



International Investment and R&D Data Link: 2008–10

Detailed Statistical Tables | NSF 16-306 | February 2016

Francisco Moris
Senior Analyst
Research and Development Statistics Program
(703) 292-4678

General Notes

The trend toward the globalization of research and development and innovation implies the need for enhanced statistics in this area. To develop new information, the National Science Foundation's (NSF's) National Center for Science and Engineering Statistics (NCSES) proposed and funded the R&D Data Link Project, a project matching R&D and international investment data sets from several federal agencies, to link data from U.S. Census Bureau and NSF on the R&D activity of all U.S. companies with Bureau of Economic Analysis (BEA) data on U.S. and foreign multinational companies (MNCs).

Data presented in this report were obtained by linking company-specific information from the Census Bureau and NSF Business R&D and Innovation Survey (BRDIS) with information on MNCs owned by, or located in, the United States from two BEA surveys: the survey of Foreign Direct Investment in the United States (FDIUS), and the survey of U.S. Direct Investment Abroad (USDIA). This report presents 2008–10 linked data, updating 2004–07 R&D information from an earlier link involving the same BEA surveys (see "Data Comparability" in Technical Notes).

Linked data include details at the industry level and selected company size for sales, employment and R&D employment, R&D performance, character of work, and source of funds. Selected data are also available by geographic detail, including state, investing country, and host country.

Tables 1–7 (year 2008), 16–22 (2009), and 31–37 (2010) of this report show data that resulted from the BRDIS-USDIA data link. Data from the BRDIS-FDIUS link appear in tables 8–15 (2008), 23–30 (2009), and 38–45 (2010).

Data Tables

Table **BRDIS-USDIA link**

Linked parent companies of U.S. MNCs: 2008

Sales and R&D costs (paid for by company and paid for by others)

1 by industry and company size

Domestic R&D performance

2 by character of work, industry, and company size

3 by source of funds, state, and company size

4 by state and selected industry

Worldwide, domestic, and foreign employment and R&D employment

5 by industry and company size

Summary BRDIS and USDIA data

6 for worldwide, domestic, and foreign activity

7 for foreign activity, by selected host country

BRDIS-FDIUS link

Linked majority-owned U.S. affiliates of foreign MNCs: 2008

Domestic R&D performance

8 by character of work, industry, and company size

9 by source of funds, state, and company size

10 by state and selected industry

11 by selected UBO investing country and state

12 by selected UBO investing country and industry

Sales originating from domestic operations and domestic R&D performance

13 by source of funds, industry, and company size

14 and domestic employment, by selected UBO investing country

Domestic employment and R&D employment

15 by industry and company size

BRDIS-USDIA link

Linked parent companies of U.S. MNCs: 2009

Sales and R&D costs (paid for by company and paid for by others)

16 by industry and company size

Domestic R&D performance

17 by character of work, industry, and company size

18 by source of funds, state, and company size

19 by state and selected industry

Worldwide, domestic, and foreign employment and R&D employment

20 by industry and company size

Summary BRDIS and USDIA survey data

21 for worldwide, domestic, and foreign activity

22 for foreign activity, by selected host country

Table **BRDIS-FDIUS link**

Linked majority-owned U.S. affiliates of foreign MNCs: 2009

Domestic R&D performance

23 by character of work, industry, and company size

24 by source of funds, state, and company size

25 by state and selected industry

26 by selected UBO investing country and state

27 by selected UBO investing country and industry

Sales originating from domestic operations and domestic R&D performance

28 by source of funds, industry, and company size

29 and domestic employment, by selected UBO investing country

Domestic employment and R&D employment

30 by industry and company size

BRDIS-USDIA link

Linked parent companies of U.S. MNCs: 2010

Sales and R&D costs (paid for by company and paid for by others)

31 by industry and company size

Domestic R&D performance

32 by character of work, industry, and company size

33 by source of funds, state, and company size

34 by selected state and industry

Worldwide, domestic, and foreign employment and R&D employment

35 by industry and company size

Summary BRDIS and USDIA survey data

36 for worldwide, domestic, and foreign activity

37 for foreign activity, by selected host country

BRDIS-FDIUS link

Linked majority-owned U.S. affiliates of foreign MNCs: 2010

Domestic R&D performance

38 by character of work, industry, and company size

39 by source of funds, state, and company size

40 by selected state and industry

41 by selected UBO investing country and state

42 by selected UBO investing country and industry

Sales originating from domestic operations and domestic R&D performance

43 by source of funds, industry, and company size

44 and domestic employment, by selected UBO investing country

Domestic employment and R&D employment

45 by industry and company size

BRDIS Business R&D and Innovation Survey
FDIUS Foreign Direct Investment in the United States
MNC multinational company
UBO ultimate beneficiary owner
USDIA U.S. Direct Investment Abroad

TABLE 1. Sales and R&D costs (paid for by company and paid for by others) for parent companies of U.S. MNCs, by industry and company size: BRDIS 2008

(Millions of U.S. dollars)

Industry and company size	NAICS code	Sales		R&D paid for by company				R&D paid for by others			
		Worldwide	Originating from domestic operations	Worldwide	Performed by company		Paid to others	Worldwide	Performed by company		Paid to others
					Domestic	Foreign			Domestic	Foreign	
All industries	21-23, 31-33, 42-81	8,110,706	5,352,927	230,533	157,782	48,968	23,783	47,212	35,684	3,593	7,936
Manufacturing industries	31-33	5,524,746	3,391,509	184,632	123,720	40,286	20,626	39,887	31,885	1,049	6,953
Food	311	433,268	297,870	1,862	1,312	448	102	3	2	*	1
Beverage and tobacco products	312	164,248	106,790	969	D	119	D	D	D	0	0
Textile, apparel, and leather	313-16	131,405	113,891	385	278	96	11	1	*	0	1
Wood products	321	28,379	25,387	195	185	3	8	3	3	0	1
Printing and related support activities	323	D	D	D	D	7	*	0	0	0	0
Chemicals	325	1,123,553	684,503	66,889	41,495	12,261	13,132	2,640	1,487	332	821
Basic chemicals	3251	265,519	147,813	4,277	3,254	915	107	36	32	1	3
Resin, synthetic rubber, fibers, and filament	3252	200,018	159,573	783	D	197	D	D	D	0	D
Pharmaceuticals and medicines	3254	417,988	253,372	55,335	33,319	9,594	12,422	2,513	1,381	330	801
Other chemicals	other 325	240,028	123,746	6,494	D	1,555	D	D	D	1	D
Plastics and rubber products	326	118,203	91,371	1,265	983	233	49	27	25	0	2
Nonmetallic mineral products	327	44,888	33,265	1,236	1,130	86	20	*	*	*	*
Primary metals	331	131,372	98,736	564	453	104	7	12	10	0	1
Fabricated metal products	332	66,291	42,620	675	498	150	26	8	5	D	D
Machinery	333	355,305	197,515	9,048	7,045	1,676	327	68	21	D	D
Computer and electronic products	334	777,853	445,263	56,431	41,340	13,443	1,648	5,645	5,125	284	236
Communications equipment	3342	116,117	75,246	11,721	D	2,596	D	1,219	D	D	4
Semiconductor and other electronic components	3344	157,855	88,338	22,968	16,602	5,780	586	365	214	D	D
Navigational, measuring, electromedical, and control instruments	3345	218,191	153,824	10,400	8,092	1,907	401	3,904	3,622	96	185
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	285,689	127,855	11,342	D	3,161	D	157	D	D	D
Electrical equipment, appliances, and components	335	97,394	62,059	2,442	1,555	815	73	16	15	*	1
Transportation equipment	336	1,077,884	681,192	34,673	20,598	9,604	4,470	31,299	25,064	423	5,812
Automobiles, bodies, trailers, and parts	3361-63	623,190	347,321	22,739	11,020	8,162	3,556	634	434	131	69
Aerospace products and parts	3364	445,458	325,481	11,683	9,360	D	D	30,664	24,630	292	5,743
Other transportation	other 336	9,236	8,390	252	218	D	D	0	0	0	0
Furniture and related products	337	13,706	11,232	160	136	16	8	0	0	0	0
Miscellaneous manufacturing	339	130,580	79,343	5,059	3,854	846	359	5	5	*	0
Medical equipment and supplies manufacturing	3391	61,433	40,554	3,571	2,677	556	339	1	1	0	0
Other miscellaneous manufacturing	3399	69,147	38,789	1,488	1,177	291	20	4	4	*	0
Other manufacturing	322, 324	D	D	D	D	378	D	D	D	0	38
Nonmanufacturing industries	21-23, 42-81	2,585,961	1,961,418	45,901	34,062	8,682	3,158	7,325	3,798	2,543	983
Mining, extraction, and support activities	21	639,800	387,787	1,609	887	194	528	26	17	D	D
Wholesale trade	42	142,274	131,224	1,086	1,019	55	12	9	5	4	*
Information	51	743,594	561,184	34,513	26,214	6,367	1,933	234	191	D	D
Publishing	511	276,677	142,028	26,965	D	5,367	D	233	D	D	D

TABLE 1. Sales and R&D costs (paid for by company and paid for by others) for parent companies of U.S. MNCs, by industry and company size: BRDIS 2008
(Millions of U.S. dollars)

Industry and company size	NAICS code	Sales		R&D paid for by company				R&D paid for by others			
		Worldwide	Originating from domestic operations	Performed by company			Paid to others	Performed by company			Paid to others
				Worldwide	Domestic	Foreign		Worldwide	Domestic	Foreign	
Telecommunications	517	311,820	306,896	1,678	D	29	D	1	D	0	D
Internet service providers, Web search portals, and data processing services	518	D	D	5,256	4,216	D	D	*	*	0	0
Other information	other 51	D	D	613	D	D	57	0	0	0	0
Professional, scientific, and technical services	54	316,695	257,243	6,527	4,248	1,819	460	7,041	3,576	2,512	953
Architectural, engineering, and related services	5413	37,588	22,279	319	D	D	D	560	D	D	D
Computer systems design and related services	5415	164,270	132,352	3,257	D	1,201	D	217	D	D	0
Scientific research and development services	5417	78,856	72,418	2,241	1,457	407	376	5,397	2,426	2,433	538
Other professional, scientific, and technical services	other 54	35,981	30,194	710	D	D	D	867	D	D	D
Other nonmanufacturing	22-23, 44-49, 52-53, 55-81	743,599	623,980	2,166	1,694	247	225	15	10	D	D
All companies	21-23, 31-33, 42-81	8,110,706	5,352,927	230,533	157,782	48,968	23,783	47,212	35,684	3,593	7,936
Small companies (5-499 domestic employees) ^a	-	52,154	38,073	3,425	2,239	761	425	165	141	13	11
Medium and large companies (number of domestic employees)											
500-999	-	74,822	48,582	3,968	2,932	842	194	124	89	25	10
1,000-4,999	-	790,948	507,418	37,708	25,624	8,787	3,297	2,007	1,298	548	161
5,000-9,999	-	784,318	529,688	23,162	17,149	4,279	1,735	5,552	2,921	D	D
10,000-24,999	-	1,948,164	1,369,327	55,547	38,056	10,368	7,123	5,524	4,160	D	D
25,000 or more	-	4,460,300	2,859,839	106,722	71,783	23,931	11,009	33,841	27,075	506	6,259

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; NAICS = 2002 North American Industry Classification System; USDIA = U.S. Direct Investment Abroad.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008-10.

TABLE 2. Domestic R&D performed by parent companies of U.S. MNCs, by character of work, industry, and company size: BRDIS 2008
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Character of work		
			Basic research	Applied research	Development
All industries	21–23, 31–33, 42–81	193,465	7,322	30,597	155,547
Manufacturing industries	31–33	155,605	5,889	25,819	123,897
Food	311	1,313	51	186	1,077
Beverage and tobacco products	312	704	48	259	397
Textile, apparel, and leather	313–16	278	30	83	165
Wood products	321	187	8	50	129
Printing and related support activities	323	D	*	7	D
Chemicals	325	42,983	2,880	9,980	30,123
Basic chemicals	3251	3,286	260	1,391	1,636
Resin, synthetic rubber, fibers, and filament	3252	593	70	131	392
Pharmaceuticals and medicines	3254	34,700	2,370	7,821	24,510
Other chemicals	other 325	4,403	180	637	3,586
Plastics and rubber products	326	1,008	57	201	749
Nonmetallic mineral products	327	1,130	15	173	942
Primary metals	331	463	26	77	360
Fabricated metal products	332	503	16	52	435
Machinery	333	7,066	155	793	6,118
Computer and electronic products	334	46,465	1,219	6,458	38,787
Communications equipment	3342	9,847	165	809	8,873
Semiconductor and other electronic components	3344	16,817	148	2,033	14,635
Navigational, measuring, electromedical, and control instruments	3345	11,714	497	1,809	9,408
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	8,087	409	1,807	5,871
Electrical equipment, appliances, and components	335	1,569	53	259	1,257
Transportation equipment	336	45,662	1,043	6,164	38,455
Automobiles, bodies, trailers, and parts	3361–63	11,454	345	1,350	9,758
Aerospace products and parts	3364	33,990	692	4,800	28,498
Other transportation	other 336	218	5	14	199
Furniture and related products	337	136	4	14	118
Miscellaneous manufacturing	339	3,859	85	409	3,365
Medical equipment and supplies manufacturing	3391	2,678	69	348	2,261
Other miscellaneous manufacturing	3399	1,181	16	61	1,104
Other manufacturing	322, 324	D	196	654	D
Nonmanufacturing industries	21–23, 42–81	37,860	1,433	4,778	31,650
Mining, extraction, and support activities	21	904	60	271	573
Wholesale trade	42	1,024	56	147	822
Information	51	26,404	1,163	2,377	22,864
Publishing	511	20,567	805	1,593	18,169
Telecommunications	517	D	229	D	828
Internet service providers, Web search portals, and data processing services	518	4,216	119	699	3,398
Other information	other 51	D	10	D	469
Professional, scientific, and technical services	54	7,824	102	1,806	5,915
Architectural, engineering, and related services	5413	588	6	43	539
Computer systems design and related services	5415	2,142	18	152	1,973
Scientific research and development services	5417	3,883	77	1,504	2,302
Other professional, scientific, and technical services	other 54	1,210	2	107	1,101
Other nonmanufacturing	22–23, 44–49, 52–53, 55–81	1,704	52	177	1,475
All companies	21–23, 31–33, 42–81	193,465	7,322	30,597	155,547
Small companies (5–499 domestic employees) ^a	–	2,381	94	330	1,957
Medium and large companies (number of domestic employees)					
500–999	–	3,021	141	538	2,342
1,000–4,999	–	26,922	917	3,284	22,721

TABLE 2. Domestic R&D performed by parent companies of U.S. MNCs, by character of work, industry, and company size: BRDIS 2008
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Character of work		
			Basic research	Applied research	Development
5,000–9,999	–	20,069	625	4,699	14,745
10,000–24,999	–	42,215	1,756	8,449	32,010
25,000 or more	–	98,858	3,788	13,298	81,772

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; NAICS = 2002 North American Industry Classification System; USDIA = U.S. Direct Investment Abroad.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 3. Domestic R&D performed by parent companies of U.S. MNCs, by source of funds, state, and company size: BRDIS 2008

(Millions of U.S. dollars)

State and company size	Total domestic R&D performed	Paid for by company	Paid for by others		
			Total	Federal	Nonfederal
All states	193,465	157,782	35,684	28,827	6,856
Alabama	2,040	D	D	D	31
Alaska	23	21	2	D	D
Arizona	3,967	2,389	1,578	1,355	223
Arkansas	200	199	1	*	1
California	44,155	35,178	8,977	7,903	1,074
Colorado	2,491	2,225	267	244	23
Connecticut	8,611	7,238	1,373	D	D
Delaware	1,174	1,162	12	5	7
District of Columbia	278	D	D	D	3
Florida	1,959	1,297	662	508	154
Georgia	1,788	1,239	549	D	D
Hawaii	91	64	28	27	1
Idaho	696	D	D	2	D
Illinois	5,719	5,241	478	232	246
Indiana	3,586	D	D	69	D
Iowa	659	598	60	D	D
Kansas	899	519	381	D	D
Kentucky	574	572	2	1	2
Louisiana	96	58	38	D	D
Maine	147	126	22	18	3
Maryland	1,606	745	861	705	156
Massachusetts	8,264	7,100	1,164	1,000	164
Michigan	10,468	9,806	662	273	389
Minnesota	3,832	3,680	152	106	46
Mississippi	64	48	16	16	*
Missouri	4,451	D	D	D	6
Montana	44	43	1	*	*
Nebraska	255	201	54	D	D
Nevada	247	243	4	4	1
New Hampshire	1,507	D	D	D	29
New Jersey	13,701	12,976	725	78	647
New Mexico	432	D	D	173	D
New York	7,294	5,837	1,457	1,299	157
North Carolina	3,285	2,868	418	149	269
North Dakota	139	D	D	0	D
Ohio	4,690	3,502	1,188	1,062	126
Oklahoma	232	214	18	D	D
Oregon	3,101	3,090	11	4	7
Pennsylvania	6,355	5,948	407	133	275
Rhode Island	255	232	23	D	D
South Carolina	646	628	18	12	5
South Dakota	12	12	1	0	1
Tennessee	767	734	32	9	23
Texas	11,111	8,824	2,287	1,733	554
Utah	611	560	51	34	17
Vermont	273	257	16	2	14
Virginia	3,712	1,346	2,366	2,253	113
Washington	10,979	10,278	701	D	D
West Virginia	197	192	5	5	*
Wisconsin	2,105	1,812	293	D	D
Wyoming	6	5	1	*	1
Undistributed ^a	13,670	D	D	D	D

TABLE 3. Domestic R&D performed by parent companies of U.S. MNCs, by source of funds, state, and company size: BRDIS 2008

(Millions of U.S. dollars)

State and company size	Total domestic R&D performed	Paid for by company	Paid for by others		
			Total	Federal	Nonfederal
All companies	193,465	157,782	35,684	28,827	6,856
Small companies (5–499 domestic employees) ^b	2,381	2,239	141	26	115
Medium and large companies (number of domestic employees)					
500–999	3,021	2,932	89	11	78
1,000–4,999	26,922	25,624	1,298	316	982
5,000–9,999	20,069	17,149	2,921	783	2,138
10,000–24,999	42,215	38,056	4,160	2,211	1,949
25,000 or more	98,858	71,783	27,075	25,480	1,595

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; USDIA = U.S. Direct Investment Abroad.

^a Includes data reported on Form BRDI-1 that were not allocated to a specific state. Data reported on Form BRDI-1A were allocated to the state in the address on the company's survey form, which is usually the company's headquarters.

^b The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 4. Domestic R&D performed by parent companies of U.S. MNCs, by state and selected industry: BRDIS 2008

(Millions of U.S. dollars)

State	Manufacturing								Nonmanufacturing				
	All industries	Total	Chemicals	Machinery	Computer and electronic products	Electrical equipment	Transportation equipment	Other	Total	Information	Professional, technical, and scientific services	Wholesale trade	Other
All states	193,465	155,605	42,983	7,066	46,465	1,569	45,662	11,860	37,860	26,404	7,824	1,024	2,608
Alabama	2,040	1,822	24	D	54	*	D	D	218	D	D	*	3
Alaska	23	21	D	0	D	D	1	D	2	0	2	0	*
Arizona	3,967	3,562	68	45	1,931	2	1,362	154	406	316	46	0	44
Arkansas	200	158	5	17	17	D	12	D	42	D	D	0	1
California	44,155	33,876	5,071	1,585	17,685	59	8,780	697	10,279	8,249	1,159	23	849
Colorado	2,491	2,098	401	72	1,313	3	191	117	394	269	114	2	9
Connecticut	8,611	8,459	D	164	109	36	D	D	152	D	86	D	D
Delaware	1,174	D	728	0	D	3	4	15	D	D	1	0	D
District of Columbia	278	D	D	*	D	0	5	0	D	21	D	0	0
Florida	1,959	1,517	285	35	530	9	604	54	442	338	60	D	D
Georgia	1,788	1,232	93	58	115	29	D	D	556	239	259	0	58
Hawaii	91	88	43	0	D	0	D	D	4	2	1	0	0
Idaho	696	D	D	1	D	0	0	D	D	14	D	*	0
Illinois	5,719	5,527	2,012	1,784	583	44	552	553	192	125	55	3	8
Indiana	3,586	D	2,140	432	162	92	205	D	D	4	D	0	*
Iowa	659	654	187	352	17	D	D	17	4	2	2	0	*
Kansas	899	669	143	29	117	*	365	14	230	D	D	0	*
Kentucky	574	559	417	11	16	14	70	31	15	4	8	0	2
Louisiana	96	81	19	6	2	0	D	D	14	*	14	0	0
Maine	147	144	1	1	65	0	D	D	3	2	1	*	0
Maryland	1,606	1,457	86	93	216	3	841	218	149	50	96	0	3
Massachusetts	8,264	6,468	2,054	223	2,555	33	1,100	503	1,796	1,070	659	28	39
Michigan	10,468	10,222	503	45	124	D	8,941	D	246	139	88	9	11
Minnesota	3,832	3,392	181	210	1,461	38	236	1,265	441	380	40	0	20
Mississippi	64	50	8	*	15	0	10	17	14	*	11	0	2
Missouri	4,451	4,321	780	D	333	D	D	D	130	D	14	0	D
Montana	44	42	D	D	D	0	D	D	2	1	1	0	0
Nebraska	255	123	24	15	24	*	D	D	132	63	D	0	D
Nevada	247	228	*	9	13	3	D	D	19	9	5	*	5
New Hampshire	1,507	1,328	D	D	1,237	D	14	12	178	132	44	2	0
New Jersey	13,701	12,779	11,435	7	541	23	108	665	922	92	753	0	77
New Mexico	432	377	19	1	288	0	69	0	55	4	51	*	0
New York	7,294	4,968	1,573	111	1,077	17	1,816	374	2,326	2,143	58	*	124
North Carolina	3,285	1,909	623	47	669	61	283	226	1,376	975	360	1	41
North Dakota	139	D	2	D	3	2	D	D	D	D	0	0	0
Ohio	4,690	4,403	1,725	110	230	93	1,658	587	286	51	223	1	12
Oklahoma	232	151	13	65	7	*	23	42	82	*	9	0	72

TABLE 4. Domestic R&D performed by parent companies of U.S. MNCs, by state and selected industry: BRDIS 2008
(Millions of U.S. dollars)

State	Manufacturing								Nonmanufacturing				
	All industries	Total	Chemicals	Machinery	Computer and electronic products	Electrical equipment	Transportation equipment	Other	Total	Information	Professional, technical, and scientific services	Wholesale trade	Other
Oregon	3,101	2,779	16	120	2,143	8	130	362	322	274	17	31	0
Pennsylvania	6,355	5,444	3,695	88	810	78	326	447	911	405	388	2	117
Rhode Island	255	213	9	3	20	4	D	D	43	D	11	*	D
South Carolina	646	D	51	28	97	14	212	D	D	1	D	0	0
South Dakota	12	11	6	3	*	0	2	*	1	1	0	0	0
Tennessee	767	702	230	49	240	37	41	106	64	D	37	*	D
Texas	11,111	8,278	478	540	4,315	5	1,934	1,005	2,833	1,586	671	*	576
Utah	611	383	65	1	103	3	154	58	228	209	13	*	6
Vermont	273	D	13	0	13	1	D	D	D	D	1	D	D
Virginia	3,712	3,073	221	4	562	6	1,951	330	639	243	378	0	18
Washington	10,979	D	352	19	606	*	D	D	D	D	D	2	D
West Virginia	197	196	182	0	2	0	12	*	1	1	*	0	*
Wisconsin	2,105	1,782	210	190	104	180	586	511	324	42	D	*	D
Wyoming	6	6	3	0	1	0	0	2	*	*	*	0	0
Undistributed ^a	13,670	D	D	D	D	D	D	D	D	D	D	D	D

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; USDIA = U.S. Direct Investment Abroad.

^a Includes data reported on Form BRDI-1 that were not allocated to a specific state. Data reported on Form BRDI-1A were allocated to the state in the address on the company's survey form, which is usually the company's headquarters.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 5. Worldwide, domestic, and foreign employment and R&D employment by parent companies of U.S. MNCs, by industry and company size: BRDIS 2008 (Thousands of employees)

Industry and company size	NAICS code	Total employment			R&D employment		
		Worldwide	Domestic	Foreign	Worldwide	Domestic	Foreign
All industries	21–23, 31–33, 42–81	17,754	10,828	6,926	1,145	786	359
Manufacturing industries	31–33	12,130	6,524	5,606	802	554	248
Food	311	850	563	287	10	7	3
Beverage and tobacco products	312	455	235	220	3	2	1
Textile, apparel, and leather	313–16	392	259	133	3	2	1
Wood products	321	87	72	15	1	1	*
Printing and related support activities	323	25	14	11	*	*	*
Chemicals	325	1,990	1,024	966	169	121	48
Basic chemicals	3251	368	196	172	20	15	6
Resin, synthetic rubber, fibers, and filament	3252	218	113	105	3	3	1
Pharmaceuticals and medicines	3254	841	439	402	116	84	32
Other chemicals	other 325	563	277	286	29	20	10
Plastics and rubber products	326	319	198	120	10	5	5
Nonmetallic mineral products	327	162	105	57	5	3	2
Primary metals	331	256	144	112	3	2	1
Fabricated metal products	332	260	157	104	6	4	3
Machinery	333	1,099	578	521	49	33	16
Computer and electronic products	334	2,140	1,080	1,059	285	196	89
Communications equipment	3342	219	124	95	59	37	21
Semiconductor and other electronic components	3344	551	221	330	112	74	38
Navigational, measuring, electromedical, and control instruments	3345	795	483	312	62	47	15
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	574	252	322	52	37	15
Electrical equipment, appliances, and components	335	416	184	232	15	7	8
Transportation equipment	336	2,642	1,408	1,234	200	138	61
Automobiles, bodies, trailers, and parts	3361–63	1,433	530	903	89	46	43
Aerospace products and parts	3364	1,190	862	328	110	91	19
Other transportation	other 336	19	16	2	1	1	*
Furniture and related products	337	62	47	14	1	1	*
Miscellaneous manufacturing	339	448	228	220	25	19	6
Medical equipment and supplies manufacturing	3391	214	125	89	15	12	3
Other miscellaneous manufacturing	3399	234	103	131	10	8	3
Other manufacturing	322, 324	526	225	301	16	11	5
Nonmanufacturing industries	21–23, 42–81	5,624	4,304	1,320	342	232	111
Mining, extraction, and support activities	21	270	164	106	5	4	1
Wholesale trade	42	137	105	32	3	3	1
Information	51	2,046	1,408	638	199	136	63
Publishing	511	962	421	541	149	96	52
Telecommunications	517	711	696	15	25	24	1
Internet service providers, Web search portals, and data processing services	518	D	D	D	23	13	10
Other information	other 51	D	D	D	3	2	*
Professional, scientific, and technical services	54	806	522	283	115	72	43
Architectural, engineering, and related services	5413	138	90	49	10	10	1
Computer systems design and related services	5415	322	190	133	49	25	25
Scientific research and development services	5417	126	99	26	39	23	16
Other professional, scientific, and technical services	other 54	219	144	76	16	15	1
Other nonmanufacturing	22–23, 44–49, 52–53, 55–81	2,366	2,105	261	20	17	3
All companies	21–23, 31–33, 42–81	17,754	10,828	6,926	1,145	786	359
Small companies (5–499 domestic employees) ^a	–	180	79	101	D	13	D
Medium and large companies (number of domestic employees)							
500–999	–	265	117	148	21	13	8
1,000–4,999	–	2,099	1,124	976	187	118	69

TABLE 5. Worldwide, domestic, and foreign employment and R&D employment by parent companies of U.S. MNCs, by industry and company size: BRDIS 2008 (Thousands of employees)

Industry and company size	NAICS code	Total employment			R&D employment		
		Worldwide	Domestic	Foreign	Worldwide	Domestic	Foreign
5,000–9,999	–	2,060	1,095	965	154	97	57
10,000–24,999	–	3,524	1,966	1,558	245	160	85
25,000 or more	–	9,625	6,448	3,178	D	385	D

* = amount < 500; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; NAICS = 2002 North American Industry Classification System; USDIA = U.S. Direct Investment Abroad.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 6. Summary BRDIS and USDIA survey data for worldwide, domestic, and foreign activity of U.S. parent companies and their affiliates: 2008

Characteristics	R&D performance		Employees			
	Companies ^a	Expenditures (US\$millions)	Companies ^a	All (thousands)	Companies ^a	R&D (thousands)
BRDIS						
Domestic activity (U.S. parents)						
All industries	1,312	193,465	1,319	10,828	1,209	786
Manufacturing	1,008	155,605	1,012	6,524	934	554
Nonmanufacturing	304	37,860	307	4,304	275	232
Foreign activity						
All industries	701	52,561	982	6,926	667	359
Manufacturing	558	41,336	755	5,606	524	248
Nonmanufacturing	143	11,225	227	1,320	143	111
Worldwide U.S. MNCs' activity						
All industries	1,313	246,026	1,319	17,754	1,214	1,145
Manufacturing	1,009	196,941	1,012	12,130	938	802
Nonmanufacturing	304	49,085	307	5,624	276	342
Foreign/worldwide (%)						
All industries	na	21.36	na	39.01	na	31.35
Manufacturing	na	20.99	na	46.22	na	30.92
Nonmanufacturing	na	22.87	na	23.47	na	32.46
USDIA survey						
Domestic activity (U.S. parents)						
All industries	951	194,156	1,328	11,064	NA	NA
Manufacturing	729	148,727	984	6,337	NA	NA
Nonmanufacturing	222	45,429	344	4,727	NA	NA
Foreign activity (MOFAs)						
All industries	945	40,333	1,299	6,125	NA	NA
Manufacturing	728	34,132	960	4,759	NA	NA
Nonmanufacturing	217	6,201	339	1,366	NA	NA
Worldwide U.S. MNCs' activity						
All industries	951	234,489	2,627	17,189	NA	NA
Manufacturing	729	182,859	1,944	11,096	NA	NA
Nonmanufacturing	222	51,630	683	6,093	NA	NA
Foreign/worldwide (%)						
All industries	na	17.20	na	35.63	na	NA
Manufacturing	na	18.67	na	42.89	na	NA
Nonmanufacturing	na	12.01	na	22.42	na	NA

na = not applicable; NA = not available.

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; MOFA = majority-owned foreign affiliate; USDIA = U.S. Direct Investment Abroad.

^a Companies reporting nonzero value for item.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. BRDIS industry classification is based on the dominant business code for domestic R&D performance, where available. For BRDIS companies that did not report business codes, the classification used for sampling was assigned. The USDIA survey industry classification is based on the industry of the parent company.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 7. Summary BRDIS and USDIA survey data for foreign activity of U.S. parent companies, by selected host country: 2008

Host country	BRDIS foreign activity		USDIA survey MOFAs				
	Matched U.S. parent companies ^a	R&D performed (US\$millions)	Matched U.S. parent companies ^b	Number of MOFAs	R&D performed (US\$millions)	Employees (thousands)	
						All	R&D
All host countries	701	52,561	945	3,589	40,333	6,125	NA
Canada	263	4,315	178	226	3,097	453	NA
China	261	2,194	113	191	1,653	464	NA
France	227	2,617	161	245	2,318	282	NA
Germany	282	7,253	210	367	7,896	462	NA
India	182	2,860	50	63	1,341	254	NA
Ireland	89	1,121	55	78	1,136	76	NA
Israel	81	2,115	31	38	1,921	50	NA
Italy	147	857	117	155	627	142	NA
Japan	168	2,189	127	150	1,961	169	NA
Russia	43	255	16	18	106	58	NA
Singapore	116	796	62	69	659	94	NA
South Korea	90	962	58	71	979	78	NA
Sweden	116	1,650	59	68	1,636	62	NA
United Kingdom	353	7,551	279	422	5,820	581	NA
All other	520	15,827	351	1,428	9,183	2,900	NA

NA = not available.

BRDIS = Business R&D and Innovation Survey; MOFA = majority-owned foreign affiliate; USDIA = U.S. Direct Investment Abroad.

^a BRDIS companies are matched to USDIA survey parent companies with a nonzero value for foreign R&D performed. Each matched parent company is counted once in the all host countries total.

^b The USDIA survey matched U.S. parent companies that owned R&D-performing MOFAs; that is, the survey matched parent companies that owned at least one MOFA with a nonzero value for R&D performed. Each matched parent company is counted once in the all host countries total and also is counted once in each country in which it has a MOFA that performed R&D. Because a parent company may have R&D-performing MOFAs in more than one country, the sum across countries exceeds the all countries total.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008-10.

TABLE 8. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by character of work, industry, and company size: BRDIS 2008
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Character of work		
			Basic research	Applied research	Development
All industries	21-23, 31-33, 42-81	35,054	1,638	8,335	25,081
Manufacturing industries	31-33	29,178	1,351	7,020	20,807
Food	311	193	5	56	132
Beverage and tobacco products	312	51	1	7	43
Textile, apparel, and leather	313-16	21	3	3	15
Wood products	321	3	*	*	3
Printing and related support activities	323	2	0	0	2
Chemicals	325	14,348	483	4,021	9,844
Basic chemicals	3251	713	31	232	451
Resin, synthetic rubber, fibers, and filament	3252	58	2	17	39
Pharmaceuticals and medicines	3254	12,735	377	3,699	8,659
Other chemicals	other 325	841	73	73	695
Plastics and rubber products	326	434	34	44	356
Nonmetallic mineral products	327	179	11	26	142
Primary metals	331	160	11	15	135
Fabricated metal products	332	268	13	30	225
Machinery	333	1,295	22	165	1,108
Computer and electronic products	334	8,458	592	2,076	5,790
Communications equipment	3342	2,786	D	D	2,166
Semiconductor and other electronic components	3344	562	3	54	505
Navigational, measuring, electromedical, and control instruments	3345	3,765	304	691	2,770
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	1,345	D	D	349
Electrical equipment, appliances, and components	335	681	30	92	559
Transportation equipment	336	1,642	67	222	1,353
Automobiles, bodies, trailers, and parts	3361-63	1,313	55	167	1,091
Aerospace products and parts	3364	322	12	54	255
Other transportation	other 336	7	*	*	7
Furniture and related products	337	38	1	*	37
Miscellaneous manufacturing	339	851	38	102	710
Medical equipment and supplies manufacturing	3391	641	35	81	525
Other miscellaneous manufacturing	3399	210	3	21	186
Other manufacturing	322, 324	554	41	162	351
Nonmanufacturing industries	21-23, 42-81	5,877	287	1,315	4,274
Mining, extraction, and support activities	21	413	17	48	348
Wholesale trade	42	637	50	61	526
Information	51	1,071	34	65	971
Publishing	511	994	29	63	903
Telecommunications	517	D	D	3	D
Internet service providers, Web search portals, and data processing services	518	D	D	0	D
Other information	other 51	D	1	*	D
Professional, scientific, and technical services	54	3,522	180	1,109	2,234
Architectural, engineering, and related services	5413	362	20	115	226
Computer systems design and related services	5415	808	2	88	718
Scientific research and development services	5417	2,122	154	889	1,079
Other professional, scientific, and technical services	other 54	230	3	17	211
Other nonmanufacturing	22-23, 44-49, 52-53, 55-81	233	6	33	195
All companies	21-23, 31-33, 42-81	35,054	1,638	8,335	25,081
Small companies (5-499 domestic employees) ^a	-	1,991	146	356	1,489
Medium and large companies (number of domestic employees)					
500-999	-	2,267	151	440	1,676
1,000-4,999	-	7,826	486	1,733	5,607

TABLE 8. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by character of work, industry, and company size: BRDIS 2008
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Character of work		
			Basic research	Applied research	Development
5,000–9,999	–	4,304	245	1,351	2,707
10,000–24,999	–	14,980	341	3,901	10,738
25,000 or more	–	3,686	269	553	2,864

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; NAICS = 2002 North American Industry Classification System.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 9. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by source of funds, state, and company size: BRDIS 2008

(Millions of U.S. dollars)

State and company size	Total domestic R&D performed	Paid for by company	Paid for by others ^a		
			Total	Federal	Nonfederal
All states	35,054	29,059	5,996	1,414	4,581
Alabama	55	D	D	2	D
Alaska	D	D	0	0	0
Arizona	207	128	79	3	76
Arkansas	67	67	*	0	*
California	5,098	3,856	1,242	D	D
Colorado	662	639	23	0	23
Connecticut	633	619	14	5	9
Delaware	D	10	D	3	D
District of Columbia	8	2	6	0	6
Florida	361	354	7	*	7
Georgia	137	125	11	0	11
Hawaii	57	D	D	D	*
Idaho	19	19	0	0	0
Illinois	1,072	1,030	43	1	42
Indiana	283	D	D	D	2
Iowa	90	90	*	0	*
Kansas	222	220	2	0	2
Kentucky	57	57	*	*	0
Louisiana	24	D	D	0	D
Maine	18	17	1	*	*
Maryland	202	141	60	D	D
Massachusetts	1,825	1,533	292	D	D
Michigan	1,320	959	361	*	361
Minnesota	547	544	3	0	3
Mississippi	6	6	0	0	0
Missouri	185	182	3	*	3
Montana	2	2	0	0	0
Nebraska	61	D	D	*	D
Nevada	26	26	0	0	0
New Hampshire	1,192	D	D	D	D
New Jersey	6,119	5,508	610	1	610
New Mexico	11	11	0	0	0
New York	657	564	93	4	89
North Carolina	1,171	966	205	3	202
North Dakota	14	14	0	0	0
Ohio	713	591	123	4	118
Oklahoma	23	23	*	*	0
Oregon	218	191	27	2	25
Pennsylvania	1,727	1,515	212	23	189
Rhode Island	51	51	*	0	*
South Carolina	269	268	1	1	*
South Dakota	18	D	D	*	D
Tennessee	178	165	13	0	13
Texas	2,264	1,766	498	D	D
Utah	45	42	3	0	3
Vermont	13	10	3	0	3
Virginia	219	179	40	D	D
Washington	278	203	75	0	75
West Virginia	4	4	0	0	0
Wisconsin	166	139	27	*	26
Wyoming	*	*	0	0	0
Undistributed ^b	D	D	D	D	D

TABLE 9. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by source of funds, state, and company size: BRDIS 2008

(Millions of U.S. dollars)

State and company size	Total domestic R&D performed	Paid for by company	Paid for by others ^a		
			Total	Federal	Nonfederal
All companies	35,054	29,059	5,996	1,414	4,581
Small companies (5–499 domestic employees) ^c	1,991	1,492	499	6	494
Medium and large companies (number of domestic employees)					
500–999	2,267	D	D	4	D
1,000–4,999	7,826	6,087	1,739	D	D
5,000–9,999	4,304	D	D	D	D
10,000–24,999	14,980	13,246	1,734	6	1,728
25,000 or more	3,686	D	D	D	237

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company.

^a Includes foreign parent companies.

^b Includes data reported on Form BRDI-1 that were not allocated to a specific state. Data reported on Form BRDI-1A were allocated to the state in the address on the company's survey form, which is usually the company's headquarters.

^c The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 10. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by state and selected industry: BRDIS 2008

(Millions of U.S. dollars)

State	All industries	Manufacturing							Nonmanufacturing				
		Total	Chemicals	Machinery	Computer and electronic products	Electrical equipment	Transportation equipment	Other	Total	Information	Professional, technical, and scientific services	Wholesale trade	Other
All states	35,054	29,178	14,348	1,295	8,458	681	1,642	2,753	5,877	1,071	3,522	637	646
Alabama	55	55	4	D	35	0	*	D	1	1	0	0	0
Alaska	D	D	*	*	0	1	0	D	0	0	0	0	0
Arizona	207	170	57	D	37	7	D	15	37	1	35	1	*
Arkansas	67	67	5	17	D	D	2	D	0	0	0	0	0
California	5,098	4,098	2,071	53	1,694	76	92	112	999	327	551	42	79
Colorado	662	650	D	3	241	1	0	D	12	10	*	2	*
Connecticut	633	621	535	13	31	2	0	40	13	9	*	3	*
Delaware	D	D	D	0	0	0	0	0	0	0	0	0	0
District of Columbia	8	2	2	0	0	0	0	0	7	6	1	0	0
Florida	361	353	39	9	240	4	*	61	7	3	*	4	*
Georgia	137	118	28	2	34	D	10	D	18	14	*	2	2
Hawaii	57	57	22	0	D	0	0	D	*	*	0	0	0
Idaho	19	19	16	1	0	0	0	2	*	0	0	*	0
Illinois	1,072	1,057	702	124	64	22	D	D	15	8	5	*	1
Indiana	283	283	5	2	59	1	174	43	0	0	0	0	0
Iowa	90	89	38	21	9	D	2	D	1	1	*	0	0
Kansas	222	221	D	14	D	0	4	D	1	0	0	0	1
Kentucky	57	52	9	2	5	7	3	26	5	4	1	*	0
Louisiana	24	D	D	1	0	0	0	*	D	0	D	0	0
Maine	18	17	*	0	1	0	0	16	*	*	0	0	0
Maryland	202	135	29	1	54	2	6	43	66	3	63	0	0
Massachusetts	1,825	1,058	576	2	361	7	1	112	766	73	D	0	D
Michigan	1,320	1,227	110	388	63	3	590	72	93	25	62	6	0
Minnesota	547	530	65	42	D	11	D	D	17	7	1	0	9
Mississippi	6	6	2	1	2	0	*	1	0	0	0	0	0
Missouri	185	174	41	*	10	7	0	115	12	0	10	0	1
Montana	2	2	1	0	0	0	0	*	0	0	0	0	0
Nebraska	61	D	14	D	D	*	0	D	D	0	D	0	0
Nevada	26	D	2	D	0	4	*	D	D	0	0	0	D
New Hampshire	1,192	1,161	D	0	D	D	D	D	31	*	D	D	0
New Jersey	6,119	5,995	5,782	5	128	4	7	68	124	1	110	2	11
New Mexico	11	10	1	0	8	0	0	0	1	1	0	*	0
New York	657	591	127	65	314	14	35	36	66	D	15	5	D
North Carolina	1,171	960	656	*	131	75	66	32	211	D	187	2	D
North Dakota	14	14	D	D	0	D	*	D	0	0	0	0	0
Ohio	713	611	184	35	76	8	64	245	102	D	D	*	D
Oklahoma	23	21	D	0	4	*	D	0	2	0	0	0	2
Oregon	218	211	6	1	59	8	D	D	7	5	1	0	2

TABLE 10. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by state and selected industry: BRDIS 2008

(Millions of U.S. dollars)

State	All industries	Manufacturing							Nonmanufacturing				
		Total	Chemicals	Machinery	Computer and electronic products	Electrical equipment	Transportation equipment	Other	Total	Information	Professional, technical, and scientific services	Wholesale trade	Other
Pennsylvania	1,727	1,648	911	51	534	D	D	D	78	41	34	3	*
Rhode Island	51	D	1	0	1	0	1	D	D	*	0	0	D
South Carolina	269	D	24	19	9	6	27	D	D	0	D	0	0
South Dakota	18	D	D	D	0	0	0	D	D	0	D	0	0
Tennessee	178	177	18	11	D	26	9	D	1	0	1	*	*
Texas	2,264	1,483	293	150	582	11	6	441	781	24	390	D	D
Utah	45	40	5	7	19	1	0	7	5	*	3	0	2
Vermont	13	7	3	0	0	4	0	1	6	0	0	0	6
Virginia	219	79	10	6	D	1	14	D	140	D	D	0	0
Washington	278	182	17	2	110	0	48	4	97	4	90	3	0
West Virginia	4	4	4	0	0	0	0	0	0	0	0	0	0
Wisconsin	166	136	22	21	19	D	*	D	30	D	D	0	0
Wyoming	*	*	0	*	0	0	0	0	0	0	0	0	0
Undistributed ^a	D	D	D	D	D	D	D	D	D	D	D	D	D

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company.

^a Includes data reported on Form BRDI-1 that were not allocated to a specific state. Data reported on Form BRDI-1A were allocated to the state in the address on the company's survey form, which is usually the company's headquarters.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008-10.

TABLE 11. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by selected UBO investing country and state: BRDIS 2008

(Millions of U.S. dollars)

Investing countries	All countries and regions	Canada	France	Germany	Japan	Netherlands	Switzerland	United Kingdom	Other ^a
All states	35,054	1,259	5,061	5,111	4,047	1,532	5,067	6,646	6,331
Alabama	55	0	*	2	11	*	1	4	37
Alaska	D	0	0	0	0	0	*	D	1
Arizona	207	24	36	53	44	7	1	D	D
Arkansas	67	0	2	*	12	0	3	2	48
California	5,098	158	294	567	885	204	1,627	314	1,049
Colorado	662	1	3	D	2	36	18	53	D
Connecticut	633	6	36	D	4	D	5	18	D
Delaware	D	0	0	*	0	0	10	D	0
District of Columbia	8	0	0	6	0	0	*	0	2
Florida	361	*	31	214	4	D	13	6	D
Georgia	137	2	0	31	19	15	3	6	61
Hawaii	57	*	0	1	0	D	D	D	*
Idaho	19	0	0	3	*	0	D	0	D
Illinois	1,072	*	15	93	549	36	141	139	99
Indiana	283	3	D	29	22	0	3	D	4
Iowa	90	2	16	11	4	*	D	0	D
Kansas	222	2	*	D	0	3	2	3	D
Kentucky	57	0	7	7	9	3	18	6	8
Louisiana	24	D	0	2	0	*	*	1	D
Maine	18	1	0	*	0	*	*	*	15
Maryland	202	3	D	5	56	5	8	23	D
Massachusetts	1,825	139	96	57	304	D	685	230	D
Michigan	1,320	25	48	740	328	19	12	24	123
Minnesota	547	15	*	38	2	0	D	15	D
Mississippi	6	0	0	1	*	3	*	0	2
Missouri	185	2	32	3	1	*	7	5	134
Montana	2	0	0	*	0	0	*	*	1
Nebraska	61	D	D	D	D	0	13	1	D
Nevada	26	0	0	1	1	0	*	1	23
New Hampshire	1,192	0	D	D	36	1	*	D	D
New Jersey	6,119	D	D	396	265	73	D	D	D
New Mexico	11	1	0	1	*	*	*	0	8
New York	657	55	24	96	33	75	66	D	D
North Carolina	1,171	D	147	316	118	8	266	12	D
North Dakota	14	0	*	*	0	0	*	0	13
Ohio	713	0	13	153	196	D	170	52	D
Oklahoma	23	0	0	2	0	0	2	1	19
Oregon	218	0	4	124	8	2	5	D	D
Pennsylvania	1,727	62	609	515	33	D	62	161	D

TABLE 11. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by selected UBO investing country and state: BRDIS 2008
(Millions of U.S. dollars)

Investing countries	All countries and regions	Canada	France	Germany	Japan	Netherlands	Switzerland	United Kingdom	Other ^a
Rhode Island	51	0	1	*	0	1	*	4	44
South Carolina	269	1	D	40	23	*	1	2	D
South Dakota	18	0	D	*	D	0	D	*	0
Tennessee	178	1	52	74	15	6	7	9	14
Texas	2,264	D	132	64	27	396	D	138	D
Utah	45	1	1	18	9	3	4	*	9
Vermont	13	0	0	*	4	1	7	0	1
Virginia	219	D	D	15	3	2	8	D	50
Washington	278	D	31	28	58	D	14	44	D
West Virginia	4	0	0	4	0	0	*	0	*
Wisconsin	166	1	10	47	*	19	6	23	60
Wyoming	*	0	0	0	0	0	*	0	0
Undistributed ^b	D	D	D	D	D	D	148	D	D

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; UBO = ultimate beneficiary owner.

^a Includes affiliates whose immediate parent company is located outside the United States but whose ultimate owner is a U.S. company.

^b Includes data reported on Form BRDI-1 that were not allocated to a specific state. Data reported on Form BRDI-1A were allocated to the state in the address on the company's survey form, which is usually the company's headquarters.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 12. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by selected UBO investing country and industry: BRDIS 2008
(Millions of U.S. dollars)

Investing country or region	All industries	Manufacturing							Nonmanufacturing				
		Total	Chemicals	Machinery	Computer and electronic products	Electrical equipment	Transportation equipment	Other	Total	Information	Professional, technical, and scientific services	Wholesale trade	Other
All countries and regions	35,054	29,178	14,348	1,295	8,458	681	1,642	2,753	5,877	1,071	3,522	637	646
Canada	1,259	279	3	3	D	D	25	D	980	D	820	11	D
Europe	25,799	23,340	12,735	862	6,517	218	1,103	1,906	2,459	744	1,251	312	150
Belgium	263	237	D	1	D	0	D	59	26	0	0	0	26
Denmark	326	D	159	D	D	7	0	19	D	0	D	0	0
Finland	621	D	D	0	D	0	D	D	D	0	0	D	D
France	5,061	4,321	1,956	D	D	D	40	348	740	D	381	29	D
Germany	5,111	4,808	2,232	500	1,222	D	654	D	303	242	40	11	10
Ireland	276	255	D	7	0	0	0	D	20	D	D	0	0
Italy	385	361	10	D	148	D	1	37	25	D	0	D	D
Netherlands	1,532	1,324	267	D	694	4	10	D	208	0	D	D	0
Norway	25	D	D	8	0	0	0	3	D	0	D	D	0
Sweden	309	292	D	42	4	D	D	101	18	0	9	8	0
Switzerland	5,067	4,272	4,039	9	D	D	D	135	794	D	695	D	D
United Kingdom	6,646	6,413	3,586	49	1,892	2	279	605	233	174	46	10	2
Other Europe	175	154	70	D	D	0	0	25	21	0	21	0	1
Latin America and OWH	1,599	1,057	4	D	D	D	D	D	542	D	D	3	D
Mexico	7	7	0	0	0	0	2	5	0	0	0	0	0
Other Latin America and OWH	1,592	1,050	4	D	D	D	D	D	542	D	D	3	D
Africa	D	D	8	0	0	0	0	D	0	0	0	0	0
Middle East	300	215	D	*	D	0	0	24	84	D	D	*	D
Israel	223	D	D	0	D	0	0	10	D	D	D	0	*
Other Middle East	77	D	D	*	6	0	0	15	D	D	0	*	D
Asia and Pacific	4,845	3,126	1,287	205	703	154	478	298	1,719	87	1,232	308	93
Australia	140	D	6	D	0	0	0	16	D	0	D	0	D
China	29	D	0	0	D	0	0	0	D	0	0	D	0
India	5	5	4	0	0	0	0	2	0	0	0	0	0
Japan	4,047	2,744	1,275	D	484	D	478	252	1,303	D	905	D	D
Singapore	120	D	0	0	64	D	0	D	D	D	D	0	0
South Korea	254	D	0	0	0	D	0	D	D	0	D	0	D
Taiwan	49	D	2	0	D	D	0	11	D	0	D	0	0
Other Asia and Pacific ^a	201	D	0	D	D	D	0	D	D	D	D	0	0
Other ^b	D	D	D	D	D	0	D	D	93	D	D	2	D

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; OWH = Other Western Hemisphere; UBO = ultimate beneficiary owner.

^a Includes Hong Kong.

^b Includes affiliates whose immediate parent is located outside the United States but whose ultimate owner is a U.S. company.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008-10.

TABLE 13. Sales originating from domestic operations and domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by source of funds, industry, and company size: BRDIS 2008 (Millions of U.S. dollars)

Industry and company size	NAICS code	Sales originating from domestic operations	Total domestic R&D performed	Paid for by company	Paid for by others ^a		
					Total	Federal	Nonfederal
All industries	21–23, 31–33, 42–81	1,407,666	35,054	29,059	5,996	1,414	4,581
Manufacturing industries	31–33	1,156,631	29,178	24,185	4,993	1,391	3,602
Food	311	46,457	193	D	D	0	D
Beverage and tobacco products	312	31,364	51	51	0	0	0
Textile, apparel, and leather	313–16	2,424	21	20	1	0	1
Wood products	321	423	3	3	0	0	0
Printing and related support activities	323	D	2	2	0	0	0
Chemicals	325	270,795	14,348	12,589	1,759	6	1,752
Basic chemicals	3251	74,567	713	D	D	D	1
Resin, synthetic rubber, fibers, and filament	3252	7,614	58	D	D	0	D
Pharmaceuticals and medicines	3254	151,549	12,735	11,066	1,669	D	D
Other chemicals	other 325	37,065	841	D	D	0	D
Plastics and rubber products	326	59,217	434	394	41	0	41
Nonmetallic mineral products	327	17,916	179	177	2	1	1
Primary metals	331	28,930	160	160	*	0	*
Fabricated metal products	332	19,986	268	D	D	D	0
Machinery	333	64,742	1,295	1,259	36	D	D
Computer and electronic products	334	124,050	8,458	5,986	2,472	D	D
Communications equipment	3342	40,192	2,786	2,292	494	D	D
Semiconductor and other electronic components	3344	12,815	562	395	167	0	167
Navigational, measuring, electromedical, and control instruments	3345	56,999	3,765	D	D	D	D
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	14,043	1,345	D	D	0	D
Electrical equipment, appliances, and components	335	42,914	681	643	39	D	D
Transportation equipment	336	178,215	1,642	1,178	465	D	D
Automobiles, bodies, trailers, and parts	3361–63	160,333	1,313	969	345	D	D
Aerospace products and parts	3364	D	322	202	120	D	D
Other transportation	other 336	D	7	7	0	0	0
Furniture and related products	337	2,045	38	38	0	0	0
Miscellaneous manufacturing	339	39,023	851	814	37	D	D
Medical equipment and supplies manufacturing	3391	19,812	641	616	25	*	25
Other miscellaneous manufacturing	3399	19,211	210	198	11	D	D
Other manufacturing	322, 324	D	554	D	D	0	D
Nonmanufacturing industries	21–23, 42–81	251,035	5,877	4,874	1,003	23	980
Mining, extraction, and support activities	21	14,686	413	413	*	0	*
Wholesale trade	42	48,395	637	596	41	0	41
Information	51	23,103	1,071	855	216	1	215
Publishing	511	18,769	994	782	212	*	212
Telecommunications	517	D	D	D	4	1	3

TABLE 13. Sales originating from domestic operations and domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by source of funds, industry, and company size: BRDIS 2008 (Millions of U.S. dollars)

Industry and company size	NAICS code	Sales originating from domestic operations	Total domestic R&D performed	Paid for by company	Paid for by others ^a		
					Total	Federal	Nonfederal
Internet service providers, Web search portals, and data processing services	518	D	D	D	0	0	0
Other information	other 51	D	D	D	0	0	0
Professional, scientific, and technical services	54	137,564	3,522	2,784	738	22	716
Architectural, engineering, and related services	5413	19,084	362	296	66	D	D
Computer systems design and related services	5415	7,936	808	D	D	0	D
Scientific research and development services	5417	96,511	2,122	1,530	592	D	D
Other professional, scientific, and technical services	other 54	14,034	230	D	D	*	D
Other nonmanufacturing	55–56, 61, 624, 71–72, 81	27,286	233	226	7	0	7
All companies	21–23, 31–33, 42–81	1,407,666	35,054	29,059	5,996	1,414	4,581
Small companies (5–499 domestic employees) ^b	–	56,805	1,991	1,492	499	6	494
Medium and large companies (number of domestic employees)							
500–999	–	82,397	2,267	D	D	4	D
1,000–4,999	–	340,044	7,826	6,087	1,739	D	D
5,000–9,999	–	194,292	4,304	D	D	D	D
10,000–24,999	–	580,394	14,980	13,246	1,734	6	1,728
25,000 or more	–	153,733	3,686	D	D	D	237

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; NAICS = 2002 North American Industry Classification System.

^a Includes foreign parent companies.

^b The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 14. Sales originating from domestic operations, domestic R&D performance, and domestic employment by majority-owned U.S. affiliates of foreign MNCs, by selected UBO investing country: BRDIS 2008

(Millions of U.S. dollars)

Investing countries	Sales originating from domestic operations	Total domestic R&D performed	Employees (thousands)	
			Total domestic employment	Domestic R&D employment
All countries and regions	1,407,666	35,054	2,168	141
Canada	39,531	1,259	85	6
Europe	838,426	25,799	1,304	100
Belgium	27,246	263	61	1
Denmark	7,956	326	17	1
Finland	10,519	621	21	2
France	92,061	5,061	198	19
Germany	176,473	5,111	341	22
Ireland	5,238	276	11	1
Italy	18,297	385	31	2
Netherlands	143,539	1,532	121	7
Norway	2,136	25	6	*
Sweden	30,151	309	63	2
Switzerland	55,657	5,067	112	15
United Kingdom	253,897	6,646	293	25
Other Europe	15,256	175	31	2
Latin America and OWH	71,710	1,599	254	8
Mexico	3,712	7	24	*
Other Latin America and OWH	67,998	1,592	230	8
Africa	D	D	3	*
Middle East	9,335	300	16	2
Israel	7,274	223	10	1
Other Middle East	2,061	77	6	1
Asia and Pacific	393,530	4,845	461	21
Australia	8,318	140	22	1
China	D	29	1	*
India	D	5	1	*
Japan	327,305	4,047	383	17
Singapore	6,784	120	21	1
South Korea	35,623	254	11	1
Taiwan	5,640	49	7	*
Other Asia and Pacific ^a	9,294	201	16	1
Other ^b	D	D	44	5

* = amount < 500; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; OWH = Other Western Hemisphere; UBO = ultimate beneficiary owner.

^a Includes Hong Kong.

^b Includes affiliates whose immediate parent company is located outside the United States but whose ultimate owner is a U.S. company.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 15. Domestic employment and R&D employment by majority-owned U.S. affiliates of foreign MNCs, by industry and company size: BRDIS 2008

(Thousands of employees)

Industry and company size	NAICS code	Total domestic employment	Domestic R&D employment
All industries	21–23, 31–33, 42–81	2,168	141
Manufacturing industries	31–33	1,746	113
Food	311	78	1
Beverage and tobacco products	312	68	*
Textile, apparel, and leather	313–16	8	*
Wood products	321	2	*
Printing and related support activities	323	*	*
Chemicals	325	337	41
Basic chemicals	3251	64	5
Resin, synthetic rubber, fibers, and filament	3252	9	*
Pharmaceuticals and medicines	3254	206	32
Other chemicals	other 325	59	4
Plastics and rubber products	326	107	3
Nonmetallic mineral products	327	55	1
Primary metals	331	32	1
Fabricated metal products	332	70	2
Machinery	333	155	7
Computer and electronic products	334	317	34
Communications equipment	3342	63	9
Semiconductor and other electronic components	3344	48	3
Navigational, measuring, electromedical, and control instruments	3345	183	17
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	24	6
Electrical equipment, appliances, and components	335	85	3
Transportation equipment	336	193	12
Automobiles, bodies, trailers, and parts	3361–63	153	8
Aerospace products and parts	3364	34	4
Other transportation	other 336	6	*
Furniture and related products	337	12	*
Miscellaneous manufacturing	339	152	5
Medical equipment and supplies manufacturing	3391	86	3
Other miscellaneous manufacturing	3399	65	1
Other manufacturing	322, 324	76	2
Nonmanufacturing industries	21–23, 42–81	422	28
Mining, extraction, and support activities	21	33	1
Wholesale trade	42	73	3
Information	51	66	7
Publishing	511	56	6
Telecommunications	517	9	*
Internet service providers, Web search portals, and data processing services	518	1	*
Other information	other 51	*	*
Professional, scientific, and technical services	54	178	15
Architectural, engineering, and related services	5413	40	2
Computer systems design and related services	5415	18	4
Scientific research and development services	5417	73	8
Other professional, scientific, and technical services	other 54	47	2
Other nonmanufacturing	22–23, 44–49, 52–53, 55–81	71	2
All companies	21–23, 31–33, 42–81	2,168	141
Small companies (5–499 domestic employees) ^a	–	90	10
Medium and large companies (number of domestic employees)			
500–999	–	125	11
1,000–4,999	–	549	37

TABLE 15. Domestic employment and R&D employment by majority-owned U.S. affiliates of foreign MNCs, by industry and company size: BRDIS 2008

(Thousands of employees)

Industry and company size	NAICS code	Total domestic employment	Domestic R&D employment
5,000–9,999	–	364	22
10,000–24,999	–	608	45
25,000 or more	–	432	17

* = amount < 500.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; NAICS = 2002 North American Industry Classification System.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 16. Sales and R&D costs (paid for by company and paid for by others) for parent companies of U.S. MNCs, by industry and company size: BRDIS 2009

(Millions of U.S. dollars)

Industry and company size	NAICS code	Sales		R&D paid for by company				R&D paid for by others			
		Worldwide	Originating from domestic operations	Worldwide	Performed by company		Paid to others	Worldwide	Performed by company		Paid to others
					Domestic	Foreign			Domestic	Foreign	
All industries	21-23, 31-33, 42-81	7,771,183	5,294,955	234,070	162,968	43,934	27,168	48,632	35,367	2,968	10,297
Manufacturing industries	31-33	5,153,147	3,287,228	185,385	125,890	35,420	24,075	41,165	30,619	946	9,600
Food	311	553,928	384,581	3,801	2,798	764	239	46	37	6	3
Beverage and tobacco products	312	147,767	58,944	777	D	D	D	D	D	0	0
Textile, apparel, and leather	313-16	27,229	21,915	304	236	62	6	*	*	D	D
Wood products	321	14,786	D	127	120	1	6	9	9	0	1
Printing and related support activities	323	29,943	25,248	45	42	D	D	*	*	0	0
Chemicals	325	958,007	619,430	64,520	40,986	8,409	15,126	3,507	2,124	326	1,057
Basic chemicals	3251	193,525	127,173	2,017	D	651	D	70	D	D	D
Resin, synthetic rubber, fibers, and filament	3252	130,102	110,367	946	D	236	D	D	D	0	1
Pharmaceuticals and medicines	3254	397,769	262,459	55,135	34,779	6,016	14,340	3,337	1,986	313	1,038
Other chemicals	other 325	236,610	119,430	6,422	D	1,505	D	D	D	D	D
Plastics and rubber products	326	132,568	77,669	2,221	D	525	D	D	D	D	0
Nonmetallic mineral products	327	29,288	24,029	809	710	30	69	2	1	D	D
Primary metals	331	97,857	77,403	589	420	110	58	15	11	D	D
Fabricated metal products	332	53,660	38,647	515	D	63	D	D	D	D	*
Machinery	333	293,369	154,650	9,034	6,776	1,766	492	178	137	17	24
Computer and electronic products	334	726,842	426,782	51,972	39,021	10,963	1,988	6,341	5,898	214	229
Communications equipment	3342	92,344	55,178	11,766	D	2,434	D	1,266	D	D	D
Semiconductor and other electronic components	3344	150,923	88,862	22,021	16,371	5,202	449	272	202	D	D
Navigational, measuring, electromedical, and control instruments	3345	208,518	143,263	9,827	7,571	1,822	434	4,630	4,409	61	161
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	275,057	139,480	8,358	D	1,506	D	172	D	D	D
Electrical equipment, appliances, and components	335	120,092	74,159	2,981	D	955	D	74	D	D	D
Transportation equipment	336	1,017,104	699,970	31,561	21,504	7,343	2,714	30,677	22,061	359	8,258
Automobiles, bodies, trailers, and parts	3361-63	576,776	371,016	17,287	D	5,771	D	D	D	D	40
Aerospace products and parts	3364	388,088	291,033	13,491	11,108	D	D	28,367	20,395	D	D
Other transportation	other 336	52,240	37,921	782	D	D	D	D	D	0	D
Furniture and related products	337	16,467	13,635	129	111	18	*	0	0	0	0
Miscellaneous manufacturing	339	352,636	277,741	13,060	6,782	3,737	2,541	131	119	6	6
Medical equipment and supplies manufacturing	3391	303,016	247,435	11,690	D	3,550	D	D	D	6	6
Other miscellaneous manufacturing	3399	49,620	30,305	1,371	D	187	D	D	D	0	0
Other manufacturing	322, 324	581,605	D	2,940	D	D	D	D	D	D	D
Nonmanufacturing industries	21-23, 42-81	2,618,037	2,007,727	48,686	37,078	8,514	3,094	7,468	4,749	2,022	697
Mining, extraction, and support activities	21	431,685	252,941	1,756	D	178	D	D	D	D	7
Wholesale trade	42	41,788	37,074	341	332	3	6	27	26	0	*
Information	51	787,457	608,451	35,057	D	6,163	D	383	D	D	5
Publishing	511	366,662	234,497	27,735	D	5,444	D	349	D	D	5

TABLE 16. Sales and R&D costs (paid for by company and paid for by others) for parent companies of U.S. MNCs, by industry and company size: BRDIS 2009
(Millions of U.S. dollars)

Industry and company size	NAICS code	Sales		R&D paid for by company				R&D paid for by others				
		Worldwide	Originating from domestic operations	Worldwide	Performed by company			Paid to others	Worldwide	Performed by company		Paid to others
					Domestic	Foreign	Domestic			Foreign		
Telecommunications	517	283,432	280,415	1,786	D	D	D	D	D	D	0	
Internet service providers, Web search portals, and data processing services	518	31,195	21,465	1,271	D	175	D	D	D	0	0	
Other information	other 51	106,168	72,073	4,265	D	D	12	0	0	0	0	
Professional, scientific, and technical services	54	370,002	260,185	8,234	5,716	1,577	942	6,775	4,106	1,986	683	
Architectural, engineering, and related services	5413	60,809	36,001	D	D	D	1	D	D	*	D	
Computer systems design and related services	5415	186,971	127,740	4,882	D	1,227	D	664	D	D	D	
Scientific research and development services	5417	62,226	55,447	2,177	1,263	182	733	5,257	2,824	D	D	
Other professional, scientific, and technical services	other 54	59,995	40,997	D	D	D	D	D	D	D	D	
Other nonmanufacturing	22-23, 44-49, 52-53, 55-81	987,106	849,077	3,298	D	594	D	D	D	1	2	
All companies	21-23, 31-33, 42-81	7,771,183	5,294,955	234,070	162,968	43,934	27,168	48,632	35,367	2,968	10,297	
Small companies (5-499 domestic employees) ^a	-	131,516	49,241	6,001	4,225	1,216	560	374	301	26	47	
Medium and large companies (number of domestic employees)												
500-999	-	93,896	63,697	5,106	3,737	973	396	220	150	D	D	
1,000-4,999	-	866,280	582,728	39,056	27,253	8,408	3,394	1,859	1,299	474	86	
5,000-9,999	-	699,521	474,496	21,940	16,363	3,429	2,148	5,663	3,422	D	D	
10,000-24,999	-	1,937,769	1,418,434	60,957	40,474	9,586	10,897	8,243	6,227	D	D	
25,000 or more	-	4,042,201	2,706,360	101,011	70,916	20,323	9,773	32,274	23,969	D	D	

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; NAICS = 2007 North American Industry Classification System; USDIA = U.S. Direct Investment Abroad.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008-10.

TABLE 17. Domestic R&D performed by parent companies of U.S. MNCs, by character of work, industry, and company size: BRDIS 2009
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Character of work		
			Basic research	Applied research	Development
All industries	21-23, 31-33, 42-81	198,335	10,374	23,593	164,368
Manufacturing industries	31-33	156,509	8,546	19,060	128,902
Food	311	2,834	185	1,135	1,514
Beverage and tobacco products	312	394	28	48	317
Textile, apparel, and leather	313-16	236	19	32	185
Wood products	321	128	2	27	100
Printing and related support activities	323	42	2	9	32
Chemicals	325	43,110	3,983	6,941	32,186
Basic chemicals	3251	1,358	82	202	1,074
Resin, synthetic rubber, fibers, and filament	3252	669	73	200	397
Pharmaceuticals and medicines	3254	36,765	3,649	5,657	27,459
Other chemicals	other 325	4,317	178	882	3,257
Plastics and rubber products	326	1,553	139	434	980
Nonmetallic mineral products	327	712	89	69	553
Primary metals	331	432	20	87	325
Fabricated metal products	332	445	12	50	382
Machinery	333	6,913	268	826	5,819
Computer and electronic products	334	44,919	2,535	4,176	38,208
Communications equipment	3342	9,914	D	D	8,324
Semiconductor and other electronic components	3344	16,573	259	1,788	14,526
Navigational, measuring, electromedical, and control instruments	3345	11,979	641	1,485	9,853
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	6,452	D	D	5,504
Electrical equipment, appliances, and components	335	1,981	54	392	1,536
Transportation equipment	336	43,564	811	3,293	39,460
Automobiles, bodies, trailers, and parts	3361-63	10,142	467	833	8,841
Aerospace products and parts	3364	31,504	311	2,253	28,939
Other transportation	other 336	1,919	33	207	1,679
Furniture and related products	337	111	3	20	88
Miscellaneous manufacturing	339	6,901	255	978	5,669
Medical equipment and supplies manufacturing	3391	5,710	227	838	4,645
Other miscellaneous manufacturing	3399	1,191	28	140	1,023
Other manufacturing	322, 324	2,234	142	543	1,548
Nonmanufacturing industries	21-23, 42-81	41,827	1,828	4,533	35,466
Mining, extraction, and support activities	21	1,685	72	519	1,094
Wholesale trade	42	359	24	53	282
Information	51	27,399	1,224	1,728	24,446
Publishing	511	21,609	1,121	1,297	19,192
Telecommunications	517	995	29	252	713
Internet service providers, Web search portals, and data processing services	518	D	D	39	980
Other information	other 51	D	D	140	3,561
Professional, scientific, and technical services	54	9,821	461	2,060	7,300
Architectural, engineering, and related services	5413	672	6	28	638
Computer systems design and related services	5415	4,158	95	661	3,402
Scientific research and development services	5417	4,086	343	1,354	2,389
Other professional, scientific, and technical services	other 54	905	17	17	870
Other nonmanufacturing	22-23, 44-49, 52-53, 55-81	2,564	46	174	2,344
All companies	21-23, 31-33, 42-81	198,335	10,374	23,593	164,368
Small companies (5-499 domestic employees) ^a	-	4,526	180	635	3,711
Medium and large companies (number of domestic employees)					
500-999	-	3,886	237	529	3,120
1,000-4,999	-	28,552	1,127	3,417	24,008

TABLE 17. Domestic R&D performed by parent companies of U.S. MNCs, by character of work, industry, and company size: BRDIS 2009
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Character of work		
			Basic research	Applied research	Development
5,000–9,999	–	19,785	970	3,151	15,664
10,000–24,999	–	46,701	4,123	6,330	36,248
25,000 or more	–	94,885	3,736	9,532	81,617

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

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; NAICS = 2007 North American Industry Classification System; USDIA = U.S. Direct Investment Abroad.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 18. Domestic R&D performed by parent companies of U.S. MNCs, by source of funds, state, and company size: BRDIS 2009
(Millions of U.S. dollars)

State and company size	Total domestic R&D performed	Paid for by company	Paid for by others		
			Total	Federal	Nonfederal
All states	198,335	162,968	35,367	27,386	7,982
Alabama	541	170	371	368	3
Alaska	18	14	4	D	D
Arizona	3,621	2,126	1,495	1,440	55
Arkansas	94	93	1	*	1
California	45,908	38,139	7,769	6,335	1,433
Colorado	2,387	2,122	265	242	22
Connecticut	8,809	7,621	1,188	D	D
Delaware	1,199	1,151	49	4	45
District of Columbia	304	D	D	D	4
Florida	2,243	1,408	836	699	137
Georgia	2,083	1,565	518	397	121
Hawaii	134	D	D	10	D
Idaho	725	D	D	4	D
Illinois	6,157	5,797	360	158	202
Indiana	3,936	3,419	518	D	D
Iowa	1,516	D	D	D	D
Kansas	662	465	197	*	197
Kentucky	534	520	13	6	7
Louisiana	92	70	22	D	D
Maine	368	356	12	12	*
Maryland	2,058	1,220	838	653	185
Massachusetts	8,356	7,282	1,074	754	320
Michigan	9,597	8,985	612	287	324
Minnesota	4,596	4,116	479	353	127
Mississippi	70	52	18	17	1
Missouri	7,942	D	D	D	46
Montana	15	14	1	*	1
Nebraska	254	242	12	*	12
Nevada	295	289	6	4	2
New Hampshire	1,544	D	D	D	13
New Jersey	14,140	13,204	936	64	872
New Mexico	396	125	271	263	9
New York	7,272	5,539	1,733	1,605	129
North Carolina	3,630	3,144	487	85	402
North Dakota	144	143	2	*	2
Ohio	4,417	3,443	974	839	135
Oklahoma	206	199	8	4	3
Oregon	3,165	3,138	27	11	16
Pennsylvania	6,439	5,996	443	67	376
Rhode Island	291	265	27	26	1
South Carolina	700	680	20	12	8
South Dakota	31	D	D	D	*
Tennessee	681	624	57	27	30
Texas	10,423	8,501	1,922	1,296	626
Utah	710	606	104	85	19
Vermont	281	275	7	6	*
Virginia	3,197	1,247	1,950	1,841	109
Washington	13,549	13,431	118	92	27
West Virginia	195	189	6	*	6
Wisconsin	2,133	1,824	309	D	D
Wyoming	11	8	3	D	D
Undistributed ^a	10,265	D	D	D	D
All companies	198,335	162,968	35,367	27,386	7,982
Small companies (5–499 domestic employees) ^b	4,526	4,225	301	55	246

TABLE 18. Domestic R&D performed by parent companies of U.S. MNCs, by source of funds, state, and company size: BRDIS 2009 (Millions of U.S. dollars)

State and company size	Total domestic R&D performed	Paid for by company	Paid for by others		
			Total	Federal	Nonfederal
Medium and large companies (number of domestic employees)					
500–999	3,886	3,737	150	D	D
1,000–4,999	28,552	27,253	1,299	325	974
5,000–9,999	19,785	16,363	3,422	392	3,030
10,000–24,999	46,701	40,474	6,227	3,563	2,663
25,000 or more	94,885	70,916	23,969	D	D

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; USDIA = U.S. Direct Investment Abroad.

^a Includes data reported on Form BRDI-1 that were not allocated to a specific state. Data reported on Form BRDI-1A were allocated to the state in the address on the company's survey form, which is usually the company's headquarters.

^b The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 19. Domestic R&D performed by parent companies of U.S. MNCs, by state and selected industry: BRDIS 2009

(Millions of U.S. dollars)

State	Manufacturing								Nonmanufacturing				
	All industries	Total	Chemicals	Machinery	Computer and electronic products	Electrical equipment	Transportation equipment	Other	Total	Information	Professional, technical, and scientific services	Wholesale trade	Other
All states	198,335	156,509	43,110	6,913	44,919	1,981	43,564	16,021	41,827	27,399	9,821	359	4,248
Alabama	541	482	17	1	387	D	43	D	60	40	16	0	3
Alaska	18	17	*	0	D	0	D	2	1	0	1	0	0
Arizona	3,621	3,303	82	37	1,694	76	1,249	165	318	265	16	5	32
Arkansas	94	87	10	6	19	11	7	34	7	*	3	0	3
California	45,908	33,864	7,188	1,475	16,592	173	6,954	1,480	12,044	9,286	1,541	36	1,181
Colorado	2,387	1,888	89	72	1,348	5	306	69	499	412	50	2	35
Connecticut	8,809	8,566	D	189	107	D	D	D	243	108	109	D	D
Delaware	1,199	D	114	0	50	D	5	D	D	D	1	0	D
District of Columbia	304	259	D	0	D	1	D	D	45	25	20	0	0
Florida	2,243	1,740	118	30	717	19	707	149	503	398	68	3	33
Georgia	2,083	1,424	72	60	382	21	554	334	659	400	147	2	111
Hawaii	134	130	D	0	D	0	10	D	4	D	D	0	*
Idaho	725	697	4	1	D	0	*	D	28	17	11	0	*
Illinois	6,157	5,590	2,224	1,332	739	68	576	652	568	169	52	4	343
Indiana	3,936	3,577	D	474	183	69	165	D	360	43	D	0	D
Iowa	1,516	1,491	146	399	583	D	D	256	25	21	2	0	2
Kansas	662	433	152	27	92	3	D	D	229	1	222	0	5
Kentucky	534	509	370	3	37	16	D	D	25	2	7	0	16
Louisiana	92	75	6	10	7	0	D	D	17	*	D	0	D
Maine	368	352	1	0	270	D	D	D	16	1	D	0	D
Maryland	2,058	1,861	537	74	238	0	902	110	197	46	123	0	28
Massachusetts	8,356	5,521	2,020	178	1,765	30	976	553	2,836	1,178	1,516	0	142
Michigan	9,597	9,292	207	33	278	D	8,001	D	305	156	123	D	D
Minnesota	4,596	4,050	189	149	1,876	69	171	1,596	545	441	48	D	D
Mississippi	70	54	17	*	23	0	5	10	16	1	12	0	3
Missouri	7,942	7,513	D	18	29	61	D	D	429	133	286	0	10
Montana	15	12	*	1	10	0	1	*	2	1	2	0	0
Nebraska	254	137	39	21	13	0	D	D	116	96	4	0	16
Nevada	295	282	*	1	16	D	D	D	12	4	3	0	6
New Hampshire	1,544	1,341	31	27	1,235	D	14	D	202	161	40	2	*
New Jersey	14,140	13,066	10,313	29	866	24	138	1,696	1,074	187	729	22	136
New Mexico	396	312	11	0	297	0	D	D	84	4	81	0	0
New York	7,272	4,973	1,376	533	597	48	2,000	420	2,300	2,073	81	0	146
North Carolina	3,630	2,224	705	60	910	79	236	234	1,406	947	405	0	54
North Dakota	144	D	2	54	D	0	D	D	D	D	0	0	0
Ohio	4,417	4,145	1,563	104	365	126	1,361	626	272	53	132	2	85
Oklahoma	206	127	8	57	19	*	10	32	80	5	11	0	63

TABLE 19. Domestic R&D performed by parent companies of U.S. MNCs, by state and selected industry: BRDIS 2009

(Millions of U.S. dollars)

State	Manufacturing								Nonmanufacturing				
	All industries	Total	Chemicals	Machinery	Computer and electronic products	Electrical equipment	Transportation equipment	Other	Total	Information	Professional, technical, and scientific services	Wholesale trade	Other
Oregon	3,165	2,755	6	202	2,091	14	101	341	410	358	D	D	6
Pennsylvania	6,439	5,642	3,339	82	735	176	265	1,044	797	370	287	0	140
Rhode Island	291	242	18	0	43	5	D	D	49	D	26	0	D
South Carolina	700	516	65	4	88	12	277	70	183	10	D	0	D
South Dakota	31	29	1	0	D	6	2	D	2	D	D	0	0
Tennessee	681	629	195	37	216	36	37	108	52	D	26	0	D
Texas	10,423	6,977	272	483	3,554	62	1,357	1,250	3,446	1,478	721	5	1,241
Utah	710	442	82	1	97	3	191	68	268	227	32	0	9
Vermont	281	D	6	0	16	D	3	D	D	D	D	0	D
Virginia	3,197	2,547	119	1	681	7	1,395	343	650	124	514	0	12
Washington	13,549	D	D	26	677	3	D	104	D	D	145	4	D
West Virginia	195	191	D	*	2	0	D	D	4	1	4	0	0
Wisconsin	2,133	1,770	241	206	138	199	567	419	363	D	D	0	D
Wyoming	11	7	1	D	D	0	2	1	4	D	*	0	D
Undistributed ^a	10,265	D	D	D	D	D	D	D	D	D	D	D	D

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; USDIA = U.S. Direct Investment Abroad.

^a Includes data reported on Form BRDI-1 that were not allocated to a specific state. Data reported on Form BRDI-1A were allocated to the state in the address on the company's survey form, which is usually the company's headquarters.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 20. Worldwide, domestic, and foreign employment and R&D employment by parent companies of U.S. MNCs, by industry and company size: BRDIS 2009

(Thousands of employees)

Industry and company size	NAICS code	Total employment			R&D employment		
		Worldwide	Domestic	Foreign	Worldwide	Domestic	Foreign
All industries	21-23, 31-33, 42-81	19,190	11,386	7,805	1,170	788	382
Manufacturing industries	31-33	12,385	6,567	5,817	809	556	253
Food	311	1,364	862	502	19	12	6
Beverage and tobacco products	312	256	87	169	2	D	D
Textile, apparel, and leather	313-16	169	89	80	2	D	D
Wood products	321	68	56	12	1	1	*
Printing and related support activities	323	149	115	34	1	D	D
Chemicals	325	1,794	938	856	154	114	40
Basic chemicals	3251	303	165	137	11	7	4
Resin, synthetic rubber, fibers, and filament	3252	189	124	66	6	5	1
Pharmaceuticals and medicines	3254	755	418	337	107	82	24
Other chemicals	other 325	547	231	317	31	20	11
Plastics and rubber products	326	385	221	164	16	9	7
Nonmetallic mineral products	327	95	55	39	3	2	*
Primary metals	331	273	179	94	4	3	1
Fabricated metal products	332	225	152	73	5	4	1
Machinery	333	1,069	546	522	52	35	16
Computer and electronic products	334	2,251	1,046	1,205	287	193	94
Communications equipment	3342	250	119	131	68	41	27
Semiconductor and other electronic components	3344	548	211	337	99	60	39
Navigational, measuring, electromedical, and control instruments	3345	862	499	363	76	63	13
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	591	218	373	44	29	15
Electrical equipment, appliances, and components	335	566	225	341	28	13	16
Transportation equipment	336	2,628	1,398	1,230	173	122	51
Automobiles, bodies, trailers, and parts	3361-63	1,475	563	912	74	43	31
Aerospace products and parts	3364	1,026	733	293	93	73	19
Other transportation	other 336	127	103	25	6	5	1
Furniture and related products	337	85	64	21	1	1	*
Miscellaneous manufacturing	339	570	298	272	45	32	13
Medical equipment and supplies manufacturing	3391	426	224	202	36	26	10
Other miscellaneous manufacturing	3399	145	75	70	9	7	3
Other manufacturing	322, 324	438	236	202	16	10	6
Nonmanufacturing industries	21-23, 42-81	6,806	4,818	1,987	361	232	129
Mining, extraction, and support activities	21	312	177	135	7	6	1
Wholesale trade	42	98	82	15	3	3	*
Information	51	1,939	1,328	611	205	129	75
Publishing	511	921	399	522	167	99	68
Telecommunications	517	650	648	2	9	9	*

TABLE 20. Worldwide, domestic, and foreign employment and R&D employment by parent companies of U.S. MNCs, by industry and company size: BRDIS 2009
(Thousands of employees)

Industry and company size	NAICS code	Total employment			R&D employment		
		Worldwide	Domestic	Foreign	Worldwide	Domestic	Foreign
Internet service providers, Web search portals, and data processing services	518	126	86	40	12	9	3
Other information	other 51	243	196	47	17	12	4
Professional, scientific, and technical services	54	1,355	767	587	121	74	46
Architectural, engineering, and related services	5413	167	104	63	5	5	*
Computer systems design and related services	5415	671	394	277	65	38	27
Scientific research and development services	5417	117	81	36	36	20	15
Other professional, scientific, and technical services	other 54	400	189	211	15	11	3
Other nonmanufacturing	22–23, 44–49, 52–53, 55–81	3,102	2,463	639	26	19	6
All companies	21–23, 31–33, 42–81	19,190	11,386	7,805	1,170	788	382
Small companies (5–499 domestic employees) ^a	–	349	124	225	38	24	14
Medium and large companies (number of domestic employees)							
500–999	–	346	165	181	34	21	13
1,000–4,999	–	2,598	1,377	1,221	209	132	77
5,000–9,999	–	2,077	1,144	933	148	95	53
10,000–24,999	–	3,724	2,237	1,487	265	190	75
25,000 or more	–	10,097	6,339	3,758	476	326	150

* = amount < 500; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; NAICS = 2007 North American Industry Classification System; USDIA = U.S. Direct Investment Abroad.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 21. Summary BRDIS and USDIA survey data for worldwide, domestic, and foreign activity of U.S. parent companies and their affiliates: 2009

Characteristics	R&D performance		Employees			
	Companies ^a	Expenditures (US\$millions)	Companies ^a	All (thousands)	Companies ^a	R&D (thousands)
BRDIS						
Domestic activity (U.S. parents)						
All industries	1,698	198,335	1,772	11,386	1,655	788
Manufacturing	1,280	156,509	1,318	6,567	1,250	556
Nonmanufacturing	418	41,827	454	4,818	405	232
Foreign activity						
All industries	928	46,902	1,358	7,805	866	382
Manufacturing	718	36,367	1,007	5,817	656	253
Nonmanufacturing	210	10,536	351	1,987	210	129
Worldwide U.S. MNCs' activity						
All industries	1,699	245,238	1,772	19,190	1,659	1,170
Manufacturing	1,281	192,875	1,318	12,385	1,252	809
Nonmanufacturing	418	52,362	454	6,806	407	361
Foreign/worldwide (%)						
All industries	na	19.13	na	40.67	na	32.65
Manufacturing	na	18.86	na	46.97	na	31.27
Nonmanufacturing	na	20.12	na	29.19	na	35.73
USDIA survey						
Domestic activity (U.S. parents)						
All industries	1,113	197,726	1,768	11,395	1,113	786
Manufacturing	805	149,552	1,242	6,175	805	548
Nonmanufacturing	308	48,174	526	5,220	308	238
Foreign activity (MOFAs)						
All industries	670	37,629	1,738	6,797	670	277
Manufacturing	513	30,214	1,220	4,865	513	207
Nonmanufacturing	157	7,415	518	1,932	157	70
Worldwide U.S. MNCs' activity						
All industries	1,113	235,355	1,768	18,192	1,095	1,063
Manufacturing	805	179,766	1,242	11,040	802	755
Nonmanufacturing	308	55,589	526	7,152	293	308
Foreign/worldwide (%)						
All industries	na	15.99	na	37.36	na	26.06
Manufacturing	na	16.81	na	44.07	na	27.42
Nonmanufacturing	na	13.34	na	27.01	na	22.73

na = not applicable.

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; MOFA = majority-owned foreign affiliate; USDIA = U.S. Direct Investment Abroad.

^a Companies reporting nonzero value for item.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The BRDIS industry classification is based on the dominant business code for domestic R&D performance, where available. For BRDIS companies that did not report business codes, the classification used for sampling was assigned. The USDIA survey industry classification is based on the industry of the parent company.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 22. Summary BRDIS and USDIA survey data for foreign activity of U.S. parent companies, by selected host country: 2009

Host country	BRDIS foreign activity		USDIA survey MOFAs				
	Matched U.S. parent companies ^a	R&D performed (US\$millions)	Matched U.S. parent companies ^b	Number of MOFAs	R&D performed (US\$millions)	Employees (thousands)	
						All	R&D
All host countries	928	46,902	670	3,697	37,629	6,797	277
Canada	298	3,274	185	233	2,778	453	23
China	318	2,522	125	204	1,544	695	17
France	258	2,175	154	235	1,894	291	12
Germany	327	6,595	227	361	6,978	468	40
India	231	2,874	66	86	1,372	371	32
Ireland	101	941	59	83	1,043	82	3
Israel	90	2,098	39	39	1,753	41	11
Italy	166	854	114	114	742	148	5
Japan	205	2,581	112	133	1,819	171	8
Russia	56	248	19	21	68	71	1
Singapore	135	782	62	74	691	110	3
South Korea	108	737	63	78	740	91	5
Sweden	124	1,176	55	69	1,127	60	4
United Kingdom	390	5,546	267	390	5,458	604	28
All other	686	14,500	377	1,577	9,622	3,142	84

BRDIS = Business R&D and Innovation Survey; MOFA = majority-owned foreign affiliate; USDIA = U.S. Direct Investment Abroad.

^a BRDIS companies are matched to USDIA survey parents with a nonzero value for foreign R&D performed. Each matched parent company is counted once in the all-host countries total.

^b The USDIA survey matched U.S. parent companies that owned R&D-performing MOFAs; that is, the survey matched parent companies that owned at least one MOFA with a nonzero value for R&D performed. Each matched parent company is counted once in the all host countries total and also is counted once in each country in which it has a MOFA that performed R&D. Because a parent company may have R&D-performing MOFAs in more than one country, the sum across countries exceeds the all countries total.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 23. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by character of work, industry, and company size: BRDIS 2009 (Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Character of work		
			Basic research	Applied research	Development
All industries	21-23, 31-33, 42-81	35,538	1,698	6,150	27,690
Manufacturing industries	31-33	29,646	1,424	4,612	23,610
Food	311	265	13	67	185
Beverage and tobacco products	312	17	*	D	D
Textile, apparel, and leather	313-16	59	5	D	D
Wood products	321	6	0	0	6
Printing and related support activities	323	*	*	*	*
Chemicals	325	15,466	689	2,570	12,207
Basic chemicals	3251	386	21	106	258
Resin, synthetic rubber, fibers, and filament	3252	458	56	144	258
Pharmaceuticals and medicines	3254	13,902	590	2,186	11,126
Other chemicals	other 325	721	21	134	565
Plastics and rubber products	326	255	7	20	228
Nonmetallic mineral products	327	60	7	7	46
Primary metals	331	97	4	13	80
Fabricated metal products	332	170	8	30	132
Machinery	333	760	17	117	626
Computer and electronic products	334	8,446	501	1,044	6,901
Communications equipment	3342	1,684	77	83	1,524
Semiconductor and other electronic components	3344	794	3	29	762
Navigational, measuring, electromedical, and control instruments	3345	4,324	364	804	3,156
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	1,645	58	127	1,460
Electrical equipment, appliances, and components	335	613	21	101	491
Transportation equipment	336	2,034	89	323	1,621
Automobiles, bodies, trailers, and parts	3361-63	1,695	86	183	1,427
Aerospace products and parts	3364	323	3	139	182
Other transportation	other 336	15	*	1	13
Furniture and related products	337	23	2	2	20
Miscellaneous manufacturing	339	855	45	147	663
Medical equipment and supplies manufacturing	3391	594	35	93	465
Other miscellaneous manufacturing	3399	261	9	53	199
Other manufacturing	322, 324	521	15	D	D
Nonmanufacturing industries	21-23, 42-81	5,891	274	1,537	4,080
Mining, extraction, and support activities	21	D	D	D	D
Wholesale trade	42	546	20	79	448
Information	51	1,487	69	113	1,305
Publishing	511	1,160	28	81	1,051
Telecommunications	517	45	D	D	28
Internet service providers, Web search portals, and data processing services	518	D	D	D	D
Other information	other 51	D	D	D	D
Professional, scientific, and technical services	54	2,986	149	1,268	1,569
Architectural, engineering, and related services	5413	377	6	50	321
Computer systems design and related services	5415	558	2	D	D
Scientific research and development services	5417	1,713	135	883	695
Other professional, scientific, and technical services	other 54	338	6	D	D
Other nonmanufacturing	22-23, 44-49, 52-53, 55-81	D	D	D	D
All companies	21-23, 31-33, 42-81	35,538	1,698	6,150	27,690
Small companies (5-499 domestic employees) ^a	-	2,171	187	435	1,549
Medium and large companies (number of domestic employees)					
500-999	-	1,782	148	295	1,339
1,000-4,999	-	8,283	397	1,619	6,266

TABLE 23. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by character of work, industry, and company size: BRDIS 2009 (Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Character of work		
			Basic research	Applied research	Development
5,000–9,999	–	6,292	170	1,264	4,858
10,000–24,999	–	13,582	584	1,927	11,072
25,000 or more	–	3,428	213	609	2,606

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; NAICS = 2007 North American Industry Classification System.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 24. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by source of funds, state, and company size: BRDIS 2009

(Millions of U.S. dollars)

State and company size	Total domestic R&D performed	Paid for by company	Paid for by others ^a		
			Total	Federal	Nonfederal
All states	35,538	27,798	7,739	1,749	5,990
Alabama	116	D	D	D	1
Alaska	8	2	6	0	6
Arizona	405	357	48	*	48
Arkansas	19	18	1	0	1
California	6,552	5,191	1,361	56	1,305
Colorado	413	392	20	*	20
Connecticut	571	560	11	1	10
Delaware	D	13	D	*	D
District of Columbia	5	1	4	0	4
Florida	371	330	41	11	30
Georgia	328	278	50	4	46
Hawaii	45	D	D	0	D
Idaho	24	20	4	0	4
Illinois	1,113	1,100	14	1	13
Indiana	351	217	134	D	D
Iowa	93	91	2	0	2
Kansas	357	311	46	0	46
Kentucky	74	67	7	6	1
Louisiana	10	9	1	0	1
Maine	12	12	*	0	*
Maryland	706	609	97	31	66
Massachusetts	2,461	1,564	897	16	882
Michigan	1,299	945	354	5	349
Minnesota	944	614	330	D	D
Mississippi	27	27	0	0	0
Missouri	198	194	4	2	2
Montana	6	6	*	0	*
Nebraska	22	21	1	0	1
Nevada	25	24	2	1	*
New Hampshire	1,194	D	D	D	10
New Jersey	5,782	4,974	808	12	796
New Mexico	13	13	*	0	*
New York	606	557	49	*	49
North Carolina	906	804	102	0	102
North Dakota	D	D	*	*	0
Ohio	726	610	117	3	114
Oklahoma	28	21	7	0	7
Oregon	199	D	D	1	D
Pennsylvania	1,856	1,550	306	12	295
Rhode Island	58	58	*	0	*
South Carolina	290	276	15	3	12
South Dakota	25	D	D	D	9
Tennessee	167	131	36	D	D
Texas	2,679	2,044	635	D	D
Utah	51	48	3	0	3
Vermont	4	4	1	0	1
Virginia	157	127	29	0	29
Washington	302	222	81	0	81
West Virginia	D	D	*	0	*
Wisconsin	196	149	47	0	47
Wyoming	0	0	0	0	0
Undistributed ^b	D	D	D	D	D

TABLE 24. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by source of funds, state, and company size: BRDIS 2009

(Millions of U.S. dollars)

State and company size	Total domestic R&D performed	Paid for by company	Paid for by others ^a		
			Total	Federal	Nonfederal
All companies	35,538	27,798	7,739	1,749	5,990
Small companies (5–499 domestic employees) ^c	2,171	1,413	758	10	748
Medium and large companies (number of domestic employees)					
500–999	1,782	D	D	12	D
1,000–4,999	8,283	6,355	1,927	86	1,841
5,000–9,999	6,292	5,548	744	D	D
10,000–24,999	13,582	11,212	2,370	D	D
25,000 or more	3,428	D	D	D	113

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company.

^a Includes foreign parent companies.

^b Includes data reported on Form BRDI-1 that were not allocated to a specific state. Data reported on Form BRDI-1A were allocated to the state in the address on the company's survey form, which is usually the company's headquarters.

^c The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 25. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by state and selected industry: BRDIS 2009

(Millions of U.S. dollars)

State	All industries	Manufacturing							Nonmanufacturing				
		Total	Chemicals	Machinery	Computer and electronic products	Electrical equipment	Transportation equipment	Other	Total	Information	Professional, technical, and scientific services	Wholesale trade	Other
All states	35,538	29,646	15,466	760	8,446	613	2,034	2,328	5,891	1,487	2,986	546	871
Alabama	116	113	4	0	94	D	0	D	3	2	1	0	0
Alaska	8	8	0	0	0	0	6	2	0	0	0	0	0
Arizona	405	316	62	27	154	D	D	3	89	D	D	D	0
Arkansas	19	19	6	2	0	11	0	1	*	0	*	0	0
California	6,552	5,249	2,940	41	1,974	48	142	104	1,303	748	449	43	63
Colorado	413	364	13	10	249	1	D	D	49	27	17	2	3
Connecticut	571	547	476	8	27	2	3	30	23	1	17	D	D
Delaware	D	D	D	0	7	0	0	D	0	0	0	0	0
District of Columbia	5	1	1	0	0	0	0	0	4	3	1	0	0
Florida	371	341	38	5	258	4	D	D	30	11	16	3	0
Georgia	328	296	151	4	54	D	10	D	31	D	6	2	D
Hawaii	45	44	1	0	D	0	0	D	1	*	1	0	0
Idaho	24	23	1	1	2	0	0	19	1	*	1	0	0
Illinois	1,113	1,071	674	105	136	14	30	112	43	36	6	0	*
Indiana	351	322	D	0	36	*	167	D	29	0	29	0	0
Iowa	93	89	18	D	8	D	*	11	3	3	*	0	0
Kansas	357	D	D	16	D	0	D	3	D	0	D	0	D
Kentucky	74	70	18	2	23	7	1	20	4	2	2	*	0
Louisiana	10	9	8	0	0	0	0	1	2	0	2	0	0
Maine	12	D	D	0	0	0	0	D	D	D	D	0	0
Maryland	706	635	470	1	63	0	D	D	71	3	D	D	0
Massachusetts	2,461	1,599	1,103	6	442	1	0	46	863	D	694	D	D
Michigan	1,299	1,161	110	36	41	5	874	94	138	D	69	23	D
Minnesota	944	919	5	15	718	D	D	136	25	17	3	0	6
Mississippi	27	27	12	0	16	0	0	*	0	0	0	0	0
Missouri	198	196	81	D	10	9	13	D	2	0	2	0	0
Montana	6	2	1	0	0	0	0	1	5	*	4	0	0
Nebraska	22	D	D	0	0	0	0	D	D	0	D	3	0
Nevada	25	5	*	1	*	D	0	D	21	D	D	0	D
New Hampshire	1,194	D	7	0	D	D	7	D	D	1	D	0	0
New Jersey	5,782	5,585	5,139	3	266	4	25	148	197	8	143	23	23
New Mexico	13	11	3	0	8	0	0	*	2	2	0	0	0
New York	606	493	77	53	242	32	25	64	113	61	24	9	20
North Carolina	906	769	309	0	268	70	106	16	137	7	124	6	1
North Dakota	D	D	*	D	0	0	*	*	0	0	0	0	0
Ohio	726	D	204	40	157	8	69	D	D	1	D	*	D
Oklahoma	28	21	1	0	D	0	D	0	7	0	*	0	6
Oregon	199	D	5	2	48	7	D	D	D	D	*	1	0

TABLE 25. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by state and selected industry: BRDIS 2009

(Millions of U.S. dollars)

State	All industries	Manufacturing							Nonmanufacturing				
		Total	Chemicals	Machinery	Computer and electronic products	Electrical equipment	Transportation equipment	Other	Total	Information	Professional, technical, and scientific services	Wholesale trade	Other
Pennsylvania	1,856	1,711	1,223	59	295	D	49	D	145	D	95	D	0
Rhode Island	58	D	1	0	10	0	1	D	D	0	*	0	D
South Carolina	290	D	13	D	13	6	28	D	D	*	D	0	0
South Dakota	25	D	D	0	D	0	0	D	D	0	D	0	0
Tennessee	167	160	28	3	91	D	14	D	8	*	8	0	0
Texas	2,679	1,721	333	11	945	23	4	405	958	D	313	3	D
Utah	51	44	4	3	26	1	0	9	7	0	1	4	1
Vermont	4	3	1	0	*	2	0	0	2	0	0	0	2
Virginia	157	29	4	8	1	*	6	9	128	39	89	0	0
Washington	302	203	11	4	164	0	17	6	100	12	83	4	0
West Virginia	D	D	D	0	0	0	0	0	*	0	*	0	0
Wisconsin	196	185	33	29	35	D	1	D	11	8	3	0	0
Wyoming	0	0	0	0	0	0	0	0	0	0	0	0	0
Undistributed ^a	D	D	D	153	D	D	D	D	D	D	D	D	D

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company.

^a Includes data reported on Form BRDI-1 that were not allocated to a specific state. Data reported on Form BRDI-1A were allocated to the state in the address on the company's survey form, which is usually the company's headquarters.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008-10.

TABLE 26. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by selected UBO investing country and state: BRDIS 2009

(Millions of U.S. dollars)

State	All countries and regions	Canada	France	Germany	Japan	Netherlands	Switzerland	United Kingdom	Other ^a
All states	35,538	848	4,679	4,561	4,057	1,608	5,977	6,473	7,335
Alabama	116	3	*	D	D	*	*	D	D
Alaska	8	0	0	6	0	0	0	2	0
Arizona	405	6	D	44	39	72	D	D	145
Arkansas	19	0	*	*	11	0	5	0	3
California	6,552	60	972	563	931	203	2,499	327	997
Colorado	413	D	1	22	78	D	12	22	235
Connecticut	571	7	30	D	2	D	1	17	D
Delaware	D	0	D	6	0	*	*	D	7
District of Columbia	5	0	0	4	1	0	*	0	1
Florida	371	*	44	177	2	D	29	16	D
Georgia	328	6	D	22	11	38	44	19	D
Hawaii	45	*	0	D	0	D	8	6	D
Idaho	24	0	0	1	0	0	5	13	4
Illinois	1,113	D	15	74	637	39	27	115	D
Indiana	351	3	41	70	18	1	1	186	30
Iowa	93	0	23	16	1	*	18	*	35
Kansas	357	D	*	D	0	D	1	0	204
Kentucky	74	0	7	17	6	4	15	20	5
Louisiana	10	0	0	1	0	0	*	1	9
Maine	12	0	0	D	0	0	*	D	D
Maryland	706	4	D	6	D	D	2	D	D
Massachusetts	2,461	67	91	240	575	111	714	349	314
Michigan	1,299	45	88	645	312	D	10	29	D
Minnesota	944	31	6	58	6	*	D	D	479
Mississippi	27	0	0	19	3	4	0	0	2
Missouri	198	1	14	55	7	*	2	5	114
Montana	6	0	0	*	0	0	*	*	6
Nebraska	22	0	0	3	0	0	D	0	D
Nevada	25	0	0	*	0	0	2	1	22
New Hampshire	1,194	0	D	17	17	*	D	D	D
New Jersey	5,782	1	1,172	289	409	33	1,607	2,018	254
New Mexico	13	2	0	11	0	*	*	0	0
New York	606	101	58	56	50	D	28	D	67
North Carolina	906	D	230	206	30	23	143	16	D
North Dakota	D	0	0	*	0	0	0	*	D
Ohio	726	1	17	201	173	D	129	61	D
Oklahoma	28	*	3	1	0	0	*	3	21
Oregon	199	1	13	142	4	2	2	D	D
Pennsylvania	1,856	30	681	349	219	D	63	229	D

TABLE 26. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by selected UBO investing country and state: BRDIS 2009
(Millions of U.S. dollars)

State	All countries and regions	Canada	France	Germany	Japan	Netherlands	Switzerland	United Kingdom	Other ^a
Rhode Island	58	0	1	*	4	D	10	22	D
South Carolina	290	*	D	69	11	1	*	5	D
South Dakota	25	0	0	D	9	0	D	D	D
Tennessee	167	1	21	80	17	4	1	24	20
Texas	2,679	211	309	80	35	428	D	139	D
Utah	51	0	7	21	9	2	*	0	12
Vermont	4	0	*	*	0	1	2	0	2
Virginia	157	D	D	17	*	2	8	13	25
Washington	302	1	25	43	62	D	D	14	D
West Virginia	D	0	0	D	0	0	0	*	*
Wisconsin	196	7	17	19	0	15	29	16	93
Wyoming	0	0	0	0	0	0	0	0	0
Undistributed ^b	D	D	D	D	D	D	D	D	D

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; UBO = ultimate beneficiary owner.

^a Includes affiliates whose immediate parent company is located outside the United States but whose ultimate owner is a U.S. company.

^b Includes data reported on Form BRDI-1 that were not allocated to a specific state. Data reported on Form BRDI-1A were allocated to the state in the address on the company's survey form, which is usually the company's headquarters.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 27. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by selected UBO investing country and industry: BRDIS 2009
(Millions of U.S. dollars)

Investing country or region	All industries	Manufacturing							Nonmanufacturing					
		Total	Chemicals	Machinery	Computer and electronic products	Electrical equipment	Transportation equipment	Other	Total	Information	Professional, technical, and scientific services	Wholesale trade	Other	
All countries and regions	35,538	29,646	15,466	760	8,446	613	2,034	2,328	5,891	1,487		2,986	546	871
Canada	848	193	6	1	D	5	57	D	655	D		D	D	6
Europe	26,151	22,902	12,641	470	5,798	481	1,507	2,004	3,249	1,071		1,721	353	104
Belgium	229	D	D	*	7	0	D	D	D	0		0	D	D
Denmark	266	D	55	69	3	0	0	D	D	0		D	0	0
Finland	592	D	8	5	D	0	0	D	D	0		0	D	6
France	4,679	3,492	2,207	6	961	D	92	D	1,187	D		391	D	D
Germany	4,561	4,362	2,034	95	1,180	17	904	131	199	D		29	D	D
Ireland	642	D	D	D	0	D	0	D	D	D		D	0	0
Italy	478	D	13	D	247	6	D	D	D	0		6	0	D
Netherlands	1,608	1,327	212	D	710	6	4	D	281	0		D	D	D
Norway	37	20	1	9	0	0	0	9	17	0		9	8	0
Sweden	418	415	D	9	9	D	D	D	3	3		0	0	0
Switzerland	5,977	5,083	4,350	18	D	D	5	D	894	D		838	5	D
United Kingdom	6,473	6,158	3,419	36	1,947	*	244	511	315	155		90	D	D
Other Europe	193	D	D	D	D	0	D	D	D	D		D	0	D
Latin America and OWH	1,894	855	D	D	D	0	D	D	1,040	0		D	3	D
Mexico	3	3	0	0	0	0	1	2	0	0		0	0	0
Other Latin America and OWH	1,891	852	D	D	D	0	D	D	1,040	0		D	3	D
Africa	D	D	7	0	0	0	0	D	0	0		0	0	0
Middle East	794	D	D	0	2	0	D	D	D	D		D	D	D
Israel	D	D	D	0	2	0	D	D	D	0		D	0	D
Other Middle East	D	D	D	0	0	0	0	D	D	D		0	D	0
Asia and Pacific	4,738	3,947	2,011	D	934	127	455	D	791	D		493	147	D
Australia	39	D	7	D	0	0	0	D	D	D		0	0	D
China	D	D	0	0	D	0	0	0	0	0		0	0	0
India	6	0	0	0	0	0	0	0	6	0		6	0	0
Japan	4,057	3,532	2,001	157	656	94	453	171	524	D		286	146	D
Singapore	162	D	0	0	122	D	0	0	D	D		D	0	0
South Korea	259	D	0	D	9	D	2	D	D	0		D	0	0
Taiwan	26	17	2	0	7	5	0	2	10	9		0	1	0
Other Asia and Pacific ^a	D	D	0	D	D	D	0	D	0	0		0	0	0
Other ^b	D	D	D	D	D	0	0	D	D	0		D	0	D

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; OWH = Other Western Hemisphere; UBO = ultimate beneficiary owner.

^a Includes Hong Kong.

^b Includes affiliates whose immediate parent is located outside the United States but whose ultimate owner is a U.S. company.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008-10.

TABLE 28. Sales originating from domestic operations and domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by source of funds, industry, and company size: BRDIS 2009
(Millions of U.S. dollars)

Industry and company size	NAICS code	Sales originating from domestic operations	Total domestic R&D performed	Paid for by company	Paid for by others ^a		
					Total	Federal	Nonfederal
All industries	21-23, 31-33, 42-81	1,281,021	35,538	27,798	7,739	1,749	5,990
Manufacturing industries	31-33	1,027,309	29,646	23,949	5,697	1,700	3,997
Food	311	62,926	265	220	44	0	44
Beverage and tobacco products	312	1,612	17	D	D	0	D
Textile, apparel, and leather	313-16	3,965	59	59	0	0	0
Wood products	321	D	6	3	3	0	3
Printing and related support activities	323	D	*	*	0	0	0
Chemicals	325	287,129	15,466	13,281	2,184	24	2,160
Basic chemicals	3251	45,671	386	D	D	0	D
Resin, synthetic rubber, fibers, and filament	3252	36,522	458	441	17	0	17
Pharmaceuticals and medicines	3254	156,316	13,902	11,829	2,072	24	2,048
Other chemicals	other 325	48,620	721	D	D	0	D
Plastics and rubber products	326	26,337	255	D	D	D	D
Nonmetallic mineral products	327	17,632	60	59	1	*	*
Primary metals	331	22,244	97	97	*	0	*
Fabricated metal products	332	14,395	170	159	10	D	D
Machinery	333	39,046	760	721	39	D	D
Computer and electronic products	334	125,945	8,446	5,833	2,613	D	D
Communications equipment	3342	12,060	1,684	1,155	529	D	D
Semiconductor and other electronic components	3344	11,722	794	D	D	D	D
Navigational, measuring, electromedical, and control instruments	3345	58,971	4,324	2,626	1,698	D	D
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	43,192	1,645	D	D	0	D
Electrical equipment, appliances, and components	335	36,585	613	563	50	D	D
Transportation equipment	336	214,880	2,034	1,614	419	D	D
Automobiles, bodies, trailers, and parts	3361-63	197,363	1,695	1,405	290	D	D
Aerospace products and parts	3364	15,010	323	194	129	D	D
Other transportation	other 336	2,507	15	15	0	0	0
Furniture and related products	337	2,222	23	23	0	0	0
Miscellaneous manufacturing	339	27,315	855	725	130	D	D
Medical equipment and supplies manufacturing	3391	15,164	594	563	31	0	31
Other miscellaneous manufacturing	3399	12,151	261	162	99	D	D
Other manufacturing	322, 324	144,663	521	D	D	D	D
Nonmanufacturing industries	21-23, 42-81	253,713	5,891	3,849	2,042	50	1,993
Mining, extraction, and support activities	21	11,808	D	D	D	*	D
Wholesale trade	42	45,770	546	503	44	1	42
Information	51	45,992	1,487	D	D	1	D
Publishing	511	D	1,160	D	D	0	D
Telecommunications	517	26,281	45	D	D	1	D

TABLE 28. Sales originating from domestic operations and domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by source of funds, industry, and company size: BRDIS 2009 (Millions of U.S. dollars)

Industry and company size	NAICS code	Sales originating from domestic operations	Total domestic R&D performed	Paid for by company	Paid for by others ^a		
					Total	Federal	Nonfederal
Internet service providers, Web search portals, and data processing services	518	D	D	D	0	0	0
Other information	other 51	175	D	D	0	0	0
Professional, scientific, and technical services	54	99,916	2,986	1,371	1,615	46	1,569
Architectural, engineering, and related services	5413	23,897	377	D	D	*	D
Computer systems design and related services	5415	11,108	558	456	102	D	D
Scientific research and development services	5417	55,803	1,713	362	1,350	D	D
Other professional, scientific, and technical services	other 54	9,107	338	D	D	1	D
Other nonmanufacturing	55-56, 61, 624, 71-72, 81	50,227	D	D	7	1	6
All companies	21-23, 31-33, 42-81	1,281,021	35,538	27,798	7,739	1,749	5,990
Small companies (5-499 domestic employees) ^b	-	47,922	2,171	1,413	758	10	748
Medium and large companies (number of domestic employees)							
500-999	-	69,705	1,782	D	D	12	D
1,000-4,999	-	333,418	8,283	6,355	1,927	86	1,841
5,000-9,999	-	170,777	6,292	5,548	744	D	D
10,000-24,999	-	469,632	13,582	11,212	2,370	D	D
25,000 or more	-	189,567	3,428	D	D	D	113

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; NAICS = 2007 North American Industry Classification System.

^a Includes foreign parent companies.

^b The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008-10.

TABLE 29. Sales originating from domestic operations, domestic R&D performance, and domestic employment by majority-owned U.S. affiliates of foreign MNCs, by selected UBO investing country: BRDIS 2009

(Millions of U.S. dollars)

Investing countries	Sales originating from domestic operations	Total domestic R&D performed	Employees (thousands)	
			Total domestic employment	Domestic R&D employment
All countries and regions	1,281,021	35,538	2,348	145
Canada	44,279	848	131	4
Europe	784,801	26,151	1,596	104
Belgium	33,765	229	178	1
Denmark	7,034	266	13	1
Finland	8,548	592	21	3
France	95,036	4,679	235	18
Germany	164,144	4,561	360	25
Ireland	25,891	642	99	3
Italy	17,805	478	36	3
Netherlands	96,541	1,608	92	6
Norway	2,158	37	5	*
Sweden	22,890	418	60	2
Switzerland	86,073	5,977	177	16
United Kingdom	212,270	6,473	291	25
Other Europe	12,648	193	30	1
Latin America and OWH	37,235	1,894	115	11
Mexico	D	3	7	*
Other Latin America and OWH	D	1,891	108	11
Africa	D	D	3	*
Middle East	16,874	794	19	2
Israel	9,714	D	11	1
Other Middle East	7,160	D	8	1
Asia and Pacific	363,786	4,738	451	19
Australia	3,641	39	10	*
China	D	D	*	*
India	D	6	*	*
Japan	300,347	4,057	390	16
Singapore	7,185	162	20	1
South Korea	42,088	259	15	1
Taiwan	1,337	26	3	*
Other Asia and Pacific ^a	8,897	D	12	1
Other ^b	D	D	32	5

* = amount < 500; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; OWH = Other Western Hemisphere; UBO = ultimate beneficiary owner.

^a Includes Hong Kong.

^b Includes affiliates whose immediate parent company is located outside the United States but whose ultimate owner is a U.S. company.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 30. Domestic employment and R&D employment by majority-owned U.S. affiliates of foreign MNCs, by industry and company size: BRDIS 2009

(Thousands of employees)

Industry and company size	NAICS code	Total domestic employment	Domestic R&D employment
All industries	21–23, 31–33, 42–81	2,348	145
Manufacturing industries	31–33	1,693	118
Food	311	117	1
Beverage and tobacco products	312	5	*
Textile, apparel, and leather	313–16	13	*
Wood products	321	*	*
Printing and related support activities	323	1	*
Chemicals	325	358	42
Basic chemicals	3251	52	2
Resin, synthetic rubber, fibers, and filament	3252	44	4
Pharmaceuticals and medicines	3254	186	32
Other chemicals	other 325	76	4
Plastics and rubber products	326	78	2
Nonmetallic mineral products	327	57	*
Primary metals	331	40	1
Fabricated metal products	332	49	1
Machinery	333	122	5
Computer and electronic products	334	337	42
Communications equipment	3342	37	8
Semiconductor and other electronic components	3344	34	7
Navigational, measuring, electromedical, and control instruments	3345	213	20
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	53	7
Electrical equipment, appliances, and components	335	64	4
Transportation equipment	336	264	14
Automobiles, bodies, trailers, and parts	3361–63	205	10
Aerospace products and parts	3364	54	3
Other transportation	other 336	6	*
Furniture and related products	337	13	*
Miscellaneous manufacturing	339	114	5
Medical equipment and supplies manufacturing	3391	90	4
Other miscellaneous manufacturing	3399	25	2
Other manufacturing	322, 324	59	1
Nonmanufacturing industries	21–23, 42–81	655	27
Mining, extraction, and support activities	21	35	2
Wholesale trade	42	89	3
Information	51	109	9
Publishing	511	D	6
Telecommunications	517	46	1
Internet service providers, Web search portals, and data processing services	518	D	2
Other information	other 51	1	*
Professional, scientific, and technical services	54	195	12
Architectural, engineering, and related services	5413	77	2
Computer systems design and related services	5415	31	2
Scientific research and development services	5417	50	6
Other professional, scientific, and technical services	other 54	36	2
Other nonmanufacturing	22–23, 44–49, 52–53, 55–81	228	1
All companies	21–23, 31–33, 42–81	2,348	145
Small companies (5–499 domestic employees) ^a	–	83	11
Medium and large companies (number of domestic employees)			
500–999	–	129	9
1,000–4,999	–	561	37

TABLE 30. Domestic employment and R&D employment by majority-owned U.S. affiliates of foreign MNCs, by industry and company size: BRDIS 2009

(Thousands of employees)

Industry and company size	NAICS code	Total domestic employment	Domestic R&D employment
5,000–9,999	–	362	29
10,000–24,999	–	569	41
25,000 or more	–	644	18

* = amount < 500; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; NAICS = 2007 North American Industry Classification System.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 31. Sales and R&D costs (paid for by company and paid for by others) for parent companies of U.S. MNCs, by industry and company size: BRDIS 2010
(Millions of U.S. dollars)

Industry and company size	NAICS code	Sales		R&D paid for by company				R&D paid for by others			
		Worldwide	Originating from domestic operations	Worldwide	Performed by company		Paid to others	Worldwide	Performed by company		Paid to others
					Domestic	Foreign			Domestic	Foreign	
All industries	21-23, 31-33, 42-81	8,586,970	5,754,824	239,764	162,421	47,911	29,432	46,929	34,742	2,896	9,291
Manufacturing industries	31-33	5,627,775	3,508,199	189,576	124,983	37,879	26,714	39,006	29,581	955	8,470
Food	311	471,484	318,796	3,812	2,750	627	435	100	88	D	D
Beverage and tobacco products	312	228,704	103,056	1,371	624	D	D	D	3	0	D
Textile, apparel, and leather	313-16	26,816	22,764	263	232	25	6	*	0	*	0
Wood products	321	16,677	13,789	112	D	D	D	D	D	0	D
Printing and related support activities	323	23,281	21,059	63	57	3	3	*	*	*	0
Chemicals	325	1,247,810	784,437	73,536	42,470	12,478	18,588	3,554	2,113	286	1,154
Basic chemicals	3251	305,197	224,869	1,928	D	635	D	D	D	D	D
Resin, synthetic rubber, fibers, and filament	3252	140,764	101,446	820	D	225	D	D	D	*	1
Pharmaceuticals and medicines	3254	479,997	297,240	63,422	35,642	9,943	17,837	3,184	1,760	279	1,145
Other chemicals	other 325	321,853	160,882	7,366	D	1,675	D	D	D	D	D
Plastics and rubber products	326	109,879	81,846	1,201	D	267	D	D	D	D	D
Nonmetallic mineral products	327	41,784	31,370	1,299	968	213	118	9	7	D	D
Primary metals	331	125,220	98,355	594	377	99	118	55	46	*	8
Fabricated metal products	332	44,371	35,760	499	441	42	16	6	6	0	*
Machinery	333	288,285	163,455	9,350	7,132	1,820	399	181	147	15	19
Computer and electronic products	334	879,000	463,182	54,384	40,852	11,394	2,138	7,317	6,737	252	327
Communications equipment	3342	126,332	86,723	12,225	D	2,624	D	1,285	D	D	D
Semiconductor and other electronic components	3344	192,886	66,900	23,270	17,324	5,523	423	352	286	61	5
Navigational, measuring, electromedical, and control instruments	3345	239,698	167,068	9,911	7,523	1,666	721	5,523	5,135	114	274
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	320,085	142,491	8,978	D	1,581	D	157	D	D	D
Electrical equipment, appliances, and components	335	129,142	77,267	3,205	1,931	1,155	119	68	58	D	D
Transportation equipment	336	1,106,576	754,399	30,932	19,273	7,696	3,962	27,232	19,908	391	6,933
Automobiles, bodies, trailers, and parts	3361-63	666,617	431,431	18,114	D	5,989	D	D	D	166	D
Aerospace products and parts	3364	390,042	283,117	12,024	9,179	1,607	1,238	24,675	18,087	225	6,363
Other transportation	other 336	49,918	39,852	794	D	101	D	D	D	0	D
Furniture and related products	337	15,792	11,879	144	118	26	*	0	0	0	0
Miscellaneous manufacturing	339	318,736	263,226	6,137	4,686	1,027	424	147	141	D	D
Medical equipment and supplies manufacturing	3391	262,548	234,280	4,783	D	816	D	D	D	D	0
Other miscellaneous manufacturing	3399	56,189	28,946	1,354	D	211	D	D	D	0	D
Other manufacturing	322, 324	554,216	263,559	2,675	D	396	D	D	D	*	2
Nonmanufacturing industries	21-23, 42-81	2,959,196	2,246,626	50,188	37,438	10,031	2,719	7,924	5,161	1,942	821
Mining, extraction, and support activities	21	648,404	402,507	2,323	1,913	211	199	261	250	D	D
Wholesale trade	42	57,029	39,859	224	D	9	D	D	D	0	0
Information	51	806,848	618,232	36,954	27,891	7,033	2,030	467	443	D	D

TABLE 31. Sales and R&D costs (paid for by company and paid for by others) for parent companies of U.S. MNCs, by industry and company size: BRDIS 2010
(Millions of U.S. dollars)

Industry and company size	NAICS code	Sales		R&D paid for by company				R&D paid for by others			
		Worldwide	Originating from domestic operations	Worldwide	Performed by company		Paid to others	Worldwide	Performed by company		Paid to others
					Domestic	Foreign			Domestic	Foreign	
Publishing	511	378,655	238,230	28,573	D	6,188	D	D	D	D	D
Telecommunications	517	288,261	284,433	2,406	D	D	D	D	D	*	D
Data processing, hosting, and related services	518	25,103	18,455	D	746	D	D	0	0	0	0
Other information	other 51	114,830	77,114	D	4,392	D	8	*	*	0	0
Professional, scientific, and technical services	54	357,606	248,598	7,198	4,982	1,913	303	6,892	4,177	1,905	810
Architectural, engineering, and related services	5413	68,110	38,662	308	267	D	D	D	415	D	D
Computer systems design and related services	5415	176,406	109,477	4,900	3,360	1,464	76	D	86	D	D
Scientific research and development services	5417	54,286	48,877	715	433	168	114	5,371	2,801	D	D
Other professional, scientific, and technical services	other 54	58,804	51,582	1,275	922	D	D	D	874	D	D
Other nonmanufacturing	22-23, 44-49, 52-53, 55-81	1,089,308	937,429	3,489	D	866	D	D	D	D	D
All companies	21-23, 31-33, 42-81	8,586,970	5,754,824	239,764	162,421	47,911	29,432	46,929	34,742	2,896	9,291
Small companies (5-499 domestic employees) ^a	-	144,237	53,114	5,805	3,895	1,412	499	272	202	34	37
Medium and large companies (number of domestic employees)											
500-999	-	105,070	73,295	4,829	3,840	676	313	164	142	D	D
1,000-4,999	-	929,759	615,760	39,216	27,243	8,729	3,244	2,357	1,627	326	404
5,000-9,999	-	922,629	633,891	26,178	19,100	4,776	2,302	6,388	4,006	D	D
10,000-24,999	-	1,821,306	1,335,992	47,114	32,347	7,419	7,348	4,480	3,346	234	901
25,000 or more	-	4,663,971	3,042,772	116,624	75,997	24,899	15,727	33,267	25,420	491	7,356

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; NAICS = 2007 North American Industry Classification System; USDIA = U.S. Direct Investment Abroad.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008-10.

TABLE 32. Domestic R&D performed by matched parent companies, by character of work, industry, and company size: BRDIS 2010
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Character of work		
			Basic research	Applied research	Development
All industries	21–23, 31–33, 42–81	197,163	9,769	29,948	157,446
Manufacturing industries	31–33	154,565	7,142	25,709	121,713
Food	311	2,838	108	1,225	1,505
Beverage and tobacco products	312	627	39	188	401
Textile, apparel, and leather	313–16	232	14	29	189
Wood products	321	109	2	23	83
Printing and related support activities	323	57	3	10	44
Chemicals	325	44,583	3,649	12,228	28,706
Basic chemicals	3251	1,231	163	269	799
Resin, synthetic rubber, fibers, and filament	3252	564	62	122	380
Pharmaceuticals and medicines	3254	37,402	3,178	10,519	23,705
Other chemicals	other 325	5,386	245	1,319	3,822
Plastics and rubber products	326	1,103	195	196	713
Nonmetallic mineral products	327	975	78	133	764
Primary metals	331	424	16	75	332
Fabricated metal products	332	447	13	59	375
Machinery	333	7,279	287	931	6,061
Computer and electronic products	334	47,589	1,092	6,120	40,377
Communications equipment	3342	10,161	101	1,609	8,451
Semiconductor and other electronic components	3344	17,609	395	1,976	15,238
Navigational, measuring, electromedical, and control instruments	3345	12,658	430	1,606	10,621
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	7,161	166	928	6,067
Electrical equipment, appliances, and components	335	1,989	95	305	1,590
Transportation equipment	336	39,182	1,047	3,164	34,971
Automobiles, bodies, trailers, and parts	3361–63	10,359	D	D	8,794
Aerospace products and parts	3364	27,266	517	1,933	24,816
Other transportation	other 336	1,556	D	D	1,362
Furniture and related products	337	118	7	18	94
Miscellaneous manufacturing	339	4,827	150	645	4,033
Medical equipment and supplies manufacturing	3391	3,752	130	529	3,092
Other miscellaneous manufacturing	3399	1,076	19	116	940
Other manufacturing	322, 324	2,185	348	361	1,476
Nonmanufacturing industries	21–23, 42–81	42,599	2,627	4,239	35,733
Mining, extraction, and support activities	21	2,163	124	519	1,519
Wholesale trade	42	211	13	21	177
Information	51	28,334	1,759	1,802	24,773
Publishing	511	21,845	1,531	1,412	18,902
Telecommunications	517	1,350	171	181	998
Data processing, hosting, and related services	518	746	6	33	707
Other information	other 51	4,392	50	176	4,166
Professional, scientific, and technical services	54	9,159	409	1,704	7,046
Architectural, engineering, and related services	5413	682	25	86	572
Computer systems design and related services	5415	3,446	44	256	3,146
Scientific research and development services	5417	3,234	271	1,127	1,837
Other professional, scientific, and technical services	other 54	1,796	69	235	1,492
Other nonmanufacturing	22–23, 44–49, 52–53, 55–81	2,732	322	192	2,217
All companies	21–23, 31–33, 42–81	197,163	9,769	29,948	157,446
Small companies (5–499 domestic employees) ^a	–	4,096	196	555	3,346
Medium and large companies (number of domestic employees)					
500–999	–	3,981	152	558	3,271
1,000–4,999	–	28,870	1,184	3,859	23,826

TABLE 32. Domestic R&D performed by matched parent companies, by character of work, industry, and company size: BRDIS 2010
(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Character of work		
			Basic research	Applied research	Development
5,000–9,999	–	23,106	1,173	3,649	18,284
10,000–24,999	–	35,693	2,390	5,731	27,572
25,000 or more	–	101,417	4,674	15,596	81,147

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

BRDIS = Business R&D and Innovation Survey; NAICS = 2007 North American Industry Classification System; USDIA = U.S. Direct Investment Abroad.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 33. Domestic R&D performed by parent companies of U.S. MNCs, by source of funds, state, and company size: BRDIS 2010

(Millions of U.S. dollars)

State and company size	Total domestic R&D performed	Paid for by company	Paid for by others		
			Total	Federal	Nonfederal
All states	197,163	162,421	34,742	25,524	9,218
Alabama	482	209	273	268	5
Alaska	4	2	3	2	*
Arizona	3,135	2,164	971	846	126
Arkansas	104	98	6	*	6
California	48,254	40,498	7,757	6,359	1,397
Colorado	2,612	2,249	363	332	31
Connecticut	5,065	4,342	722	D	D
Delaware	1,159	D	D	9	D
District of Columbia	277	D	D	D	7
Florida	3,227	1,578	1,649	1,534	115
Georgia	2,245	1,761	483	342	142
Hawaii	165	D	D	7	D
Idaho	746	D	D	7	D
Illinois	9,665	9,244	421	139	282
Indiana	3,954	3,449	504	65	439
Iowa	1,513	D	D	D	D
Kansas	759	541	218	*	218
Kentucky	566	557	9	6	3
Louisiana	171	144	27	D	D
Maine	128	120	8	8	*
Maryland	1,867	926	941	756	184
Massachusetts	9,069	7,933	1,136	657	479
Michigan	9,904	9,145	759	304	455
Minnesota	4,224	4,002	222	172	50
Mississippi	84	D	D	D	D
Missouri	7,089	D	D	D	68
Montana	50	49	1	*	*
Nebraska	330	314	16	2	14
Nevada	391	385	7	6	1
New Hampshire	1,354	D	D	D	D
New Jersey	13,042	11,936	1,107	70	1,037
New Mexico	364	121	243	240	4
New York	7,914	5,828	2,086	1,929	157
North Carolina	4,013	3,454	559	77	482
North Dakota	139	129	10	2	8
Ohio	4,561	3,540	1,021	933	88
Oklahoma	229	217	12	3	8
Oregon	3,513	3,479	34	13	21
Pennsylvania	6,184	5,841	344	95	248
Rhode Island	296	268	28	D	D
South Carolina	762	D	D	6	D
South Dakota	20	17	3	*	3
Tennessee	660	618	42	11	31
Texas	10,850	9,041	1,809	1,147	662
Utah	895	844	51	16	34
Vermont	200	D	D	D	10
Virginia	3,317	1,416	1,901	1,790	111
Washington	11,032	10,883	149	92	57
West Virginia	136	135	1	1	1
Wisconsin	2,135	D	D	26	D
Wyoming	6	D	D	D	D
Undistributed ^a	8,302	D	D	271	D

TABLE 33. Domestic R&D performed by parent companies of U.S. MNCs, by source of funds, state, and company size: BRDIS 2010

(Millions of U.S. dollars)

State and company size	Total domestic R&D performed	Paid for by company	Paid for by others		
			Total	Federal	Nonfederal
All companies	197,163	162,421	34,742	25,524	9,218
Small companies (5–499 domestic employees) ^b	4,096	3,895	202	D	D
Medium and large companies (number of domestic employees)					
500–999	3,981	3,840	142	28	114
1,000–4,999	28,870	27,243	1,627	392	1,235
5,000–9,999	23,106	19,100	4,006	458	3,548
10,000–24,999	35,693	32,347	3,346	1,157	2,189
25,000 or more	101,417	75,997	25,420	D	D

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; USDIA = U.S. Direct Investment Abroad.

^a Includes data reported on Form BRDI-1 that were not allocated to a specific state. Data reported on Form BRDI-1A were allocated to the state in the address on the company's survey form, which is usually the company's headquarters.

^b The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 34. Domestic R&D performed by parent companies of U.S. MNCs, by selected state and industry: BRDIS 2010

(Millions of U.S. dollars)

State	All industries	Manufacturing							Nonmanufacturing				
		Total	Chemicals	Machinery	Computer and electronic products	Electrical equipment	Transportation equipment	Other	Total	Information	Professional, technical, and scientific services	Wholesale trade	Other
All states	197,163	154,565	44,583	7,279	47,589	1,989	39,182	13,942	42,599	28,334	9,159	211	4,895
Alabama	482	180	48	2	78	0	42	10	302	36	262	0	4
Alaska	4	2	*	0	1	0	1	0	2	D	D	0	D
Arizona	3,135	2,996	106	48	2,258	D	342	D	139	106	22	6	5
Arkansas	104	97	12	*	26	D	D	D	7	3	1	0	3
California	48,254	35,833	8,706	1,549	17,696	71	6,546	1,264	12,422	9,785	1,598	19	1,019
Colorado	2,612	1,945	102	83	1,419	7	149	185	667	400	53	3	211
Connecticut	5,065	4,925	3,097	144	137	61	1,329	156	140	100	28	0	12
Delaware	1,159	D	113	*	51	3	D	D	D	D	1	0	1
District of Columbia	277	D	8	0	D	0	D	D	D	D	17	0	D
Florida	3,227	2,683	348	27	1,501	16	763	28	544	434	91	1	18
Georgia	2,245	1,588	106	56	486	32	570	339	656	412	149	1	94
Hawaii	165	155	70	0	D	0	19	D	10	3	7	0	1
Idaho	746	724	28	*	672	4	*	20	22	16	6	0	0
Illinois	9,665	9,048	3,263	1,855	2,886	48	485	511	617	172	33	D	D
Indiana	3,954	3,535	2,281	417	152	80	251	354	418	45	D	0	D
Iowa	1,513	1,484	176	D	D	53	10	D	29	27	2	0	*
Kansas	759	475	132	26	74	2	221	20	284	D	251	0	D
Kentucky	566	539	364	4	68	8	D	D	27	8	1	0	18
Louisiana	171	128	62	15	D	0	D	14	43	1	2	0	40
Maine	128	123	4	*	D	0	D	D	6	4	2	0	*
Maryland	1,867	1,587	199	D	294	0	908	D	280	56	210	0	15
Massachusetts	9,068	6,934	3,087	208	2,633	29	320	658	2,133	1,079	917	D	D
Michigan	9,904	9,512	467	49	184	D	8,190	D	391	142	223	1	26
Minnesota	4,224	3,812	267	173	1,503	92	212	1,564	412	302	62	3	46
Mississippi	84	76	18	D	8	2	D	15	7	3	D	0	D
Missouri	7,089	6,696	D	D	D	D	D	D	393	105	256	0	32
Montana	50	48	D	D	D	0	D	D	2	1	D	0	D
Nebraska	330	161	72	15	15	2	D	D	169	D	61	0	D
Nevada	391	371	2	1	94	D	D	D	21	10	D	0	D
New Hampshire	1,354	1,143	55	26	994	39	18	10	211	167	D	D	D
New Jersey	13,042	11,875	10,312	48	633	26	101	755	1,167	216	752	2	197
New Mexico	364	317	14	*	300	0	4	*	46	2	D	0	D
New York	7,914	5,375	1,488	275	812	23	2,421	356	2,539	2,352	40	0	148
North Carolina	4,013	2,597	882	96	1,037	101	271	211	1,415	962	433	0	21
North Dakota	139	D	D	57	D	0	5	*	D	D	*	0	0
Ohio	4,561	4,370	1,730	85	384	149	1,485	537	190	76	49	0	66
Oklahoma	229	94	28	7	12	0	14	34	135	6	1	0	128
Oregon	3,513	3,100	34	259	2,314	8	D	D	413	387	D	D	*
Pennsylvania	6,184	5,445	3,569	85	848	215	266	462	739	411	192	0	136

TABLE 34. Domestic R&D performed by parent companies of U.S. MNCs, by selected state and industry: BRDIS 2010
(Millions of U.S. dollars)

State	All industries	Manufacturing							Nonmanufacturing				
		Total	Chemicals	Machinery	Computer and electronic products	Electrical equipment	Transportation equipment	Other	Total	Information	Professional, technical, and scientific services	Wholesale trade	Other
Rhode Island	296	249	20	D	67	D	*	D	47	D	28	0	D
South Carolina	762	724	70	4	102	21	D	D	38	17	10	0	11
South Dakota	20	18	D	1	2	0	2	D	2	D	D	0	0
Tennessee	660	597	180	31	194	44	52	96	63	9	34	1	19
Texas	10,850	7,025	656	172	3,932	58	1,223	984	3,825	1,657	522	0	1,646
Utah	895	586	175	1	172	1	154	82	310	253	32	0	25
Vermont	200	D	9	0	4	2	D	7	D	D	*	0	D
Virginia	3,317	2,563	102	4	797	6	1,351	304	753	215	528	0	10
Washington	11,032	4,220	183	39	680	6	D	D	6,811	D	D	4	D
West Virginia	136	135	103	0	3	D	D	D	1	1	*	0	*
Wisconsin	2,135	1,751	148	224	161	239	572	408	385	D	D	0	D
Wyoming	6	5	D	D	1	0	0	0	1	*	D	0	D
Undistributed ^a	8,303	D	1,108	759	938	D	1,130	1,435	D	995	D	156	D

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; NAICS = 2007 North American Industry Classification System; USDIA = U.S. Direct Investment Abroad.

^a Includes data reported on Form BRDI-1 that were not allocated to a specific state. Data reported on Form BRDI-1A were allocated to the state in the address on the company's survey form, which is usually the company's headquarters.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 35. Worldwide, domestic, and foreign employment and R&D employment by parent companies of U.S. MNCs, by industry and company size: BRDIS 2010

(Thousands of employees)

Industry and company size	NAICS code	Total employment			R&D employment		
		Worldwide	Domestic	Foreign	Worldwide	Domestic	Foreign
All industries	21–23, 31–33, 42–81	19,337	11,387	7,950	1,208	788	419
Manufacturing industries	31–33	12,101	6,435	5,665	833	552	281
Food	311	1,082	620	461	17	12	4
Beverage and tobacco products	312	525	242	283	6	2	3
Textile, apparel, and leather	313–16	159	78	80	2	1	*
Wood products	321	59	42	16	1	1	*
Printing and related support activities	323	97	85	12	1	*	*
Chemicals	325	2,036	1,068	967	180	122	57
Basic chemicals	3251	251	150	101	12	8	4
Resin, synthetic rubber, fibers, and filament	3252	168	94	74	5	3	2
Pharmaceuticals and medicines	3254	869	459	410	123	87	36
Other chemicals	other 325	747	365	383	39	24	16
Plastics and rubber products	326	366	219	147	9	6	2
Nonmetallic mineral products	327	147	87	60	8	4	3
Primary metals	331	250	164	86	3	3	1
Fabricated metal products	332	169	129	40	4	3	1
Machinery	333	953	514	439	48	32	16
Computer and electronic products	334	2,297	1,088	1,209	297	191	107
Communications equipment	3342	262	144	118	64	38	26
Semiconductor and other electronic components	3344	572	199	373	107	60	47
Navigational, measuring, electromedical, and control instruments	3345	821	514	306	74	61	14
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	643	231	412	51	31	20
Electrical equipment, appliances, and components	335	581	232	349	32	15	17
Transportation equipment	336	2,395	1,339	1,056	182	126	56
Automobiles, bodies, trailers, and parts	3361–63	1,221	511	710	72	38	33
Aerospace products and parts	3364	1,021	715	306	90	D	D
Other transportation	other 336	153	113	40	20	D	D
Furniture and related products	337	82	58	24	1	1	*
Miscellaneous manufacturing	339	494	270	224	30	22	8
Medical equipment and supplies manufacturing	3391	323	191	132	19	16	4
Other miscellaneous manufacturing	3399	171	79	92	10	6	4
Other manufacturing	322, 324	410	200	210	14	10	5
Nonmanufacturing industries	21–23, 42–81	7,236	4,952	2,284	374	236	138
Mining, extraction, and support activities	21	342	202	140	8	6	2
Wholesale trade	42	116	87	29	1	1	*
Information	51	1,875	1,228	647	216	138	78
Publishing	511	924	378	546	176	106	70
Telecommunications	517	593	588	4	12	11	1

TABLE 35. Worldwide, domestic, and foreign employment and R&D employment by parent companies of U.S. MNCs, by industry and company size: BRDIS 2010
(Thousands of employees)

Industry and company size	NAICS code	Total employment			R&D employment		
		Worldwide	Domestic	Foreign	Worldwide	Domestic	Foreign
Data processing, hosting, and related services	518	109	69	40	7	6	1
Other information	other 51	249	193	56	22	16	6
Professional, scientific, and technical services	54	1,115	674	441	127	74	53
Architectural, engineering, and related services	5413	206	138	67	5	4	1
Computer systems design and related services	5415	586	278	308	69	40	29
Scientific research and development services	5417	71	41	30	36	17	19
Other professional, scientific, and technical services	other 54	252	216	36	18	13	5
Other nonmanufacturing	22-23, 44-49, 52-53, 55-81	3,788	2,760	1,028	22	17	5
All companies	21-23, 31-33, 42-81	19,337	11,387	7,950	1,208	788	419
Small companies (5-499 domestic employees) ^a	-	332	120	211	33	19	14
Medium and large companies (number of domestic employees)							
500-999	-	308	156	152	D	19	D
1,000-4,999	-	2,442	1,270	1,172	200	119	80
5,000-9,999	-	2,211	1,151	1,059	174	102	72
10,000-24,999	-	3,186	2,005	1,181	204	145	59
25,000 or more	-	10,859	6,685	4,174	D	384	D

* = amount < 500; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; NAICS = 2007 North American Industry Classification System; USDIA = U.S. Direct Investment Abroad.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008-10.

TABLE 36. Summary BRDIS and USDIA survey data for worldwide, domestic, and foreign activity of U.S. parent companies and their affiliates: 2010

Characteristics	R&D performance		Employees			
	Companies ^a	Expenditures (US\$millions)	Companies ^a	All (thousands)	Companies ^a	R&D (thousands)
BRDIS						
Domestic activity (U.S. parents)						
All industries	1,618	197,163	1,643	11,387	1,504	788
Manufacturing	1,199	154,565	1,211	6,435	1,121	552
Nonmanufacturing	419	42,599	432	4,952	383	236
Foreign activity						
All industries	875	50,807	1,304	7,950	827	419
Manufacturing	671	38,834	966	5,665	634	281
Nonmanufacturing	204	11,973	338	2,284	193	138
Worldwide U.S. MNCs' activity						
All industries	1,626	247,970	1,643	19,337	1,512	1,208
Manufacturing	1,204	193,399	1,211	12,101	1,127	833
Nonmanufacturing	422	54,572	432	7,236	385	374
Foreign/worldwide (%)						
All industries	na	20.5	na	41.1	na	34.7
Manufacturing	na	20.1	na	46.8	na	33.7
Nonmanufacturing	na	21.9	na	31.6	na	36.9
USDIA survey						
Domestic activity (U.S. parents)						
All industries	1,148	197,075	1,665	11,614	NA	NA
Manufacturing	834	148,022	1,165	6,131	NA	NA
Nonmanufacturing	314	49,053	500	5,484	NA	NA
Foreign activity (MOFAs)						
All industries	1,148	38,897	1,633	7,454	NA	NA
Manufacturing	834	30,874	1,140	4,977	NA	NA
Nonmanufacturing	314	8,023	493	2,477	NA	NA
Worldwide U.S. MNCs' activity						
All industries	1,148	235,972	1,665	19,068	NA	NA
Manufacturing	834	178,896	1,165	11,108	NA	NA
Nonmanufacturing	314	57,076	500	7,961	NA	NA
Foreign/worldwide (%)						
All industries	na	16.5	na	39.1	na	NA
Manufacturing	na	17.3	na	44.8	na	NA
Nonmanufacturing	na	14.1	na	31.1	na	NA

na = not applicable; NA = not available.

BRDIS = Business R&D and Innovation Survey; MNC = multinational company; MOFA = majority-owned foreign affiliate; USDIA = U.S. Direct Investment Abroad.

^a Companies reporting nonzero value for the item.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the USDIA survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The BRDIS industry classification is based on the dominant business code for domestic R&D performance, where available. For BRDIS companies that did not report business codes, the classification used for sampling was assigned. The USDIA survey industry classification was based on the industry of the parent company.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 37. Summary BRDIS and USDIA survey data for foreign activity of U.S. parent companies, by selected host country: 2010

Host country	BRDIS foreign activity		USDIA survey MOFAs				
	Matched U.S. parent companies ^a	R&D performed (US\$millions)	Matched U.S. parent companies ^b	Number of MOFAs	R&D performed (US\$millions)	Employees (thousands)	
						All	R&D
All host countries	875	50,807	1,148	3,986	38,897	7,454	NA
Canada	288	3,478	197	252	2,717	490	NA
China	324	2,676	136	233	1,523	971	NA
France	252	2,171	165	249	1,997	286	NA
Germany	314	6,477	231	359	6,665	477	NA
India	233	3,043	68	89	1,714	436	NA
Ireland	91	983	64	96	1,423	82	NA
Israel	87	2,184	40	48	1,994	42	NA
Italy	146	890	118	162	594	144	NA
Japan	194	2,541	118	147	1,807	168	NA
Russia	60	251	22	24	65	107	NA
Singapore	128	1,251	70	90	736	122	NA
South Korea	100	871	58	73	821	101	NA
Sweden	96	875	53	65	396	45	NA
United Kingdom	361	6,950	284	426	5,505	611	NA
All other	666	16,166	408	1,673	10,940	3,372	NA

NA = not available.

BRDIS = Business R&D and Innovation Survey; MOFA = majority-owned foreign affiliate; USDIA = U.S. Direct Investment Abroad.

^a BRDIS companies matched to USDIA survey parent companies with a nonzero value for foreign R&D performed. Each matched parent company is counted once in the all host countries total.

^b The USDIA survey matched U.S. parent companies that owned R&D-performing MOFAs; that is, the survey matched parent companies that owned at least one MOFA with a nonzero value for R&D performed. Each matched parent company is counted once in the all host countries total and also is counted once in each country in which it has a MOFA that performed R&D. Because a parent company may have R&D-performing MOFAs in more than one country, the sum across countries exceeds the all host countries total.

NOTES: Data are for matched companies obtained by linking BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) with the USDIA survey (conducted by the Bureau of Economic Analysis). Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008-10.

TABLE 38. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by character of work, industry, and company size: BRDIS 2010 (Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Character of work		
			Basic research	Applied research	Development
All industries	21–23, 31–33, 42–81	39,700	2,020	7,010	30,670
Manufacturing industries	31–33	33,019	1,672	5,510	25,837
Food	311	320	6	84	230
Beverage and tobacco products	312	31	2	2	27
Textile, apparel, and leather	313–16	81	7	17	58
Wood products	321	12	0	0	12
Printing and related support activities	323	D	D	D	D
Chemicals	325	16,134	816	3,285	12,033
Basic chemicals	3251	561	77	91	393
Resin, synthetic rubber, fibers, and filament	3252	169	12	64	93
Pharmaceuticals and medicines	3254	14,414	686	2,934	10,793
Other chemicals	other 325	989	41	195	754
Plastics and rubber products	326	397	148	77	172
Nonmetallic mineral products	327	174	8	38	128
Primary metals	331	109	3	13	93
Fabricated metal products	332	149	6	15	127
Machinery	333	1,076	24	95	957
Computer and electronic products	334	9,568	351	1,044	8,173
Communications equipment	3342	3,138	105	224	2,809
Semiconductor and other electronic components	3344	963	55	114	794
Navigational, measuring, electromedical, and control instruments	3345	4,087	154	559	3,374
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	1,380	37	148	1,196
Electrical equipment, appliances, and components	335	643	57	68	518
Transportation equipment	336	2,742	106	502	2,135
Automobiles, bodies, trailers, and parts	3361–63	1,842	84	311	1,447
Aerospace products and parts	3364	877	21	189	667
Other transportation	other 336	23	*	2	20
Furniture and related products	337	D	D	1	D
Miscellaneous manufacturing	339	1,152	66	168	918
Medical equipment and supplies manufacturing	3391	985	57	139	788
Other miscellaneous manufacturing	3399	167	8	29	129
Other manufacturing	322, 324	375	D	D	D
Nonmanufacturing industries	21–23, 42–81	6,681	348	1,499	4,833
Mining, extraction, and support activities	21	1,215	D	D	999
Wholesale trade	42	364	16	35	314
Information	51	1,969	91	212	1,667
Publishing	511	1,856	63	202	1,592
Telecommunications	517	64	D	D	42
Data processing, hosting, and related services	518	D	D	0	D
Other information	other 51	D	D	D	D
Professional, scientific, and technical services	54	2,949	140	1,094	1,716
Architectural, engineering, and related services	5413	409	12	66	331
Computer systems design and related services	5415	343	10	30	303
Scientific research and development services	5417	1,907	112	982	813
Other professional, scientific, and technical services	other 54	290	6	16	268
Other nonmanufacturing	22–23, 44–49, 52–53, 55–81	183	D	D	138
All companies	21–23, 31–33, 42–81	39,700	2,020	7,010	30,670
Small companies (5–499 domestic employees) ^a	–	2,428	161	445	1,822
Medium and large companies (number of domestic employees)					
500–999	–	2,427	135	423	1,869
1,000–4,999	–	10,409	505	1,883	8,021

TABLE 38. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by character of work, industry, and company size: BRDIS 2010 (Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Character of work		
			Basic research	Applied research	Development
5,000–9,999	–	7,037	350	1,388	5,299
10,000–24,999	–	11,267	629	1,272	9,365
25,000 or more	–	6,133	241	1,600	4,293

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; NAICS = 2007 North American Industry Classification System.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 39. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by source of funds, state, and company size: BRDIS 2010

(Millions of U.S. dollars)

State and company size	Total domestic R&D performed	Paid for by company	Paid for by others ^a		
			Total	Federal	Nonfederal
All states	39,700	30,175	9,524	1,469	8,055
Alabama	52	16	36	D	D
Alaska	D	D	5	0	5
Arizona	344	248	96	0	96
Arkansas	16	D	D	0	D
California	6,609	4,862	1,746	208	1,538
Colorado	498	424	74	3	71
Connecticut	687	630	57	0	57
Delaware	D	18	D	0	D
District of Columbia	7	2	5	*	5
Florida	428	364	64	18	46
Georgia	223	161	61	0	61
Hawaii	60	D	D	0	D
Idaho	27	11	16	0	16
Illinois	1,355	1,255	99	0	99
Indiana	391	230	160	D	D
Iowa	119	79	40	0	40
Kansas	384	D	D	0	D
Kentucky	67	58	9	5	4
Louisiana	44	42	3	0	3
Maine	D	10	D	0	D
Maryland	708	634	74	12	63
Massachusetts	2,662	1,337	1,325	92	1,233
Michigan	1,190	796	394	15	379
Minnesota	630	477	153	D	D
Mississippi	12	9	3	0	3
Missouri	249	205	44	D	D
Montana	4	3	1	0	1
Nebraska	21	15	6	0	6
Nevada	48	D	D	D	D
New Hampshire	933	D	D	D	D
New Jersey	6,833	6,063	771	10	761
New Mexico	D	D	*	0	*
New York	650	512	138	10	128
North Carolina	871	732	139	D	D
North Dakota	D	D	1	0	1
Ohio	1,038	486	553	D	D
Oklahoma	12	11	1	0	1
Oregon	332	257	75	D	D
Pennsylvania	1,709	1,468	242	54	188
Rhode Island	46	39	8	0	8
South Carolina	287	D	D	*	D
South Dakota	D	D	D	D	D
Tennessee	149	136	13	*	13
Texas	2,782	2,108	674	78	597
Utah	81	67	14	0	14
Vermont	10	9	1	0	1
Virginia	204	155	49	D	D
Washington	380	284	96	D	D
West Virginia	15	15	*	0	*

TABLE 39. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by source of funds, state, and company size: BRDIS 2010

(Millions of U.S. dollars)

State and company size	Total domestic R&D performed	Paid for by company	Paid for by others ^a		
			Total	Federal	Nonfederal
Wisconsin	199	141	58	0	58
Wyoming	3	3	*	0	*
Undistributed ^b	5,464	D	D	1	D
All companies	39,700	30,175	9,524	1,469	8,055
Small companies (5–499 domestic employees) ^c	2,428	1,531	897	15	882
Medium and large companies (number of domestic employees)					
500–999	2,427	2,000	427	14	412
1,000–4,999	10,409	7,149	3,260	70	3,190
5,000–9,999	7,037	5,174	1,863	D	D
10,000–24,999	11,267	9,830	1,437	7	1,430
25,000 or more	6,133	4,492	1,641	D	D

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company.

^a Includes foreign parent companies.

^b Includes data reported on Form BRDI-1 that were not allocated to a specific state. Data reported on Form BRDI-1A were allocated to the state in the address on the company's survey form, which is usually the company's headquarters.

^c The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 40. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by selected state and industry: BRDIS 2010

(Millions of U.S. dollars)

State	Manufacturing								Nonmanufacturing				
	All industries	Total	Chemicals	Machinery	Computer and electronic products	Electrical equipment	Transportation equipment	Other	Total	Information	Professional, technical, and scientific services	Wholesale trade	Other
All states	39,700	33,019	16,134	1,076	9,568	643	2,742	2,856	6,681	1,969	2,949	364	1,398
Alabama	52	46	3	D	D	0	D	*	7	D	3	0	D
Alaska	D	D	*	D	0	0	D	0	0	0	0	0	0
Arizona	344	289	54	D	124	D	44	D	55	41	14	0	*
Arkansas	16	16	D	0	0	D	*	1	1	*	*	0	0
California	6,609	5,255	2,768	32	2,032	43	208	172	1,354	779	526	26	22
Colorado	498	455	29	26	177	2	D	D	43	D	20	D	D
Connecticut	687	660	466	71	12	0	3	109	27	D	22	D	*
Delaware	D	D	D	0	D	0	0	D	1	*	*	0	0
District of Columbia	7	D	D	0	1	0	0	0	D	5	D	0	0
Florida	428	401	86	D	293	3	5	D	27	11	16	0	0
Georgia	223	162	24	6	46	D	26	D	61	D	22	D	4
Hawaii	60	59	D	0	D	0	0	D	1	0	1	0	0
Idaho	27	25	14	D	2	4	0	D	2	1	1	0	0
Illinois	1,355	1,261	889	112	208	4	12	35	93	D	18	D	D
Indiana	391	358	95	8	D	6	D	51	33	D	D	0	D
Iowa	119	107	61	22	*	D	*	D	12	D	D	0	0
Kansas	384	382	53	D	D	0	D	D	2	*	*	0	1
Kentucky	67	62	19	0	14	D	4	D	5	2	2	1	*
Louisiana	44	D	9	0	*	0	0	D	D	*	3	0	D
Maine	D	D	*	0	*	0	0	D	D	*	D	0	0
Maryland	708	626	505	1	44	0	D	D	82	1	75	1	5
Massachusetts	2,662	1,739	913	5	575	2	3	241	923	D	780	D	D
Michigan	1,190	1,099	109	16	46	3	878	47	92	1	66	21	4
Minnesota	630	603	48	17	482	D	D	D	27	D	15	0	D
Mississippi	12	11	6	0	6	0	0	0	1	*	*	*	0
Missouri	249	245	85	*	8	D	2	D	4	2	2	0	0
Montana	4	1	1	0	0	0	0	0	3	*	3	0	0
Nebraska	21	D	14	0	3	0	D	0	D	*	D	0	0
Nevada	48	D	1	D	2	D	*	1	D	D	1	0	D
New Hampshire	933	931	3	D	D	D	D	D	2	1	1	0	0
New Jersey	6,833	6,629	6,240	0	231	D	10	D	205	9	165	*	30
New Mexico	D	D	D	0	0	0	0	0	*	0	*	0	0
New York	650	577	110	58	252	14	46	97	73	D	18	*	D
North Carolina	871	783	369	D	221	66	97	D	87	4	82	1	1
North Dakota	D	D	*	D	0	0	0	0	0	0	0	0	0

TABLE 40. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by selected state and industry: BRDIS 2010

(Millions of U.S. dollars)

State	Manufacturing								Nonmanufacturing				
	All industries	Total	Chemicals	Machinery	Computer and electronic products	Electrical equipment	Transportation equipment	Other	Total	Information	Professional, technical, and scientific services	Wholesale trade	Other
Ohio	1,038	959	180	26	77	8	D	D	79	D	D	*	D
Oklahoma	12	9	D	D	D	0	3	0	3	*	1	0	2
Oregon	332	311	12	D	107	3	D	D	20	D	D	D	0
Pennsylvania	1,709	1,602	923	54	463	D	39	D	108	22	85	0	1
Rhode Island	46	D	11	0	D	0	0	14	D	*	*	0	D
South Carolina	287	282	14	D	8	4	D	207	5	D	4	0	D
South Dakota	D	D	D	0	0	0	0	0	7	0	7	0	0
Tennessee	149	137	11	5	D	D	25	11	11	*	11	0	0
Texas	2,782	1,598	323	43	902	11	4	315	1,184	27	202	0	955
Utah	81	47	4	2	27	1	0	13	34	D	D	0	D
Vermont	10	5	1	*	0	2	0	2	5	D	D	0	D
Virginia	204	72	6	12	17	0	12	25	131	39	92	0	*
Washington	380	254	8	5	224	0	1	17	126	D	88	D	D
West Virginia	15	D	D	0	0	0	0	1	D	0	D	0	0
Wisconsin	199	173	23	27	29	D	5	D	25	23	2	0	*
Wyoming	3	3	*	3	0	0	0	0	*	0	*	0	*
Undistributed ^a	5,464	D	809	360	D	197	402	448	D	793	D	D	68

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company.

^a Includes data reported on Form BRDI-1 that were not allocated to a specific state. Data reported on Form BRDI-1A were allocated to the state in the address on the company's survey form, which is usually the company's headquarters.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 41. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by selected UBO investing country and state: BRDIS 2010
(Millions of U.S. dollars)

State	All countries and regions	Canada	France	Germany	Japan	Netherlands	Switzerland	United Kingdom	Other ^a
All states	39,700	703	5,287	4,806	5,673	1,788	7,169	6,987	7,287
Alabama	52	0	0	3	1	0	1	5	43
Alaska	D	0	0	D	0	D	0	0	*
Arizona	344	D	D	47	46	D	D	31	107
Arkansas	16	0	1	D	*	0	7	*	D
California	6,609	D	1,003	543	1,018	247	2,364	425	D
Colorado	498	0	*	27	7	57	D	45	D
Connecticut	687	D	D	D	20	109	5	23	97
Delaware	D	0	D	6	0	0	*	D	D
District of Columbia	7	0	0	6	0	0	*	0	2
Florida	428	0	17	202	19	D	49	13	D
Georgia	223	8	4	32	30	D	17	47	D
Hawaii	60	0	0	*	0	D	D	D	1
Idaho	27	0	*	1	1	0	D	D	5
Illinois	1,355	0	15	75	817	35	47	111	254
Indiana	391	D	43	17	26	1	D	203	81
Iowa	119	0	29	6	4	*	D	*	D
Kansas	384	D	*	D	0	D	D	1	34
Kentucky	67	0	D	19	10	2	D	8	6
Louisiana	44	0	0	2	0	2	*	D	D
Maine	D	*	0	*	0	0	*	0	D
Maryland	708	2	D	8	48	D	3	D	136
Massachusetts	2,662	52	101	287	668	D	D	252	438
Michigan	1,190	8	57	560	354	2	9	55	145
Minnesota	630	21	15	27	74	0	26	D	D
Mississippi	12	0	0	*	*	4	D	0	D
Missouri	249	D	2	68	12	*	4	2	D
Montana	4	0	0	1	0	0	*	*	3
Nebraska	21	0	1	1	1	0	D	0	D
Nevada	48	D	0	1	1	0	3	3	D
New Hampshire	933	0	7	D	22	2	D	D	3
New Jersey	6,833	8	D	582	597	64	2,099	D	233
New Mexico	D	0	0	D	0	0	*	0	*
New York	650	D	33	100	64	D	50	D	93
North Carolina	871	D	240	198	54	6	206	25	D
North Dakota	D	0	0	*	0	0	0	0	D
Ohio	1,038	D	12	121	566	109	179	25	D
Oklahoma	12	3	0	1	0	0	*	*	8
Oregon	332	0	D	220	16	2	D	D	14
Pennsylvania	1,709	1	461	493	270	97	88	150	150
Rhode Island	46	0	D	1	4	1	D	1	D
South Carolina	287	0	D	22	4	D	*	5	D
South Dakota	D	0	0	*	7	0	D	0	*
Tennessee	149	0	D	87	16	8	6	4	D
Texas	2,782	17	314	39	44	416	D	421	D
Utah	81	0	7	25	15	1	*	D	D
Vermont	10	0	0	*	*	1	6	D	D
Virginia	204	D	65	24	2	2	23	26	D
Washington	380	*	6	67	67	D	22	13	D
West Virginia	15	0	0	D	0	0	0	D	D

TABLE 41. Domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by selected UBO investing country and state: BRDIS 2010
(Millions of U.S. dollars)

State	All countries and regions	Canada	France	Germany	Japan	Netherlands	Switzerland	United Kingdom	Other ^a
Wisconsin	199	8	20	26	0	13	25	6	100
Wyoming	3	0	0	0	0	0	1	2	*
Undistributed ^b	5,464	378	1,337	339	768	140	202	672	1,626

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; UBO = ultimate beneficiary owner.

^a Includes affiliates whose immediate parent company is located outside the United States but whose ultimate owner is a U.S. company.

^b Includes data reported on Form BRDI-1 that were not allocated to a specific state. Data reported on Form BRDI-1A were allocated to the state in the address on the company's survey form, which is usually the company's headquarters.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 42. Domestic R&D performed by matched majority-owned U.S. affiliates of foreign companies, by selected UBO investing country and industry: BRDIS 2010

(Millions of U.S. dollars)

Investing country or region	Manufacturing								Nonmanufacturing				
	All industries	Total	Chemicals	Machinery	Computer and electronic products	Electrical equipment	Transportation equipment	Other	Total	Information	Professional, technical, and scientific services	Wholesale trade	Other
All countries and regions	39,700	33,019	16,134	1,076	9,568	643	2,742	2,856	6,681	1,969	2,949	364	1,398
Canada	703	514	D	D	D	D	D	D	189	D	111	D	D
Europe	29,487	25,348	13,117	732	6,940	522	1,720	2,316	4,139	1,290	2,112	62	674
Belgium	69	66	D	D	D	0	0	29	3	0	0	0	3
Denmark	365	D	136	69	0	0	0	D	D	0	D	D	0
Finland	673	D	D	D	D	0	0	23	D	0	0	D	D
France	5,287	4,281	1,829	7	1,795	95	203	352	1,006	D	D	D	D
Germany	4,806	4,475	1,983	95	1,153	15	1,053	177	330	D	6	18	D
Ireland	1,208	D	D	D	0	D	0	D	D	4	D	*	0
Italy	477	448	12	D	D	7	D	44	29	0	D	D	D
Netherlands	1,788	1,554	276	D	775	5	D	398	234	D	225	D	D
Norway	63	25	1	6	2	D	0	D	39	0	D	D	0
Sweden	376	376	15	29	5	D	D	152	0	0	0	0	0
Switzerland	7,169	6,074	4,976	D	494	D	D	297	1,096	D	D	0	D
United Kingdom	6,987	6,062	3,578	40	1,852	1	274	316	925	252	D	D	D
Other Europe	219	D	58	4	D	0	D	33	D	0	D	D	D
Latin America and OWH	1,250	D	D	D	573	0	D	D	D	0	D	3	D
Mexico	7	7	0	0	0	0	2	5	0	0	0	0	0
Other Latin America and OWH	1,243	D	D	D	573	0	D	D	D	0	D	3	D
Africa	D	D	8	0	0	0	0	D	0	0	0	0	0
Middle East	550	467	442	*	*	0	2	23	83	D	D	0	D
Israel	381	D	D	0	*	0	2	D	D	D	D	0	2
Other Middle East	168	D	D	*	0	0	0	D	D	D	0	0	D
Asia and Pacific	6,615	5,142	2,480	D	991	D	953	333	1,473	457	655	D	D
Australia	60	D	9	D	0	0	0	7	D	D	0	0	D
China	136	D	0	D	D	0	0	0	D	0	0	D	0
India	D	D	0	0	D	0	0	0	D	0	D	0	0
Japan	5,673	4,740	2,466	202	724	91	949	307	933	387	387	114	45
Singapore	238	D	0	0	206	3	0	D	D	D	*	0	0
South Korea	343	49	0	D	D	0	4	D	293	D	D	D	0

TABLE 42. Domestic R&D performed by matched majority-owned U.S. affiliates of foreign companies, by selected UBO investing country and industry: BRDIS 2010
(Millions of U.S. dollars)

Investing country or region	Manufacturing								Nonmanufacturing				
	All industries	Total	Chemicals	Machinery	Computer and electronic products	Electrical equipment	Transportation equipment	Other	Total	Information	Professional, technical, and scientific services	Wholesale trade	Other
Taiwan	90	34	4	0	D	5	0	D	55	D	D	D	0
Other Asia and Pacific ^a	D	D	0	D	0	D	0	6	4	0	0	4	0
Other ^b	D	D	D	D	D	0	0	D	D	D	D	D	D

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; OWH = Other Western Hemisphere; UBO = ultimate beneficiary owner.

^a Includes Hong Kong.

^b Includes affiliates whose immediate parent company is located outside the United States but whose ultimate owner is a U.S. company.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 43. Sales originating from domestic operations and domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by source of funds, industry, and company size: BRDIS 2010 (Millions of U.S. dollars)

Industry and company size	NAICS code	Sales originating from domestic operations	Total domestic R&D performed	Paid for by company	Paid for by others ^a		
					Total	Federal	Nonfederal
All industries	21–23, 31–33, 42–81	1,367,921	39,700	30,175	9,524	1,469	8,055
Manufacturing industries	31–33	1,046,057	33,019	25,927	7,092	1,423	5,669
Food	311	36,452	320	176	144	0	144
Beverage and tobacco products	312	30,744	31	31	0	0	0
Textile, apparel, and leather	313–16	4,877	81	81	0	0	0
Wood products	321	719	12	D	D	0	D
Printing and related support activities	323	D	D	D	*	0	*
Chemicals	325	291,956	16,134	13,747	2,386	D	D
Basic chemicals	3251	68,677	561	D	D	D	D
Resin, synthetic rubber, fibers, and filament	3252	23,950	169	D	D	0	D
Pharmaceuticals and medicines	3254	156,473	14,414	12,364	2,050	8	2,042
Other chemicals	other 325	42,856	989	D	D	0	D
Plastics and rubber products	326	36,678	397	D	D	D	D
Nonmetallic mineral products	327	14,155	174	D	D	D	D
Primary metals	331	37,866	109	D	D	0	D
Fabricated metal products	332	16,942	149	141	8	0	8
Machinery	333	46,189	1,076	887	189	1	188
Computer and electronic products	334	144,682	9,568	6,815	2,754	D	D
Communications equipment	3342	49,359	3,138	2,535	603	D	D
Semiconductor and other electronic components	3344	16,466	963	D	D	D	94
Navigational, measuring, electromedical, and control instruments	3345	60,732	4,087	2,430	1,657	D	D
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	18,125	1,380	D	D	1	D
Electrical equipment, appliances, and components	335	26,863	643	600	43	2	42
Transportation equipment	336	238,411	2,742	1,684	1,059	D	D
Automobiles, bodies, trailers, and parts	3361–63	220,005	1,842	1,398	444	8	436
Aerospace products and parts	3364	15,619	877	D	D	D	D
Other transportation	other 336	2,787	23	D	D	0	D
Furniture and related products	337	1,487	D	D	0	0	0
Miscellaneous manufacturing	339	30,734	1,152	981	170	4	166
Medical equipment and supplies manufacturing	3391	18,954	985	828	157	3	155
Other miscellaneous manufacturing	3399	11,780	167	154	13	2	11
Other manufacturing	322, 324	D	375	D	D	0	D
Nonmanufacturing industries	21–23, 42–81	321,863	6,681	4,249	2,432	46	2,386
Mining, extraction, and support activities	21	104,016	1,215	D	D	D	D
Wholesale trade	42	37,113	364	D	D	D	D
Information	51	54,768	1,969	1,661	308	D	D
Publishing	511	24,187	1,856	D	D	0	D
Telecommunications	517	D	64	D	D	D	D

TABLE 43. Sales originating from domestic operations and domestic R&D performed by majority-owned U.S. affiliates of foreign MNCs, by source of funds, industry, and company size: BRDIS 2010 (Millions of U.S. dollars)

Industry and company size	NAICS code	Sales originating from domestic operations	Total domestic R&D performed	Paid for by company	Paid for by others ^a		
					Total	Federal	Nonfederal
Data processing, hosting, and related services	518	D	D	D	0	0	0
Other information	other 51	142	D	D	0	0	0
Professional, scientific, and technical services	54	100,950	2,949	1,113	1,835	42	1,793
Architectural, engineering, and related services	5413	21,853	409	322	88	D	D
Computer systems design and related services	5415	D	343	D	D	D	D
Scientific research and development services	5417	63,450	1,907	331	1,576	14	1,561
Other professional, scientific, and technical services	other 54	D	290	D	D	D	D
Other nonmanufacturing	55–56, 61, 624, 71–72, 81	25,017	183	D	D	1	D
All companies	21–23, 31–33, 42–81	1,367,921	39,700	30,175	9,524	1,469	8,055
Small companies (5–499 domestic employees) ^b	–	55,289	2,428	1,531	897	15	882
Medium and large companies (number of domestic employees)							
500–999	–	92,731	2,427	2,000	427	14	412
1,000–4,999	–	367,377	10,409	7,149	3,260	70	3,190
5,000–9,999	–	185,448	7,037	5,174	1,863	D	D
10,000–24,999	–	407,371	11,267	9,830	1,437	7	1,430
25,000 or more	–	259,705	6,133	4,492	1,641	D	D

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; NAICS = 2007 North American Industry Classification System.

^a Includes foreign parent companies.

^b The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 44. Sales originating from domestic operations, domestic R&D performance, and domestic employment by majority-owned U.S. affiliates of foreign MNCs, by selected UBO investing country: BRDIS 2010

(Millions of U.S. dollars)

Investing country or region	Sales originating from domestic operations	Total domestic R&D performed	Employees (thousands)	
			Total domestic employment	Domestic R&D employment
All countries and regions	1,367,921	39,700	2,114	155
Canada	40,443	703	160	4
Europe	861,804	29,487	1,394	114
Belgium	22,692	69	53	*
Denmark	8,401	365	13	2
Finland	8,615	673	21	3
France	100,757	5,287	221	19
Germany	185,552	4,806	332	25
Ireland	29,071	1,208	95	5
Italy	18,001	477	34	3
Netherlands	139,086	1,788	103	8
Norway	2,211	63	5	*
Sweden	24,573	376	47	2
Switzerland	81,697	7,169	167	19
United Kingdom	225,379	6,987	272	26
Other Europe	15,769	219	33	1
Latin America and OWH	28,966	1,250	56	8
Mexico	D	7	D	*
Other Latin America and OWH	D	1,243	D	8
Africa	D	D	3	*
Middle East	23,113	550	21	2
Israel	10,869	381	10	1
Other Middle East	12,243	168	11	1
Asia and Pacific	401,635	6,615	444	23
Australia	2,368	60	8	*
China	752	136	2	1
India	792	D	1	*
Japan	330,704	5,673	378	19
Singapore	7,427	238	20	1
South Korea	48,732	343	14	1
Taiwan	2,968	90	4	*
Other Asia and Pacific ^a	7,891	D	17	*
Other ^b	D	D	36	5

* = amount < \$500,000; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; OWH = Other Western Hemisphere; UBO = ultimate beneficiary owner.

^a Includes Hong Kong.

^b Includes affiliates whose immediate parent company is located outside the United States but whose ultimate owner is a U.S. company.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

TABLE 45. Domestic employment and R&D employment by majority-owned U.S. affiliates of foreign MNCs, by industry and company size: BRDIS 2010
(Thousands of employees)

Industry and company size	NAICS code	Total domestic employment	Domestic R&D employment
All industries	21–23, 31–33, 42–81	2,114	155
Manufacturing industries	31–33	1,565	125
Food	311	59	1
Beverage and tobacco products	312	54	*
Textile, apparel, and leather	313–16	14	*
Wood products	321	2	*
Printing and related support activities	323	4	*
Chemicals	325	317	43
Basic chemicals	3251	56	5
Resin, synthetic rubber, fibers, and filament	3252	13	1
Pharmaceuticals and medicines	3254	188	32
Other chemicals	other 325	60	5
Plastics and rubber products	326	96	2
Nonmetallic mineral products	327	39	1
Primary metals	331	39	1
Fabricated metal products	332	50	1
Machinery	333	113	7
Computer and electronic products	334	290	46
Communications equipment	3342	58	12
Semiconductor and other electronic components	3344	32	7
Navigational, measuring, electromedical, and control instruments	3345	184	21
Computer and peripheral equipment and other computer and electronic products	3341, 3343, 3346	16	5
Electrical equipment, appliances, and components	335	74	3
Transportation equipment	336	242	14
Automobiles, bodies, trailers, and parts	3361–63	183	11
Aerospace products and parts	3364	53	4
Other transportation	other 336	6	*
Furniture and related products	337	8	*
Miscellaneous manufacturing	339	124	5
Medical equipment and supplies manufacturing	3391	97	4
Other miscellaneous manufacturing	3399	27	1
Other manufacturing	322, 324	43	1
Nonmanufacturing industries	21–23, 42–81	549	30
Mining, extraction, and support activities	21	64	2
Wholesale trade	42	62	2
Information	51	131	12
Publishing	511	56	11
Telecommunications	517	D	1
Data processing, hosting, and related services	518	D	*
Other information	other 51	1	*
Professional, scientific, and technical services	54	161	12
Architectural, engineering, and related services	5413	68	2
Computer systems design and related services	5415	D	2
Scientific research and development services	5417	35	7
Other professional, scientific, and technical services	other 54	D	1
Other nonmanufacturing	22–23, 44–49, 52–53, 55–81	131	1
All companies	21–23, 31–33, 42–81	2,114	155
Small companies (5–499 domestic employees) ^a	–	95	12
Medium and large companies (number of domestic employees)			
500–999	–	129	11
1,000–4,999	–	531	43

TABLE 45. Domestic employment and R&D employment by majority-owned U.S. affiliates of foreign MNCs, by industry and company size: BRDIS 2010
(Thousands of employees)

Industry and company size	NAICS code	Total domestic employment	Domestic R&D employment
5,000–9,999	–	345	30
10,000–24,999	–	514	37
25,000 or more	–	500	22

* = amount < 500; D = data withheld to avoid disclosing operations of individual companies.

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; NAICS = 2007 North American Industry Classification System.

^a The upper bound is based on the U.S. Small Business Administration's definition of a small business; BRDIS does not include companies with fewer than five domestic employees.

NOTES: Data from BRDIS (cosponsored by the National Science Foundation and the U.S. Census Bureau) are matched to data from the FDIUS survey (conducted by the Bureau of Economic Analysis). BRDIS data in this table are for matched companies, where BRDIS-reported worldwide R&D expense plus worldwide R&D costs funded by others is greater than zero. Data are not weighted. Detail may not add to total because of rounding. The industry classification is based on the dominant business code for domestic R&D performance, where available. For companies that did not report business codes, the classification used for sampling was assigned.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

Appendix A. Technical Notes

Project Overview

Purpose. This report presents 2008–10 annual data from the R&D Data Link Project. The project integrates data from the U.S. Census Bureau and the Business R&D and Innovation Survey (BRDIS) from the National Science Foundation’s (NSF’s) National Center for Scientific and Engineering Statistics (NCSES) with data from Bureau of Economic Analysis (BEA) surveys on U.S. and foreign multinational companies (MNCs) with U.S. activities. The combined data enhance information on trends toward globalization in business research and development.

Authority. The project is governed by a Memorandum of Understanding (69-12-MOU-01) signed by NSF’s NCSES, BEA, and the Census Bureau. NSF enters into this agreement per the authority of the National Science Foundation Act of 1950, 42 U.S.C. 1861-76. The Census Bureau’s authority to enter this agreement is given by 13 U.S.C. Sections 8(b), 9, 23(c), and 401. The Census Bureau conducts BRDIS under a separate interagency agreement with NSF.

BEA’s authority to enter this agreement is 13 U.S.C. Section 401, 22 U.S.C. Section 3101, et seq., and 26 U.S.C., 6103(j)(1). Responses to the BEA surveys are mandatory under the International Investment and Trade in Services Survey Act (P.L. 94-472, 90 Stat. 2059, 22 U.S.C. 3101-3108). Section 401 authorizes the Census Bureau and BEA to exchange confidential business information for statistical purposes.

Project sponsor. The R&D Data Link Project is sponsored by NSF’s NCSES.

Link Methodology

Participating surveys. BRDIS is the primary source of information on U.S. R&D expenditures and the R&D workforce. BRDIS is an annual, nationally representative sample survey of approximately 43,000 companies. The target population for BRDIS consists of all for-profit companies that have five or more employees and that perform R&D in the United States. For details on BRDIS scope and methodology for 2008–10, see the Technical Notes in <http://www.nsf.gov/statistics/nsf13332/>.

BEA’s surveys on direct investment and the operations of MNCs are used to assess the role these business enterprises play in the global economy. The survey of Foreign Direct Investment in the United States (FDIUS) covers U.S. (i.e., U.S.-located) affiliates of foreign MNCs. The survey of U.S. Direct Investment Abroad (USDIA) covers U.S. MNC parent companies and also their foreign affiliates. U.S. affiliates and U.S. parent companies must file on a fully consolidated domestic (U.S.) basis. These surveys provide financial and operating data, including total R&D expenditures and R&D employment. BEA conducts the FDIUS and USDIA surveys annually and conducts more comprehensive FDIUS and USDIA benchmark surveys every 5 years. For FDIUS, 2008, 2009, and 2010 were annual survey years. For USDIA, 2008 and 2010 were annual survey years, and 2009 was a benchmark year. FDIUS survey data on U.S. affiliates used in this project (2008–10) covered majority-owned bank and nonbank affiliates. Data for U.S. MNC parent companies and their majority-owned foreign affiliates from the USDIA survey covered nonbank parents and nonbank affiliates for 2008 and covered both bank and nonbank entities for 2009 and 2010. However, the latter change had little effect in the BEA information used in the R&D Data Link Project. For the purpose of the BEA surveys, the United States includes the District of Columbia, Puerto Rico, and other U.S. territories and possessions. For details on BEA surveys and releases, see http://bea.gov/scb/account_articles/international/iidguide.htm. For methodology details, see <http://www.bea.gov/international/ai1.htm#intinv>.

Conducting the links. The link consisted of matching data across surveys for a given year. No linking was performed across years. For a given data year, there were two links of BRDIS data performed at the

Census Bureau: the link with BEA FDIUS survey data for majority-owned U.S. affiliates of foreign MNCs, and the link with BEA USDIA survey data for U.S. MNC parent companies. Separately, majority-owned foreign affiliates (MOFAs) (collected in the USDIA survey) of matched U.S. MNC parent companies were identified and tabulated by BEA. The rest of this section focuses on the two links of BRDIS with the BEA FDIUS and USDIA surveys.

For a given year, each link of BRDIS to a BEA survey consisted in two basic steps. The first step was a computer match of the BEA survey (FDIUS or USDIA) to records for the corresponding company in the Census Bureau's Business Register (BR), which is a database covering all U.S. companies and their establishments and serves as the BRDIS frame. The BR includes names, addresses, and other identification information, as well as key economic data obtained from Census Bureau surveys and administrative records. The computer match was made using Employer Identification Numbers (EINs) that are reported in BEA surveys and included in the Census Bureau BR. EINs are used by companies and their establishments when they file federal and state payroll and income taxes. For companies that failed to link in the computer match of EINs, other identification information, such as names and addresses, was used to link BEA companies to Census Bureau companies.

The second step was to link BEA companies successfully matched by EINs from the above step to the BRDIS company sample using Census Bureau ID numbers obtained from the BR. Additional steps were required to verify the matches, evaluate the accuracy of the matched data, and tabulate the linked BRDIS data. Appendix table A-1 provides a summary of company counts.

Validity checks and data adjustments. At various points in the link process, the Census Bureau, with input from NSF and BEA, reviewed or validated outputs prior to proceeding to the next step. For example, the BR match was examined in terms of names associated with matched EINs and the degree to which total employment from the BR was close to the BEA file (e.g., within 5%, 10%, 25%). The BRDIS match was assessed by examining reported (or imputed) domestic R&D performance, total domestic employment, domestic sales, and domestic R&D employment across the surveys. Discrepancies were sorted by size, discussed by analysts from the respective surveys, corrected, or determined to be unsolvable but acceptable for purposes of meaningful comparisons of aggregate data. Discrepancies with differences of at least \$100 million in domestic R&D performance, \$5 billion in domestic sales, 10,000 in total domestic employment, or 2,000 in domestic R&D employment were examined. Records that fell outside of the discrepancy review criteria were not investigated and were left as is. The criteria levels were set based on an examination of all discrepancies. A determination was made by NSF, BEA, and the Census Bureau that these levels would have the largest impact on improving the quality of the matched data. Among the reasons for the differences were reporting errors and company consolidation or composition between surveys. When warranted, changes were made to reported data for purposes of tabulations.

Coverage of linked data sets in comparison with published totals from participating surveys follow:

- 2008: BRDIS-reported domestic R&D performed by matched parent companies in 2008 accounted for 97.3% of R&D published by 2008 BEA USDIA survey. BRDIS-reported domestic R&D performed by matched U.S. affiliates accounted for 86.1% of the published R&D total for the BEA FDIUS survey. R&D performed overseas by MOFAs of matched parents accounted for 96.7% of R&D published by 2008 BEA USDIA survey.
- 2009: BRDIS-reported domestic R&D performed by matched parent companies in 2009 accounted for 95.7% of R&D published by the 2009 BEA USDIA survey. BRDIS-reported domestic R&D performed by matched U.S. affiliates accounted for 87.9% of the published R&D

total for the BEA FDIUS survey. R&D performed overseas by MOFAs of matched parents accounted for 96.0% of R&D published by the 2009 BEA USDIA survey.

- 2010: BRDIS-reported domestic R&D performed by matched parent companies in 2010 accounted for 95.9% of R&D published by the 2010 BEA USDIA survey. BRDIS-reported domestic R&D performed by matched U.S. affiliates accounted for 93.7% of the published R&D total for the BEA FDIUS survey. Lastly, R&D performed overseas by MOFAs of matched parents accounted for 97.5% of R&D published by the 2010 BEA USDIA survey.

Data Comparability

Comparability with Other R&D Link Data

This report presents 2008–10 linked data. An earlier report provided 2004–07 linked data using the BRDIS predecessor, the Survey of Industrial R&D (SIRD), available at <http://www.nsf.gov/statistics/nsf12327/>. Selected 1997 and 1999 data from methodology development activities involving SIRD and BEA surveys are available at <http://www.nsf.gov/statistics/infbrief/nsf07310/>. The methodology used for linked 2008–10 data in the present report is essentially the same as the methodology used for the 2004–07 link data report.

Comparability of Survey-Specific Methodology

All three participating surveys, BRDIS, FDIUS, and USDIA, cover for-profit companies on a fully consolidated domestic (U.S.) basis and use comparable definitions and accounting guidance for R&D expenditures and employment. The definitions of two items that were critical to establishing the accuracy of the links—total domestic employment and domestic R&D performance—are essentially the same. At the same time, there are some definitional and methodological differences across the surveys. For example, the Census Bureau and NSF's NCSES BRDIS data are collected on a calendar-year basis, while BEA data are collected on a fiscal-year basis. Unless otherwise stated, data tables used BRDIS-based statistics.

Comparability with Published Data from Original Participating Surveys

Data from matched companies presented here are based on the subset of companies in BRDIS that are part of an MNC, based on BEA information, and are not equivalent to estimates presented in BRDIS for total U.S. business R&D activity. BRDIS estimates of the latter are computed by weighting sample data to universe totals. Data from the link project are not weighted and are instead obtained from simple aggregations of linked sample microdata. Companies in the BRDIS-FDIUS match are the subset of BRDIS companies that are also majority-owned U.S. affiliates of foreign MNCs as identified in BEA surveys. Companies in the BRDIS-USDIA match are the subset of BRDIS companies that are parent companies of U.S. MNCs as identified in BEA surveys.

Similarly, data from matched companies presented here come from a subset of companies in the full set of companies reflected in BEA annual publications of the FDIUS and USDIA surveys. See the section "Validity Checks and Data Adjustments" above for data comparisons.

Lastly, data for matched parent companies of U.S. MNCs and matched majority-owned U.S. affiliates (U.S.-located, foreign-owned companies) should not be summed to attempt a U.S. R&D aggregate related to MNCs because some companies are both MNC parent companies of overseas affiliates and are themselves owned by a foreign parent company.

Definitions

Terms Related to MNCs and Foreign Direct Investment

Affiliate: A company or business enterprise located in one country but owned or controlled (in terms of 10% or more of voting securities or equivalent) by a person (in the broad legal sense, including a company) in another country; an affiliate may be either incorporated or unincorporated.

Foreign direct investment (FDI): Ownership or control of 10% or more of the voting securities (or equivalent) of a business located outside the home country.

Foreign parent company: The foreign entity, or the first entity outside the United States in a foreign chain of ownership, which has direct investment in a U.S. business enterprise.

Investing country: The country of the ultimate beneficial owner, the entity that ultimately owns or controls U.S. affiliate.

Majority-owned affiliate: A company owned or controlled to the extent of more than 50% of the voting securities (or equivalent) by its parent company.

Multinational company (MNC): A parent company and its foreign affiliates.

U.S. affiliate: A company located in the United States but owned by a foreign parent company.

U.S. multinational company (MNC) parent company: An entity (individual, branch, partnership, or corporation) that is located in the United States and that owns or controls at least 10% of the voting securities, or equivalent, of a foreign business enterprise.

Terms Related to Employment, R&D, and Sales

Employment, total and R&D. Employee head counts during the pay period that included 12 March of the survey year. R&D employees are those who provide direct support to R&D, such as researchers, R&D managers, technicians, clerical staff, and others assigned to R&D groups.

Research and development. R&D is planned, creative work aimed at discovering new knowledge or developing new or significantly improved goods and services. This includes (1) activities aimed at acquiring new knowledge or understanding without specific immediate commercial applications or uses (*basic research*), (2) activities aimed at solving a specific problem or meeting a specific commercial objective (*applied research*), and (3) systematic use of research and practical experience to produce new or significantly improved goods, services, or processes (*development*). R&D does not include expenditures for routine product testing, quality control, and technical services unless they are an integral part of an R&D project. R&D also does not include market research; efficiency surveys or management studies; literary, artistic, or historical projects, such as films, music, or books and other publications; and prospecting or exploration for natural resources.

R&D paid for by others. Cost of R&D funded by others outside of the company, including the U.S. federal government, and performed within the respondent company's facilities, both foreign and domestic.

R&D performed by the company. Cost of R&D performed within the respondent company's facilities regardless of funding source.

R&D performed by others. Cost of R&D funded by the company itself or by others outside of the company and performed by others outside of the company under contract, subcontract, grant, or other funding arrangement.

Sales. Dollar values for goods sold or services rendered to customers outside the company, including the U.S. federal government, less such items as returns, allowances, freight, charges, and excise taxes.

Data Availability

Data and publications from the *R&D Data Link Project* are available at <http://www.nsf.gov/statistics/rdlink/> and <http://www.bea.gov/international/ai1.htm#BEACENS>.

TABLE A-1. Summary of company counts: 2008–10

Company counts	2008	2009	2010
Published BRDIS (U.S.-located, for-profit companies)			
Companies in frame (millions)	1,926,012	2,090,181	2,013,399
Consolidated companies in sample	38,536	39,993	39,974
Unweighted number of company respondents with nonzero R&D performance	10,213	12,041	11,492
FDIUS survey (U.S. affiliates)			
Consolidated U.S. affiliates	18,069	18,925	19,878
U.S. affiliates matched to Business Register	8,259	8,471	8,738
U.S. affiliates matched to BRDIS	1,285	1,074	1,118
Unique BRDIS companies matched to FDIUS	1,137	944	1,014
With nonzero R&D performance	984	825	997
USDIA survey (parent companies of U.S. MNCs)			
Consolidated U.S. parent companies	3,003	3,920	3,863
U.S. parent companies matched to Business Register	2,825	3,587	3,485
U.S. parent companies matched to BRDIS	1,461	1,807	1,673
Unique BRDIS companies matched to USDIA	1,431	1,773	1,643
With nonzero R&D performance	1,392	1,713	1,638

BRDIS = Business R&D and Innovation Survey; FDIUS = Foreign Direct Investment in the United States; MNC = multinational company; USDIA = U.S. Direct Investment Abroad.

NOTES: The R&D Data Link project consisted of matching data across surveys for a given year. No linking was performed across years. Year-to-year variation in this table may reflect a combination of factors: changes in the multinational status of companies (e.g., acquisition or divestiture by a parent company), changes in R&D-active status (e.g., a company may be an R&D performer in one year but not the next), or changes in coverage (e.g., a company not captured by a given survey in one year because of size thresholds or other reasons [hence not matched] but sampled and matched in another year). The term "nonzero R&D performance" refers to nonzero sum of worldwide R&D paid for and performed by a company and the worldwide R&D funded by others and performed by a company.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, U.S. Bureau of Economic Analysis, and U.S. Census Bureau, R&D Data Link Project, 2008–10.

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National Center for Science and Engineering Statistics

John R. Gawalt

Director

Jeri M. Mulrow

Deputy Director

Jeri M. Mulrow

Chief Statistician (Acting)

John E. Jankowski

Program Director

Research and Development Statistics Program



National Center for Science and Engineering Statistics (NCSES)

The National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230, USA

Tel: (703) 292-8780, FIRS: (800) 877-8339 | TDD: (800) 281-8749