

TABLE 15

Domestic sales and domestic R&D performed by the company as a percentage of domestic sales, by selected industry and employment size, for companies with R&D expenditures and 1–9 employees: 2019

(Thousands of U.S. dollars)

| Industry | NAICS code | All companies | | 1–4 employees | | 5–9 employees | |
|--|---------------------------------|---------------|------------------------------|---------------|------------------------------|---------------|------------------------------|
| | | Total sales | R&D as a percentage of sales | Total sales | R&D as a percentage of sales | Total sales | R&D as a percentage of sales |
| All selected industries | 31–33, 42, 51, 5413, 5415, 5417 | 14,795,588 | 35 | 7,091,687 | 33 | 7,703,901 | 37 |
| Manufacturing industries | 31–33 | 1,587,305 | 39 | 632,124 | 43 | 955,181 | 37 |
| Food, beverage, and tobacco products | 311–12 | 18,702 | 32 r | 7,334 r | 55 r | 11,368 r | 16 r |
| Textile, apparel, and leather products | 313–16 | 1,433 r | 16 r | 1,433 r | 16 r | 0 | 0 |
| Wood products | 321 | 41 r | 10,000 | 0 | 0 | 41 r | 10,000 |
| Paper | 322 | 0 | 0 | 0 | 0 | 0 | 0 |
| Printing and related support activities | 323 | 2,323 | 24 r | 253 r | 56 r | 2,070 | 20 |
| Petroleum and coal products | 324 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chemicals | 325 | 313,780 | 57 | 148,886 | 58 r | 164,894 | 55 |
| Pharmaceuticals and medicines | 3254 | 139,834 | 84 r | 80,667 | 70 r | 59,166 | 104 r |
| Chemicals, excluding pharmaceuticals | other 325 | 173,946 | 35 | 68,219 | 45 | 105,727 | 28 r |
| Plastics and rubber products | 326 | 31,117 r | 20 r | 14,262 r | 22 r | 16,855 r | 18 r |
| Nonmetallic mineral products | 327 | 521 | 1,125 | 521 | 41 | 0 | 0 |
| Primary metals | 331 | 733 r | 321 r | 733 r | 321 r | 0 | 0 |
| Fabricated metal products | 332 | 54,892 r | 37 | 14,439 r | 68 r | 40,454 r | 26 r |
| Machinery | 333 | 225,319 | 10 r | 97,469 | 13 r | 127,850 r | 7 |
| Computer and electronic products | 334 | 678,482 | 34 | 281,719 | 36 | 396,763 | 32 |
| Semiconductor and other electronic components | 3344 | 116,001 | 33 r | 85,326 | 25 r | 30,675 | 56 r |
| Navigational, measuring, electromedical, and control instruments | 3345 | 495,090 | 33 | 188,687 | 41 | 306,403 | 28 |
| Other computer and electronic products | other 334 | 67,391 | 41 r | 7,706 | 55 r | 59,685 | 39 r |
| Electrical equipment, appliances, and components | 335 | 49,902 r | 19 r | 4,262 | 146 r | 45,641 r | 7 r |
| Transportation equipment | 336 | 42,777 | 58 r | 16,928 | 109 r | 25,849 | 24 r |
| Aerospace products and parts | 3364 | 38,145 | 31 r | 14,605 | 46 | 23,540 r | 22 r |
| Other transportation equipment | other 336 | 4,632 | 275 r | 2,323 | 504 r | 2,309 | 43 |
| Furniture and related products | 337 | 0 | 0 | 0 | 0 | 0 | 0 |
| Miscellaneous manufacturing | 339 | 167,285 | 69 | 43,885 | 55 r | 123,399 | 74 |
| Selected nonmanufacturing industries | 42, 51, 5413, 5415, 5417 | 13,208,283 | 35 | 6,459,563 | 32 | 6,748,720 | 37 |
| Wholesale trade | 42 | 1,301,893 | 17 r | 737,390 r | 11 r | 564,503 | 25 r |
| Information | 51 | 1,862,457 | 32 | 597,022 | 45 | 1,265,435 | 26 |
| Software publishers | 5112 | 1,093,050 | 30 | 419,604 | 43 | 673,447 | 22 |
| Information, excluding software publishers | 51 less 5112 | 769,406 | 35 | 177,418 | 51 | 591,989 | 30 r |
| Architectural, engineering, and related services | 5413 | 1,696,811 | 27 | 1,047,902 | 27 | 648,910 | 27 |

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| | | Total sales | R&D as a percentage of sales | Total sales | R&D as a percentage of sales | Total sales | R&D as a percentage of sales |
| Computer systems design and related services | 5415 | 6,013,691 | 24 | 3,179,717 | 22 | 2,833,974 | 26 |
| Scientific research and development services | 5417 | 2,333,431 | 81 | 897,532 | 83 | 1,435,899 | 79 |
| Research and development in nanotechnology | 541713 | 271,509 | 65 | 112,887 | 76 | 158,622 | 56 r |
| Research and development in biotechnology (except nanobiotechnology) | 541714 | 586,531 | 110 | 266,460 | 98 | 320,071 | 120 |
| Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology) | 541715 | 1,446,037 | 71 | 502,307 | 76 | 943,729 | 68 |
| Social sciences and humanities research and development | 541720 | 28,110 | 112 r | 14,634 | 66 | 13,476 | 162 r |

r = relative standard error > 50%.

NAICS = 2017 North American Industry Classification System.

Note(s):

Detail may not add to total because of rounding or unavailable NAICS detail for select records beyond the 4-digit industry classification. Industry classification is based on dominant establishment payroll. Statistics are representative of companies located in the United States that performed or funded R&D.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, 2020 Annual Business Survey: Data Year 2019.