

TABLE 23

Domestic and foreign R&D paid for by the company and others and performed by the company, by type of R&D and selected industry for companies that performed foreign R&D: 2016

(Millions of U.S. dollars)

Industry	NAICS code	Total	Paid for by company	Paid for by others	Research (basic and applied)			Development			
					Total	Paid for by company	Paid for by others	Total	Paid for by company	Paid for by others	
Domestic R&D performance											
All industries	21-23, 31-33, 42-81	271,023	240,862	30,161	53,859	46,434	7,424	217,164	194,428	22,736	
Manufacturing industries	31-33	182,727	161,405	21,321	41,296	36,679	4,617	141,431	124,726	16,705	
Chemicals	325	45,301	43,517	1,784	15,527	14,987	541	29,774	28,530	1,243	
Pharmaceuticals and medicines	3254	38,893	37,597	1,296	13,665	13,482	183	25,228	24,115	1,113	
Other chemicals	other 325	6,408	5,920	488	1,862	1,504	358	4,546	4,416	131	
Computer and electronic products	334	67,266	62,642	4,624	10,320	9,631	689	56,946	53,012	3,935	
Semiconductors and other electronic components	3344	28,655	28,289	366	4,826	4,815	11	23,829	23,474	355	
Other computer and electronic products	other 334	38,611	34,353	4,258	5,494	4,816	678	33,117	29,537	3,580	
Nonmanufacturing industries	21-23, 42-81	88,296	79,457	8,839	12,563	9,755	2,808	75,733	69,701	6,032	
Information	51	59,960	59,653	307	5,391	5,322	69	54,568	54,331	238	
Software publishers	5112	29,817	29,566	251	3,137	3,105	32	26,680	26,461	219	
Other information	other 51	30,143	30,086	56	2,254	2,217	37	27,888	27,869	19	
Professional, scientific, and technical services	54	20,080	11,663	8,417	5,719	2,983	2,736	14,360	8,680	5,681	
Scientific research and development services	5417	8,155	333	7,822	2,398	138	2,261	5,756	195	5,561	
Other professional, scientific, and technical services	other 54	11,925	11,330	595	3,321	2,845	476	8,604	8,485	120	
Foreign R&D performance											
All industries	21-23, 31-33, 42-81	77,146	70,326	6,820	17,430	15,569	1,861	59,716	54,757	4,959	
Manufacturing industries	31-33	52,689	51,421	1,268	12,910	12,685	225	39,779	38,736	1,042	
Chemicals	325	12,313	12,146	167	3,944	3,898	47	8,369	8,248	120	
Pharmaceuticals and medicines	3254	9,914	9,768	146	2,984	2,952	32	6,930	6,816	114	
Other chemicals	other 325	2,399	2,378	21	960	946	14	1,439	1,432	7	
Computer and electronic products	334	20,791	20,530	261	5,830	5,734	96	14,961	14,796	165	
Semiconductors and other electronic components	3344	10,304	10,278	26	2,118	2,114	4	8,186	8,164	22	
Other computer and electronic products	other 334	10,487	10,252	235	3,712	3,620	91	6,775	6,632	143	
Nonmanufacturing industries	21-23, 42-81	24,457	18,905	5,552	4,520	2,884	1,636	19,937	16,021	3,917	
Information	51	13,384	13,355	29	1,805	1,800	5	11,580	11,556	24	
Software publishers	5112	8,693	8,682	12	1,392	1,392	0	7,301	7,289	12	
Other information	other 51	4,691	4,674	17	412	408	5	4,278	4,266	12	
Professional, scientific, and technical services	54	9,176	3,690	5,486	2,446	829	1,617	6,730	2,862	3,868	
Scientific research and development services	5417	5,412	64	5,348	1,545	16	1,528	3,867	47	3,820	

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Other professional, scientific, and technical services	other 54	3,764	3,627	138	901	i	812	i	89	i	2,863	2,814	49

i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

Note(s)

Detail may not add to total because of 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, the classification used for sampling was assigned. Statistics are representative of companies located in the United States that performed foreign R&D.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2016.