

IV. Domestic economy

1. Key economic indicators*

Annual averages						
Period	Assessment of the business situation ¹	Orders received at constant prices ^{2,3}	Output in the production sector (excluding construction) ^{2,3,4}	Output in the construction industry ^{2,5}	Retail turnover in constant prices ^{2,6}	Gross wages and salaries per employed person ^{2,7}
	Percentage points	Annual percentage change				
1951	.	.	18.6	9.9	6.7	13.4
1952	.	.	6.1	6.4	7.5	7.9
1953	.	7.7	9.8	18.3	14.4	4.6
1954	.	27.0	11.4	9.7	9.4	3.9
1955	42.8	16.7	15.2	12.9	10.3	6.8
1956	34.2	6.8	8.3	5.6	10.3	6.6
1957	23.6	1.1	5.8	-2.1	7.1	4.5
1958	4.9	-1.7	2.7	3.6	3.5	6.9
1959	32.9	25.2	7.3	14.5	6.7	5.1
1960	49.8	11.9	11.8	4.5	11.7	10.3
1961	33.7	-1.4	6.0	9.3	4.8	10.1
1962	21.2	1.0	4.2	8.8	10.8	9.5
1963	10.2	5.2	3.4	0.8	2.6	7.2
1964	32.3	12.7	8.2	11.1	7.1	8.9
1965	27.0	3.4	5.5	2.2	8.0	10.2
1966	-2.8	-2.1	0.8	0.6	3.3	6.7
1967	-26.7	1.4	-2.8	-5.3	1.0	3.3
1968	19.6	22.1	9.6	4.8	3.9	7.9
1969	55.0	19.8	13.0	9.0	8.8	9.9
1970	28.7	-2.3	6.2	5.7	7.8	15.9
1971	-8.4	-3.3	1.0	3.8	5.5	10.4
1972	-9.2	4.8	3.2	6.6	4.6	9.5
1973	15.8	12.6	6.3	0.8	0.7	12.2
1974	-14.7	-5.0	-1.7	-7.1	-1.7	12.3
1975	-46.5	-4.9	-6.2	-11.3	3.5	7.5
1976	-13.2	8.5	7.5	4.7	3.5	8.6
1977	-19.5	-0.7	2.1	-1.1	3.5	7.4
1978	-17.5	3.8	1.6	-0.6	2.9	5.7
1979	9.7	6.7	5.3	5.1	2.4	6.5
1980	-7.7	-2.1	0.1	-0.2	0.2	7.1
1981	-34.3	-0.3	-1.8	-8.8	-1.1	5.6
1982	-45.5	-6.1	-3.3	-3.8	-3.5	4.5
1983	-24.7	2.6	0.5	0.3	0.2	4.0
1984	-2.3	6.8	3.2	1.5	0.6	3.6
1985	10.4	5.6	4.8	-7.8	1.0	4.2
1986	9.8	0.0	1.9	5.7	2.3	4.2
1987	-1.4	0.1	0.4	-0.2	3.7	3.4
1988	15.1	7.0	3.4	4.1	3.2	3.8
1989	31.5	8.0	4.9	6.5	2.3	3.5
1990	35.5	5.0	5.4	5.8	7.1	4.8
1991	17.9	1.4	3.2	2.6	4.3	5.8
1992	-13.8	-5.6	-2.3	10.0	-1.0	13.7
1993	-51.2	-7.9	-7.5	2.2	-1.9	4.9
1994	-15.7	8.0	2.9	10.1	-1.3	4.5
1995	-1.3	0.6	1.1	-1.1	1.3	4.4
1996	-17.8	0.3	0.1	-6.7	-1.0	3.0
1997	1.9	7.5	2.9	-4.6	-1.6	1.8
1998	13.0	3.4	3.6	-2.9	0.5	2.1
1999	-1.7	2.9	1.1	0.7	-0.4	1.7
2000	19.3	12.1	5.6	-3.3	1.0	2.7
2001	1.4	-2.3	0.3	-7.7	0.3	2.0
2002	-14.6	0.2	-1.1	-4.2	-2.5	1.9
2003	-12.6	0.7	0.5	-4.2	-1.1	2.4
2004	2.5	6.0	3.1	-5.2	1.5	2.3
2005	4.5	5.5	3.5	-6.8	1.5	1.6
2006	29.2	9.2	5.6	5.7	0.5	2.5
2007	40.5	9.8	6.1	2.7	-1.3	2.3
2008	20.1	-7.1	0.0	0.2	-0.3	1.7
2009	-42.2	-21.7	-16.3	-0.3	-2.7	-3.2
2010	8.7	21.2	11.0	0.4	1.2	4.8
2011	38.1	7.7	7.2	12.2	1.0	4.4
2012	21.0	-3.8	-0.4	0.8	0.1	2.5
2013	14.9	2.8	0.1	3.1	0.5	2.8
2014	23.2	2.9	1.4	6.1	1.2	2.8
2015	23.1	0.9	0.8	-0.5	3.8	2.6
2016	21.4	1.5	0.8	4.2	2.0	1.8
2017	41.8	6.2	3.1	8.2	3.6	2.0
2018	43.8	0.4	1.0	5.6	1.6	2.5
2019	14.2	-5.9	-3.2	6.2	3.3	1.6
2020	-15.6	-7.1	-9.6	4.7	4.4	-3.0
2021	29.8	17.8	4.6	0.2	0.7	4.0
2022	21.7	-4.6	-0.2	-0.7	-0.7	4.4
2023	6.3	-6.5	-1.9	-2.6	-3.1	4.2

Sources: Federal Statistical Office, ifo and Bundesbank calculations. * Up to 1994 West Germany. 1 ifo business survey; balance of shares of enterprises which assess conditions to be good or bad. Up to 1994 excluding the food, drink and tobacco industry; before 1970 also excluding ironmaking and chemical industry, manufacture of refined petroleum products and other economic sectors. 2 Calendar adjusted. 3 Impaired comparability due to change in survey in 1995. 4 From 1991 unadjusted figures sourced from Federal Statistical Office, prior to that Bundesbank back calculations. 5 Construction of buildings and civil engineering. 6 From 1950 to 1979 excluding retail trade of automotive fuel by agencies, including retail trade in motor vehicles and motorcycles. From 1980 to 1993 excluding retail trade of automotive fuel by agencies and excluding retail trade in motor vehicles and motorcycles. From 1994 including retail trade by petrol stations and excluding retail trade in motor vehicles and motorcycles. Up to 1967 including turnover tax, 1968 to 1990 including VAT, and as of 1991 excluding VAT. 7 Production sector excluding construction and energy supply.

IV. Domestic economy

2. Gross value added by economic sector*

Nominal														
Total		of which:												
		Agriculture, forestry and fishing		Manufacturing (excluding construction)		Construction		Trade, transport, hotels and restaurants ¹		Information, financing, renting and business services ¹		Public and other services		
Period	Index 2020=100	Annual percentage change	Index 2020=100	Share of total (%)	Index 2020=100	Share of total (%)	Index 2020=100	Share of total (%)	Index 2020=100	Share of total (%)	Index 2020=100	Share of total (%)	Index 2020=100	Share of total (%)
1960	5.0	.	35.9	5.8	9.8	45.5	7.6	7.7	5.7	18.5	2.2	13.6	1.9	8.8
1961	5.5	9.6	35.1	5.2	10.7	45.5	8.8	8.1	6.2	18.2	2.4	13.9	2.1	9.1
1962	5.9	8.7	38.2	5.2	11.5	44.8	10.0	8.5	6.8	18.5	2.7	14.0	2.3	9.0
1963	6.3	6.0	39.7	5.1	11.9	43.9	10.7	8.6	7.3	18.5	2.9	14.5	2.5	9.4
1964	6.9	10.1	39.6	4.6	13.2	44.1	12.5	9.1	7.8	18.2	3.3	14.7	2.7	9.3
1965	7.6	9.4	40.7	4.4	14.4	44.2	13.3	8.8	8.4	17.9	3.7	15.2	3.1	9.6
1966	8.1	6.7	42.4	4.3	15.1	43.2	14.1	8.7	9.0	17.9	4.1	16.0	3.4	10.0
1967	8.2	1.3	41.5	4.1	15.1	42.7	13.1	8.0	9.1	17.8	4.4	17.0	3.6	10.4
1968	8.4	2.4	45.1	4.4	15.6	43.2	12.5	7.5	8.6	16.5	4.7	17.6	3.9	10.8
1969	9.4	11.5	47.8	4.1	17.7	43.9	13.4	7.2	9.3	15.9	5.3	17.9	4.4	11.0
1970	10.5	12.2	42.8	3.3	18.2	40.3	16.8	8.0	12.4	19.0	4.7	13.9	6.9	15.4
1971	11.6	10.8	44.5	3.1	19.3	38.5	19.4	8.4	13.7	19.0	5.4	14.6	8.2	16.5
1972	12.7	9.3	48.3	3.1	20.5	37.4	21.4	8.4	15.1	19.1	6.1	15.0	9.2	17.0
1973	14.2	11.9	51.3	2.9	22.9	37.4	22.5	7.9	16.5	18.6	7.1	15.5	10.7	17.6
1974	15.5	8.8	51.0	2.7	25.0	37.5	21.8	7.1	17.4	18.0	7.9	15.9	12.4	18.8
1975	16.2	4.6	56.4	2.8	25.1	36.0	20.7	6.4	18.6	18.5	8.5	16.4	13.8	20.0
1976	17.6	8.4	61.7	2.8	27.5	36.3	22.2	6.4	20.1	18.4	9.1	16.2	14.9	19.9
1977	18.8	6.7	63.7	2.8	29.0	36.0	23.6	6.3	22.0	18.8	9.7	16.2	15.9	19.9
1978	19.9	6.3	64.7	2.6	30.7	35.8	25.7	6.5	23.6	19.1	10.3	16.2	16.9	19.9
1979	21.6	8.4	62.8	2.4	32.7	35.2	29.1	6.8	25.0	18.7	11.9	17.3	18.1	19.7
1980	23.1	6.9	61.6	2.2	34.1	34.3	32.0	7.0	26.1	18.2	13.6	18.4	19.7	20.0
1981	24.2	4.7	64.2	2.2	34.9	33.5	32.6	6.8	26.9	17.9	14.8	19.1	21.2	20.6
1982	25.2	4.3	70.7	2.3	36.4	33.5	31.4	6.3	27.8	17.7	15.9	19.7	22.0	20.5
1983	26.3	4.3	64.1	2.0	37.8	33.3	32.4	6.2	28.7	17.5	17.2	20.4	23.0	20.5
1984	27.6	4.9	66.4	2.0	39.4	33.2	32.6	5.9	30.4	17.7	18.4	20.8	24.0	20.4
1985	28.9	4.8	61.9	1.7	42.3	34.0	31.3	5.4	31.4	17.5	19.4	21.0	25.1	20.4
1986	30.6	5.6	65.3	1.7	44.9	34.1	32.8	5.4	32.7	17.2	20.7	21.2	26.5	20.4
1987	31.4	2.5	59.3	1.5	45.1	33.4	33.4	5.3	33.9	17.4	21.5	21.5	27.8	20.8
1988	33.1	5.7	65.2	1.6	47.2	33.1	35.2	5.3	35.0	17.0	23.6	22.4	29.1	20.6
1989	35.3	6.5	73.2	1.7	49.6	32.6	37.7	5.4	37.4	17.0	26.1	23.2	30.2	20.1
1990	38.3	8.6	63.6	1.3	53.0	32.1	42.3	5.5	41.2	17.3	29.3	23.9	32.3	19.8
1991	46.7	21.7	67.7	1.2	61.4	30.6	56.2	6.0	46.7	16.1	38.8	26.1	39.9	20.1
1992	50.1	7.4	67.2	1.1	62.2	28.8	66.5	6.7	48.2	15.5	43.3	27.1	44.4	20.8
1993	51.4	2.5	68.3	1.1	58.8	26.6	69.8	6.8	49.4	15.5	47.2	28.8	46.6	21.3
1994	53.5	4.1	72.6	1.1	59.8	26.0	75.0	7.0	52.0	15.6	48.8	28.6	49.3	21.6
1995	55.5	3.7	78.0	1.1	61.2	25.6	74.9	6.8	54.2	15.7	51.2	28.9	51.6	21.8
1996	56.3	1.4	81.9	1.2	60.7	25.1	70.8	6.3	54.4	15.5	53.1	29.6	53.4	22.3
1997	57.4	2.1	81.1	1.1	62.1	25.1	68.0	5.9	56.2	15.7	54.8	29.9	54.1	22.1
1998	59.0	2.7	78.6	1.1	64.3	25.3	65.2	5.6	58.8	16.0	56.7	30.1	54.9	21.9
1999	60.3	2.2	79.4	1.1	64.7	24.9	64.6	5.4	59.4	15.8	59.2	30.8	56.4	22.0
2000	61.8	2.5	84.4	1.1	67.2	25.2	62.3	5.1	61.9	16.1	60.3	30.6	57.6	21.9
2001	63.8	3.2	94.6	1.2	68.3	24.9	59.1	4.7	65.4	16.5	63.2	31.1	59.1	21.7
2002	64.7	1.3	79.7	1.0	67.5	24.2	56.5	4.4	66.2	16.5	65.4	31.7	61.1	22.2
2003	65.1	0.6	73.9	0.9	68.1	24.3	54.0	4.2	67.2	16.6	65.7	31.7	61.8	22.3
2004	66.8	2.6	86.5	1.1	71.0	24.7	52.4	3.9	68.1	16.4	67.8	31.8	62.8	22.1
2005	67.6	1.3	80.7	0.8	72.0	24.7	50.7	3.8	69.8	16.6	68.9	31.9	63.7	22.1
2006	70.5	4.3	69.1	0.8	77.2	25.4	52.3	3.7	72.4	16.5	71.7	31.9	64.9	21.6
2007	73.4	4.2	83.1	0.9	81.6	25.8	54.9	3.8	75.4	16.5	74.7	31.9	65.9	21.1
2008	74.8	1.8	86.2	0.9	81.4	25.3	57.1	3.8	77.6	16.7	75.8	31.8	68.3	21.5
2009	71.8	-4.0	66.5	0.8	70.3	22.7	57.8	4.0	76.3	17.1	73.9	32.3	70.5	23.1
2010	75.6	5.3	80.7	0.9	81.5	25.1	61.0	4.1	75.4	16.1	75.8	31.5	72.4	22.5
2011	79.1	4.7	101.0	1.0	86.5	25.4	64.6	4.1	78.6	16.0	79.3	31.4	74.4	22.1
2012	80.7	1.9	101.5	1.0	88.8	25.6	67.5	4.2	78.4	15.6	80.5	31.3	76.6	22.3
2013	82.5	2.3	105.7	1.0	88.1	24.8	69.7	4.2	80.3	15.7	83.7	31.8	78.8	22.4
2014	85.9	4.1	108.7	1.0	92.3	24.9	72.3	4.2	85.0	15.9	86.3	31.5	81.9	22.4
2015	88.8	3.3	87.0	0.8	95.2	24.9	73.7	4.2	89.2	16.2	89.5	31.6	84.6	22.4
2016	92.1	3.7	92.8	0.8	99.5	25.1	78.0	4.3	92.5	16.2	91.9	31.3	87.6	22.4
2017	96.0	4.3	114.0	1.0	103.1	24.9	82.4	4.3	98.7	16.5	94.7	30.9	91.2	22.3
2018	98.9	3.1	101.4	0.8	104.5	24.5	88.5	4.5	102.0	16.6	98.3	31.2	94.4	22.4
2019	101.9	3.0	117.2	0.9	105.8	24.1	92.7	4.6	105.2	16.6	100.4	30.9	99.4	22.9
2020	100.0	-1.9	100.0	0.8	100.0	23.2	100.0	5.0	100.0	16.1	100.0	31.4	100.0	23.5
2021	106.1	6.1	108.5	0.8	106.6	23.3	104.7	5.0	105.8	16.0	107.9	31.9	103.7	23.0
2022	115.0	8.4	157.9	1.1	117.0	23.6	111.7	4.9	122.7	17.2	111.0	30.3	112.3	22.9
2023	123.4	7.3	140.2	0.9	127.6	24.0	131.6	5.4	126.9	16.5	119.5	30.4	119.7	22.8

Source: Federal Statistical Office and Bundesbank calculations. * From 1960 to 1969 pursuant to ESA 1979, from 1970 to 1990 pursuant to ESA 1995, and from 1991 pursuant to ESA 2010. From 1991 Germany, prior to that West Germany. ¹ From 1991 major changes in the composition of the economic sectors.

IV. Domestic economy

3. Aggregate profitability*

in %		
Period	Profit ratio ¹	Earnings ratio per nominal sales unit ²
1950	41.4	.
1951	41.6	.
1952	42.5	.
1953	40.8	.
1954	39.5	.
1955	39.9	.
1956	39.3	.
1957	39.2	.
1958	38.7	.
1959	39.4	.
1960	39.9	27.4
1961	37.6	25.9
1962	36.1	24.7
1963	35.1	23.9
1964	35.5	24.1
1965	34.7	23.4
1966	33.6	22.6
1967	33.9	22.7
1968	35.3	23.7
1969	34.3	22.5
1970	34.4	22.5
1971	32.6	21.4
1972	31.5	20.8
1973	30.4	20.1
1974	28.9	18.7
1975	28.9	18.6
1976	29.3	18.5
1977	28.6	18.2
1978	28.7	18.1
1979	28.4	17.7
1980	26.8	16.3
1981	26.4	16.0
1982	26.8	16.4
1983	28.4	17.2
1984	29.4	17.4
1985	30.0	17.7
1986	30.3	18.7
1987	28.8	18.0
1988	30.3	18.6
1989	31.8	19.1
1990	32.2	19.2
1991	29.9	18.0
1992	28.7	17.4
1993	27.8	17.0
1994	28.5	17.7
1995	28.3	17.6
1996	28.8	17.7
1997	29.5	17.9
1998	29.6	18.0
1999	28.6	17.2
2000	27.4	15.8
2001	28.4	16.5
2002	28.3	16.9
2003	28.2	16.7
2004	31.4	17.5
2005	32.6	17.8
2006	35.1	18.6
2007	35.5	18.7
2008	33.5	17.6
2009	30.6	15.6
2010	32.2	16.5
2011	33.1	16.4
2012	31.4	15.5
2013	30.8	15.2
2014	30.8	15.5
2015	30.3	15.3
2016	31.0	15.4
2017	30.6	15.2
2018	30.3	14.1
2019	28.8	13.3
2020	26.7	13.2
2021	29.4	13.8
2022	28.9	12.5
2023	28.9	13.1

Source: Federal Statistical Office and Bundesbank calculations. * From 1960 to 1969 pursuant to ESA 1979, from 1970 to 1990 pursuant to ESA 1995, and from 1991 pursuant to ESA 2010. From 1991 Germany, prior to that West Germany. **1** Business revenue and property income as a percentage of national income. **2** Operating surplus/mixed income as a percentage of aggregate demand (GDP plus imports).

IV. Domestic economy

4. Gross capital formation and saving*

As a percentage of GDP						
Period	Gross capital formation			Saving ¹		
	Overall economy	Private sector	General government	Overall economy	Private sector	General government
1950	24.6	.	.	.	.	.
1951	25.2	.	.	.	.	.
1952	26.5	.	.	.	.	.
1953	24.5	.	.	.	.	.
1954	25.3	.	.	.	.	.
1955	28.2	.	.	.	.	.
1956	27.4	.	.	.	.	.
1957	26.8	.	.	.	.	.
1958	25.6	.	.	.	.	.
1959	27.1	.	.	.	.	.
1960	27.3	24.1	3.2	26.3	19.1	7.2
1961	27.2	23.7	3.4	26.8	18.7	8.0
1962	27.3	23.4	4.0	28.0	20.4	7.5
1963	26.2	21.8	4.5	26.4	19.6	6.7
1964	28.1	23.1	5.0	28.2	21.1	7.1
1965	28.4	23.9	4.5	30.0	24.7	5.3
1966	26.5	22.2	4.3	26.5	21.2	5.3
1967	23.0	19.2	3.8	21.0	17.4	3.7
1968	24.5	20.6	3.9	22.4	18.2	4.2
1969	26.2	22.2	4.0	24.9	18.4	6.5
1970	28.4	23.7	4.7	29.5	23.0	6.6
1971	27.7	23.1	4.6	28.2	22.0	6.2
1972	26.6	22.5	4.1	27.2	21.9	5.3
1973	25.5	21.6	3.8	26.9	20.5	6.4
1974	23.0	18.7	4.3	25.7	21.5	4.3
1975	21.2	17.1	4.2	22.4	22.4	0.1
1976	22.2	18.5	3.7	23.1	21.2	1.9
1977	21.9	18.4	3.5	22.8	20.1	2.7
1978	22.2	18.6	3.6	23.6	21.1	2.5
1979	23.9	20.2	3.6	23.0	20.6	2.5
1980	23.7	20.0	3.6	21.9	19.7	2.1
1981	21.4	18.1	3.3	20.7	20.0	0.7
1982	20.1	17.2	2.9	21.0	20.2	0.8
1983	20.8	18.1	2.7	21.5	20.4	1.1
1984	20.6	18.1	2.6	22.1	20.3	1.8
1985	20.1	17.6	2.5	22.9	20.4	2.5
1986	20.1	17.5	2.6	24.3	21.9	2.4
1987	19.6	17.0	2.6	23.6	21.9	1.7
1988	20.2	17.8	2.5	24.7	23.4	1.4
1989	21.1	18.6	2.5	25.7	22.3	3.4
1990	21.6	19.2	2.4	25.3	24.0	1.3
1991	26.2	23.1	3.2	24.8	23.0	1.8
1992	25.6	22.3	3.3	24.5	22.5	2.0
1993	24.2	21.0	3.1	23.2	22.0	1.2
1994	24.6	21.6	3.0	23.0	21.7	1.3
1995	24.5	21.8	2.7	23.2	22.7	0.6
1996	23.5	20.9	2.6	22.7	22.9	-0.1
1997	23.4	21.0	2.4	22.8	22.6	0.2
1998	24.1	21.7	2.4	23.3	22.5	0.8
1999	23.8	21.1	2.7	22.3	20.8	1.6
2000	24.0	21.3	2.7	22.2	20.3	1.9
2001	22.8	20.3	2.5	22.3	21.8	0.5
2002	20.2	17.6	2.6	21.9	22.3	-0.4
2003	19.6	17.1	2.5	20.8	21.4	-0.6
2004	19.0	16.8	2.2	23.3	23.9	-0.6
2005	18.7	16.5	2.2	23.2	23.3	-0.2
2006	19.9	17.6	2.3	25.5	24.2	1.3
2007	20.8	18.6	2.2	27.4	24.4	3.0
2008	20.9	18.5	2.4	26.3	23.2	3.1
2009	18.0	15.4	2.7	23.7	23.5	0.3
2010	19.6	17.0	2.6	25.3	25.2	0.1
2011	21.3	18.8	2.5	27.5	25.2	2.3
2012	19.5	17.1	2.5	26.7	23.7	3.0
2013	19.8	17.4	2.4	26.4	23.3	3.1
2014	20.2	17.8	2.3	27.6	24.1	3.5
2015	19.5	17.1	2.4	27.7	24.0	3.6
2016	19.7	17.3	2.4	28.7	24.8	3.9
2017	20.5	18.1	2.5	28.7	24.2	4.5
2018	21.5	18.9	2.6	30.1	25.0	5.0
2019	21.3	18.6	2.7	29.3	24.7	4.6
2020	21.7	18.6	3.1	28.0	28.8	-0.7
2021	22.5	19.6	2.9	29.5	28.9	0.6
2022	23.0	20.2	2.8	27.7	25.5	2.2
2023	21.7	18.9	2.8	27.9	26.3	1.5

Source: Federal Statistical Office and Bundesbank calculations. * From 1960 to 1969 pursuant to ESA 1979, from 1970 to 1990 pursuant to ESA 1995, and from 1991 pursuant to ESA 2010. From 1991 Germany, prior to that West Germany. 1 Including capital consumption.

IV. Domestic economy

5. Budget balance by sector*

As a percentage of GDP

Period	of which:						
	Overall economy	General government	Private sector	of which:			
				Households and non-profit institutions serving households	Financial corporations	Non-financial corporations	
1960	-1.3	2.9	-4.2	5.3	-2.4	-7.1	
1961	-0.7	2.8	-3.5	5.8	-0.9	-8.3	
1962	0.4	1.4	-1.1	5.4	0.8	-7.2	
1963	0.0	0.9	-0.9	6.0	0.0	-7.0	
1964	0.0	0.7	-0.8	6.8	0.0	-7.6	
1965	1.4	-0.6	2.0	7.5	3.0	-8.5	
1966	-0.1	-0.2	0.1	6.9	-0.1	-6.8	
1967	-2.1	-1.4	-0.7	6.5	-4.1	-3.0	
1968	-2.2	-0.8	-1.4	7.2	-4.3	-4.4	
1969	-1.3	1.1	-2.4	7.6	-2.5	-7.6	
1970	1.1	0.5	-0.7	7.8	-0.6	-7.8	
1971	0.5	0.2	-0.2	7.7	-0.3	-7.5	
1972	0.5	-0.4	0.0	8.1	-0.6	-7.6	
1973	1.4	1.1	-2.5	7.6	-2.1	-8.0	
1974	2.6	-1.6	-1.3	8.1	-4.2	-5.2	
1975	1.1	-5.6	4.2	8.9	-1.4	-3.3	
1976	0.8	-3.4	2.6	7.4	-0.8	-4.1	
1977	0.9	-2.5	1.6	6.7	-0.7	-4.4	
1978	1.3	-2.6	1.1	6.5	-1.6	-3.8	
1979	-0.9	-2.7	3.1	6.8	2.5	-6.1	
1980	-2.0	-2.9	0.9	3.8	1.0	-3.9	
1981	-0.8	-3.9	3.1	5.1	1.2	-3.2	
1982	0.8	-3.4	4.2	5.1	1.0	-1.8	
1983	0.6	-2.9	3.5	3.6	0.8	-1.0	
1984	1.4	-2.0	3.4	4.2	0.8	-1.6	
1985	2.7	-1.1	3.8	4.7	0.7	-1.6	
1986	4.1	-1.2	5.3	5.1	0.6	-0.5	
1987	3.9	-1.8	5.7	5.3	0.8	-0.4	
1988	4.4	-2.0	6.4	5.3	1.0	0.1	
1989	4.5	0.1	4.4	4.6	0.7	-0.9	
1990	3.5	-1.9	5.4	4.8	1.0	-0.3	
1991	-1.7	-3.2	1.5	4.8	0.0	-3.3	
1992	-1.3	-2.6	1.4	4.6	0.2	-3.5	
1993	-1.1	-3.1	2.0	4.1	0.3	-2.4	
1994	-1.6	-2.5	0.9	2.8	-0.1	-1.8	
1995	-1.4	-9.4	8.0	3.0	0.2	4.9	
1996	-0.9	-3.6	2.8	3.2	0.3	-0.7	
1997	-0.6	-3.0	2.4	3.2	-0.1	-0.7	
1998	-0.8	-2.6	1.8	3.4	-0.7	-0.9	
1999	-1.5	-1.9	0.4	3.3	0.8	-3.8	
2000	-2.0	-1.7	-0.3	3.5	0.4	-4.2	
2001	-0.6	-3.1	2.5	4.4	0.4	-2.3	
2002	1.5	-4.1	5.6	4.6	0.4	0.7	
2003	1.5	-3.8	5.3	5.6	0.8	-1.0	
2004	4.2	-3.4	7.7	5.8	0.9	0.9	
2005	4.3	-3.4	7.7	6.2	0.9	0.6	
2006	5.5	-1.8	7.3	5.6	1.5	0.2	
2007	6.5	0.2	6.4	5.4	1.0	0.0	
2008	5.3	-0.3	5.5	5.3	1.0	-0.8	
2009	5.6	-3.2	8.8	6.1	0.1	2.6	
2010	5.6	-4.4	10.0	5.7	1.5	2.9	
2011	6.0	-0.8	6.8	4.6	0.6	1.6	
2012	6.9	-0.1	7.0	4.8	0.2	1.9	
2013	6.3	0.1	6.2	4.6	-0.1	1.6	
2014	7.3	0.7	6.6	4.8	0.4	1.3	
2015	8.0	0.9	7.1	5.2	0.1	1.8	
2016	8.8	1.1	7.6	5.1	0.2	2.4	
2017	7.9	1.3	6.5	5.3	0.0	1.2	
2018	8.3	1.9	6.4	5.5	0.8	0.1	
2019	7.7	1.3	6.3	5.5	0.0	0.9	
2020	5.9	-4.4	10.3	8.7	-0.5	2.1	
2021	6.7	-3.2	9.9	7.5	-0.3	2.7	
2022	3.9	-2.1	6.0	5.2	-0.1	1.0	
2023	5.3	-2.6	7.9	5.9	-0.1	2.1	

Source: Federal Statistical Office and Bundesbank calculations. * From 1960 to 1969 pursuant to ESA 1979, from 1970 to 1990 pursuant to ESA 1995, and from 1991 pursuant to ESA 2010. From 1991 Germany, prior to that West Germany.

IV. Domestic economy

6. Gross fixed capital formation*

Real							
Period	Total	General government		Private housing construction		Enterprises ¹	
	Annual percentage change	Annual percentage change	Contribution to total change in percentage points	Annual percentage change	Contribution to total change in percentage points	Annual percentage change	Contribution to total change in percentage points
1960	7.2	.	.	.	.	.	.
1961	6.5	10.7	1.4	2.8	0.8	8.2	4.7
1962	3.8	15.4	2.1	0.6	0.2	3.2	1.8
1963	1.2	15.2	2.3	-0.4	-0.1	-1.6	-0.9
1964	11.3	21.3	3.7	11.3	3.2	7.9	4.3
1965	4.7	1.3	0.2	4.1	1.2	6.4	3.4
1966	1.2	0.6	0.1	3.7	1.1	-0.5	-0.3
1967	-7.0	-8.5	-1.5	0.0	0.0	-11.9	-6.3
1968	3.3	5.9	1.0	-1.0	-0.3	6.0	3.1
1969	9.6	8.5	1.5	-0.9	-0.3	18.5	9.6
1970	8.9	12.8	2.2	-1.0	-0.3	14.4	7.9
1971	6.0	-0.2	0.0	10.6	2.7	5.8	3.3
1972	2.7	-4.1	-0.7	12.7	3.5	-0.2	-0.1
1973	0.5	-0.8	-0.1	1.4	0.4	0.3	0.2
1974	-8.6	13.0	2.1	-14.4	-4.6	-11.7	-6.1
1975	-4.5	-1.7	-0.3	-9.7	-2.9	-2.5	-1.3
1976	3.5	-4.9	-1.0	3.7	1.0	6.7	3.5
1977	4.5	-2.8	-0.5	3.8	1.1	7.3	3.9
1978	4.8	1.7	0.3	2.9	0.8	6.8	3.7
1979	6.2	1.8	0.3	6.6	1.9	7.4	4.0
1980	2.3	-3.2	-0.5	2.2	0.6	3.9	2.1
1981	-4.7	-6.8	-1.1	-4.9	-1.4	-3.9	-2.1
1982	-4.6	-9.2	-1.4	-4.6	-1.4	-3.2	-1.8
1983	3.0	-5.2	-0.7	5.2	1.6	3.9	2.2
1984	0.1	-1.9	-0.2	1.9	0.6	-0.3	-0.2
1985	0.7	1.4	0.2	-8.7	-2.7	5.7	3.2
1986	3.2	8.0	1.0	-0.5	-0.1	3.9	2.3
1987	2.1	-0.6	-0.1	-0.5	-0.1	3.9	2.3
1988	5.0	-0.1	0.0	4.5	1.2	6.4	3.9
1989	7.2	3.0	0.4	6.8	1.8	8.3	5.0
1990	8.0	1.7	0.2	8.0	2.1	9.2	5.7
1991	5.3	-2.2	-0.2	4.1	1.1	7.2	4.4
1992	4.0	6.2	0.8	10.2	2.5	1.2	0.7
1993	-4.3	-4.4	-0.6	4.8	1.3	-8.1	-4.9
1994	3.6	-2.6	-0.3	12.0	3.5	0.8	0.5
1995	-0.2	-7.7	-1.0	0.3	0.1	1.1	0.6
1996	-0.4	-1.3	-0.2	-0.2	0.0	-0.4	-0.2
1997	0.5	-5.0	-0.6	0.3	0.1	1.7	1.0
1998	4.0	1.6	0.2	0.5	0.2	6.4	3.7
1999	4.3	18.3	1.9	1.4	0.4	3.3	1.9
2000	2.1	-2.1	-0.2	-3.3	-1.0	5.8	3.3
2001	-2.6	0.2	0.0	-5.9	-1.7	-1.6	-0.9
2002	-6.1	5.2	0.6	-5.9	-1.7	-8.4	-5.1
2003	-1.6	-2.9	-0.4	-1.9	-0.5	-1.2	-0.7
2004	-0.5	-9.1	-1.2	-3.2	-0.9	2.8	1.7
2005	0.9	-0.3	0.0	-4.3	-1.2	3.5	2.1
2006	7.5	8.1	1.0	6.1	1.6	8.0	5.0
2007	3.6	-1.5	-0.2	-1.8	-0.5	6.9	4.3
2008	1.6	5.8	0.7	-3.2	-0.8	2.8	1.8
2009	-9.7	5.8	0.7	-3.2	-0.8	-15.2	-9.6
2010	5.7	3.1	0.4	4.4	1.2	6.9	4.1
2011	7.4	0.9	0.1	9.9	2.6	7.9	4.7
2012	-0.2	-4.0	-0.5	3.5	1.0	-1.1	-0.7
2013	-1.2	-0.5	-0.1	-0.8	-0.2	-1.5	-0.9
2014	3.6	-0.7	-0.1	2.9	0.8	4.9	2.8
2015	1.8	3.6	0.4	-0.7	-0.2	2.6	1.5
2016	3.8	4.9	0.6	4.9	1.4	3.0	1.8
2017	2.6	3.7	0.4	0.7	0.2	3.4	2.0
2018	3.6	6.3	0.8	3.2	0.9	3.3	1.9
2019	2.0	2.0	0.3	1.4	0.4	2.3	1.4
2020	-3.0	9.7	1.2	4.7	1.4	-9.7	-5.6
2021	0.6	-3.0	-0.4	-2.5	-0.8	3.4	1.9
2022	-0.2	-5.2	-0.7	-4.3	-1.4	3.5	1.9
2023	-1.2	0.2	0.0	-4.3	-1.4	0.3	0.1

Source: Federal Statistical Office and Bundesbank calculations. * From 1960 to 1969 pursuant to ESA 1979, from 1970 to 1990 pursuant to ESA 1995, and from 1991 pursuant to ESA 2010. From 1991 Germany, prior to that West Germany. ¹ Gross fixed capital formation of financial corporations and households (excluding housing construction).

IV. Domestic economy

7. Housing investment in selected countries*

As a percentage of GDP, nominal				
Period	Germany ¹	France	United Kingdom	USA ²
1950	12.7	.	.	6.9
1951	12.2	.	.	5.4
1952	12.6	.	.	5.1
1953	13.9	.	.	5.1
1954	14.1	.	.	5.5
1955	15.3	.	.	6.0
1956	15.7	.	.	5.3
1957	15.1	.	.	4.8
1958	15.3	.	.	4.7
1959	16.5	.	.	5.5
1960	15.3	.	.	5.0
1961	15.7	.	.	4.8
1962	16.0	.	.	4.9
1963	16.2	.	.	5.2
1964	17.3	.	.	5.1
1965	16.7	.	.	4.7
1966	16.4	.	.	4.1
1967	14.8	.	.	3.9
1968	14.3	.	.	4.3
1969	14.3	.	.	4.4
1970	6.6	.	.	4.0
1971	7.3	.	.	5.0
1972	8.0	.	.	5.7
1973	7.8	.	.	5.5
1974	6.6	.	.	4.5
1975	5.8	.	.	4.0
1976	5.8	.	.	4.6
1977	5.9	.	.	5.5
1978	6.0	.	.	5.9
1979	6.4	.	.	5.6
1980	6.7	8.5	.	4.5
1981	6.4	8.1	.	4.0
1982	6.1	7.5	.	3.3
1983	6.3	7.0	.	4.4
1984	6.3	6.7	.	4.7
1985	5.6	6.3	.	4.6
1986	5.3	6.1	.	5.1
1987	5.3	6.2	.	5.1
1988	5.3	6.3	.	4.9
1989	5.5	6.4	.	4.5
1990	5.8	6.2	.	4.0
1991	6.0	6.0	.	3.6
1992	6.6	5.7	.	3.9
1993	7.0	5.5	.	4.2
1994	7.6	5.5	.	4.4
1995	7.6	5.4	.	4.2
1996	7.4	5.2	.	4.4
1997	7.3	5.3	2.8	4.4
1998	7.1	5.3	2.8	4.6
1999	7.0	5.5	2.9	4.8
2000	6.6	5.4	3.1	4.7
2001	6.0	5.4	3.1	4.8
2002	5.6	5.5	3.6	5.1
2003	5.4	5.7	3.9	5.6
2004	5.2	5.9	4.2	6.1
2005	5.0	6.2	4.2	6.6
2006	5.1	6.6	4.2	6.1
2007	5.1	6.9	4.0	4.8
2008	5.0	6.9	3.6	3.5
2009	5.1	6.4	3.2	2.7
2010	5.1	6.4	3.3	2.5
2011	5.5	6.5	3.2	2.4
2012	5.8	6.4	3.0	2.7
2013	5.7	6.2	3.2	3.0
2014	5.8	6.1	3.3	3.2
2015	5.7	6.0	3.5	3.5
2016	5.9	6.1	3.6	3.8
2017	5.9	6.4	3.9	3.9
2018	6.1	6.5	4.0	3.9
2019	6.3	6.6	4.1	3.8
2020	6.9	6.5	3.6	4.3
2021	6.8	7.2	4.1	4.8
2022	7.0	7.0	4.5	4.5
2023	6.9	6.4	...	3.9

Sources: Federal Statistical Office, Eurostat, OECD, national institutions and Bundesbank calculations. * Housing construction in the economy as a whole. 1 From 1960 to 1969 pursuant to ESA 1979, from 1970 to 1990 pursuant to ESA 1995, and from 1991 pursuant to ESA 2010. From 1991 Germany, prior to that West Germany. 2 Private housing construction.

IV. Domestic economy

8. Private saving ratio in selected countries*

Period	As a percentage of disposable income					
	Germany ¹	France	United Kingdom	USA	Japan	
1950	4.2		14.5	-2.1	9.3	.
1951	4.0		13.9	-2.0	10.9	.
1952	6.6		14.5	-0.1	11.1	.
1953	7.6		12.8	0.3	11.0	.
1954	8.1		14.8	-0.5	10.3	.
1955	7.4		15.9	0.0	9.7	11.9
1956	6.6		13.5	1.9	11.1	12.9
1957	8.8		14.6	1.5	11.2	12.6
1958	9.1		15.2	0.7	11.4	12.3
1959	9.4		14.0	1.5	10.3	13.7
1960	9.2		16.2	4.1	10.1	11.1
1961	9.9		15.4	6.0	11.3	12.4
1962	9.5		17.7	5.0	11.2	12.2
1963	10.7		17.2	5.6	10.7	11.4
1964	11.8		17.1	6.7	11.6	11.9
1965	12.9		17.9	7.1	11.5	12.2
1966	12.3		18.1	7.3	11.2	11.4
1967	11.8		18.6	6.7	12.3	10.4
1968	13.1		18.8	5.9	11.3	13.2
1969	13.8		17.5	6.1	10.9	13.6
1970	14.7		19.7	6.9	12.8	14.3
1971	14.4		19.5	5.5	13.5	14.8
1972	15.3		19.9	7.8	12.4	15.2
1973	14.7		20.3	8.6	13.5	17.6
1974	15.6		20.5	8.9	13.3	20.4
1975	16.2		21.5	9.7	13.4	19.6
1976	14.5		19.3	9.6	11.6	20.0
1977	13.2		19.3	8.6	10.7	18.3
1978	13.3		20.8	10.5	10.7	17.2
1979	13.9		18.6	12.0	10.3	14.0
1980	13.1		17.9	13.6	11.1	14.5
1981	13.5		17.3	13.9	11.8	15.7
1982	12.9		16.2	13.2	12.0	14.6
1983	11.3		15.6	11.7	10.0	14.3
1984	11.8		14.2	13.1	11.3	14.3
1985	11.7		13.3	12.7	9.2	13.8
1986	12.5		12.5	11.8	8.8	13.0
1987	12.7		11.2	9.5	7.9	11.2
1988	13.1		11.2	7.8	8.5	11.8
1989	12.5		11.4	9.1	8.4	12.0
1990	13.7		12.6	10.7	8.4	12.1
1991	13.5		13.1	13.0	8.8	13.7
1992	13.4		14.1	14.4	9.4	12.9
1993	12.8		14.5	14.1	7.9	12.2
1994	12.2		13.6	12.2	6.9	12.3
1995	11.8		14.2	13.4	7.0	11.1
1996	11.4		13.4	12.3	6.5	9.5
1997	11.0		14.4	9.7	6.3	9.7
1998	10.8		13.6	6.8	6.8	11.1
1999	10.1		13.3	5.6	5.1	9.6
2000	9.5		13.3	7.7	4.8	8.0
2001	10.3		14.0	7.7	5.0	4.2
2002	10.2		15.1	7.6	5.8	2.7
2003	10.5		14.6	6.5	5.6	2.3
2004	10.5		14.7	7.0	5.2	2.0
2005	10.5		14.0	6.8	3.2	2.7
2006	10.6		14.3	7.4	3.8	3.2
2007	10.7		14.8	8.8	3.7	3.3
2008	10.9		14.6	8.2	5.0	3.4
2009	10.4		16.1	11.0	6.1	4.5
2010	10.3		15.8	11.9	6.5	3.3
2011	10.0		15.4	9.5	7.2	3.6
2012	9.7		15.6	8.9	8.9	2.2
2013	9.3		14.2	8.4	6.4	-0.1
2014	9.9		14.5	7.5	7.3	-1.3
2015	10.0		14.0	9.8	7.6	-0.4
2016	10.0		13.8	6.4	6.8	1.4
2017	10.3		14.0	5.3	7.3	1.0
2018	10.8		13.9	5.3	7.6	1.1
2019	10.3		14.6	5.5	8.8	2.9
2020	15.9		20.4	16.8	17.0	10.9
2021	14.1		19.1	12.5	11.4	6.6
2022	10.3		16.8	8.4	3.3	3.4
2023	10.4		16.9	9.7	4.5	0.0

Sources: Federal Statistical Office, national authorities and Bundesbank calculations. * As a percentage of households' disposable income; level not fully comparable due to varying calculation methods. ¹ From 1960 to 1969 pursuant to ESA 1979, from 1970 to 1990 pursuant to ESA 1995, and from 1991 pursuant to ESA 2010. From 1991 Germany, prior to that West Germany.

IV. Domestic economy

9. Household income and expenditure*

Period	Household disposable income		Household real disposable income ¹		Real household spending	
	€ billion	Annual percentage change	€ billion	Annual percentage change	€ billion	Annual percentage change
1960	95.5	.	497.5	.	458.1	.
1961	105.1	10.1	530.4	6.6	486.0	6.1
1962	113.7	8.1	557.4	5.1	513.5	5.7
1963	122.1	7.4	581.2	4.3	527.9	2.8
1964	133.5	9.4	621.7	7.0	556.1	5.3
1965	148.7	11.4	670.6	7.9	594.3	6.9
1966	157.8	6.1	687.2	2.5	612.8	3.1
1967	161.5	2.4	692.5	0.8	619.8	1.1
1968	174.6	8.1	736.5	6.4	649.0	4.7
1969	193.6	10.9	801.3	8.8	700.7	8.0
1970	217.0	12.1	868.0	8.3	754.6	7.7
1971	240.3	10.7	914.4	5.3	796.0	5.5
1972	268.1	11.6	966.2	5.7	838.7	5.4
1973	291.8	8.8	987.2	2.2	862.6	2.9
1974	316.7	8.5	999.9	1.3	861.0	-0.2
1975	349.0	10.2	1,039.6	4.0	893.1	3.7
1976	369.7	5.9	1,057.0	1.7	931.3	4.3
1977	393.9	6.5	1,090.6	3.2	970.9	4.3
1978	418.8	6.3	1,129.6	3.6	1,005.8	3.6
1979	453.3	8.2	1,173.6	3.9	1,038.4	3.2
1980	512.9	13.1	1,189.3	1.3	1,053.9	1.5
1981	546.3	6.5	1,193.7	0.4	1,050.0	-0.4
1982	563.9	3.2	1,173.1	-1.7	1,039.4	-1.0
1983	578.9	2.7	1,167.1	-0.5	1,054.1	1.4
1984	607.6	5.0	1,195.2	2.4	1,074.6	1.9
1985	629.3	3.6	1,219.3	2.0	1,094.6	1.9
1986	653.0	3.8	1,278.7	4.9	1,136.5	3.8
1987	676.6	3.6	1,326.2	3.7	1,176.9	3.6
1988	710.9	5.1	1,368.3	3.2	1,208.2	2.7
1989	756.7	6.4	1,402.3	2.5	1,244.8	3.0
1990	821.8	8.6	1,479.0	5.5	1,297.4	4.2
1991	1,004.5	22.2	1,540.6	4.2	1,353.9	4.4
1992	1,077.1	7.2	1,581.0	2.6	1,393.1	2.9
1993	1,119.0	3.9	1,579.1	-0.1	1,396.6	0.3
1994	1,152.2	3.0	1,591.4	0.8	1,418.1	1.5
1995	1,176.8	2.1	1,601.6	0.6	1,435.7	1.2
1996	1,202.2	2.2	1,624.9	1.5	1,459.5	1.7
1997	1,220.1	1.5	1,630.5	0.3	1,472.8	0.9
1998	1,238.0	1.5	1,648.5	1.1	1,494.7	1.5
1999	1,275.4	3.0	1,688.9	2.5	1,542.4	3.2
2000	1,297.4	1.7	1,701.9	0.8	1,576.5	2.2
2001	1,355.8	4.5	1,742.5	2.4	1,592.1	1.0
2002	1,367.9	0.9	1,731.3	-0.6	1,583.2	-0.6
2003	1,407.7	2.9	1,750.8	1.1	1,595.1	0.8
2004	1,435.1	1.9	1,763.6	0.7	1,605.2	0.6
2005	1,463.1	2.0	1,775.8	0.7	1,619.7	0.9
2006	1,497.1	2.3	1,795.3	1.1	1,642.8	1.4
2007	1,523.2	1.7	1,792.0	-0.2	1,640.3	-0.1
2008	1,554.6	2.1	1,792.7	0.0	1,641.4	0.1
2009	1,544.7	-0.6	1,783.1	-0.5	1,647.3	0.4
2010	1,577.9	2.1	1,791.6	0.5	1,656.6	0.6
2011	1,626.5	3.1	1,810.2	1.0	1,676.2	1.2
2012	1,660.6	2.1	1,820.4	0.6	1,695.1	1.1
2013	1,681.8	1.3	1,815.2	-0.3	1,696.5	0.1
2014	1,726.4	2.7	1,843.3	1.5	1,713.3	1.0
2015	1,779.1	3.0	1,889.6	2.5	1,752.8	2.3
2016	1,834.2	3.1	1,934.2	2.4	1,792.0	2.2
2017	1,897.2	3.4	1,967.6	1.7	1,818.9	1.5
2018	1,973.6	4.0	2,012.8	2.3	1,844.6	1.4
2019	2,021.8	2.4	2,033.0	1.0	1,875.4	1.7
2020	2,025.2	0.2	2,025.2	-0.4	1,748.8	-6.8
2021	2,085.0	3.0	2,026.4	0.1	1,789.0	2.3
2022	2,249.6	7.9	2,047.7	1.0	1,888.8	5.6
2023	2,404.4	6.9	2,051.5	0.2	1,881.9	-0.4

Source: Federal Statistical Office and Bundesbank calculations. * From 1960 to 1969 pursuant to ESA 1979, from 1970 to 1990 pursuant to ESA 1995, and from 1991 pursuant to ESA 2010. From 1991 Germany, prior to that West Germany. ¹ Deflated by the price index of real consumer spending.

IV. Domestic economy

10. Research and development in selected countries*

As a percentage of GDP

Period	Germany ¹				France	Spain	Italy	Netherlands	Portugal	Ireland	Austria	United Kingdom	United States
	Total	Private sector	General government	Rest ²	Total								
1981	2.4	1.3	1.0	0.0	1.9	0.4	0.8	1.6	.	0.6	1.1	2.2	2.3
1982	2.4	1.4	1.0	0.0	1.9	0.4	0.9	1.7	0.3	0.6	1.1	.	2.4
1983	2.4	1.5	0.9	0.0	2.0	0.4	0.9	1.8	0.3	0.6	1.1	2.1	2.5
1984	2.4	1.4	0.9	0.0	2.1	0.5	1.0	1.7	0.3	0.7	1.2	.	2.5
1985	2.6	1.6	0.9	0.0	2.1	0.5	1.1	1.8	0.3	0.7	1.2	2.1	2.7
1986	2.6	1.6	1.0	0.0	2.1	0.6	1.1	1.9	0.3	0.8	1.2	2.1	2.6
1987	2.7	1.8	0.9	0.0	2.2	0.6	1.1	2.0	0.4	0.8	1.2	2.0	2.6
1988	2.7	1.7	0.9	0.1	2.2	0.7	1.1	2.0	0.4	0.8	1.3	2.0	2.6
1989	2.7	1.7	0.9	0.1	2.2	0.7	1.2	1.9	0.4	0.8	1.3	2.0	2.5
1990	2.6	1.7	0.9	0.1	2.3	0.8	1.2	1.9	0.5	0.8	1.4	1.9	2.6
1991	2.4	1.5	0.9	0.1	2.3	0.8	1.1	1.8	0.5	0.9	1.4	1.9	2.6
1992	2.3	1.4	0.8	0.1	2.3	0.8	1.1	1.8	0.6	1.0	1.4	1.8	2.5
1993	2.2	1.3	0.8	0.0	2.3	0.8	1.1	1.8	0.6	1.1	1.4	1.9	2.4
1994	2.1	1.3	0.8	0.0	2.3	0.8	1.0	1.8	0.5	1.2	1.5	1.8	2.3
1995	2.1	1.3	0.8	0.0	2.2	0.8	0.9	1.8	0.5	1.2	1.5	1.6	2.4
1996	2.1	1.3	0.8	0.0	2.2	0.8	0.9	1.8	0.5	1.3	1.6	1.6	2.5
1997	2.2	1.3	0.8	0.1	2.1	0.8	1.0	1.8	0.6	1.2	1.7	1.5	2.5
1998	2.2	1.4	0.8	0.1	2.1	0.8	1.0	1.7	0.6	1.2	1.7	1.5	2.5
1999	2.3	1.5	0.8	0.1	2.1	0.8	1.0	1.8	0.7	1.2	1.8	1.6	2.5
2000	2.4	1.6	0.8	0.1	2.1	0.9	1.0	1.8	0.7	1.1	1.9	1.6	2.6
2001	2.4	1.6	0.8	0.1	2.1	0.9	1.0	1.8	0.8	1.1	2.0	1.6	2.6
2002	2.4	1.6	0.8	0.1	2.2	1.0	1.1	1.7	0.7	1.1	2.1	1.6	2.5
2003	2.5	1.6	0.8	0.1	2.1	1.0	1.1	1.8	0.7	1.1	2.2	1.6	2.6
2004	2.4	1.6	0.7	0.1	2.1	1.0	1.1	1.8	0.7	1.2	2.2	1.5	2.5
2005	2.4	1.6	0.7	0.1	2.1	1.1	1.0	1.8	0.8	1.2	2.4	1.6	2.5
2006	2.5	1.7	0.7	0.1	2.1	1.2	1.1	1.7	1.0	1.2	2.4	1.6	2.5
2007	2.5	1.7	0.7	0.1	2.0	1.2	1.1	1.7	1.1	1.2	2.4	1.6	2.6
2008	2.6	1.8	0.7	0.1	2.1	1.3	1.2	1.6	1.4	1.4	2.6	1.6	2.7
2009	2.7	1.8	0.8	0.1	2.2	1.4	1.2	1.7	1.6	1.6	2.6	1.7	2.8
2010	2.7	1.8	0.8	0.1	2.2	1.4	1.2	1.7	1.5	1.6	2.7	1.6	2.7
2011	2.8	1.8	0.8	0.1	2.2	1.3	1.2	1.9	1.5	1.6	2.7	1.6	2.7
2012	2.9	1.9	0.8	0.1	2.2	1.3	1.3	1.9	1.4	1.6	2.9	1.6	2.7
2013	2.8	1.9	0.8	0.2	2.2	1.3	1.3	2.2	1.3	1.6	3.0	1.6	2.7
2014	2.9	1.9	0.8	0.2	2.3	1.2	1.3	2.2	1.3	1.5	3.1	2.3	2.7
2015	2.9	1.9	0.8	0.2	2.2	1.2	1.3	2.1	1.2	1.2	3.0	2.3	2.8
2016	2.9	1.9	0.8	0.2	2.2	1.2	1.4	2.2	1.3	1.2	3.1	2.3	2.8
2017	3.0	2.0	0.8	0.2	2.2	1.2	1.4	2.2	1.3	1.2	3.1	2.3	2.9
2018	3.1	2.1	0.9	0.2	2.2	1.2	1.4	2.1	1.3	1.1	3.1	2.7	3.0
2019	3.2	2.0	0.9	0.2	2.2	1.3	1.5	2.2	1.4	1.2	3.1	2.7	3.1
2020	3.1	2.0	0.9	0.2	2.3	1.4	1.5	2.3	1.6	1.1	3.2	2.9	3.4
2021	3.1	2.0	0.9	0.2	2.2	1.4	1.4	2.3	1.7	1.1	3.3	2.9	3.5
2022	3.1	...	...	...	2.2	1.4	1.3	2.3	1.7	1.0	3.2	...	3.6

Source: OECD. * Gross Domestic Expenditure on Research and Development (GERD). Level not fully comparable over time and across countries due to varying calculation methods. 1 From 1991 Germany, prior to that West Germany. 2 Other national sources and rest of the world.

IV. Domestic economy

11. Patents in selected countries*

Number per million inhabitants

Period	Germany ¹	France	Spain	Italy	Netherlands	Portugal	Ireland	Austria	United Kingdom	United States
1985	59.5	26.4	0.9	9.0	38.1	0.1	5.2	21.4	22.4	32.8
1986	63.1	27.2	0.9	9.7	42.6	0.2	5.1	20.9	24.8	34.0
1987	69.9	30.5	1.2	10.5	48.2	0.2	6.2	24.0	25.8	38.1
1988	72.6	31.7	1.2	11.3	46.9	0.1	5.1	28.2	28.3	41.2
1989	71.7	33.6	1.7	11.7	47.3	0.0	7.1	26.3	28.0	44.2
1990	65.3	32.8	1.8	11.3	39.2	0.1	7.8	22.8	25.5	45.1
1991	48.3	31.9	1.8	12.0	40.5	0.4	8.3	24.5	24.5	42.3
1992	49.3	29.1	1.8	10.2	41.3	0.4	6.8	19.0	24.4	42.2
1993	50.7	29.5	1.8	11.2	39.6	0.4	5.3	22.8	25.5	41.9
1994	54.8	32.7	2.2	11.2	44.8	0.2	9.7	26.9	27.1	43.1
1995	60.4	33.2	2.1	11.1	50.0	0.3	8.7	28.5	27.6	46.4
1996	68.7	36.4	2.3	12.5	53.0	0.4	8.2	27.1	29.5	48.6
1997	71.1	37.7	2.8	13.1	54.6	0.8	10.4	33.0	29.7	52.0
1998	77.9	39.6	3.3	12.1	56.5	0.5	10.8	34.6	32.7	54.0
1999	79.1	41.5	3.5	12.3	61.8	0.6	21.4	34.9	31.5	54.7
2000	93.8	48.1	4.8	14.6	79.4	0.5	13.3	43.3	40.1	55.3
2001	88.7	45.8	5.2	16.1	85.0	0.9	15.8	42.3	38.7	55.8
2002	84.4	44.6	5.4	16.2	115.5	0.8	16.9	43.3	37.5	57.1
2003	82.7	44.3	4.9	15.6	122.6	1.2	21.0	42.7	36.9	57.6
2004	85.9	47.3	6.8	16.8	121.3	1.1	23.5	43.1	35.0	58.7
2005	87.8	48.3	6.7	16.6	108.0	1.5	23.8	49.9	35.9	58.7
2006	80.5	45.3	6.0	14.1	90.3	2.0	17.6	42.9	34.4	51.7
2007	71.7	43.5	5.7	12.4	64.9	4.0	20.6	45.4	29.4	46.0
2008	67.9	44.8	5.8	12.8	68.6	2.9	18.7	40.7	27.4	45.4
2009	69.0	42.2	5.5	12.4	63.4	1.6	18.9	44.3	27.7	44.0
2010	63.1	37.9	5.1	11.4	49.7	1.7	14.2	46.6	26.4	41.2
2011	60.1	39.8	4.7	12.0	58.0	2.4	15.6	43.2	27.3	42.4
2012	57.1	37.1	5.0	12.0	62.1	2.2	16.2	44.8	26.7	43.8
2013	60.9	36.8	4.9	12.8	67.7	2.0	20.5	44.8	28.5	46.8
2014	57.5	37.6	5.5	13.6	76.4	3.1	23.1	47.0	26.0	42.9
2015	58.3	34.7	6.3	13.7	67.1	3.2	21.4	46.8	25.9	42.6
2016	59.8	32.2	7.1	15.8	56.5	4.8	22.2	43.1	25.1	41.5
2017	57.6	30.5	6.3	14.6	53.4	3.6	23.3	50.3	25.6	40.5
2018	50.5	30.3	6.3	13.8	51.9	3.5	23.9	42.1	26.1	41.8
2019	54.2	29.4	7.3	15.4	50.4	3.9	31.0	41.2	27.6	44.3
2020	52.9	29.0	7.4	15.4	50.4	4.0	32.2	39.5	27.6	43.8
2021	52.5	29.2	7.5	15.6	50.9	4.1	32.1	38.7	27.9	43.1

Source: OECD. * Triadic Patent Families. 1 From 1991 Germany, prior to that West Germany.