

Table 6**Sales, R&D, R&D-to-sales ratio, employment, and R&D-to-employment ratio for companies that performed or funded business R&D in the United States, by selected industry: 2021**

(Millions of dollars, percent R&D intensity, and thousands of employees)

Industry and NAICS code	Domestic net sales ^a (\$millions)	All R&D ^b (\$millions)	R&D-to-sales ratio ^c (%)	Domestic employment ^d (headcounts in thousands)		R&D-to-employment ratio ^f (%)
				Total	R&D ^e	
All industries, 21–33, 42–81	13,097,756	602,499	4.6	23,654	2,132	9.0
Manufacturing industries, 31–33	6,550,600	326,060	5.0	10,334	1,015	9.8
Machinery, 333	427,096	17,730	4.2	932	100	10.7
Semiconductor machinery, 333242	29,820	5,349	17.9	40	14	35.0
Computer and electronic products, 334	778,262	101,063	13.0	1,058	256	24.2
Semiconductor and other electronic components, 3344	232,353	47,396	20.4	270	93	34.4
Nonmanufacturing industries, 21–23, 42–81	6,547,157	276,439	4.2	13,320	1,117	8.4

NAICS = North American Industry Classification System.

^a Net sales are for goods sold or services rendered by R&D-performing or R&D-funding companies located in the United States to customers outside of the company, including the U.S. federal government, foreign customers, and the company's foreign subsidiaries. Included are revenues from a company's foreign operations and subsidiaries and from discontinued operations. If a respondent company is owned by a foreign parent company, sales to the parent company and to affiliates not owned by the respondent company are included. Excluded are intracompany transfers, returns, allowances, freight charges, and excise, sales, and other revenue-based taxes.

^b All R&D is the cost of R&D paid for and performed by the respondent company and paid for by others outside of the company and performed by the respondent company.

^c R&D-to-sales ratio is the cost of domestic R&D paid for by the respondent company and others outside of the company and performed by the company divided by domestic net sales of companies that performed or funded R&D.

^d Data recorded on 12 March represent employment figures for the year.

^e Headcounts of researchers, R&D managers, technicians, clerical staff, and others assigned to R&D groups.

^f R&D-to-employment ratio is the headcount of R&D employees (researchers and R&D managers, technicians or equivalent staff, and other supporting staff) divided by the total number of employees.

Note(s):

Data are for companies with 10 or more domestic employees. Detail may not add to total because of rounding. Industry classification was based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, Business Enterprise Research and Development Survey, 2021.