

TABLE 51-B

R&D paid for by the company and others and performed by the company outside of the United States, by selected location, industry, and company size: 2018 (part B)

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total outside United States	Argentina	Brazil	Chile	Mexico	Other Latin American locations	Australia	China	Hong Kong	India	Indonesia	Japan	Malaysia	New Zealand	Singapore	South Korea	Taiwan	Thailand	Other Asian or Pacific locations	Israel	Other Middle Eastern locations	South Africa	Other African locations	Undistributed	
All industries	21-23, 31-33, 42-81	100,376	298	1,529	129	1,532	2,948	1,953	7,867	347	9,521	28	3,986	879	154	3,889	1,381	1,772	362	905	5,099	253	236	92	777	i
Manufacturing industries	31-33	64,878	124	1,169	66	1,357	2,243	1,096	5,678	237	5,008	23	2,653	855	76	3,153	1,087	1,137	283	725	3,429	197	66	29	638	i
Food	311	864	3	83	i 4	20	11	38	141	i 2	12	3	3	2	3	19	3	*	4	5	*	2	3	3	0-170	i
Chemicals	325	16,749	96	369	35	127	302	277	799	98	314	i 9	1,172	8	12	221	92	88	21	155	236	96	49	19	4-40	i
Pharmaceuticals and medicines	3254	13,945	75	242	24	85	241	260	550	67	269	i 3	1,040	5	11	115	87	81	15	52	224	88	39	15	5	i
Other chemicals	other 325	2,804	22	i 127	11	i 41	i 61	17	250	31	i 44	6	131	3	1	i 106	6	6	6	103	12	8	10	3	0-36	i
Plastics and rubber products	326	428	3	11	0	37	1	1	57	1	2	*	22	0	*	1	4	*	5	0	0	0	0	0	21	i
Nonmetallic mineral products	327	181	i 0	0	0	3	i 0	*	14	i 0	1	i 0	31	0	0	0	45	i 9	i 0	0	20	i 0	0	0	*	i
Fabricated metal products	332	216	1	*	*	3	*	1	23	0	4	0	50	1	7	1	0	1	*	4	0	1	*	0	1	i
Machinery	333	4,521	2	113	*	21	5	43	394	4	338	* i	169	10	10	112	146	107	i 1	13	244	3	6	*	2	i
Computer and electronic products	334	28,322	9	48	*	167	1,814	i 117	2,765	74	3,937	2	856	829	40	2,648	215	882	212	389	i 2,752	17	2	*	227-525	i
Electrical equipment, appliances, and components	335	1,693	1	96	*	23	*	2	307	13	45	*	55	1	*	39	26	21	2	12	1	1	1	1	3	i
Transportation equipment	336	7,446	1	i 405	0	914	13	465	677	1	210	*	78	0	0	1	516	17	20	106	51	*	3	i 4	85	i
Miscellaneous	339	3,270-3,274	0-12	23	25	21	65	130	380	29	i 134	9	183	4	4	85	28	12	2	23	125	0-81	1	0-5	0-247	i
Other manufacturing	312-16, 321-24, 331, 337	1,180-1,191	0-12	21	2	21	31	22	121	14	11	0	34	*	0	26	13	1	15	18	*	0-81	2	0-5	0-179	i
Nonmanufacturing industries	21-23, 42-81	35,498	175	361	63	175	705	857	2,189	111	4,513	5	1,333	24	78	736	294	636	79	180	1,670	56	170	63	139	i
Wholesale trade	42	32	0	0	0	0	0	0	2	9	0	0	1	0	0	0	0	3	0	9	0	0	0	0	1	i
Information	51	17,156	17	91	31	67	53	382	1,178	38	2,753	3	278	7	40	273	62	486	7	121	1,011	8	42	47	0-15	i
Telecommunications	517	131-138	0	0	0	0-8	0-5	*	8	1	34	0	*	0	0	*	3	0	0	0	0-20	0	0	0	0	
Data processing, hosting, and related services	518	4,739	2	31	*	60	49	127	338	5	1,297	2	i 45	2	27	43	12	22	i 1	i 29	225	4	32	*	0-15	
Other information	other 51	12,278-12,287	15	61	31	0-8	0-5	255	832	32	1,422	1	233	5	13	230	47	464	6	92	765-787	4	10	47	0-15	i
Professional, scientific, and technical services	54	13,307	157	174	28	91	631	253	710	25	i 1,109	2	684	12	23	224	140	138	19	29	567	13	97	11	79-92	i
Architectural, engineering, and related services	5413	56-66	i 0	*	0	0	0	1	*	5	i 2	0	17	i 0	0	*	i *	4	i 0	0	0	*	0	0	0-15	i
Scientific research and development services	5417	8,370-8,379	115	117	26	78	53	158	371	19	262	2	602	12	19	187	136	72	19	20	74	11	96	6	0-12	i
Research and development in biotechnology	541711	2,590	17	21	8	35	13	66	139	6	78	*	88	2	8	16	45	17	4	4	21	0-7	9	0	0-7	i

TABLE 51-B

R&D paid for by the company and others and performed by the company outside of the United States, by selected location, industry, and company size: 2018 (part B)

(Millions of U.S. dollars)

Industry and company size	NAICS code	Total outside United States	Argentina	Brazil	Chile	Mexico	Other Latin American locations	Australia	China	Hong Kong	India	Indonesia	Japan	Malaysia	New Zealand	Singapore	South Korea	Taiwan	Thailand	Other Asian or Pacific locations	Israel	Other Middle Eastern locations	South Africa	Other African locations	Undistributed
Other scientific research and development	other 5417	5,779 - 5,790	97	96 i	18 i	43 i	40 i	92	231	13 i	184	1	514	10	11	171	91	55	15	17	53 i	4 - 12	87	6	0 - 12
Other professional, scientific, and technical services	other 54	4,871	42 i	57	2	14	577	94	339	* i	845	0	65	*	4	37	4 i	62	0	9	493	1	1	5	75 i
Other nonmanufacturing	21-23, 44-45, 48-49, 52-53, 55-56, 621-24, 71-72, 81	5,002 i	1	95 i	3	17 i	21 i	221 i	299 i	39	651 i	*	371 i	5	15 i	238 i	91 i	9 i	53	21 i	92 i	36 i	31 i	5 i	33 - 53
All companies (number of domestic employees)	-	100,376	298	1,529	129	1,532	2,948	1,953	7,867	347	9,521	28	3,986	879	154	3,889	1,381	1,772	362	905	5,099	253	236	92	777 i
Small companies																									
10-19 ^a	-	128	0	* i	0	0	1	4	10	* i	9	0	5	0	0	0	14	3	0	2	6 i	1 i	* i	0	16 i
20-49	-	569	1	* i	0	*	4	12	78	2	74	0	5	0	*	5	6	34	0	2	8	*	* i	0	12 i
Medium companies																									
50-99	-	692	1	4	1	1	1	30	51	1	139	*	10	1	3	13	6	24	1	3	83	0	* i	1	10 i
100-249	-	1,872	* i	3	1	8	33	7	242	36	110	0	2	0	1	74	9	103	1	7	123	3	7	0	8 i
Large companies																									
250-499	-	2,179	12	14	1	48 i	7	11	208	28	206	*	37	3	*	97	96	113	1	56	142	2	2	*	12 i
500-999	-	2,557	10	21	2	36	7	41	228	30	163	*	131	56	4	63	14	61	9	9	82	2	2	4	65
1,000-4,999	-	15,184	51	139	8	95	43	312	1,338	62 i	1,798	7 i	294	57	43	290	78	213	66	157 i	619	7	37	1	232 i
5,000-9,999	-	15,538	103	135	25 i	113 i	1,004 i	212	873 i	61 i	1,275	1	1,122	305 i	19	567	194 i	198 i	211	176 i	366	24	90	6	235 i
10,000-24,999	-	22,356	87	456	30	171	878	287	1,427	44	2,119	13	1,075	18	55	2,194	252	227	18	279	503	52	46	16	2 i
25,000 or more	-	39,301	33	756	61	1,060	970	1,038	3,412	82	3,627	6	1,305	439	28	587	711	797	54	215	3,167	162	52 i	65	184 i

* = amount < \$500,000; i = > 50% of the estimate is a combination of imputation and reweighting to account for nonresponse.

NAICS = 2012 North American Industry Classification System.

^a Business Research and Development Survey does not include companies with fewer than 10 domestic employees.**Note(s):**

Detail may not add to total because of rounding. Country detail was not collected from companies reporting less than \$1 million of R&D paid for by the company or reporting less than \$1 million of R&D paid for by others. 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. Beginning in survey year 2018, statistics are representative of companies located in the United States that performed or funded \$50,000 or more of R&D. This change has affected the comparability of these estimates with estimates published for years prior to 2018. An estimate range may be displayed in place of a single estimate to avoid disclosing operations of individual companies.

Source(s):

National Center for Science and Engineering Statistics and U.S. Census Bureau, Business Research and Development Survey, 2018.