Table 2

Domestic R&D costs, by selected industry and type of cost, for companies with 1–9 employees: 2022

(Thousands of U.S. dollars)

ndustry	NAICS code	Total		Salaries, wages, and fringe benefits		Expensed machinery and equipment		Materials and supplies		Payments to others for R&D		Depreciation on R&D property and equipment		All other costs
	31-33, 42,													
All selected industries	51, 5413, 5415, 5417	6,715,757		3,690,003		178,461		610,277		1,005,187		64,854		1,166,975
Manufacturing industries	31-33	871,014		343,316		42,082		139,093		176,767		11,744		158,012
Food, beverage, and tobacco products	311-12	18,162		7,296		3,628	r	1,416		736	r	35	r	5,052
Textile, apparel, and leather products	313-16	9,268	r	4,903	r	288	r	1,167	r	0		90	r	2,820
Wood products	321	0		0		0		0		0		0		0
Paper	322	912	r	670	r	38	r	21	r	13	r	0		169
Printing and related support activities	323	0		0		0		0		0		0		0
Petroleum and coal products	324	202		97		53		0		44		0		9
Chemicals	325	259,180		80,099		6,833		35,575		90,617		5,088		40,969
Pharmaceuticals and medicines	3254	210,352		54,308		3,922		29,689		84,878		3,177		34,379
Chemicals, excluding pharmaceuticals	other 325	48,828		25,791		2,912		5,885		5,739	r	1,911		6,590
Plastics and rubber														
products	326	14,698		7,299	r	1,408	r	3,141	r	231	r	229	r	2,390
Nonmetallic mineral products	327	3,642		2,782		215		484		34	r	101	r	26
Primary metals	331	3,709		1,453		447		467		496		27		818
Fabricated metal products	332	46,559	r	19,339	r	7,501	r	4,773		1,684	r	465	r	12,797
Machinery	333	44,908		25,046		2,649	r	7,649		574		189		8,801
Computer and electronic products	334	190,377		102,588		8,108		30,000		18,449		2,107		29,124
Semiconductor and other electronic components	3344	51,473		27,740		759		8,640		5,046		588		8,701
Navigational, measuring, electromedical, and														
control instruments	3345	107,299		57,354		4,448		15,960		12,484		1,019		16,034
Other computer and electronic products	other 334	31,605		17,494		2,902		5,400		919		500		4,389
Electrical equipment, appliances, and components	335	17,417		8,876		584		3,251		2,820		44		1,842
Transportation equipment	336	44,133		22,856		1,220	r	4,993		7,395		94		7,574
Aerospace products and parts	3364	24,767		12,036		1,072	r	2,105		4,885	r	52		4,616
Other transportation equipment	other 336	19,366		10,820		148		2,888	r	2,510	r	42	r	2,957
Furniture and related products	337	212		133		35		44		0		0		0
Miscellaneous manufacturing	339	217,634		59,879		9,074	r	46,111		53,675	r	3,275	r	45,620
Selected nonmanufacturing industries	42, 51, 5413, 5415, 5417	5,844,743		3,346,687		136,379		471,184		828,420		53,110		1,008,963
Wholesale trade	42	382,712		183,835		7,665		38,741		76,750		3,741		71,980
Information	51	676,309		543,557		26,714		14,849		22,644		2,276		66,268
Software publishers Information, excluding	5112 51 less	495,336		418,082		6,098		10,630		16,870		1,362		42,294
software publishers	5112	180,973		125,475		20,616	r	4,219		5,774		915		23,974

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(Thousands of U.S. dollars)

Industry	NAICS code	Total	Salaries, wages, and fringe benefits	Expensed machinery and equipment	Materials and	Payments to others for R&D	Depreciation on R&D property and equipment	All other costs
Architectural, engineering, and related services	5413	412,244	264,122	14,118	43,252	23,398	1,164	66,191
Computer systems design and related services	5415	1,458,925	1,149,759	27,619	57,072	43,954	5,812	174,708
Scientific research and development services	5417	2,914,553	1,205,414	60,263	317,270	661,673	40,116	629,817
Research and development in nanotechnology	541713	171,764	84,760	4,773	18,271	34,492	2,029	27,438
Research and development in biotechnology (except nanobiotechnology)	541714	1,389,297	498,796	23,696	168,504	378,936	17,192	302,172
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	1,331,941	606,424	31,614	129,598	246,678	20,477	297,149
Social sciences and humanities research and development	541720	21,551	15,433	180	r 896	1,567	418	3,058

r = relative standard error > 50%.

NAICS = 2017 North American Industry Classification System.

Note(s):

Detail may not add to total because of rounding or unavailable NAICS detail for select records beyond the 4-digit industry classification. Industry classification is based on dominant establishment payroll. Statistics are representative of companies located in the United States that performed or funded R&D.

Source(s):

National Center for Science and Engineering Statistics and Census Bureau, 2023 Annual Business Survey: Data Year 2022.