

TABLE 42

Domestic R&D paid for by other companies and performed by the company, by funders' business activity: 2017

(Millions of U.S. dollars)

Funders' business activity ^a	Business code ^b	Amount	
All business activities	21100-81000	35,897	
Oil and gas extraction	21100	0 - 1,454	i
Mining	21200	1	i
Support activities for mining, including oil and gas	21300	240	
Utilities	22100	4	
Construction	23000	18	
Food manufacturing	31100	212	
Beverage manufacturing	31210	113	
Tobacco manufacturing	31220	*	
Textile, apparel, and leather products manufacturing	31990	1	
Wood products manufacturing	32100	5	
Paper manufacturing	32200	1	
Printing and related support activities	32300	10	
Petroleum refineries	32401	6	
Asphalt paving, roofing, and saturated materials manufacturing	32402	0	
Other petroleum and coal products manufacturing, including motor oil, hydraulic fluid, and charcoal	32403	10	
Basic chemicals manufacturing	32510	70	
Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	32520	3	i
Pesticide, fertilizer, and other agricultural chemicals manufacturing	32530	0 - 1,454	i
Pharmaceutical, medicinal, botanical, and biological products (except diagnostic substances) manufacturing	32541	14,352	
In vitro diagnostic substances manufacturing	32542	22	
Biotechnology-based pharmaceutical and biological products (except diagnostic substances)	32543	5,888	
Soap, cleaning compound, and toilet preparations manufacturing	32591	189	
Paint, adhesive, and other chemical manufacturing	32592	17	
Plastics and rubber products manufacturing	32600	32	
Clay and glass products manufacturing	32710	2	i
Cement, concrete, lime, gypsum, and other nonmetallic mineral products manufacturing	32790	8	i
Primary metal manufacturing	33100	1	i
Fabricated metal products manufacturing	33200	33	i
Agricultural machinery and equipment manufacturing	33311	57	i
Construction machinery manufacturing	33312	1	i
Mining, oil, and gas field machinery and equipment manufacturing	33319	14	
Semiconductor machinery manufacturing	33321	416	
Industrial machinery manufacturing (except semiconductor machinery)	33322	40	
Photographic and photocopying equipment manufacturing	33331	8	i
Commercial, service industry, temperature control, and air-flow control machinery manufacturing	33332	6	
Digital cameras manufacturing	33333	6	i
Engine, turbine, and power transmission equipment manufacturing	33360	130	
Metalworking and other general purpose machinery manufacturing	33390	37	i
Computers and peripheral equipment manufacturing and magnetic and optical media	33412	88	
Telephone apparatus manufacturing, including routers, modems, and gateways	33421	0	
Radio, television, and wireless communication equipment manufacturing	33422	866	i
Other communication equipment manufacturing (except radio, television, and wireless communication equipment)	33429	35	
Audio and video equipment manufacturing	33430	3	
Semiconductor and other electronic components manufacturing	33440	2,540	
Electromedical, electrotherapeutic, and irradiation apparatus manufacturing	33451	98	
Search, detection, navigation, guidance, aeronautical, and nautical system and instruments manufacturing	33452	818	
Measuring and control instruments manufacturing (not listed elsewhere)	33459	39	
Electrical equipment, appliances, and components manufacturing	33500	448	
Motor vehicles manufacturing	33610	2,852	
Motor vehicle body and trailer manufacturing	33620	0	

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Motor vehicle parts manufacturing	33630	0 - 1,454
Aircraft manufacturing	33641	39
Aircraft engine and engine parts manufacturing	33642	73
Other aircraft parts and auxiliary equipment manufacturing	33643	537 i
Guided missiles, space vehicles, and related parts manufacturing	33644	0 - 1,454 i
Railroad rolling stock manufacturing	33651	0 - 1,454
Ship and boat building	33660	*
Motorcycle, bicycle, and parts manufacturing	33691	0 - 1,454
Military armored vehicle, tank, and tank components manufacturing	33692	3
All other transportation equipment manufacturing	33699	0 - 1,454
Furniture and related products manufacturing	33700	1
Medical equipment and supplies manufacturing	33910	486
Miscellaneous manufacturing not listed elsewhere (games, office supplies, slot machines, etc.)	33990	68
Merchant wholesalers, durable goods	42300	9 i
Merchant wholesalers, nondurable goods	42400	3 i
Wholesale electronic markets and agents and brokers (business to business)	42500	15
Retail trade (except electronic shopping and electronic auctions)	44000	32 i
Electronic shopping and electronic auctions	45411	0
Transportation	48000	19
Couriers, messengers, and express delivery services	49200	0
Warehousing and storage	49300	*
Newspaper, periodical, book, and directory publishers (except Internet)	51110	0
Software publishers (except Internet)	51120	763
Motion picture and sound recording (except Internet)	51200	0
Broadcasting (except Internet)	51500	0
Wired telecommunications carriers	51710	0 - 1,454
Wireless telecommunications carriers (except satellite)	51720	15 i
Satellite telecommunications	51740	4 i
Other telecommunications (not listed elsewhere)	51790	22
Data processing, hosting, and related services	51800	7 i
Cloud computing applications and Internet-based software services	51801	50
Other information services, including Internet publishing, broadcasting, and Web search portals	51910	0 - 1,454
Finance: banking and credit intermediation	52200	0
Securities, commodity contracts, and other financial investments and related activities, including funds and trusts	52310	6
Insurance carriers and related activities	52400	0
Real estate	53100	19
Rental and leasing services	53200	0
Lessors of nonfinancial intangible assets, including patent licensing	53300	0
Legal, accounting, tax preparation, bookkeeping, and payroll services	54111	0
Architectural, engineering, and related services	54130	97
Specialized design services	54140	39 i
Computer systems design and related services	54150	531 i
Management, scientific, and technical consulting services	54160	3
Research and development services in social sciences and humanities	54172	21
Research and development services in biotechnology	54173	140
Research and development services in physical, engineering, and life sciences (except biotechnology)	54174	981
Advertising and related services	54180	4
Professional, scientific, and technical services (not listed elsewhere)	54190	220
Management of companies and enterprises	55100	6
Administrative and support services	56100	1 i
Waste management and remediation services	56200	0

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Offices of physicians	62110	71	i
Medical and diagnostic laboratories	62150	0	
Other ambulatory health care services (ambulance, dental, home health care)	62199	0	
Hospitals and nursing care facilities	62200	1	
Social assistance services	62400	*	
Arts, entertainment, and recreation	71000	8	
Accommodation and food services	72000	0	
Other services (not listed elsewhere)	81000	134	
Undistributed	-	316	i

* = amount < \$500,000; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

^a Data are tabulated independent of the industry classification and business activities of the company that performs R&D.

^b Business codes and descriptions are based on 2012 NAICS industry definitions.

Note(s)

Detail may not add to total because of rounding. For an R&D performer that did not report the R&D funders' business activities, no systematic imputation of these business activities was conducted. The business activities of the R&D funders may not be assumed to be the same as those of the R&D performer. Statistics are representative of companies located in the United States that performed or funded R&D. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s)

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2017.