

Appendix table 4-17

Domestic R&D paid for by sources located outside the United States and performed by the company, by source of funds, industry, and company size: 2010

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total	Companies outside United States				All other
			Subsidiaries ^a	Foreign parent companies	Unaffiliated companies	Foreign governments	
All industries	21–23, 31–33, 42–81	14,644	3,519	7,102	3,913	37	74
Manufacturing industries	31–33	9,332	2,789	4,051	2,432	31	29
Food	311	D	D	D	D	0	D
Beverage and tobacco products	312	D	D	0	D	0	0
Textile, apparel, and leather products	313–16	1	0	0	D	0	D
Wood products	321	D	0	7	D	0	0
Paper manufacturing	322	D	0	2	D	0	0
Printing and related support activities	323	D	D	2	D	0	0
Petroleum and coal products	324	D	D	D	D	0	0
Chemicals	325	4,058	D	1,882	D	*	D
Basic chemicals	3251	107	80	D	*	0	0
Resin, synthetic rubber, fiber, and filament	3252	10 i	1	* i	9 i	0	0
Pesticide, fertilizer, and other agricultural chemical manufacturing	3253	D	D	D	0	0	0
Pharmaceuticals and medicines	3254	3,581	D	1,683	D	*	D
Soap, cleaning compound, and toilet preparation	3256	4	4	0	0	0	0
Paint, coating, adhesive, and other chemical manufacturing	3255, 3259	D	D	D	D	0	D
Plastic and rubber products	326	227 i	D	225 i	D	0	D
Nonmetallic mineral products	327	3	D	*	D	0	0
Primary metals	331	34	0	34	*	D	D
Fabricated metal products	332	D	0	D	D	0	D
Machinery	333	457	172	200	82	*	3
Agricultural implement manufacturing	33311	D	D	D	1 i	0	*
Semiconductor machinery manufacturing	333295	D	0	111	D	0	0
Engine, turbine, and power transmission equipment manufacturing	3336	57	0	10	47	0	0
Other machinery manufacturing	other 333	D	D	D	D	*	2
Computer and electronic products	334	2,274	482	1,039	728	23	2
Communication equipment	3342	814	D	603	D	* i	* i
Semiconductor and other electronic components	3344	519	244	172	101	0	1
Navigational, measuring, electromedical, and control instruments	3345	528	82	219	203	23	1 i
Electromedical, electrotherapeutic, and irradiation apparatus manufacturing	334510, 334517	190	65	D	89	0	0
Search, detection, navigation, guidance, aeronautical, and nautical system and instrument manufacturing	334511	301	D	D	112	D	0

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Other measuring and controlling device manufacturing	other 3345	37	D	D	2	D	1 i
Other computer and electronic products	other 334	413	D	44	D	0	0
Electrical equipment, appliances, and components	335	D	D	54	D	0	0
Transportation equipment	336	661	112	324	217	D	D
Automobiles, bodies, trailers, and parts	3361, 3362, 3363	554	D	D	D	0	0
Aerospace products and parts	3364	D	D	D	D	D	D
Aircraft, aircraft engine, and aircraft part manufacturing	336411-13	101	D	D	D	D	D
Guided missile, space vehicle, and related part manufacturing	336414-15, 336419	D	0	0	D	D	0
Military armored vehicle, tank, and tank component manufacturing	336992	0	0	0	0	0	0
Other transportation	other 336	D	0	D	D	0	0
Furniture and related products	337	0	0	0	0	0	0
Miscellaneous manufacturing	339	656	D	210	D	1	D
Medical equipment and supply manufacturing	3391	641	D	197	D	0	D
Other miscellaneous manufacturing	3399	15	0	13	D	1	D
Nonmanufacturing industries	21-23, 42-81	5,312	730	3,051	1,481	6	44
Mining, extraction, and support activities	21	587	D	0	D	0	0
Utilities	22	0	0	0	0	0	0
Construction	23	3	0	2	*	0	0
Wholesale trade	42	D	0	101 i	0	0	D
Retail trade	44-45	0	0	0	0	0	0
Electronic shopping and electronic auctions	454111-12	0	0	0	0	0	0
Other retail trade	other 44-45	0	0	0	0	0	0
Transportation and warehousing	48-49	* i	0	* i	0	0	0
Information	51	698	337	342	D	1	D
Publishing	511	520	200	305	D	1	D
Newspaper, periodical, book, and directory publishers	5111	0	0	0	0	0	0
Software publishers	5112	520	200	305	D	1	D
Telecommunications	517	D	D	30	D	0	D
Data processing, hosting, and related services	518	0	0	0	0	0	0
Other information	other 51	D	D	8 i	0	0	0
Finance and insurance	52	D	D	0	0	0	0
Real estate, rental, and leasing	53	11	11	0	0	0	0
Professional, scientific, and technical services	54	3,883	D	2,603	1,198	D	D
Architectural, engineering, and related services	5413	199	0	83	116	*	0

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			Subsidiaries ^a	Foreign parent companies	Unaffiliated companies	Foreign governments	
Computer system design and related services	5415	380	D	236	112	0	D
Scientific research and development services	5417	3,187	17	2,229	915	3 i	22
Biotechnology research and development	541711	1,634	10	1,043	565	2 i	15
Physical, engineering, and life sciences (except biotechnology) research and development	541712	1,551	7	1,184	351	1	7
Social sciences and humanities research and development	541720	2	0	2	0	0	0
Other professional, scientific, and technical services	other 54	116	D	54	54	D	D
Health care services	621-23	D	0	0	D	D	D
Other nonmanufacturing	55-56, 624, 71-72, 81	D	0	2	D	0	0
All companies (number of employees)	-	14,644	3,519	7,102	3,913	37	74
Small companies (number of employees) ^b							
5-499	-	2,273	195	1,357	647	6	67
5-99	-	1,115	54	671	341	6	43
5-49	-	555	*	396	133	5 i	22
5-9	-	47	0	18	17	2 i	11
10-24	-	203	*	170	29	1	3
25-49	-	305	0	209	87	2	8
50-99	-	559	54	275	208 i	1	22
100-249	-	685	D	403	228	D	D
250-499	-	473	D	284	78	D	D
Medium and large companies (number of employees)							
500-999	-	680	70	490	119	1	* i
1,000-4,999	-	5,565	717	2,808	2,036	*	4
5,000-9,999	-	2,210	323	1,706	181	0	1
10,000-24,999	-	2,137	784	737	616	*	0
25,000 or more	-	1,779	1,431	3	314	30	1

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

NAICS = 2007 North American Industry Classification System.

^a Subsidiaries are company-owned units outside the United States. Although all estimates include an adjustment to the weight to account for unit nonresponse, the estimates for domestic R&D paid for by foreign subsidiaries do not include item imputation. Caution should be used when comparing the subsidiaries estimates to other estimates presented in this table.^b Upper bound is based on the U.S. Small Business Administration's definition of a small business; the Business R&D and Innovation Survey does not include companies with fewer than five domestic employees.

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

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics and U.S. Census Bureau, Business R&D and Innovation Survey (2010).