

Appendix table 4-43

**International nondefense R&D expenditures and nondefense R&D as percentage of gross domestic product, by selected country: 1981–2003**

Year	United States	Japan <sup>a</sup>	Germany <sup>b</sup>	France	United Kingdom	Italy	Canada
Billions of constant 2000 U.S. dollars <sup>c</sup>							
1981.....	92	42	29	16	16	8	6
1982.....	93	45	29	17	NA	9	7
1983.....	98	48	30	18	16	9	7
1984.....	106	52	30	19	NA	10	7
1985.....	114	57	33	20	18	11	8
1986.....	116	58	34	20	19	12	8
1987.....	118	62	36	21	20	13	8
1988.....	123	67	37	22	21	14	9
1989.....	130	73	39	23	19	15	9
1990.....	139	79	39	25	20	16	10
1991.....	148	81	43	25	20	15	10
1992.....	150	80	42	26	19	15	10
1993.....	147	77	41	26	20	14	11
1994.....	151	77	40	26	21	13	12
1995.....	162	82	41	27	21	13	12
1996.....	174	87	41	27	21	13	12
1997.....	185	91	42	28	21	14	12
1998.....	197	93	44	28	21	14	14
1999.....	213	94	47	30	23	14	15
2000.....	229	98	50	31	23	15	17
2001.....	231	101	51	32	25	16	18
2002.....	225	102	52	33	26	NA	NA
2003.....	225	NA	51	NA	NA	NA	NA
Percent of GDP							
1981.....	1.7	2.1	2.3	1.6	1.9	0.9	1.2
1982.....	1.8	2.2	2.4	1.6	NA	0.9	1.3
1983.....	1.8	2.3	2.4	1.7	1.7	0.9	1.3
1984.....	1.8	2.4	2.4	1.8	NA	1.0	1.3
1985.....	1.9	2.5	2.6	1.8	1.8	1.1	1.4
1986.....	1.9	2.5	2.6	1.8	1.8	1.1	1.4
1987.....	1.8	2.6	2.7	1.8	1.8	1.2	1.4
1988.....	1.8	2.6	2.7	1.8	1.8	1.2	1.3
1989.....	1.9	2.7	2.7	1.9	1.7	1.2	1.4
1990.....	2.0	2.8	2.5	1.9	1.7	1.3	1.5
1991.....	2.1	2.7	2.4	1.9	1.7	1.2	1.6
1992.....	2.1	2.7	2.3	2.0	1.7	1.2	1.6
1993.....	2.0	2.6	2.3	2.0	1.7	1.1	1.7
1994.....	1.9	2.6	2.2	2.0	1.7	1.0	1.7
1995.....	2.0	2.7	2.2	2.0	1.7	1.0	1.7
1996.....	2.1	2.8	2.2	2.0	1.6	1.0	1.7
1997.....	2.1	2.8	2.2	2.0	1.5	1.1	1.7
1998.....	2.2	2.9	2.3	2.0	1.5	1.1	1.8
1999.....	2.3	2.9	2.4	2.0	1.6	1.0	1.8
2000.....	2.4	3.0	2.4	2.0	1.6	1.1	1.9
2001.....	2.4	3.1	2.5	2.1	1.6	1.1	2.0
2002.....	2.2	3.1	2.5	2.1	1.7	NA	NA
2003.....	2.2	NA	2.5	NA	NA	NA	NA

NA = not available

GDP = gross domestic product

<sup>a</sup>Data for 1996 on may not be consistent with earlier data because of changes in methodology.<sup>b</sup>1981–90 data for West Germany.<sup>c</sup>Nondefense R&D data are estimates. Nondefense R&D/GDP obtained directly from Organisation for Economic Co-operation and Development (OECD) reports, or for following countries and years, estimated by the National Science Foundation from OECD data: United States, all years; Japan, 1995 on; Germany, 1990 and earlier; United Kingdom, 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&amp;D/GDP for Russian Federation was 1.2 in 1990, 0.6 in 1995, 0.8 in 2000, and 0.9 in 2002.

SOURCE: OECD, *Main Science and Technology Indicators* (2004).