9	3.9	0.0
Hotels and restaurants	55	NA	0.3	0.0	NA	0.0	NA	NA
Transport and storage	60–63	NA	0.5	0.9	0.2	0.5	NA	0.4
Post and telecommunications	64	NA	5.6	1.7	1.7	0.1	3.9	6.2
Post and courier activities	641	NA	0.5	0.0	NA	0.1	NA	NA
Telecommunications	642	NA	5.1	1.7	NA	0.0	3.8	NA
Financial intermediation	65–67	NA	4.0	0.7	2.1	0.1	6.5	NA
Real estate, renting, and business activities	70–74	NA	23.7	9.7	26.8	28.6	25.2	NA
Computer and related activities	72	NA	12.0	4.0	9.2	8.5	14.0	5.0
Software consultancy and supply	722	NA	11.6	2.3	NA	6.4	11.8	NA
Other computer and related activities, NEC	72 (minus 722)	NA	0.5	1.7	NA	2.1	2.2	NA
R&D	73	NA	5.8	0.3	13.4	16.6	1.2	NA
Other business activities	74	NA	5.8	5.3	4.2	3.5	10.0	1.0
Community, social, and personal services	75–99	NA	0.9	0.5	NA	2.4	0.2	0.8

Share of business expenditures for R&D, by industry and selected country/economy: 2001–03

(Percent)

Industry	ISIC	France (2002)	Germany (2003)	Ireland (2001)	Italy (2003)	Japan (2002)	Korea (2003)	Netherlands (2002)
Total business enterprise		100.0	100.0	100.0	100.0	100.0	100.0	100.0
Manufacturing	15–37	84.6	90.9	68.3	78.1	91.1	85.5	76.0
Food products, beverages, and tobacco	15–16	2.3	0.8	5.5	1.7	2.2	1.4	6.2
Textiles, textile products, leather, and footwear	17–19	0.5	0.6	0.7	1.3	0.5	0.6	0.3
Wood, paper, printing, and publishing	20–22	0.4	0.3	1.4	0.5	1.0	0.3	0.9
Chemical, rubber, plastics, and fuel products	23–25	22.8	18.2	11.1	17.1	18.5	8.9	19.8
Coke, refined petroleum products, and nuclear fuel	23	0.8	0.1	0.0	0.1	0.3	1.0	0.2
Chemicals and chemical products	24	18.8	16.4	9.8	14.1	15.8	6.7	18.8
Chemicals excluding pharmaceuticals	24 (minus 2423)	6.0	9.5	2.1	5.8	7.5	5.0	10.4
Pharmaceuticals	2423	12.8	7.0	7.7	8.4	8.3	1.7	8.4
Rubber and plastics products	25	3.2	1.6	1.3	2.9	2.3	1.2	0.9
Other nonmetallic mineral products	26	1.1	0.8	1.2	0.6	1.3	0.7	0.7
Basic metals	27	1.3	0.7	0.3	0.4	2.4	1.9	1.8
Fabricated metal products (excluding machinery and equipment)	28	0.8	1.4	0.8	0.8	0.7	0.5	1.3
Machinery and equipment, instruments, and transportation equipment	29–35	54.6	67.6	47.1	55.1	64	70.8	44.6
Machinery and equipment, NEC	29	4.5	10.8	2.2	9.3	7.8	5.1	10.6
Office, accounting, and computing machinery	30	1.1	1.5	2.8	0.7	12.8	1.1	26.7
Electrical machinery and apparatus, NEC	31	3.5	2.9	1.3	3.3	8.1	1.5	1.7
Radio, TV, and communication equipment	32	13.1	9.4	33.5	13.2	15.9	45.5	0.2
Instruments, watches, and clocks	33	6.8	6.1	6.5	5.2	3.9	1.4	2.6
Motor vehicles	34	14.6	29.3	0.7	12.6	14.3	13.7	2.3
Other transportation equipment	35	10.9	7.6	0.1	10.8	1.1	2.5	0.6
Building and repairing ships and boats	351	0.1	0.2	0.0	0.2	0.1	1.7	0.4
Aircraft and spacecraft	353	10.7	6.3	0.0	9.7	0.8	0.6	0.0
Railroad and other transportation equipment, NEC	352+359	0.2	1.1	0.1	0.9	0.2	0.3	0.2
Furniture, manufacturing, NEC	36	0.9	0.4	0.5	0.5	0.7	0.3	0.4
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	0.5	0.7	1.1	0.5
Construction	45	0.4	0.1	NA	0.2	1.2	4.4	0.7
Services	50–99	11.1	8.5	31.6	20.9	6.8	9.0	19.5
Wholesale and retail trade, repairs	50–52	0.0	NA	0.3	1.7	0.4	0.1	5.4
Hotels and restaurants	55	0.0	NA	0.0	0.0	NA	0.0	NA
Transport and storage	60–63	NA	2.2	0.0	0.2	0.2	0.0	0.3
Post and telecommunications	64	5.8	NA	0.1	0.2	NA	3.0	0.3
Post and courier activities	641	NA	NA	0.0	0.0	NA	0.0	NA
Telecommunications	642	5.7	NA	0.1	0.2	NA	3.0	NA
Financial intermediation	65–67	NA	NA	1.1	3.0	0.0	0.0	0.9
Real estate, renting, and business activities	70–74	5.3	5.9	29.5	15.8	6.1	5.7	12.3
Computer and related activities	72	3.8	NA	27.5	3.3	1.7	4.1	6.5
Software consultancy and supply	722	3.4	NA	24.5	2.5	NA	3.5	5.2
Other computer and related activities, NEC	72 (minus 722)	0.3	NA	3.0	0.7	NA	0.6	1.3
R&D	73	NA	NA	0.8	10.9	4.2	0.3	2.5
Other business activities	74	1.5	NA	1.3	1.5	0.2	1.3	3.3
Community, social, and personal services	75–99	NA	NA	0.6	0.1	NA	0.2	0.2

Share of business expenditures for R&D, by industry and selected country/economy: 2001–03

(Percent)

Industry	ISIC	Norway (2003)	Poland (2002)	Spain (2002)	Sweden (2003)	United Kingdom (2002)	United States (2002) ^a
Total business enterprise		100.0	100.0	100.0	100.0	100.0	100.0
Manufacturing		50.5	81.1	68.4	87.9	77.3	70.9
Food products, beverages, and tobacco	15–16	5.7	1.8	2.9	0.6	2.3	1.1
Textiles, textile products, leather, and footwear	17–19	0.8	1.2	1.6	0.1	0.1	0.1
Wood, paper, printing, and publishing	20–22	3.2	0.7	0.9	2.1	0.3	1.8
Chemical, rubber, plastics, and fuel products	23–25	7.5	32.9	20.5	21.8	32.1	12.1
Coke, refined petroleum products, and nuclear fuel	23	0.1	0.9	1.0	0.2	2.0	0.6
Chemicals and chemical products	24	6.6	28.3	18.1	21.1	29.6	10.7
Chemicals excluding pharmaceuticals	24 (minus 2423)	3.8	10.0	5.2	1.6	4.4	3.3
Pharmaceuticals	2423	2.8	18.3	13.0	19.5	25.2	10.9
Rubber and plastics products	25	0.8	3.7	1.3	0.4	0.5	0.8
Other nonmetallic mineral products	26	0.7	1.2	1.4	0.3	0.4	0.2
Basic metals	27	3.2	3.8	1.7	1.7	0.4	0.2
Fabricated metal products (excluding machinery and equipment)	28	1.9	0.5	1.6	0.6	0.4	0.7
Machinery and equipment, instruments, and transportation equipment	29–35	26.0	37.8	36.8	60.4	40.9	50.3
Machinery and equipment, NEC	29	7.1	9.0	6.6	7.0	5.9	3.3
Office, accounting, and computing machinery	30	0.1	0.1	1.1	1.0	1.1	10.1
Electrical machinery and apparatus, NEC	31	2.3	9.2	3.9	2.1	3.5	3.1
Radio, TV, and communication equipment	32	5.4	4.8	4.4	22.1	7.3	9.8
Instruments, watches, and clocks	33	5.8	2.0	2.2	5.5	3.4	10.3
Motor vehicles	34	1.8	6.2	9.6	18.9	7.1	7.9
Other transportation equipment	35	3.5	6.4	9.0	3.8	12.7	5.6
Building and repairing ships and boats	351	3.1	1.2	1.8	0.1	0.7	NA
Aircraft and spacecraft	353	0.3	4.5	6.1	3.2	10.3	5.0
Railroad and other transportation equipment, NEC	352+359	0.1	0.7	1.1	0.4	1.7	0.6
Furniture, manufacturing, NEC	36	1.3	1.3	0.8	0.3	0.4	0.8
Recycling	37	0.1	0.0	0.1	NA	0.0	NA
Electricity, gas, and water	40–41	2.1	1.1	1.5	0.7	0.9	0.1
Construction	45	2.2	0.4	1.1	0.2	0.3	0.1
Services		33.4	12.5	27.3	10.4	20.2	27.4
Wholesale and retail trade, repairs	50–52	2.8	0.0	2.0	0.0	NA	1.3
Hotels and restaurants	55	0.0	0.0	0.2	0.0	NA	NA
Transport and storage	60–63	1.4	0.2	0.8	0.1	NA	0.2
Post and telecommunications	64	3.3	5.1	7.3	1.5	5.7	NA
Post and courier activities	641	0.0	0.0	0.0	NA	NA	NA
Telecommunications	642	3.3	5.1	7.3	NA	NA	0.9
Financial intermediation	65–67	2.8	0.1	2.6	1.3	NA	1.0
Real estate, renting, and business activities	70–74	23.2	5.0	13.0	6.5	13.8	NA
Computer and related activities	72	13.6	0.0	6.7	2.6	6.8	10.4
Software consultancy and supply	722	9.9	0.0	5.6	1.6	NA	4.2
Other computer and related activities, NEC	72 (minus 722)	3.6	0.0	1.1	1.0	NA	6.2
R&D	73	3.6	4.9	0.1	3.7	4.3	6.8
Other business activities	74	6.0	0.1	6.2	0.3	2.7	NA
Community, social, and personal services	75–99	0.0	2.1	1.3	0.9	0.1	NA

NA = not available

EU = European Union; ISIC = International Standard Industrial Classification; NEC = not elsewhere classified

^aData for United States adjusted to reclassify some wholesale trade R&D as manufacturing R&D.

NOTES: Data are for years in parentheses. Because Organisation for Economic Co-operation and Development (OECD) and National Science Foundation (NSF) analysts adjust country data to achieve internationally comparable estimates, these 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 (March 2005); and NSF, special tabulations.