

TABLE 40

## Domestic R&amp;D paid for by other companies and performed by the company, by funders' business activity: 2015

(Millions of U.S. dollars)

Funders' business activity <sup>a</sup>	Business code <sup>b</sup>	Amount
All business activities	21100-81000	30,912
Oil and gas extraction	21100	D
Mining	21200	*
Support activities for mining, including oil and gas	21300	D
Utilities	22100	23
Construction	23000	1 i
Food manufacturing	31100	164
Beverage manufacturing	31210	117
Tobacco manufacturing	31220	2
Textile, apparel, and leather products manufacturing	31990	4
Wood products manufacturing	32100	4
Paper manufacturing	32200	1
Printing and related support activities	32300	11
Petroleum refineries	32401	14
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	105
Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	32520	6
Pesticide, fertilizer, and other agricultural chemical manufacturing	32530	*
Pharmaceutical, medicinal, botanical, and biological products (except diagnostics)	32541	10,115
In vitro diagnostic substances manufacturing	32542	15
Biotechnology-based pharmaceutical and biological products (except diagnostics)	32543	5,676
Soap, cleaning compound, and toilet preparation manufacturing	32591	179
Paint, adhesive, and other chemical manufacturing	32592	163
Plastics and rubber products manufacturing	32600	26 i
Clay and glass products manufacturing	32710	2
Cement, concrete, lime, gypsum, and other nonmetallic mineral products manufacturing	32790	8
Primary metal manufacturing	33100	18
Fabricated metal products manufacturing	33200	50
Agricultural machinery and equipment manufacturing	33311	17
Construction machinery manufacturing	33312	3 i
Mining, oil, and gas field machinery and equipment manufacturing	33319	20
Semiconductor machinery manufacturing	33321	94 i
Industrial machinery manufacturing (except semiconductor machinery)	33322	20
Photographic and photocopying equipment manufacturing	33331	6
Commercial, service industry, temperature control, and air-flow control machinery manufacturing	33332	3
Digital cameras manufacturing	33333	1 i
Engine, turbine, and power transmission equipment manufacturing	33360	182
Metalworking and other general purpose machinery manufacturing	33390	77
Computers and peripheral equipment manufacturing and magnetic and optical media	33412	97
Telephone apparatus manufacturing, including routers, modems, and gateways	33421	D
Radio, television, and wireless communication equipment manufacturing	33422	597 i
Other communication equipment manufacturing (except radio, television, and wireless communication equipment)	33429	17
Audio and video equipment manufacturing	33430	18 i
Semiconductors and other electronic components manufacturing	33440	1,810
Electromedical, electrotherapeutic, and irradiation apparatuses manufacturing	33451	121
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments manufacturing	33452	540
Measuring and control instruments manufacturing (not listed elsewhere)	33459	38
Electrical equipment, appliances, and components manufacturing	33500	764
Motor vehicles manufacturing	33610	1,676
Motor vehicle body and trailer manufacturing	33620	*
Motor vehicle parts manufacturing	33630	709 i

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Aircraft manufacturing	33641	126 i
Aircraft engine and engine parts manufacturing	33642	163 i
Other aircraft parts and auxiliary equipment manufacturing	33643	520 i
Guided missiles, space vehicles, and related parts manufacturing	33644	343
Railroad rolling stock manufacturing	33651	1
Ship and boat building	33660	*
Motorcycle, bicycle, and parts manufacturing	33691	7
Military armored vehicle, tank, and tank components manufacturing	33692	104
All other transportation equipment manufacturing	33699	22
Furniture and related products manufacturing	33700	1 i
Medical equipment and supplies manufacturing	33910	327
Miscellaneous manufacturing not listed elsewhere (games, office supplies, slot machines, etc.)	33990	149 i
Merchant wholesalers, durable goods	42300	15 i
Merchant wholesalers, nondurable goods	42400	8 i
Wholesale electronic markets and agents and brokers (business to business)	42500	3 i
Retail trade (except electronic shopping and electronic auctions)	44000	4
Electronic shopping and electronic auctions	45411	2 i
Transportation	48000	*
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)	51120	543
Motion picture and sound recording (except Internet)	51200	0
Broadcasting (except Internet)	51500	0
Wired telecommunications carriers	51710	53 i
Wireless telecommunications carriers (except satellite)	51720	25
Satellite telecommunications	51740	*
Other telecommunications (not listed elsewhere)	51790	* i
Data processing, hosting, and related services	51800	15 i
Cloud computing applications and Internet-based software services	51801	21
Other information services, including Internet publishing, broadcasting, and Web search portals	51910	18
Finance: banking and credit intermediation	52200	8
Securities, commodity contracts, and other financial investments and related activities, including funds and trusts	52310	3 i
Insurance carriers and related activities	52400	9
Real estate	53100	*
Rental and leasing services	53200	*
Lessors of nonfinancial intangible assets, including patent licensing	53300	0
Legal, accounting, tax preparation, bookkeeping, and payroll services	54111	4
Architectural, engineering, and related services	54130	146
Specialized design services	54140	97
Computer systems design and related services	54150	445 i
Management, scientific, and technical consulting services	54160	7
Research and development services in social sciences and humanities	54172	6
Research and development services in biotechnology	54173	1,004 i
Research and development services in physical, engineering, and life sciences (except biotechnology)	54174	417 i
Advertising and related services	54180	7
Professional, scientific, and technical services (not listed elsewhere)	54190	606
Management of companies and enterprises	55100	0
Administrative and support services	56100	1
Waste management and remediation services	56200	*
Offices of physicians	62110	14 i
Medical and diagnostic laboratories	62150	184 i

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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	D
Accommodation and food services	72000	0
Other services (not listed elsewhere)	81000	13
Undistributed	-	1,314 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.

NAICS = 2012 North American Industry Classification System.

<sup>a</sup> Data are tabulated independently of the industry classification and business activities of the company that performs R&D.

<sup>b</sup> Business codes and descriptions are based on 2012 NAICS industry definitions.

**Note(s)**

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(s)**

National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2015.