

Appendix table 4-36

International nondefense R&D expenditures and nondefense R&D as percentage of gross domestic product, by selected country: 1981–2006

Year	U.S. ^a	Japan ^b	Germany ^c	France	UK	Italy	Canada
	2000 constant US\$billions ^d						
1981.....	92	39	28	16	17	8	6
1982.....	95	42	29	17	NA	9	7
1983.....	100	45	30	17	16	9	7
1984.....	108	48	31	19	NA	10	7
1985.....	115	58	33	19	18	11	8
1986.....	116	59	34	20	19	12	8
1987.....	118	63	36	20	20	13	8
1988.....	123	68	38	21	21	14	8
1989.....	131	74	39	23	19	15	9
1990.....	140	80	39	24	20	16	10
1991.....	148	82	42	25	20	15	10
1992.....	150	80	42	26	20	15	10
1993.....	148	78	40	26	21	14	11
1994.....	150	78	39	26	21	13	12
1995.....	162	89	40	27	21	13	12
1996.....	173	88	41	28	21	13	12
1997.....	185	91	42	28	21	14	12
1998.....	198	94	44	29	21	15	14
1999.....	214	94	48	30	23	15	15
2000.....	232	98	51	31	24	15	16
2001.....	233	101	51	32	25	16	18
2002.....	225	102	52	33	26	NA	18
2003.....	227	104	53	31	25	NA	18
2004.....	228	106	53	32	26	NA	19
2005.....	238	NA	54	NA	NA	NA	19
2006.....	245	NA	NA	NA	NA	NA	20
	GDP (%)						
1981.....	1.7	2.1	2.3	1.5	1.9	0.8	1.2
1982.....	1.8	2.2	2.3	1.6	NA	0.9	1.3
1983.....	1.8	2.3	2.3	1.6	1.7	0.9	1.3
1984.....	1.9	2.4	2.3	1.7	NA	0.9	1.3
1985.....	1.9	2.6	2.5	1.8	1.8	1.0	1.4
1986.....	1.8	2.5	2.5	1.8	1.8	1.1	1.4
1987.....	1.8	2.6	2.6	1.8	1.8	1.2	1.3
1988.....	1.8	2.6	2.6	1.8	1.8	1.2	1.3
1989.....	1.9	2.7	2.6	1.8	1.7	1.2	1.4
1990.....	2.0	2.8	2.5	1.9	1.7	1.2	1.5
1991.....	2.1	2.8	2.4	1.9	1.7	1.2	1.5
1992.....	2.0	2.7	2.3	1.9	1.7	1.1	1.6
1993.....	2.0	2.6	2.2	2.0	1.7	1.1	1.6
1994.....	1.9	2.6	2.1	2.0	1.7	1.0	1.7
1995.....	2.0	2.9	2.1	2.0	1.7	1.0	1.7
1996.....	2.1	2.8	2.1	2.0	1.6	1.0	1.6
1997.....	2.1	2.9	2.2	2.0	1.5	1.0	1.6
1998.....	2.2	3.0	2.2	2.0	1.5	1.1	1.7
1999.....	2.3	3.0	2.3	2.0	1.6	1.0	1.8
2000.....	2.4	3.0	2.4	2.0	1.6	1.0	1.9
2001.....	2.4	3.1	2.4	2.0	1.6	1.1	2.1
2002.....	2.2	3.2	2.5	2.1	1.6	NA	2.0
2003.....	2.2	3.2	2.5	1.9	1.6	NA	2.0
2004.....	2.1	3.1	2.5	1.9	1.6	NA	2.0
2005.....	2.1	NA	2.5	NA	NA	NA	2.0
2006.....	2.1	NA	NA	NA	NA	NA	1.9

NA = not available; GDP = gross domestic product; UK = United Kingdom

^aData for United States do not include capital expenditures for R&D, business sector social sciences R&D, or humanities R&D.

^bData for 1996 on may not be consistent with earlier data because of changes in methodology.

^c1981–90 data for West Germany.

^dEstimated nondefense R&D data. Nondefense R&D/GDP obtained directly from Organisation for Economic Co-operation and Development (OECD) reports, or for following countries and years, estimated by National Science Foundation (NSF) from OECD data: United States, all years; Japan, 1995 on; Germany, 1990 and earlier; UK, 1981–84 and 1986–88; Italy, 1986 and earlier; and Canada, 1990 on. Conversions of foreign currency to U.S. dollars calculated with OECD purchasing power parity exchange rates.

NOTE: Nondefense R&D/GDP for Russian Federation was 1.2 in 1990, 0.6 in 1995, 0.8 in 2000, and 0.9 in 2002.

SOURCES: National Science Foundation, Division of Science Resources Statistics, National Patterns of R&D Resources (annual series); and OECD, Main Science and Technology Indicators (2006).