TABLE 3. Worldwide R&D paid for by the company and others and performed by the company, by industry, company size, and worldwide R&D program size: 2014 (Millions of U.S. dollars)

Marchestey			R&D program size						
All industries		•						\$100 million or	
Manufachuring industries	Industry	NAICS codes	companies	million	\$9.999 million	\$49.999 million	\$99.999 million	more	
Food	All industries	21-23, 31-33, 42-81	416,038	9,407 i	27,013	32,840	20,984	325,794	
Peerages and tobeocon products	Manufacturing industries	31–33	286,476	4,681 i	13,387	19,987	14,116	234,305	
Textilles, apparel, and leather products	Food	311	6,532	238 i	1,010	616	539	4,130 i	
Mood products         321         368 i         20 i         69 i         279 i         10         0           Paper         322         880 i         60 i         92         177 i         110 i         441           Printing and related support activities         323 i         238 i         50 i         104 i         84 i         152 i         0           Chemicals         324 i         7968 i         570 i         2.56 i         6.018 i         2.815 i         7.489 i           Basic chemicals         325 i         3.633 i         81 i         324 i         766 i         393 i         2.070 i           Rustrs, synthetic rubber, and artificial sysphetic flowers and flimenets         3252 i         1.842 i         47 i i         194 i         67 i         166 i         1.368 ii           Pesticides, fertilizes, and other agricultural chemicals         3253 i         2.08 i         38 i i         23 i         111 i         0         1.914 i           Pharmaceuticals and medicines         325 i         3.499 i         104 i         155 i         227 i         167 i         2.947 i           Palaris, coatings, afterbases, and other chemicals         325 i         3.999 i         104 i         155 i         2271 ii         155 i	Beverages and tobacco products	312	1,423	11 i	52	153	187	1,020	
Pager   322   880   60 i 92   177   110 i 441     Printing and related support activities   323   238   50 i 104   84   0   0     Petroleum and coel products   324   298   20 i 48   78   152   0     Chemicals   325   79,468   570 i 2,506   6,018   2,885   67,489     Basic chemicals   325   3,833   81 i 326   6,018   2,885   67,489     Basic chemicals   325   3,832   81 i 326   6,018   2,885   67,489     Basic chemicals   325   3,832   81 i 326   6,018   2,885   67,489     Basic chemicals   325   3,832   81 i 194   67   166   1,868     Pesicidizer, fertilizers, and other agricultural chemicals   325   6,777   181 i 1,583   4,637   2,004   58,365     Pasints, canding, and medicines   325   6,377   181 i 1,583   4,637   2,004   58,365     Soars, cleaning compounds, and tolled preparations   3256   6,737   181 i 1,583   4,637   2,004   58,365     Soars, cleaning compounds, and tolled preparations   3256   6,737   181 i 1,583   4,637   2,004   58,365     Soars, cleaning compounds, and tolled preparations   3256   4,457   304 i 1,584   227   210 i 1,515   2,935     Plastics and rubber products   326   4,457   304 i 1,584   227   210 i 1,555   2,935     Plastics and rubber products   327   1,599   55 i 166   205   0   1,173     Primary metals   3331   770   71 i 113   349   0   2,237     Primary metals   3331   20   0   86   102   0   1,471     Primary metals   3331   34,337   796 i 1,714   1,989   1,461   8,978     Agricultural implements   334   2,283   18 i   0   1,991   1,991   1,461   2,279     Engines, turbines, and power transmission   4,982   3,434   19 i   2,526   3,476   4,213   8,3893     Communications equipment   3342   2,204   170 i   1,166   1,093   9,57   15,446     Components   348   4,2722   165 i   640   1,304   1,711   3,890     Alvadigation pagerius   3,485   1,480   3,491	Textiles, apparel, and leather products	313–16	734	92 i	148	276	217	0	
Printing and related support activities         323         238         50 i         104         84         0         0           Petroleum and coal products         324         298         20 i         48         78         152         0           Chemicals         325         79,468         570 i         2,506         6,018         2,885         67,489           Basic chemicals         325         79,468         570 i         2,506         6,018         2,885         67,899           Resincias, synthetic rubbers and fillaments         325         1,842         47 i         194         67         166         1,368           Pesticides, ferilizers, and other agricultural         325         2,086 i         38 i         23         111         0         1,914           Pharmaceulticals and medicines         325         2,086 i         38 i         23         111         0         1,914           Pharmaceulticals and medicines         325         2,086 i         38 i         23         115         227         167         2,004         83,35           Soaps, cleaning compounds, and tollet preparations         3255,325         1,670 i         155         227         10 i         155         295 i	Wood products	321	368 i	20 i	69 i	279 i	0	0	
Petroleum and coal products	Paper	322	880	60 i	92	177	110 i	441	
Chemicals         325         79,468         570 i         2,506         6,018         2,885         67,899           Basic chemicals         3251         3,633         81 i         324         766         393         2,070           Resins. synthetic rubber, and artificial synthetic fibers and filaments         3252         1,842         47 i         194         67         166         1,368           Pesticides, fertilizers, and other agricultural chemicals         3253         2,086 i         38 i         23         111         0         1,914 i           Pharmaceuticals and medicines         3253         2,086 i         38 i         23         111         0         58,365           Soaps, cleaning compounds, and sollet preparations         3255         3,499         104 i         1555         227         167         2,847           Plants, cadalings, athesises, and other chemicals         3255,3259         1,670 i         154 i         2227         210 i         155         294         460         2,433           Plastics and rubber products         327         1,599         15 i         166         205         0         1,173           Plastics and rubber products         331         707         1 i         13         349 <td>Printing and related support activities</td> <td>323</td> <td>238</td> <td>50 i</td> <td>104</td> <td>84</td> <td>0</td> <td>0</td>	Printing and related support activities	323	238	50 i	104	84	0	0	
Basic chemicals         3251         3.633         81 i         324         766         393         2,070           Resins, synthetic rubber, and artificial synthetic fibers and filiments         3252         1,842         47 i         194         67         166         1,368           Pesticides, fertilizers, and other agricultural chemicals         3253         2,086 i         38 i         23         111         0         1,914 i           Pharmaceucicals and medicines         3254         66,737         148 i         1,593         4,637         2,004         58,365           Soaps, cleaning compounds, and tollet preparations         325         34,99         104 i         155         227         167         2,847           Paints, coalings, adhesives, and other chemicals         3255,3259         1,670 i         154 i         227         210 i         155         925 i           Plastics and rubber products         325         25,5259         1,670 i         154 i         227         210 i         155         925 i           Plastics and rubber products         3331         770         71 i         133         349 i         0         20         0         1,173           Primary metals         3331         14937         796 i	Petroleum and coal products	324	298	20 i	48	78	152	0	
Resins, synthetic rubber, and artificial synthetic fibers and filaments 325 1,842 47 i 194 67 166 1,368 Pesiticides, and filaments 325 2,868 i 38 i 194 11 0 1,914 i Pharmaceuricals and medicines 325 2,868 i 38 i 23 111 0 1,914 i Pharmaceuricals and medicines 325 6,849 104 i 155 227 167 2,847 Paints, coatings, adhesives, and other chemicals 3255,3259 1,670 i 154 i 227 210 i 155 925 i Plastics and rubber products 326 4,457 304 i 568 692 400 2,433 Nonnetallic mineral products 326 4,457 304 i 568 692 400 2,433 Nonnetallic mineral products 326 4,457 304 i 568 692 400 2,433 Nonnetallic mineral products 327 1599 55 i 166 205 0 1,173 Primary metals 331 770 71 i 113 349 0 237 Fabricated metal products 332 2,353 541 i 756 736 319 0 237 Fabricated metal products 332 2,353 541 i 756 736 319 0 1,271 Semiconductor machinery 3331 1,00 D D 86 102 D 1,871 Semiconductor machinery 3332 3,44 19 i 93 i 218 314 i 2,791 Engines, turbines, and power transmission equipment 3336 2,883 18 i D D 169 266 D D Computer and electronic products 334 9,490 801 i 2,556 3,476 4,213 83,893 C Communications equipment 334 42,722 165 i 640 1,304 1,711 38,901 Navigational, measuring, electromedical, and control instruments 3345 19,030 369 i 1,166 1,093 957 15,446 Electromedical, arand control instruments 3345 19,030 81 i 3,14 i 3,14 i 3,03 684 3,583 Search, delection, navigation, guidance, aeronaductal and naulical systems and instruments 3345 8,486 8 i 134 i 242 62 8,040 8,0	Chemicals	325	79,468	570 i	2,506	6,018	2,885	67,489	
synthetic fibers and filaments         3252         1,842         47 i         194         67         166         1,368           Pesticides, fertilizers, and other agricultural chemicals         3253         2,086 i         38 i         23         1111         0         1,914 i           Pharmaceuticals and medicines         3254         66,737         148 i         1,583         4,637         2,004         58,365           Soaps, cleaning compounds, and foliet preparations         3256         3,499         104 i         1555         227         167         2,847           Paints, coatings, adhesives, and other chemicals         3255, 3259         1,670 i         157         227         210 i         155         292 i           Plastics and rubber products         326         4,457         304 i         568         692         400         2,433           Nonmetallic mineral products         337         1,599         55 i         166         205         0         1,173           Plastics and rubber products         333         14,937         796 i         1,113         349         0         237           Fabricated metal products         3331         D         D         86         102         D         1,461         8,	Basic chemicals	3251	3,633	81 i	324	766	393	2,070	
Pesticides, fertilizers, and other agricultural chemicals   3253   2,086 i   38 i   23   111   0   1,914 i   1,914	Resins, synthetic rubber, and artificial								
chemicals         3253         2,086 i         38 i         23         111         0         1,914 i           Pharmaceuticals and medicines         3254         66,737         148 i         1,563         4,637         2,004         59,365           Soaps, cleaning compounds, and toilet preparations         3255         3256         3,499         104 i         155         227         167         2,847           Paints, coatings, adhessives, and other chemicals         3255, 3259         1,670 i         154 i         227         210 i         155         925 i           Plastics and rubber products         325         4,457         304 i         568         692         460         2,433           Nonmetallic mineral products         327         1,599         55 i         166         205         0         1,173           Primary metals         3331         770         71 i         113         349         0         237           Fabricated metal products         3331         14,937         796 i         1,714         1,989         1,461         8,778           Agricultural implements         33311         0         0         86         102         0         1,871           Semiconductor machinery<	synthetic fibers and filaments	3252	1,842	47 i	194	67	166	1,368	
Pharmaceuticals and medicines   3254   66,737   148   1,593   4,637   2,004   59,365	Pesticides, fertilizers, and other agricultural								
Soaps, cleaning compounds, and toilet preparations         3256         3,499         104 i         155         227         167         2,847           Paints, coalings, adhesives, and other chemicals         3255, 3259         1,670 i         154 i         227         210 i         155         925 i           Plastics and rubber products         326         4,457         304 i         568         692         460         2,433           Nonmetallic mineral products         327         1,599         55 i         166         205         0         11,733           Primary metals         331         770         71 i         113         349         0         237           Fabricated metal products         332         2,533         541 i         756         736         319         0           Machinery         333         14,937         796 i         1,714         1,989         1,461         8,78           Agricultural implements         33311 n         0         0         86         102         0         1,871           Semiconductor machinery         3332         2,883         18 i         0         169         266         D           Other machinery         other 333         0	chemicals	3253	2,086 i	38 i	23	111	0	1,914 i	
Soaps, cleaning compounds, and toilet preparations         3256         3,499         104 i         155         227         167         2,847           Paints, coalings, adhesives, and other chemicals         3255, 3259         1,670 i         154 i         227         210 i         155         925 i           Plastics and rubber products         326         4,457         304 i         568         692         460         2,433           Nonmetallic mineral products         327         1,599         55 i         166         205         0         11,733           Primary metals         331         770         71 i         113         349         0         237           Fabricated metal products         332         2,533         541 i         756         736         319         0           Machinery         333         14,937         796 i         1,714         1,989         1,461         8,78           Agricultural implements         33311 n         0         0         86         102         0         1,871           Semiconductor machinery         3332         2,883         18 i         0         169         266         D           Other machinery         other 333         0	Pharmaceuticals and medicines	3254	66,737	148 i	1,583	4,637	2,004	58,365	
Plastics and rubber products         326         4,457         304 i         568         692         460         2,433           Nonmetallic mineral products         327         1,599         55 i         166         205         0         1,173           Primary metals         331         770         71 i         113         349         0         237           Fabricated metal products         332         2,535         541 i         756         736         319         0           Machinery         333         14,937         796 i         1,714         1,989         1,461         8,978           Agricultural implements         33311         0         0         86         102         0         1,871           Semiconductor machinery         33329         3,343         18 i         0         169         266         D           Other machinery         others 33         0         D         0         1,501         D         D           Computer and electronic products         334         94,910         801 i         2,526         3,476         4,213         38,983           Semiconductors and other electronic         344         42,722         165 i         640	Soaps, cleaning compounds, and toilet preparations	3256		104 i			167		
Plastics and rubber products         326         4,457         304 i         568         692         460         2,433           Nonmetallic mineral products         327         1,599         55 i         166         205         0         1,173           Primary metals         331         770         71 i         113         349         0         237           Fabricated metal products         332         2,535         541 i         756         736         319         0           Machinery         333         14,937         796 i         1,714         1,989         1,461         8,978           Agricultural implements         33311         0         0         86         102         0         1,871           Semiconductor machinery         33329         3,343         18 i         0         169         266         D           Other machinery         others 33         0         D         0         1,501         D         D           Computer and electronic products         334         94,910         801 i         2,526         3,476         4,213         38,983           Semiconductors and other electronic         344         42,722         165 i         640	Paints, coatings, adhesives, and other chemicals	3255, 3259	1,670 i	154 i	227	210 i	155	925 i	
Nonmetallic mineral products         327         1,599         55 i         166         205         0         1,173           Primary metals         331         770         71 i         113         349         0         237           Fabricated metal products         332         2,353         541 i         756         736         319         0           Machinery         3331         14,937         796 i         1,714         1,989         1,461         8,978           Agricultural implements         33311         D         D         86         102         D         1,871           Semiconductor machinery         333295         3,434         19 i         93 i         218         314 i         2,791           Engines, turbines, and power transmission         2,833         18 i         D         169         266         D           Other machinery         31433         94,910         801 i         2,526         3,476         4,213         83,893           Computer and electronic products         334         94,910         801 i         2,526         3,476         4,213         83,893           Semiconductors and other electronic         3345         19,030         369 i         1			4,457	304 i	568	692	460	2,433	
Primary metals         331         770         71 i         113         349         0         237           Fabricated metal products         332         2,353         541 i         756         736         319         0           Machinery         333         14,937         796 i         1,714         1,989         1,461         8,978           Agricultural implements         33311         D         D         86         102         D         1,871           Semiconductor machinery         33329         3,434         19 i         93 i         218         314 i         2,791           Engines, turbines, and power transmission equipment         3336         2,883         18 i         D         169         266         D           Other machinery         other 333         P         D         D         D         1,501         D         D         D         D         1,501         D         D         D         D         1,501         P         2,004         2,526         3,476         4,213         83,893         8,004         1,304         1,711         38,901         3,893         1,804         1,106         1,304         1,711         38,901         3,802         3,802<	·	327	1,599	55 i	166	205	0	1,173	
Fabricaled metal products         332         2,353         541 i         756         736         319         0           Machinery         333         14,937         796 i         1,714         1,989         1,461         8,978           Agricultural implements         33311         D         D         86         102         D         1,871           Semiconductor machinery         333295         3,434         19 i         93 i         218         314 i         2,791           Engines, turbines, and power transmission equipment         3336         2,883         18 i         D         169         266         D           Other machinery         other 333         D         D         D         D         1,501         D         D         D           Computer and electronic products         334         94,910         801 i         2,526         3,476         4,213         83,893           Communications equipment         334         42,722         165 i         640         1,304         1,711         38,901           Navigational, measuring, electromedical, electromedical, and control instruments         3345 i         19,030         369 i         1,166         1,093         957         15,446 <t< td=""><td>·</td><td>331</td><td>770</td><td>71 i</td><td>113</td><td>349</td><td>0</td><td>237</td></t<>	·	331	770	71 i	113	349	0	237	
Machinery         333         14,937         796 i         1,714         1,989         1,461         8,978           Agricultural implements         33311         D         D         86         102         D         1,871           Semiconductor machinery         333295         3,434         19 i         93 i         218         314 i         2,791           Engines, turbines, and power transmission equipment         3336         2,883         18 i         D         169         266         D           Other machinery         other333         D         D         D         1,501         D	•		2,353	541 i		736	319		
Agricultural implements         33311         D         D         86         102         D         1,871           Semiconductor machinery         333295         3,434         19 i         93 i         218         314 i         2,791           Engines, turbines, and power transmission equipment         3336         2,883         18 i         D         169         266         D           Other machinery         other 333         D         D         D         1,501         D         D           Computer and electronic products         334         94,910         801 i         2,526         3,476         4,213         83,893           Communications equipment         3342         22,044         170 i         414         512         900         20,048           Semiconductors and other electronic         3344         42,722         165 i         640 i         1,304         1,711         38,901           Navigational, measuring, electromedical, and control instruments         3345 i         19,030         369 i         1,166 i         1,093         957 i         15,446           Electromedical, electrotherapeutic, and irradiation apparatus         334510, 33451         4,982         81 i         331 i         330         684         3	·	333	14,937	796 i	1,714	1,989	1,461	8,978	
Semiconductor machinery         333295         3,434         19 i         93 i         218         314 i         2,791           Engines, turbines, and power transmission equipment         3336         2,883         18 i         D         169         266         D           Other machinery         other 333         D         D         D         1,501         D         D           Computer and electronic products         334         94,910         801 i         2,526         3,476         4,213         83,893           Communications equipment         3342         22,044         170 i         414         512         900         20,048           Semiconductors and other electronic components         3344         42,722         165 i         640 i         1,304         1,711         38,901           Navigational, measuring, electromedical, and control instruments         3345 i         19,030         369 i         1,166         1,093         957         15,446           Electromedical, electrotherapeutic, and irradiation apparatus         334510, 334517         4,982         81 i         331 i         303         684         3,583           Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments         334511         8,486 <td< td=""><td></td><td>33311</td><td>D</td><td>D</td><td>86</td><td>102</td><td>D</td><td>1.871</td></td<>		33311	D	D	86	102	D	1.871	
Engines, turbines, and power transmission equipment         3336         2,883         18 i         D         169         266         D           Other machinery         other 333         D         D         D         1,501         D         D           Computer and electronic products         334         94,910         801 i         2,526         3,476         4,213         83,893           Communications equipment         3342         22,044         170 i         414         512         900         20,048           Semiconductors and other electronic components         3344         42,722         165 i         640         1,304         1,711         38,901           Navigational, measuring, electromedical, and control instruments         3345         19,030         369 i         1,166         1,093         957         15,446           Electromedical, electrotherapeutic, and irradiation apparatus         334510,334517         4,982         81 i         331         303         684         3,583           Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments         334511         8,486         8 i         134 i         242         62         8,040	- · · · · · · · · · · · · · · · · · · ·								
equipment         3336         2,883         18 i         D         169         266         D           Other machinery         other 333         D         D         D         D         1,501         D         D           Computer and electronic products         334         94,910         801 i         2,526         3,476         4,213         83,893           Communications equipment         3342         22,044         170 i         414         512         900         20,048           Semiconductors and other electronic components         3344         42,722         165 i         640         1,304         1,711         38,901           Navigational, measuring, electromedical, and control instruments         3345         19,030         369 i         1,166         1,093         957         15,446           Electromedical, electrotherapeutic, and irradiation apparatus         334510, 334517         4,982         81 i         331         303         684         3,583           Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments         334511         8,486         8 i         134 i         242         62         8,040	•		-,					•	
Other machinery         other 333         D         D         D         1,501         D         D           Computer and electronic products         334         94,910         801 i         2,526         3,476         4,213         83,893           Communications equipment         3342         22,044         170 i         414         512         900         20,048           Semiconductors and other electronic components         3344         42,722         165 i         640         1,304         1,711         38,901           Navigational, measuring, electromedical, and control instruments         3345         19,030         369 i         1,166         1,093         957         15,446           Electromedical, electrotherapeutic, and irradiation apparatus         334510, 334517         4,982         81 i         331         303         684         3,583           Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments         334510, 334511         8,486         8 i         134 i         242         62         8,040	9	3336	2.883	18 i	D	169	266	D	
Computer and electronic products         334         94,910         801         i         2,526         3,476         4,213         83,893           Communications equipment         3342         22,044         170         i         414         512         900         20,048           Semiconductors and other electronic         components           components         3344         42,722         165         i         640         1,304         1,711         38,901           Navigational, measuring, electromedical, and control instruments         3345         19,030         369         i         1,166         1,093         957         15,446           Electromedical, electrotherapeutic, and irradiation apparatus         334510, 334517         4,982         81         i         331         303         684         3,583           Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments         334511         8,486         8         i         134         i         242         62         8,040	Other machinery	other 333	D	D	D	1,501	D	D	
Communications equipment         3342         22,044         170 i         414         512         900         20,048           Semiconductors and other electronic components           components         3344         42,722         165 i         640         1,304         1,711         38,901           Navigational, measuring, electromedical, and control instruments         3345         19,030         369 i         1,166         1,093         957         15,446           Electromedical, electrotherapeutic, and irradiation apparatus         334510, 334517         4,982         81 i         331         303         684         3,583           Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments         334511         8,486         8 i         134 i         242         62         8,040	,	334	94,910	801 i	2,526	3,476	4,213	83,893	
Semiconductors and other electronic components       3344       42,722       165 i       640       1,304       1,711       38,901         Navigational, measuring, electromedical, and control instruments       3345       19,030       369 i       1,166       1,093       957       15,446         Electromedical, electrotherapeutic, and irradiation apparatus       334510, 334517       4,982       81 i       331       303       684       3,583         Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments       334511       8,486       8 i       134 i       242       62       8,040		3342	22.044	170 i	414	512	900	20.048	
components         3344         42,722         165 i         640         1,304         1,711         38,901           Navigational, measuring, electromedical, and control instruments         3345         19,030         369 i         1,166         1,093         957         15,446           Electromedical, electrotherapeutic, and irradiation apparatus         334510, 334517         4,982         81 i         331         303         684         3,583           Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments         334511         8,486         8 i         134 i         242         62         8,040			•					·	
Navigational, measuring, electromedical, and control instruments 3345 19,030 369 i 1,166 1,093 957 15,446 Electromedical, electrotherapeutic, and irradiation apparatus 334510, 334517 4,982 81 i 331 303 684 3,583 Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments 334511 8,486 8 i 134 i 242 62 8,040		3344	42.722	165 i	640	1.304	1.711	38.901	
and control instruments 3345 19,030 369 i 1,166 1,093 957 15,446  Electromedical, electrotherapeutic, and irradiation apparatus 334510, 334517 4,982 81 i 331 303 684 3,583  Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments 334511 8,486 8 i 134 i 242 62 8,040	Navigational, measuring, electromedical.		•			,,,,,	•		
Electromedical, electrotherapeutic, and irradiation apparatus 334510, 334517 4,982 81 i 331 303 684 3,583 Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments 334511 8,486 8 i 134 i 242 62 8,040		3345	19.030	369 i	1.166	1.093	957	15.446	
irradiation apparatus 334510, 334517 4,982 81 i 331 303 684 3,583  Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments 334511 8,486 8 i 134 i 242 62 8,040	Electromedical, electrotherapeutic, and		.,		,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Search, detection, navigation, guidance, aeronautical, and nautical systems and instruments 334511 8,486 8 i 134 i 242 62 8,040	·	334510, 334517	4.982	81 i	331	303	684	3.583	
aeronautical, and nautical systems and instruments 334511 8,486 8 i 134 i 242 62 8,040	• •	22.0.0,001017	.,, 02	J. 1		555		0,000	
instruments 334511 8,486 8 i 134 i 242 62 8,040									
		334511	8,486	8 i	134 i	242	62	8,040	
	Other measuring and controlling devices	other 3345			700	548			

TABLE 3. Worldwide R&D paid for by the company and others and performed by the company, by industry, company size, and worldwide R&D program size: 2014 (Millions of U.S. dollars)

		R&D program size						
	NAICC as to	All	Less than \$1	\$1 million-	\$10 million-	\$50 million-	\$100 million or	
Industry	NAICS codes	companies	million	\$9.999 million	\$49.999 million	\$99.999 million	more	
Other computer and electronic products	other 334	11,114	96 i	306	568	646	9,498	
Electrical equipment, appliances, and								
components	335	5,750	272 i	784	1,341 i	718	2,634	
Transportation equipment	336	56,359	253 i	1,135	1,594	1,701	51,676	
Automobiles, bodies, trailers, and parts	3361–63	D	D	671	873	1,094	23,280	
Aerospace products and parts	3364	D	D	304	521	462	26,646 i	
Aircraft, aircraft engines, and aircraft parts	336411–13	D	D	D	401	D	D	
Guided missiles, space vehicles, and								
related parts	336414–15, 336419	D	4 i	D	120	D	D	
Military armored vehicles, tanks, and tank								
components	336992	D	D	20	0	0	0	
Other transportation	other 336	D	D	140	200	146	1,750 i	
Furniture and related products	337	418	106 i	94	219	0	0	
Miscellaneous manufacturing	339	14,983	421 i	1,503	1,706	1,152	10,202	
Medical equipment and supplies	3391	12,091	191 i	1,074	1,342	1,087	8,397	
Other miscellaneous manufacturing	3399	2,892	230 i	429	363	65	1,805	
Nonmanufacturing industries	21-23, 42-81	129,562	4,726 i	13,626	12,853	6,868	91,489	
Mining, extraction, and support activities	21	D	29 i	311	191	D	4,531	
Utilities	22	311	25 i	48	98	140	0	
Wholesale trade	42	D	245 i	D	0	0	0	
Electronic shopping and electronic auctions	454111–12	D	38 i	5	0	0	D	
Transportation and warehousing	48–49	692	35 i	75 i	0	0	582	
Information	51	77,341	893 i	4,418	5,378	3,528	63,124	
Publishing	511	46,157	475 i	2,120 i	1,746	1,342	40,474	
Newspaper, periodical, book, and								
directory publishers	5111	92 i	21 i	20 i	51 i	0	0	
Software publishers	5112	46,065	454 i	2,100 i	1,694	1,342	40,474	
Telecommunications	517	3,816	67 i	276 i	293	627 i	2,552	
Data processing, hosting, and related services	518	10,322	274 i	1,690	2,956	1,314	4,088	
Other information	other 51	17,046	77 i	331	383	244	16,010	
Finance and insurance	52	4,748	55 i	91	309	350	3,943	
Real estate and rental and leasing	53	268	17 i	8	52	192	0	
Lessors of nonfinancial intangible assets								
(except copyrighted works)	533	58	3 i	3	52	0	0	
Other real estate and rental and leasing	other 53	210	14 i	5	0	192	0	
Professional, scientific, and technical services	54	37,476 i	3,086 i	8,117	6,473	2,364	17,436 i	
Architectural, engineering, and related services	5413	3,440	351 i	1,084 i	759	495	751	
Computer systems design and related services	5415	12,536 i	1,785 i	3,100 i	2,604 i	1,034	4,012 i	
Scientific R&D services	5417	17,329	468 i	3,209	1,967	561	11,123	
Biotechnology R&D	541711	4,898	113 i	722	D	0	D	

TABLE 3. Worldwide R&D paid for by the company and others and performed by the company, by industry, company size, and worldwide R&D program size: 2014 (Millions of U.S. dollars)

Industry		R&D program size						
	NAICS codes	All companies	Less than \$1 million	\$1 million– \$9.999 million	\$10 million– \$49.999 million	\$50 million– \$99.999 million	\$100 million or more	
Physical, engineering, and life sciences								
(except biotechnology) R&D	541712	11,749	345 i	2,453	1,572	561	6,818	
Social sciences and humanities R&D	541720	682	10 i	34	D	0	D	
Other professional, scientific, and technical								
services	other 54	4,172 i	481 i	724	1,143	274	1,549 i	
Health care services	621–23	501 i	97 i	127	156	121 i	0	
Other nonmanufacturing	23, 44–45 (excluding 454111–12), 55–56,							
	624, 71–72, 81	D	207 i	D	196	D	D	
All companies (number of domestic employees)	-	416,038	9,407 i	27,013	32,840	20,984	325,794	
Small companies <sup>a</sup>								
5–499	-	58,967	9,149 i	23,443	18,242	4,792	3,341	
5–99	-	30,333 i	7,685 i	15,604	6,694	349 i	0	
5–49	-	19,607 i	6,231 i	10,769	2,553 i	54	0	
5–9	-	3,390 i	1,588 i	1,802	0	0	0	
10–24	-	7,450 i	2,844 i	4,167	440 i	0	0	
25–49	-	8,767 i	1,799 i	4,801	2,113 i	54	0	
50–99	-	10,726	1,455 i	4,835	4,141	295 i	0	
100–249	-	14,984	1,112 i	5,438	6,259	1,738	438	
250–499	-	13,650	352 i	2,401	5,289	2,705	2,903	
Medium and large companies								
500–999	-	15,526	132 i	1,522	4,596	4,075	5,201	
1,000–4,999	-	71,736	74 i	1,669	7,294	8,039	54,660	
5,000-9,999	-	51,020	4 i	178	1,462	2,529	46,847	
10,000–24,999	-	63,639	44 i	113	796	1,015 i	61,672	
25,000 or more	-	155,150	4 i	86	451	535	154,074	

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 = 2012 North American Industry Classification System.

NOTES: 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 or funded R&D. R&D program size classifications are based on R&D performance.

SOURCE: National Science Foundation, National Center for Science and Engineering Statistics, and U.S. Census Bureau, Business R&D and Innovation Survey, 2014.

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