

## Appendix table 4-15

**Domestic business R&D by major funding source, by industry and company size: 2008–11**

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total U.S. R&D business performance	Paid by company	Paid by others		Federal	Paid by company and nonfederal
				Total	Nonfederal		
2008							
All industries	21–23, 31–33, 42–81	290,680	232,505	58,176	21,816	36,360	254,320
Manufacturing industries	31–33	203,755	164,386	39,368	8,266	31,102	172,653
Food	311	2,100	2,063	37	35	2	2,098
Beverage and tobacco products	312	780	777	3	3	0	780
Wood products	321	273	270	3	3	0	273
Printing and related support activities	323	349	312	37	5	32	317
Chemicals	325	58,250	55,042	3,207	3,010	197	58,053
Pharmaceuticals and medicines	3254	48,131	45,169	2,962	2,825	137	47,994
Plastic and rubber products	326	1,817	1,713	104	100	4	1,813
Nonmetallic mineral products	327	1,556	1,509	46	13	33	1,523
Primary metals	331	695	654	42	33	9	686
Fabricated metal products	332	2,419	2,362	57	41	16	2,403
Machinery	333	10,104	9,846	258	196	62	10,042
Computer and electronic products	334	60,464	52,912	7,551	2,905	4,646	55,818
Electrical equipment, appliances, and components	335	3,143	2,947	196	105	91	3,052
Transportation equipment	336	50,552	23,039	27,513	1,572	25,941	24,611
Furniture and related products	337	477	477	D	D	0	477
Nonmanufacturing industries	21–23, 42–81	86,926	68,118	18,807	13,549	5,258	81,668
Information	51	37,695	36,922	772	543	229	37,466
Publishing	511	28,427	27,871	556	380	176	28,251
Telecommunications	517	1,684	1,601	83	48	35	1,649
Internet service providers, Web search portals, and data processing services	518	6,567	6,493	75	74	1	6,566
Professional, scientific, and technical services	54	37,954	20,539	17,415	12,571	4,844	33,110
Architectural, engineering, and related services	5413	3,422	1,378	2,044	1,116	928	2,494
Computer system design and related services	5415	12,146	8,569	3,577	2,793	784	11,362
Scientific research and development services	5417	17,913	8,708	9,205	7,090	2,115	15,798
Company size (number of domestic employees) <sup>a</sup>							
5–499	–	58,137	46,396	11,741	7,624	4,117	54,020
500–999	–	11,886	9,673	2,213	1,466	747	11,139
1,000–4,999	–	46,336	39,010	7,327	5,165	2,162	44,174
5,000–9,999	–	24,764	20,358	4,406	3,238	1,168	23,596
10,000–24,999	–	48,737	43,049	5,688	2,664	3,024	45,713
25,000 or more	–	100,820	74,020	26,800	1,658	25,142	75,678

## Appendix table 4-15

**Domestic business R&D by major funding source, by industry and company size: 2008–11**

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total U.S. R&D business performance	Paid by company	Paid by others		Federal	Paid by company and nonfederal
				Total	Nonfederal		
2009							
All industries	21–23, 31–33, 42–81	282,393	224,920	57,473	17,900	39,573	242,820
Manufacturing industries	31–33	195,144	158,225	36,920	8,095	28,825	166,319
Food	311	4,192	D	D	D	D	D
Beverage and tobacco products	312	477	475	2	D	D	D
Wood products	321	512	495	17	17	0	512
Printing and related support activities	323	195	194	1	0	1	194
Chemicals	325	53,328	49,876	3,452	3,245	207	53,121
Pharmaceuticals and medicines	3254	44,936	41,751	3,185	3,072	113	44,823
Plastic and rubber products	326	2,468	2,329	139	112	27	2,441
Nonmetallic mineral products	327	1,100	1,077	23	5	18	1,082
Primary metals	331	837	593	244	233	11	826
Fabricated metal products	332	2,040	1,931	109	90	19	2,021
Machinery	333	9,138	8,782	356	206	150	8,988
Computer and electronic products	334	56,436	48,865	7,571	2,361	5,210	51,226
Electrical equipment, appliances, and components	335	3,334	3,105	228	158	70	3,264
Transportation equipment	336	48,337	24,223	24,114	1,091	23,023	25,314
Furniture and related products	337	396	393	3	3	0	396
Nonmanufacturing industries	21–23, 42–81	87,248	66,695	20,553	9,804	10,749	76,499
Information	51	33,806	32,995	811	617	194	33,612
Publishing	511	27,077	26,412	666	490	176	26,901
Telecommunications	517	1,496	1,414	82	77	5	1,491
Internet service providers, Web search portals, and data processing services	518	2,735	2,675	60	48	12	2,723
Professional, scientific, and technical services	54	44,946	26,031	18,915	8,454	10,461	34,485
Architectural, engineering, and related services	5413	3,281	1,223	2,058	637	1,421	1,860
Computer system design and related services	5415	12,560	10,742	1,818	578	1,240	11,320
Scientific research and development services	5417	17,270	7,981	9,289	6,632	2,657	14,613
Company size (number of domestic employees) <sup>a</sup>							
5–499	–	58,719	44,258	14,461	5,627	8,834	49,885
500–999	–	10,119	8,577	1,542	1,069	473	9,646
1,000–4,999	–	44,008	38,383	5,625	4,013	1,612	42,396
5,000–9,999	–	21,864	17,585	4,279	3,274	1,005	20,859
10,000–24,999	–	51,037	42,191	8,847	2,958	5,889	45,148
25,000 or more	–	96,645	73,927	22,719	960	21,759	74,886

## Appendix table 4-15

**Domestic business R&D by major funding source, by industry and company size: 2008–11**

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total U.S. R&D business performance	Paid by company	Paid by others		Federal	Paid by company and nonfederal
				Total	Nonfederal		
2010							
All industries	21–23, 31–33, 42–81	278,977	221,706	57,271	23,072	34,199	244,778
Manufacturing industries	31–33	196,711	159,579	37,133	10,394	26,739	169,972
Food	311	D	3,659	D	D	15	D
Beverage and tobacco products	312	D	717	D	D	D	D
Wood products	321	247	229	18	18	0	247
Printing and related support activities	323	231	201	30	29	1	230
Chemicals	325	58,038	53,555	4,483	4,303	180	57,858
Pharmaceuticals and medicines	3254	49,415	45,398	4,017	3,918	99	49,316
Plastic and rubber products	326	2,121	1,809	312	304	8	2,113
Nonmetallic mineral products	327	1,276	1,246	30	7	23	1,253
Primary metals	331	653	579	74	45	29	624
Fabricated metal products	332	1,703	1,464	239	149	90	1,613
Machinery	333	9,955	9,384	571	473	98	9,857
Computer and electronic products	334	59,875	51,223	8,652	2,717	5,935	53,940
Electrical equipment, appliances, and components	335	3,320	3,141	180	96	84	3,236
Transportation equipment	336	42,913	21,076	21,837	1,646	20,191	22,722
Furniture and related products	337	373	370	3	3	0	373
Nonmanufacturing industries	21–23, 42–81	82,265	62,127	20,138	12,678	7,460	74,805
Information	51	36,852	36,085	768	616	152	36,700
Publishing	511	26,982	26,387	595	455	140	26,842
Telecommunications	517	1,868	1,755	113	108	5	1,863
Internet service providers, Web search portals, and data processing services	518	2,538	2,491	47	44	3	2,535
Professional, scientific, and technical services	54	33,690	15,438	18,252	11,423	6,829	26,861
Architectural, engineering, and related services	5413	4,093	1,381	2,712	1,178	1,534	2,559
Computer system design and related services	5415	11,050	9,416	1,634	922	712	10,338
Scientific research and development services	5417	14,818	2,851	11,968	8,689	3,279	11,539
Company size (number of domestic employees) <sup>a</sup>							
5–499	–	52,202	40,822	11,379	6,428	4,951	47,251
500–999	–	10,116	8,640	1,477	892	585	9,531
1,000–4,999	–	48,227	39,468	8,760	7,086	1,674	46,553
5,000–9,999	–	27,463	21,940	5,523	4,886	637	26,826
10,000–24,999	–	41,835	36,688	5,147	2,358	2,789	39,046
25,000 or more	–	99,133	74,148	24,985	1,422	23,563	75,570

## Appendix table 4-15

**Domestic business R&D by major funding source, by industry and company size: 2008–11**

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total U.S. R&D business performance	Paid by company	Paid by others		Federal	Paid by company and nonfederal
				Total	Nonfederal		
2011							
All industries	21–23, 31–33, 42–81	294,093	238,768	55,324	24,015	31,309	262,784
Manufacturing industries	31–33	201,361	163,340	38,021	13,323	24,698	176,663
Food	311	4,399	4,204	196	179	17	4,382
Beverage and tobacco products	312		684	D	D	D	D
Wood products	321	211	202	9	9	0	211
Printing and related support activities	323	175	174	1	0	1	174
Chemicals	325	55,324	49,988	5,337	5,227	110	55,214
Pharmaceuticals and medicines	3254	45,949	41,111	4,838	4,786	52	45,897
Plastic and rubber products	326	2,280	1,973	307	299	8	2,272
Nonmetallic mineral products	327	1,179	1,145	33	8	25	1,154
Primary metals	331	655	591	64	D	D	D
Fabricated metal products	332	1,853	1,738	115	D	D	D
Machinery	333	14,709	13,578	1,131	609	522	14,187
Computer and electronic products	334	62,704	53,664	9,040	3,879	5,161	57,543
Electrical equipment, appliances, and components	335	3,595	3,417	178	102	76	3,519
Transportation equipment	336	40,880	20,275	20,605	D	D	D
Furniture and related products	337	319	317	2	D	D	D
Nonmanufacturing industries	21–23, 42–81	92,731	75,428	17,303	10,692	6,611	86,120
Information	51	41,865	41,014	851	D	D	D
Publishing	511	28,435	27,748	687	551	136	28,299
Telecommunications	517	2,157	2,040	117	D	D	D
Internet service providers, Web search portals, and data processing services	518	4,285	4,257	28	D	D	D
Professional, scientific, and technical services	54	38,219	23,368	14,851	9,003	5,848	32,371
Architectural, engineering, and related services	5413	3,774	1,808	1,966	843	1,123	2,651
Computer system design and related services	5415	13,259	11,706	1,553	955	598	12,661
Scientific research and development services	5417	15,301	6,170	9,131	5,905	3,226	12,075
Company size (number of domestic employees) <sup>a</sup>							
5–499	–	56,793	46,509	10,283	6,345	3,938	52,855
500–999	–	10,027	8,739	1,288	911	377	9,650
1,000–4,999	–	50,485	42,905	7,579	5,877	1,702	48,783

Appendix table 4-15

**Domestic business R&D by major funding source, by industry and company size: 2008–11**

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total U.S. R&D business performance	Paid by company	Paid by others		Federal	Paid by company and nonfederal
				Total	Nonfederal		
5,000–9,999	–	24,951	18,659	6,292	5,816	476	24,475
10,000–24,999	–	49,214	42,585	6,630	3,053	3,577	45,637
25,000 or more	–	102,623	79,370	23,253	2,013	21,240	81,383

D = data withheld to avoid disclosing operations of individual companies.

NAICS = North American Industry Classification System.

<sup>a</sup> Upper bound is based on the U.S. Small Business Administration's definition of a small business; the Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.

NOTES: Detail may not add to total due to 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, classification used for sampling was assigned. Statistics pertain to companies located in the United States that performed or funded R&D.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics and U.S. Census Bureau, Business R&D and Innovation Survey (2008–11).

*Science and Engineering Indicators 2014*