Table 2

Domestic R&D costs, by selected industry and type of cost, for companies with 1–9 employees: 2021

(Thousands of U.S. dollars)

Industry	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	7,254,217		4,036,146		199,530		573,007		1,129,548		74,926		1,241,060	
Manufacturing industries	31-33	920,331		425,563		27,714		128,070		173,207		9,581		156,196	
Food, beverage, and tobacco products	311-12	19,097	r	11,185		2,710	r	3,718	r	827	r	57	r	600	
Textile, apparel, and leather products	313-16	7,096	r	2,523	r	39		493		0		16		4,024	
Wood products	321	138		106		14		3		4		0		11	
Paper	322	0		0		0		0		0		0		0	
Printing and related support activities	323	0		0		0		0		0		0		0	
Petroleum and coal products	324	739		444		30		148		0		0		118	
Chemicals	325	208,440		59,578		8,664		25,060		76,185		3,357		35,595	
Pharmaceuticals and medicines	3254	163,546		37,379		6,958	r	22,124		66,881		2,717		27,488	
Chemicals, excluding pharmaceuticals	other 325	44,894		22,199		1,706		2,937		9,305	r	640		8,107	
Plastics and rubber products	326	6,486		3,001		491		940		59		115		1,880	
Nonmetallic mineral products	327	3,808	r	3,250	r	0		327	r	170		8		52	
Primary metals	331	2,240		930		348		253		123	-	209	r	376	
Fabricated metal products	332	15,819	r	5,495	_	1,130	r	2,569	r	3,836	-	367	_	2,422	
Machinery	333	76,360	•	46,830	i.	1,091	L'	6,670		12,252	-	81	i	9,437	
Computer and electronic products	334	330,785		172,865		7,014		50,420		51,582		4,163		44,741	
Semiconductor and other electronic components	3344	105,362		48,223		3,199		7,767		34,082		2,006		10,084	
Navigational, measuring, electromedical, and	3344	100,302		40,223		0,199		7,707		34,002	Ė	2,000		10,004	
control instruments	3345	179,628		102,953		2,865		35,825	r	14,829		1,141		22,014	
Other computer and electronic products	other 334	45,795		21,689		950		6,828		2,672		1,016	r	12,642	
Electrical equipment, appliances, and components	335	41,714		25,638		1,707	r	6,881		1,682		426		5,381	
Transportation equipment	336	36,042		20,951		1,703	_	9,961		2,131		185		1,112	
Aerospace products and parts	3364	13,903		9,043		311		3,031		900		45		573	
Other transportation equipment	other 336	22,139		11,907		1,391	r	6,930		1,231	r	139	r	540	
Furniture and related products	337	1,471	r	273	r	286		54		0		36	r	821	
Miscellaneous manufacturing	339	170,097		72,495		2,487	r	20,574		24,356	r	560	r	49,626	
Selected nonmanufacturing industries	42, 51, 5413, 5415, 5417	6,333,886		3,610,583		171,816		444,937		956,342		65,345		1,084,863	
Wholesale trade	42	154,712		71,006		7,676		43,108	r	11,649	_	1,159	r	20,114	
Information	51	784,850		617,001		39,065	r	17,102		28,193	_	6,171		77,319	
Software publishers	5112	560,818		460,456		9,596		13,299		24,868	_	6,109		46,490	
Information, excluding software publishers	51 less 5112	224,032		156,545		29,469	r	3,803		3,325		61		30,829	

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Domestic R&D costs, by selected industry and type of cost, for companies with 1–9 employees: 2021 (Thousands of U.S. dollars)

Industry	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
Architectural, engineering, and related services	5413	647,610	447,922	27,288	59,372	41,424	7,188 r	64,415
Computer systems design and related services	5415	1,690,254	1,226,739	27,900	40,717	74,064	5,269 r	315,566
Scientific research and development services	5417	3,056,460	1,247,915	69,886	284,639	801,012	45,559	607,450
Research and development in nanotechnology	541713	201,891	111,127	5,676	17,371	29,309	2,815	35,595
Research and development in biotechnology (except nanobiotechnology)	541714	1,288,461	441,338	18,479	115,229	419,881	20,267	273,267
Research and development in the physical, engineering, and life sciences (except nanotechnology and biotechnology)	541715	1,538,246	677,439	45,557	151,157	344,568	22,421	297,103
Social sciences and humanities research and development	541720	17,262	9,856	174	474	5,215	56 r	1,485

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, 2022 Annual Business Survey: Data Year 2021.