

TABLE 43. Domestic R&D paid for by other companies and performed by the company, by funders' business activity: 2013
(Millions of U.S. dollars)

Funders' business activity ^a	Business code ^b	Amount
All business activities	21100-81000	27,241
Oil and gas extraction	21100	39
Mining	21200	1
Support activities for mining, including oil and gas	21300	310
Utilities	22100	123
Construction	23000	2
Food manufacturing	31100	196
Beverage manufacturing	31210	107 i
Tobacco manufacturing	31220	6
Textile, apparel, and leather products manufacturing	31990	5 i
Wood products manufacturing	32100	9 i
Paper manufacturing	32200	3 i
Printing and related support activities	32300	2 i
Petroleum refineries	32401	13
Asphalt paving, roofing, and saturated materials manufacturing	32402	0
Other petroleum and coal products manufacturing, including motor oil, hydraulic fluid, and charcoal	32403	2
Basic chemicals manufacturing	32510	79
Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	32520	6
Pesticide, fertilizer, and other agricultural chemicals manufacturing	32530	65 i
Pharmaceutical, medicinal, botanical, and biological products (except diagnostic) manufacturing ^c	32541	9,276
In-vitro diagnostic substances manufacturing ^c	32542	29
Biotechnology-based pharmaceutical and biological products (except diagnostics)	32543	1,233
Soap, cleaning compound, and toilet preparations manufacturing	32591	23
Paint, adhesive, and other chemical manufacturing	32592	10 i
Plastics and rubber products manufacturing	32600	209
Clay and glass products manufacturing	32710	*
Cement, concrete, lime, gypsum, and other nonmetallic mineral product manufacturing	32790	1 i
Primary metal manufacturing	33100	3 i
Fabricated metal products manufacturing	33200	118
Agricultural machinery and equipment manufacturing	33311	35
Construction machinery manufacturing	33312	11 i
Mining, oil, and gas field machinery and equipment manufacturing	33319	7
Semiconductor machinery manufacturing	33321	76
Industrial machinery manufacturing (except semiconductor machinery)	33322	27 i
Photographic and photocopying equipment manufacturing	33331	54 i
Commercial, service industry, temperature control, and air-flow control machinery manufacturing	33332	D
Engine, turbine, and power transmission equipment manufacturing	33360	99
Metalworking and other general purpose machinery manufacturing	33390	44 i
Computers and peripheral equipment manufacturing and magnetic and optical media	33412	118
Telephone apparatus manufacturing, including routers, modems, and gateways	33421	1 i
Radio, television, and wireless communication equipment manufacturing	33422	1,024 i
Other communication equipment manufacturing (except radio, television, and wireless communication equipment)	33429	42 i
Audio and video equipment manufacturing	33430	5
Semiconductor and other electronic components manufacturing	33440	1,942

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Electromedical, electrotherapeutic, and irradiation apparatus manufacturing	33451	130
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing	33452	605
Measuring and control instruments manufacturing (not listed elsewhere)	33459	27 i
Electrical equipment, appliances, and components manufacturing	33500	776
Motor vehicles manufacturing	33610	1,691
Motor vehicle body and trailer manufacturing	33620	1
Motor vehicle parts manufacturing	33630	633 i
Aircraft manufacturing	33641	238 i
Aircraft engine and engine parts manufacturing	33642	244
Other aircraft parts and auxiliary equipment manufacturing	33643	407
Guided missiles, space vehicles, and related parts manufacturing	33644	335
Railroad rolling stock manufacturing	33651	1
Ship and boat building	33660	1
Motorcycle, bicycle, and parts manufacturing	33691	5
Military armored vehicle, tank, and tank components manufacturing	33692	5
All other transportation equipment manufacturing	33699	9
Furniture and related products manufacturing	33700	* i
Medical equipment and supplies manufacturing	33910	461
Miscellaneous manufacturing not listed elsewhere (games, office supplies, slot machines, etc.)	33990	29
Merchant wholesalers, durable goods	42300	23
Merchant wholesalers, nondurable goods	42400	4
Wholesale electronic markets and agents and brokers (business to business)	42500	D
Retail trade (except electronic shopping and electronic auctions)	44000	*
Electronic shopping and electronic auctions	45411	1 i
Transportation	48000	4
Couriers, messengers, and express delivery services	49200	0
Warehousing and storage	49300	0
Newspaper, periodical, book, and directory publishers (except Internet)	51110	0
Software publishers (except Internet) ^d	51120	417
Motion picture and sound recording (except Internet)	51200	0
Broadcasting (except Internet)	51500	*
Wired telecommunications carriers	51710	0
Wireless telecommunications carriers (except satellite)	51720	23
Satellite telecommunications	51740	1
Other telecommunications (not listed elsewhere)	51790	14
Data processing, hosting, and related services ^d	51800	31 i
Cloud computing applications and Internet-based software services	51801	14 i
Other information services, including Internet publishing, broadcasting, and Web search portals ^d	51910	8
Finance: banking and credit intermediation	52200	2
Securities, commodity contracts, and other financial investments and related activities, including funds and trusts	52310	11
Insurance carriers and related activities	52400	9
Real estate	53100	1
Rental and leasing services	53200	1
Lessors of nonfinancial intangible assets, including patent licensing	53300	0
Legal, accounting, tax preparation, bookkeeping, and payroll services	54111	0

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Architectural, engineering, and related services	54130	78
Specialized design services	54140	41
Computer systems design and related services ^d	54150	150 i
Management, scientific, and technical consulting services	54160	107
Research and development services in social sciences and humanities	54172	11
Research and development services in biotechnology ^f	54173	1,902
Research and development services in physical, engineering, and life sciences (except biotechnology)	54174	1,098
Advertising and related services	54180	12 i
Professional, scientific, and technical services (not listed elsewhere)	54190	272
Management of companies and enterprises	55100	0
Administrative and support services	56100	2
Waste management and remediation services	56200	1 i
Offices of physicians	62110	0
Medical and diagnostic laboratories	62150	564
Other ambulatory health care services (ambulance, dental, home health care)	62199	0
Hospitals and nursing care facilities	62200	3
Social assistance services	62400	0
Arts, entertainment, and recreation	71000	10
Accommodation and food services	72000	0
Other services (not listed elsewhere)	81000	89
Undistributed	-	1,294 i

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

^a Data tabulated independent of the industry classification of the company. Companies were asked to report their sales and R&D activity in one or more business activity codes.

^b Business codes and descriptions based on industry definitions in the 2007 North American Industry Classification System.

^c Estimates for this business code may not be comparable to those from prior years due to the introduction of a related business code for survey year 2013: 32543, Biotechnology-based pharmaceutical and biological products (except diagnostics).

^d Estimates for this business code may not be comparable to those from prior years due to the introduction of a related business code for survey year 2013: 51801, Cloud computing applications and Internet-based software services.

NOTES: Detail may not add to total because of rounding. Statistics are representative of companies located in the United States that performed or funded R&D. 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.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2013.