

Appendix table 4-15

## Sources of funds for domestic R&amp;D performed by the company, by industry and company size: 2008

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	R&D paid for by the company	R&D paid for by others		
				Total	U.S. federal government	Nonfederal sources
All industries	21-23, 31-33, 42-81	290,681	232,505	58,176	36,360	21,816
Manufacturing industries	31-33	203,754	164,386	39,368	31,102	8,266
Food	311	2,100	2,063	37	2	35
Beverage and tobacco products	312	780	777	3	0	3
Textile, apparel, and leather	313-16	814	802	12	D	D
Wood products	321	273	270	3	0	3
Paper manufacturing	322	1,167	1,156	11	D	D
Printing and related support activities	323	349	312	37	32	5
Petroleum and coal products	324	D	D	D	*	D
Chemicals	325	58,249	55,042	3,207	197	3,010
Basic chemicals	3251	4,074	4,012	62	33	29
Resin, synthetic rubber, fibers, and filament	3252	761	726	35	12	23
Pesticide, fertilizer, and other agricultural chemical manufacturing	3253	D	941	D	1	D
Pharmaceuticals and medicines	3254	48,131	45,169	2,962	137	2,825
Soap, cleaning compound, and toilet preparation	3256	2,108	2,099	9	6	3
Paint, coating, adhesive, and other chemicals manufacturing	3255, 3259	D	2,095	D	8	D
Plastics and rubber products	326	1,817	1,713	104	4	100
Nonmetallic mineral products	327	1,555	1,509	46	33	13
Primary metals	331	696	654	42	9	33
Fabricated metal products	332	2,419	2,362	57	16	41
Machinery	333	10,104	9,846	258	62	196
Agricultural implement manufacturing	33311	1,184	1,181	3	0	3
Semiconductor machinery manufacturing	333295	2,172	2,113	59	32	27
Engine, turbine, and power transmission equipment manufacturing	3336	1,343	1,280	63	9	54
Other machinery manufacturing	other 333	5,405	5,272	133	21	112
Computer and electronic products	334	60,463	52,912	7,551	4,646	2,905
Communications equipment	3342	12,903	11,484	1,419	D	D
Semiconductor and other electronic components	3344	22,324	21,588	736	D	D
Navigational, measuring, electromedical, and control instruments	3345	15,460	10,463	4,997	3,635	1,362
Electromedical, electrotherapeutic, and irradiation apparatus manufacturing	334510, 334517	6,015	4,896	1,119	1,098	21
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing	334511	D	2,803	3,739	2,410	1,329
Other measuring and controlling device manufacturing	other 3345	D	2,764	139	127	12
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	9,776	9,377	399	51	348
Electrical equipment, appliances, and components	335	3,143	2,947	196	91	105
Transportation equipment	336	50,552	23,039	27,513	25,941	1,572
Automobiles, bodies, trailers, and parts	3361, 3362, 3363	13,140	12,234	906	D	D
Aerospace products and parts	3364	36,941	10,371	26,570	25,805	765
Aircraft, aircraft engine, and aircraft parts manufacturing	336411-13	D	9,698	21,163	D	D
Guided missile, space vehicle, and related parts manufacturing	336414, 336415, 336419	D	673	5,407	D	D
Military armored vehicle, tank, and tank component manufacturing	336992	32	25	7	D	D
Other transportation	other 336	439	409	30	D	D
Furniture and related products	337	D	477	*	0	D

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Miscellaneous manufacturing	339	D	D	D	54	D
Medical equipment and supplies manufacturing	3391	5,300	5,179	121	20	101
Other miscellaneous manufacturing	3399	D	D	D	34	D
Nonmanufacturing industries	21-23, 42-81	86,925	68,118	18,807	5,258	13,549
Mining, extraction, and support activities	21	D	1,478	24	5	19
Utilities	22	225	190	35	D	D
Construction	23	D	D	D	0	D
Wholesale trade	42	2,084	1,944	140	46	94
Retail trade	44-45	1,031	1,029	2	0	2
Electronic shopping and mail-order houses	4541	675	674	1	0	1
Other retail trade	other 44-45	355	354	1	0	1
Transportation and warehousing	48-49	D	134	*	*	D
Information	51	37,694	36,922	772	229	543
Publishing	511	28,427	27,871	556	176	380
Newspaper, periodical, book, and directory publishers	5111	205	205	0	0	0
Software publishers	5112	28,221	27,665	556	176	380
Telecommunications	517	1,684	1,601	83	35	48
Internet service providers, Web search portals, and data processing services	518	6,568	6,493	75	1	74
Other information	other 51	1,016	958	58	17	41
Finance and insurance	52	1,092	1,084	8	0	8
Real estate and rental and leasing	53	253	246	7	0	7
Professional, scientific, and technical services	54	37,954	20,539	17,415	4,844	12,571
Architectural, engineering, and related services	5413	3,422	1,378	2,044	928	1,116
Computer systems design and related services	5415	12,146	8,569	3,577	784	2,793
Scientific research and development services	5417	17,913	8,708	9,205	2,115	7,090
Other professional, scientific, and technical services	other 54	4,474	1,884	2,590	1,016	1,574
Health care services	621-23	1,314	1,032	282	16	266
Other nonmanufacturing	55-56, 61, 624, 71-72, 81	D	D	D	D	D
All companies	21-23, 31-33, 42-81	290,681	232,505	58,176	36,360	21,816
Small companies (number of employees) <sup>a</sup>						
5-499	-	58,137	46,396	11,741	4,117	7,624
5-99	-	33,256	24,890	8,366	2,667	5,699
5-49	-	23,905	17,642	6,263	1,972	4,291
5-24	-	14,280	10,333	3,947	1,086	2,861
25-49	-	9,626	7,309	2,317	886	1,431
50-99	-	9,351	7,248	2,103	695	1,408
100-249	-	14,662	12,933	1,729	718	1,011
250-499	-	10,218	8,572	1,646	732	914
Medium and large companies (number of employees)						
500-999	-	11,886	9,673	2,213	747	1,466
1,000-4,999	-	46,337	39,010	7,327	2,162	5,165

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5,000–9,999	–	24,764	20,358	4,406	1,168	3,238
10,000–24,999	–	48,737	43,049	5,688	3,024	2,664
25,000 or more	–	100,820	74,020	26,800	25,142 i	1,658

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

BRDIS = Business R&D and Innovation Survey; NAICS = 2002 North American Industry Classification System

<sup>a</sup>Upper bound based on U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Detail may not add to total because of rounding. Industry classification based on dominant business code for domestic R&D performance where available. For companies that did not report business codes, classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2008.

*Science and Engineering Indicators 2012*