

**Appendix Table 4-15 Business expenditures for R&D, by industry and selected country/economy: 2012 or most recent year**

(Millions of current PPP dollars)

Industry	ISIC Rev.4		United States (2011)	France (2012)	Germany (2012)	United Kingdom (2012)	China (2012)	Japan (2012)	South Korea (2012)
	Section	Division							
Total business enterprise	A-U	1-99	294,093	35,237	68,469	24,610	223,169	116,321	50,245
Agriculture, forestry, and fishing	A	1-3	NA	184	176	20	463	18	31
Mining and quarrying	B	5-9	2,733	17	14	246	7,970	29	41
Manufacturing	C	10-33	201,361	17,691	58,977	9,837	194,810	102,306	44,127
Food products, beverages, and tobacco		10-12	5,086	407	401	395	9,175	2,107	547
Textiles, wearing apparel, leather, and related products		13-15	634	133	156	46	6,291	1,301	374
Wood, paper, printing, and reproduction of recorded media		16-18	1,732	86	219	32	3,390	675	140
Paper and paper products		17	1,346	47	74		2,157	240	88
Printing and reproduction of recorded media		18	175	18	120	16	700	334	37
Coke and refined petroleum products		19	1,484	91	122	32	2,323	438	316
Chemicals and chemical products		20	9,375	1,060	4,450	378	17,559	7,138	2,655
Pharmaceuticals, medicinal chemical and botanical products		21	45,949	946	5,209	725	8,062	12,484	1,214
Rubber and plastic products		22	2,280	927	1,217	142	4,919	2,630	630
Other non-metallic mineral products		23	1,179	218	364	45	4,655	1,412	378
Basic metals		24	655	288	690	91	25,583	2,160	853



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	Section	Division							
Fabricated metal products, except machinery and equipment		25	1,853	806	958	713	5,334	490	580
Computer, electronic, and optical products		26	62,704	4,050	9,409	1,405	33,819	28,291	25,081
Electrical equipment		27	3,595	782	2,205	244	20,038	3,257	1,258
Machinery and equipment nec		28	14,709	1,274	6,597	1,117	25,598	10,379	3,165
Motor vehicles, trailers, and semi-trailers		29	11,695	2,212	22,098	2,126	16,238	26,839	5,688
Other transport equipment		30	29,185	3,685	3,415	2,025	9,754	586	886
Building of ships and boats		301	NA	149	158	44	NA	163	582
Railway locomotives and rolling stock		302	NA	NA	210	NA	NA	15	102
Air and spacecraft and related machinery		303	26,054	3,368	3,026	1,938	NA	309	185
Furniture		31	319	21	51	52	413	98	66
Other manufacturing		32	8,927	345	669	149	1,519	2,024	297
Medical and dental instruments and supplies		325	6,686	257	573	112	NA	978	216
Repair and installation of machinery and equipment		33	NA	362	749	120	138	NA	NA
Electricity, gas, and water supply; sewerage, waste management, and remediation activities	D, E	35-39	386	642	237	120	1,483	502	506
Construction	F	41-43	668	171	90	87	4,287	1,063	1,149
Total services	G-U	45-99	88,945	16,532	8,975	14,300	14,156	12,403	4,391
Wholesale and retail trade; repair of motor vehicles and motorcycles	G	45-47	2,617	1,788	361	1,006	NA	462	784
Transportation and storage	H	49-53	81	55	156	14	NA	424	81



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	Section	Division							
Accommodation and food service activities	I	55–56	NA	4	1	42	NA	NA	1
Information and communication	J	58–63	55,124	3,845	4,042	3,483	NA	5,164	2,364
Publishing activities		58	28,435	930	NA	74	NA	6	1,518
Software publishing		582	27,965	920	NA	34	NA	NA	1,507
Motion picture, video, and television program production, sound recording, and music publishing activities		59	NA	60	NA	15	NA	1	13
Programming and broadcasting activities		60	NA	9	NA	10	NA	2	19
Telecommunications		61	2,157	849	791	1,009	NA	2,823	449
Computer programming, consultancy, and related activities		62	13,259	1,877	3,072	2,250	NA	2,086	245
Information service activities		63	4,285	120	125	125	NA	245	120
Data processing, hosting, and related activities; Web portals		631	NA	120	118	123	NA	50	44
Other information service activities		639	NA	0	7	2	NA	195	76
Financial and insurance activities	K	64–66	3,457	300	338	384	NA	18	2
Real estate activities	L	68	71	2	1	16	NA	NA	2
Professional, scientific, and technical activities	M	69–75	24,960	10,282	3,997	8,583	NA	6,280	1,037
Scientific R&D		72	15,301	4,334	2,155	6,744	NA	5,694	273
Administrative and support services	N	77–82	324	191	49	417	NA	56	82
Public administration and defense; compulsory social security; education	O, P	84–85	NA	4	3	27	NA	NA	15
Human health and social work activities	Q	86–88	741	18	5	24	NA	NA	1



Industry	ISIC Rev.4		United States (2011)	France (2012)	Germany (2012)	United Kingdom (2012)	China (2012)	Japan (2012)	South Korea (2012)
	Section	Division							
Arts, entertainment, and recreation	R	90–93	NA	7	2	267	NA	NA	3
Other service activities; activities of households as employers; activities of extraterritorial organizations and bodies	S, T, U	94–99	NA	36	22	36	NA	NA	19

NA = not available.  
 ISIC Rev.4 = International Standard Industrial Classification of All Economic Activities, Revision 4; nec = not elsewhere classified; PPP = purchasing power parity.

NOTES: U.S. business R&D data in the Analytical Business Enterprise R&D (ANBERD) database are from the U.S. Business R&D and Innovation Survey 2011. Detail may not add to total because of rounding. Industry classifications for all countries are based on main activity.

SOURCE: Organisation for Economic Co-operation and Development, ANBERD, Statistical Analysis Database (STAN), R&D Expenditures in Industry, [http://stats.oecd.org/Index.aspx?DataSetCode=ANBERD\\_REV4](http://stats.oecd.org/Index.aspx?DataSetCode=ANBERD_REV4), accessed 9 April 2015.

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