

TABLE 12

Domestic R&D paid for by the company and others and performed by the company, by type of R&D, industry, and company size: 2018

(Millions of U.S. dollars)

| Industry and company size | NAICS code | Total | Basic research | Applied research | Development |
|---|-----------------------------|---------|----------------|------------------|-------------|
| All industries | 21-23, 31-33, 42-81 | 441,036 | 28,980 | 65,222 | 346,834 |
| Manufacturing industries | 31-33 | 274,075 | 20,873 | 44,027 | 209,175 |
| Food | 311 | 4,654 | 442 | 1,457 | 2,755 |
| Beverage and tobacco products | 312 | 1,113 | 121 | 254 | 738 |
| Textile, apparel, and leather products | 313-16 | 989 | 55 | 82 | 853 |
| Wood products | 321 | 203 | 13 | 38 | 153 |
| Printing and related support activities | 323 | 242 | 18 | 37 | 187 |
| Chemicals | 325 | 84,137 | 11,972 | 18,531 | 53,635 |
| Pharmaceuticals and medicines | 3254 | 74,592 | 10,957 | 16,177 | 47,458 |
| Other chemicals | other 325 | 9,545 | 1,015 | 2,353 | 6,177 |
| Plastics and rubber products | 326 | 2,751 | 168 | 457 | 2,126 |
| Nonmetallic mineral products | 327 | 1,385 | 200 | 301 | 884 |
| Primary metals | 331 | 839 | 39 | 122 | 678 |
| Fabricated metal products | 332 | 2,327 | 128 | 465 | 1,734 |
| Machinery | 333 | 14,799 | 939 | 1,697 | 12,162 |
| Computer and electronic products | 334 | 83,697 | 2,445 | 9,947 | 71,305 |
| Semiconductor and other electronic components | 3344 | 31,052 | 631 | 3,287 | 27,135 |
| Navigational, measuring, electromedical, and control instruments | 3345 | 16,727 | 905 | 2,327 | 13,494 |
| Other computer and electronic products | other 334 | 35,918 | 910 | 4,333 | 30,676 |
| Electrical equipment, appliances, and components | 335 | 4,487 | 286 | 576 | 3,626 |
| Transportation equipment | 336 | 52,629 | 3,062 | 7,440 | 42,128 |
| Aerospace products and parts | 3364 | 24,291 | 1,978 | 3,409 | 18,904 |
| Other transportation | other 336 | 28,338 | 1,084 | 4,031 | 23,224 |
| Furniture and related products | 337 | 410 | 26 | 61 | 323 |
| Miscellaneous manufacturing | 322, 324, 339 | 19,412 | 960 | 2,562 | 15,890 |
| Nonmanufacturing industries | 21-23, 42-81 | 166,961 | 8,108 | 21,195 | 137,658 |
| Information | 51 | 94,349 | 3,250 | 8,979 | 82,120 |
| Publishing | 511 | 32,770 | 1,530 | 3,188 | 28,053 |
| Telecommunications | 517 | 3,696 | 253 | 1,565 | 1,878 |
| Data processing, hosting, and related services | 518 | 23,306 | 1,038 | 2,329 | 19,939 |
| Other information | other 51 | 34,576 | 429 | 1,897 | 32,250 |
| Professional, scientific, and technical services | 54 | 44,860 | 3,482 | 9,384 | 31,994 |
| Architectural, engineering, and related services | 5413 | 3,961 | 273 | 1,413 | 2,275 |
| Computer systems design and related services | 5415 | 15,923 | 1,239 | 2,684 | 12,000 |
| Scientific research and development services | 5417 | 20,185 | 1,790 | 4,704 | 13,691 |
| Research and development in biotechnology | 541711 | 5,857 | 773 | 344 | 4,740 |
| Research and development in the physical, engineering, and life sciences (except biotechnology) | 541712 | 13,657 | 613 | 4,169 | 8,874 |
| Research and development in the social sciences and humanities | 541720 | 671 | 403 | 191 | 77 |
| Other professional, scientific, and technical services | other 54 | 4,791 | 180 | 583 | 4,028 |
| Other nonmanufacturing | 21-23, 42-49, 52, 53, 55-81 | 27,752 | 1,376 | 2,832 | 23,544 |
| All companies (number of domestic employees) | - | 441,036 | 28,980 | 65,222 | 346,834 |
| Small companies | | | | | |
| 10-19 ^a | - | 4,390 | 372 | 1,015 | 3,003 |
| 20-49 | - | 11,252 | 947 | 2,543 | 7,761 |
| Medium companies | | | | | |
| 50-99 | - | 12,321 | 1,082 | 2,126 | 9,113 |
| 100-249 | - | 18,547 | 1,651 | 3,552 | 13,345 |

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(Millions of U.S. dollars)

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|---------------------------|------------|---------|----------------|------------------|-------------|
| Large companies | | | | | |
| 250–499 | – | 19,645 | 1,216 | 3,538 | 14,891 |
| 500–999 | – | 17,657 | 1,205 | 2,799 | 13,653 |
| 1,000–4,999 | – | 68,578 | 6,749 | 11,559 | 50,270 |
| 5,000–9,999 | – | 45,337 | 2,146 | 7,860 | 35,330 |
| 10,000–24,999 | – | 84,420 | 5,107 | 13,169 | 66,145 |
| 25,000 or more | – | 158,889 | 8,505 | 17,061 | 133,323 |

i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

^a Business Research and Development Survey does not include companies with fewer than 10 domestic employees.

Note(s):

Detail may not add to total because of rounding. Industry classification is 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. Beginning in survey year 2018, statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D. This change has affected the comparability of these estimates with estimates published for years prior to 2018.

Source(s):

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2018.