

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	All R&D			Basic research			Applied research		
		Total	Company funded	Federally funded	Total	Company funded	Federally funded	Total	Company funded	Federally funded
All industries	21-23, 31-33, 42, 44-81	10	10	20	20	20	10	20	20	10
Manufacturing industries	31-33	10	20	20	20	20	10	20	20	10
Food	311	10	10	0	20	20	99	10	10	99
Beverage and tobacco products	312	20	20	0	0	0	0	0	0	0
Textiles, apparel, and leather	313-16	20	10	0	0	0	0	0	10	0
Wood products	321	30	30	100	50	50	0	30	30	0
Paper, printing, and support activities	322, 323	30	30	0	10	10	0	10	10	0
Petroleum and coal products	324	10	20	0	0	0	0	10	0	0
Chemicals	325	10	10	20	10	10	10	20	20	10
Basic chemicals	3251	10	10	10	10	10	0	10	10	0
Resin, synthetic rubber, fibers, and filament	3252	0	10	0	0	0	0	0	10	0
Pharmaceuticals and medicines	3254	10	10	20	10	10	10	20	20	10
Other chemicals	other 325	10	10	0	10	10	0	10	10	0
Plastics and rubber products	326	10	10	99	10	10	0	10	10	100
Nonmetallic mineral products	327	10	10	50	10	10	99	10	10	0
Primary metals	331	10	10	0	10	10	0	10	10	0
Fabricated metal products	332	20	20	90	0	10	0	10	10	0
Machinery	333	10	10	10	30	30	0	10	10	20
Computer and electronic products	334	20	20	30	40	60	10	30	30	10
Computers and peripheral equipment	3341	30	20	0	50	50	0	60	70	0
Communications equipment	3342	20	20	10	90	99	10	40	50	10
Semiconductor and other electronic components	3344	20	30	10	90	90	10	20	30	20
Navigational, measuring, electromedical, and control instruments	3345	30	20	30	10	10	10	20	20	20
Other computer and electronic products	other 334	50	50	0	30	30	0	10	10	0
Electrical equipment, appliances, and components	335	20	20	20	10	10	0	10	10	0
Transportation equipment	336	10	10	10	10	20	10	20	20	10
Motor vehicles, trailers, and parts	3361-63	10	10	0	10	10	0	10	10	0
Aerospace products and parts	3364	10	10	10	30	20	40	20	30	20
Other transportation equipment	other 336	10	10	10	10	10	0	10	20	0
Furniture and related products	337	10	10	0	0	0	0	0	0	0
Miscellaneous manufacturing	339	20	20	10	10	10	0	10	10	0
Medical equipment and supplies	3391	20	20	10	10	10	0	10	10	0
Other miscellaneous manufacturing	other 339	10	10	0	0	10	0	10	10	0

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	All R&D			Basic research			Applied research		
		Total	Company funded	Federally funded	Total	Company funded	Federally funded	Total	Company funded	Federally funded
Nonmanufacturing industries	21-23, 42, 44-81	10	10	10	20	20	20	10	10	10
Mining, extraction, and support activities	21	10	10	20	10	10	0	10	10	0
Utilities	22	20	20	20	30	10	100	10	10	60
Construction	23	20	10	0	0	0	0	0	0	0
Wholesale trade	42	10	10	0	0	0	0	10	10	0
Retail trade	44, 45	10	10	0	0	0	0	10	10	0
Transportation and warehousing	48, 49	10	10	0	0	0	0	0	0	0
Information	51	10	10	10	50	60	0	10	10	0
Publishing	511	10	10	0	10	10	0	10	10	0
Newspaper, periodical, book, and directory	5111	10	10	0	0	0	0	0	0	0
Software	5112	10	10	0	10	10	0	10	10	0
Telecommunications	517	40	40	100	80	80	0	40	40	0
Wired and wireless (except satellite)										
telecommunications carriers	5171, 5172	50	50	100	99	99	0	50	50	0
Satellite telecommunications	5174	0	0	0	0	0	0	0	0	0
Other telecommunications	other 517	20	20	0	0	0	0	0	0	0
Internet service providers, Web search portals, and data-processing services	518	10	10	0	0	10	0	0	10	0
Internet service providers and Web search portals	5181	10	10	0	0	0	0	0	10	0
Data-processing, hosting, and related services	5182	10	10	0	0	20	0	0	0	0
Other information	other 51	50	50	0	0	0	0	0	10	0
Finance, insurance, and real estate	52, 53	10	10	0	30	30	0	10	10	0
Professional, scientific, and technical services	54	10	10	10	10	10	10	10	10	10
Architectural, engineering, and related services	5413	10	10	20	10	10	10	10	10	30
Computer systems design and related services	5415	10	10	10	10	10	10	10	10	10
Scientific R&D services	5417	10	10	10	20	20	20	10	10	10
Other professional, scientific, and technical services	other 54	10	10	10	10	10	10	10	10	10
Health care services	621-23	10	20	0	0	0	0	30	60	0
Other nonmanufacturing <sup>a</sup>	55, 56, 61, 624, 71, 72, 81	40	50	10	30	20	80	10	10	70

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	All R&D			Basic research			Applied research		
		Total	Company funded	Federally funded	Total	Company funded	Federally funded	Total	Company funded	Federally funded
Company size (employees)										
All companies	-	10	10	20	20	20	10	20	20	10
5-24	-	10	10	10	10	10	10	10	20	10
25-49	-	10	10	10	10	10	10	10	10	10
50-99	-	10	10	10	10	10	10	10	10	10
100-249	-	20	20	20	20	20	20	20	20	20
250-499	-	20	20	30	20	10	60	20	20	20
500-999	-	20	20	10	20	20	10	20	20	10
1,000-4,999	-	20	20	30	10	10	30	10	20	10
5,000-9,999	-	20	20	20	60	60	0	30	30	0
10,000-24,999	-	10	10	40	10	10	10	20	20	10
25,000 or more	-	10	10	10	20	20	10	20	20	10

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	Development			Type of R&D expense				
		Total	Company funded	Federally funded	Wages and salaries of R&D personnel	Fringe benefits of R&D personnel	Materials and supplies	R&D depreciation	Other costs
All industries	21–23, 31–33, 42, 44–81	20	20	20	30	40	40	30	40
Manufacturing industries	31–33	20	20	20	40	40	40	40	50
Food	311	10	10	0	20	20	10	20	20
Beverage and tobacco products	312	10	10	0	20	20	20	20	20
Textiles, apparel, and leather	313–16	10	10	0	20	20	30	20	30
Wood products	321	30	30	100	30	30	30	10	10
Paper, printing, and support activities	322, 323	10	10	0	80	80	80	90	80
Petroleum and coal products	324	10	10	0	60	60	70	70	60
Chemicals	325	10	10	30	40	40	40	30	40
Basic chemicals	3251	10	10	20	20	30	20	20	30
Resin, synthetic rubber, fibers, and filament	3252	10	10	0	10	10	10	10	10
Pharmaceuticals and medicines	3254	10	10	40	40	40	50	40	50
Other chemicals	other 325	10	10	0	10	10	10	10	10
Plastics and rubber products	326	10	10	0	20	20	30	30	20
Nonmetallic mineral products	327	10	10	40	20	20	20	20	20
Primary metals	331	10	10	0	10	10	20	40	20
Fabricated metal products	332	10	10	0	30	30	40	30	30
Machinery	333	10	10	10	40	40	40	40	50
Computer and electronic products	334	30	30	50	50	50	50	40	60
Computers and peripheral equipment	3341	20	20	0	50	50	60	40	70
Communications equipment	3342	80	80	30	40	40	70	50	60
Semiconductor and other electronic components	3344	20	20	10	30	30	30	30	40
Navigational, measuring, electromedical, and control instruments	3345	30	30	60	60	60	70	60	60
Other computer and electronic products	other 334	10	10	0	50	50	40	50	80
Electrical equipment, appliances, and components	335	10	10	0	20	20	20	30	40
Transportation equipment	336	20	20	10	50	60	40	50	50
Motor vehicles, trailers, and parts	3361–63	10	10	0	50	50	40	40	50
Aerospace products and parts	3364	40	40	10	30	60	30	50	40
Other transportation equipment	other 336	10	20	10	90	90	80	50	80
Furniture and related products	337	0	0	0	20	20	20	10	20
Miscellaneous manufacturing	339	10	10	10	30	20	30	30	40
Medical equipment and supplies	3391	10	10	10	30	30	30	30	30
Other miscellaneous manufacturing	other 339	10	10	0	20	20	20	20	60

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	Development			Type of R&D expense				
		Total	Company funded	Federally funded	Wages and salaries of R&D personnel	Fringe benefits of R&D personnel	Materials and supplies	R&D depreciation	Other costs
Nonmanufacturing industries	21–23, 42, 44–81	10	10	10	20	20	20	20	30
Mining, extraction, and support activities	21	10	10	0	10	10	10	20	20
Utilities	22	10	10	0	50	30	30	20	30
Construction	23	0	10	0	10	10	10	10	40
Wholesale trade	42	10	10	0	20	20	20	20	30
Retail trade	44, 45	10	10	0	10	10	10	10	10
Transportation and warehousing	48, 49	10	10	0	20	30	40	40	50
Information	51	10	10	10	20	30	20	20	20
Publishing	511	10	10	0	20	20	20	20	20
Newspaper, periodical, book, and directory	5111	10	10	0	20	20	20	10	10
Software	5112	10	10	0	20	20	20	20	20
Telecommunications	517	40	40	100	50	70	30	20	30
Wired and wireless (except satellite) telecommunications carriers	5171, 5172	50	50	100	50	90	30	20	40
Satellite telecommunications	5174	0	0	0	50	50	90	50	99
Other telecommunications	other 517	10	10	0	20	10	20	10	10
Internet service providers, Web search portals, and data-processing services	518	10	10	0	20	30	20	10	20
Internet service providers and Web search portals	5181	10	10	0	10	10	10	10	10
Data-processing, hosting, and related services	5182	10	10	0	30	50	50	30	30
Other information	other 51	60	60	0	40	60	70	60	80
Finance, insurance, and real estate	52, 53	10	10	0	10	20	20	10	40
Professional, scientific, and technical services	54	10	10	10	20	20	20	20	30
Architectural, engineering, and related services	5413	10	10	10	20	10	10	20	40
Computer systems design and related services	5415	10	10	20	10	10	10	10	20
Scientific R&D services	5417	20	20	10	20	20	20	20	20
Other professional, scientific, and technical services	other 54	10	10	40	10	10	20	10	90
Health care services	621–23	0	10	0	20	10	10	30	20
Other nonmanufacturing <sup>a</sup>	55, 56, 61, 624, 71, 72, 81	40	60	0	70	80	80	30	70

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	Development			Type of R&D expense				
		Total	Company funded	Federally funded	Wages and salaries of R&D personnel	Fringe benefits of R&D personnel	Materials and supplies	R&D depreciation	Other costs
Company size (employees)									
All companies	-	20	20	20	30	40	40	30	40
5-24	-	10	10	10	20	20	20	10	30
25-49	-	10	10	20	10	10	10	20	30
50-99	-	10	10	30	20	20	20	20	40
100-249	-	20	20	10	20	20	20	30	30
250-499	-	20	20	30	30	30	30	30	30
500-999	-	20	20	10	30	30	30	30	30
1,000-4,999	-	20	20	20	30	30	40	30	40
5,000-9,999	-	10	10	10	30	30	30	30	40
10,000-24,999	-	10	10	60	40	30	40	30	40
25,000 or more	-	20	20	10	40	50	50	40	60

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	R&D performed by other organizations			Company-funded R&D projected for next year		
		Total	Company funded	Federally funded	Total	Company funded	Federally funded
All industries	21-23, 31-33, 42, 44-81	10	10	0	40	40	60
Manufacturing industries	31-33	10	10	0	50	50	80
Food	311	10	10	0	20	20	20
Beverage and tobacco products	312	10	10	0	20	20	0
Textiles, apparel, and leather	313-16	0	10	0	50	50	0
Wood products	321	10	0	0	30	30	100
Paper, printing, and support activities	322, 323	10	10	0	80	80	100
Petroleum and coal products	324	10	10	0	70	70	100
Chemicals	325	10	10	0	40	40	30
Basic chemicals	3251	10	10	0	20	20	40
Resin, synthetic rubber, fibers, and filament	3252	0	0	0	10	10	0
Pharmaceuticals and medicines	3254	10	10	0	40	40	30
Other chemicals	other 325	10	10	0	40	40	10
Plastics and rubber products	326	10	10	0	40	40	50
Nonmetallic mineral products	327	10	10	0	20	20	50
Primary metals	331	10	10	0	20	20	10
Fabricated metal products	332	0	0	0	30	30	90
Machinery	333	10	10	0	30	30	30
Computer and electronic products	334	20	20	0	70	60	80
Computers and peripheral equipment	3341	10	10	0	70	80	80
Communications equipment	3342	20	20	0	80	80	50
Semiconductor and other electronic components	3344	10	20	0	60	60	10
Navigational, measuring, electromedical, and control instruments	3345	30	40	0	60	40	90
Other computer and electronic products	other 334	10	10	0	50	50	0
Electrical equipment, appliances, and components	335	10	10	0	30	20	50
Transportation equipment	336	10	10	0	50	60	80
Motor vehicles, trailers, and parts	3361-63	10	10	0	20	40	30
Aerospace products and parts	3364	10	10	0	60	70	70
Other transportation equipment	other 336	10	10	0	80	60	99
Furniture and related products	337	0	0	0	10	10	0
Miscellaneous manufacturing	339	10	10	0	40	40	10
Medical equipment and supplies	3391	10	10	0	40	40	10
Other miscellaneous manufacturing	other 339	10	10	0	30	30	20

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	R&D performed by other organizations			Company-funded R&D projected for next year		
		Total	Company funded	Federally funded	Total	Company funded	Federally funded
Nonmanufacturing industries	21–23, 42, 44–81	10	10	0	30	30	20
Mining, extraction, and support activities	21	10	10	0	10	10	40
Utilities	22	0	0	0	20	20	20
Construction	23	99	0	0	10	10	30
Wholesale trade	42	10	10	0	20	20	0
Retail trade	44, 45	10	10	0	30	30	0
Transportation and warehousing	48, 49	0	0	0	40	40	0
Information	51	20	30	0	30	30	10
Publishing	511	30	30	0	30	30	10
Newspaper, periodical, book, and directory	5111	10	10	0	20	20	0
Software	5112	30	30	0	30	30	10
Telecommunications	517	30	30	0	60	60	100
Wired and wireless (except satellite)							
telecommunications carriers	5171, 5172	99	99	0	80	80	100
Satellite telecommunications	5174	0	0	0	10	10	0
Other telecommunications	other 517	10	10	0	30	30	0
Internet service providers, Web search portals, and data-processing services	518	20	20	0	20	20	0
Internet service providers and Web search portals	5181	10	10	0	20	20	0
Data-processing, hosting, and related services	5182	20	30	0	30	30	0
Other information	other 51	10	10	0	60	60	0
Finance, insurance, and real estate	52, 53	10	10	0	20	20	0
Professional, scientific, and technical services	54	10	10	0	20	20	30
Architectural, engineering, and related services	5413	10	10	0	30	20	70
Computer systems design and related services	5415	10	20	0	20	10	40
Scientific R&D services	5417	10	10	0	20	30	10
Other professional, scientific, and technical services	other 54	10	10	0	10	10	10
Health care services	621–23	0	0	0	20	30	10
Other nonmanufacturing <sup>a</sup>	55, 56, 61, 624, 71, 72, 81	10	10	0	50	60	10

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	R&D performed by other organizations			Company-funded R&D projected for next year		
		Total	Company funded	Federally funded	Total	Company funded	Federally funded
Company size (employees)							
All companies	-	10	10	0	40	40	60
5-24	-	10	10	0	10	10	10
25-49	-	10	10	0	10	10	20
50-99	-	10	10	0	20	20	20
100-249	-	20	10	0	20	30	20
250-499	-	20	20	0	30	30	40
500-999	-	10	10	0	40	40	40
1,000-4,999	-	20	20	0	40	40	70
5,000-9,999	-	10	10	0	30	30	80
10,000-24,999	-	20	20	0	40	40	50
25,000 or more	-	10	10	0	60	60	80

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	Total	Company-funded R&D performed by other organizations				
			For-profit companies	Federal agencies or laboratories	State government agencies or laboratories	Universities or colleges	Other nonprofit organizations
All industries	21-23, 31-33, 42, 44-81	10	10	20	0	10	10
Manufacturing industries	31-33	10	10	20	0	10	10
Food	311	10	10	0	0	10	10
Beverage and tobacco products	312	10	10	0	0	30	0
Textiles, apparel, and leather	313-16	0	0	0	0	0	0
Wood products	321	0	0	0	0	0	0
Paper, printing, and support activities	322, 323	10	10	0	0	0	0
Petroleum and coal products	324	10	100	0	0	0	0
Chemicals	325	10	20	30	0	10	10
Basic chemicals	3251	10	10	0	0	10	0
Resin, synthetic rubber, fibers, and filament	3252	0	0	0	0	0	0
Pharmaceuticals and medicines	3254	10	20	40	0	10	10
Other chemicals	other 325	10	10	0	0	10	0
Plastics and rubber products	326	10	10	0	0	0	0
Nonmetallic mineral products	327	10	10	0	0	0	0
Primary metals	331	10	10	0	0	0	0
Fabricated metal products	332	0	0	0	0	0	0
Machinery	333	20	20	0	0	10	0
Computer and electronic products	334	20	20	40	0	20	50
Computers and peripheral equipment	3341	10	10	0	0	20	0
Communications equipment	3342	20	20	0	0	0	0
Semiconductor and other electronic components	3344	20	20	100	0	40	0
Navigational, measuring, electromedical, and control instruments	3345	40	40	0	0	10	60
Other computer and electronic products	other 334	10	10	0	0	0	0
Electrical equipment, appliances, and components	335	10	10	0	0	0	100
Transportation equipment	336	10	10	0	0	10	10
Motor vehicles, trailers, and parts	3361-63	10	10	0	0	0	0
Aerospace products and parts	3364	10	10	0	0	10	10
Other transportation equipment	other 336	60	0	0	0	0	0
Furniture and related products	337	0	0	0	0	0	0
Miscellaneous manufacturing	339	10	10	0	0	10	0
Medical equipment and supplies	3391	10	10	0	0	10	0
Other miscellaneous manufacturing	other 339	10	0	0	0	0	0

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	Total	Company-funded R&D performed by other organizations				
			For-profit companies	Federal agencies or laboratories	State government agencies or laboratories	Universities or colleges	Other nonprofit organizations
Nonmanufacturing industries	21–23, 42, 44–81	10	10	10	0	10	10
Mining, extraction, and support activities	21	10	10	0	0	10	0
Utilities	22	0	0	0	0	0	0
Construction	23	0	0	0	0	0	0
Wholesale trade	42	20	10	0	0	0	0
Retail trade	44, 45	10	10	0	0	0	0
Transportation and warehousing	48, 49	0	0	0	0	0	0
Information	51	30	30	0	0	50	0
Publishing	511	30	20	0	0	0	0
Newspaper, periodical, book, and directory	5111	10	10	0	0	0	0
Software	5112	30	30	0	0	0	0
Telecommunications	517	40	40	0	0	99	0
Wired and wireless (except satellite) telecommunications carriers	5171, 5172	99	100	0	0	99	0
Satellite telecommunications	5174	0	0	0	0	0	0
Other telecommunications	other 517	10	0	0	0	0	0
Internet service providers, Web search portals, and data-processing services	518	30	30	0	0	0	0
Internet service providers and Web search portals	5181	10	0	0	0	0	0
Data-processing, hosting, and related services	5182	30	30	0	0	0	0
Other information	other 51	10	10	0	0	0	0
Finance, insurance, and real estate	52, 53	10	10	0	0	0	0
Professional, scientific, and technical services	54	10	10	10	0	10	20
Architectural, engineering, and related services	5413	10	10	0	0	0	0
Computer systems design and related services	5415	30	20	0	0	0	0
Scientific R&D services	5417	10	10	40	0	10	20
Other professional, scientific, and technical services	other 54	10	10	0	0	0	0
Health care services	621–23	0	0	0	0	100	0
Other nonmanufacturing <sup>a</sup>	55, 56, 61, 624, 71, 72, 81	20	0	0	0	0	0

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	Company-funded R&D performed by other organizations					
		Total	For-profit companies	Federal agencies or laboratories	State government agencies or laboratories	Universities or colleges	Other nonprofit organizations
Company size (employees)							
All companies	-	10	10	20	0	10	10
5-24	-	10	0	0	0	10	80
25-49	-	10	10	99	0	50	0
50-99	-	10	10	10	0	10	10
100-249	-	10	10	0	0	10	0
250-499	-	20	20	0	0	20	10
500-999	-	10	10	0	0	20	50
1,000-4,999	-	20	20	0	0	20	40
5,000-9,999	-	10	10	0	0	10	0
10,000-24,999	-	20	20	40	0	10	0
25,000 or more	-	10	10	0	0	10	0







TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	R&D area				Scientists and engineers by source of funds			
		Biotechnology	Software development	Materials synthesis and processing	Other areas	Percentage of nanotechnology	Total	Company funded	Federally funded
All industries	21–23, 31–33, 42, 44–81	10	10	10	10	0	30	30	70
Manufacturing industries	31–33	10	10	10	10	0	40	30	70
Food	311	10	10	10	10	0	20	20	100
Beverage and tobacco products	312	10	0	10	10	0	20	10	0
Textiles, apparel, and leather	313–16	0	10	10	10	0	40	40	70
Wood products	321	0	0	10	50	0	30	20	100
Paper, printing, and support activities	322, 323	10	40	10	20	0	50	50	100
Petroleum and coal products	324	0	0	10	10	0	50	60	100
Chemicals	325	10	10	10	10	0	40	30	60
Basic chemicals	3251	10	0	10	10	0	50	50	20
Resin, synthetic rubber, fibers, and filament	3252	0	0	10	10	0	10	50	40
Pharmaceuticals and medicines	3254	10	10	10	10	0	40	30	90
Other chemicals	other 325	10	10	10	10	0	20	10	30
Plastics and rubber products	326	0	20	10	10	0	30	20	90
Nonmetallic mineral products	327	10	99	10	10	0	50	40	90
Primary metals	331	0	10	10	10	0	30	30	40
Fabricated metal products	332	0	20	10	10	0	30	30	80
Machinery	333	10	30	10	10	0	30	40	70
Computer and electronic products	334	50	20	10	30	0	40	40	80
Computers and peripheral equipment	3341	0	10	10	30	0	20	20	90
Communications equipment	3342	0	30	30	30	0	50	60	70
Semiconductor and other electronic components	3344	99	10	10	30	0	40	30	20
Navigational, measuring, electromedical, and control instruments	3345	30	20	20	20	0	50	50	80
Other computer and electronic products	other 334	0	10	20	10	0	40	30	100
Electrical equipment, appliances, and components	335	0	10	10	30	0	20	20	80
Transportation equipment	336	0	10	20	10	0	30	30	40
Motor vehicles, trailers, and parts	3361–63	0	10	30	10	0	30	30	40
Aerospace products and parts	3364	0	10	10	10	0	20	20	40
Other transportation equipment	other 336	0	10	50	20	0	30	20	70
Furniture and related products	337	0	10	10	10	0	30	20	100
Miscellaneous manufacturing	339	20	20	20	10	0	30	30	70
Medical equipment and supplies	3391	20	10	20	10	0	30	40	60
Other miscellaneous manufacturing	other 339	10	20	10	10	0	20	10	90

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	R&D area				Scientists and engineers by source of funds			
		Biotechnology	Software development	Materials synthesis and processing	Other areas	Percentage of nanotechnology	Total	Company funded	Federally funded
Nonmanufacturing industries	21–23, 42, 44–81	20	10	10	10	0	20	20	70
Mining, extraction, and support activities	21	80	20	10	10	0	20	10	60
Utilities	22	50	10	10	20	0	30	20	50
Construction	23	0	10	10	10	0	10	10	10
Wholesale trade	42	10	20	10	10	0	20	20	20
Retail trade	44, 45	0	10	10	10	0	10	20	100
Transportation and warehousing	48, 49	0	0	0	10	0	60	20	0
Information	51	0	10	20	20	0	20	20	20
Publishing	511	0	10	0	0	0	20	20	30
Newspaper, periodical, book, and directory	5111	0	20	0	0	0	30	10	100
Software	5112	0	10	0	0	0	20	20	30
Telecommunications	517	0	60	0	20	0	50	70	100
Wired and wireless (except satellite) telecommunications carriers	5171, 5172	0	70	0	20	0	80	80	100
Satellite telecommunications	5174	0	0	0	0	0	0	0	0
Other telecommunications	other 517	0	20	0	0	0	10	70	0
Internet service providers, Web search portals, and data-processing services	518	0	20	0	10	0	20	10	10
Internet service providers and Web search portals	5181	0	10	0	10	0	20	10	0
Data-processing, hosting, and related services	5182	0	30	0	20	0	20	10	10
Other information	other 51	0	40	99	70	0	30	30	0
Finance, insurance, and real estate	52, 53	0	10	10	10	0	30	20	0
Professional, scientific, and technical services	54	20	10	10	10	0	20	20	70
Architectural, engineering, and related services	5413	80	10	10	10	0	30	40	70
Computer systems design and related services	5415	20	10	10	10	0	20	20	50
Scientific R&D services	5417	20	10	20	10	0	10	30	80
Other professional, scientific, and technical services	other 54	0	20	50	10	0	10	10	60
Health care services	621–23	10	0	0	10	0	50	30	60
Other nonmanufacturing <sup>a</sup>	55, 56, 61, 624, 71, 72, 81	0	70	30	10	0	30	40	99

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	R&D area				Scientists and engineers by source of funds			
		Biotech- nology	Software development	Materials synthesis and processing	Other areas	Percentage of nanotechnology	Total	Company funded	Federally funded
Company size (employees)									
All companies	-	10	10	10	10	0	30	30	70
5-24	-	10	20	10	10	0	20	20	90
25-49	-	20	10	20	10	0	20	20	60
50-99	-	20	20	20	10	0	20	20	70
100-249	-	10	20	20	20	0	20	20	50
250-499	-	20	20	20	20	0	20	20	60
500-999	-	20	20	20	20	0	30	30	20
1,000-4,999	-	20	10	10	20	0	30	30	60
5,000-9,999	-	40	10	20	20	0	30	30	50
10,000-24,999	-	10	10	10	10	0	50	40	60
25,000 or more	-	10	10	10	10	0	30	30	80

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	Company-funded R&D performed outside of the 50 United States and DC							
		Total	By organizations more than 50% owned by the company						
			Puerto Rico	Canada	China	France	Germany	India	Ireland
All industries	21-23, 31-33, 42, 44-81	10	10	10	10	10	10	10	10
Manufacturing industries	31-33	10	10	10	10	10	10	10	10
Food	311	10	0	10	0	20	60	0	0
Beverage and tobacco products	312	10	0	0	0	0	0	0	0
Textiles, apparel, and leather	313-16	0	0	0	0	0	0	0	0
Wood products	321	0	0	0	0	0	0	0	0
Paper, printing, and support activities	322, 323	10	0	0	0	0	0	0	0
Petroleum and coal products	324	0	0	0	0	0	0	0	0
Chemicals	325	10	10	10	10	10	30	0	10
Basic chemicals	3251	10	0	0	10	0	0	0	0
Resin, synthetic rubber, fibers, and filament	3252	0	0	0	0	0	0	0	0
Pharmaceuticals and medicines	3254	10	10	10	10	0	40	0	0
Other chemicals	other 325	0	0	0	10	10	0	0	100
Plastics and rubber products	326	10	0	10	10	10	10	0	0
Nonmetallic mineral products	327	10	0	0	0	0	0	0	0
Primary metals	331	0	0	0	0	0	0	0	0
Fabricated metal products	332	10	0	40	0	20	20	0	0
Machinery	333	10	0	10	10	10	10	10	0
Computer and electronic products	334	10	0	30	10	10	10	20	10
Computers and peripheral equipment	3341	10	0	20	0	0	20	20	0
Communications equipment	3342	20	0	30	60	50	80	50	10
Semiconductor and other electronic components	3344	10	0	20	10	20	10	10	0
Navigational, measuring, electromedical, and control instruments	3345	10	0	30	0	10	10	0	0
Other computer and electronic products	other 334	0	0	0	0	0	0	0	0
Electrical equipment, appliances, and components	335	10	0	30	10	70	10	0	0
Transportation equipment	336	10	0	10	0	10	10	0	100
Motor vehicles, trailers, and parts	3361-63	10	0	10	0	10	10	0	100
Aerospace products and parts	3364	10	0	0	0	0	0	0	0
Other transportation equipment	other 336	0	0	0	0	0	0	0	0
Furniture and related products	337	0	0	0	0	0	0	0	0
Miscellaneous manufacturing	339	10	0	0	10	0	10	0	10
Medical equipment and supplies	3391	10	0	0	0	0	0	0	10
Other miscellaneous manufacturing	other 339	20	0	0	10	0	99	0	0

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	Company-funded R&D performed outside of the 50 United States and DC							
		Total	By organizations more than 50% owned by the company						
			Puerto Rico	Canada	China	France	Germany	India	Ireland
Nonmanufacturing industries	21–23, 42, 44–81	10	0	10	10	30	10	10	10
Mining, extraction, and support activities	21	10	0	0	0	0	0	0	0
Utilities	22	0	0	0	0	0	0	0	0
Construction	23	70	0	0	0	0	0	0	0
Wholesale trade	42	10	0	0	10	0	10	10	70
Retail trade	44, 45	0	0	0	0	0	0	0	0
Transportation and warehousing	48, 49	0	0	0	0	0	0	0	0
Information	51	10	0	10	10	30	20	10	10
Publishing	511	10	0	10	10	30	20	10	10
Newspaper, periodical, book, and directory	5111	10	0	100	0	0	0	0	0
Software	5112	10	0	10	10	30	20	10	10
Telecommunications	517	0	0	0	0	0	0	0	0
Wired and wireless (except satellite)									
telecommunications carriers	5171, 5172	0	0	0	0	0	0	0	0
Satellite telecommunications	5174	0	0	0	0	0	0	0	0
Other telecommunications	other 517	0	0	0	0	0	0	0	0
Internet service providers, Web search portals, and data-processing services	518	10	0	0	0	10	0	0	10
Internet service providers and Web search portals	5181	0	0	0	0	0	0	0	0
Data-processing, hosting, and related services	5182	10	0	0	0	10	0	0	70
Other information	other 51	0	0	0	0	0	0	0	0
Finance, insurance, and real estate	52, 53	10	0	0	0	100	0	0	0
Professional, scientific, and technical services	54	10	0	10	0	10	10	10	10
Architectural, engineering, and related services	5413	10	0	0	0	0	0	10	0
Computer systems design and related services	5415	10	0	10	0	0	10	10	10
Scientific R&D services	5417	10	0	10	0	10	10	0	0
Other professional, scientific, and technical services	other 54	20	0	0	0	0	0	70	0
Health care services	621–23	0	0	0	0	0	0	0	0
Other nonmanufacturing <sup>a</sup>	55, 56, 61, 624, 71, 72, 81	80	0	70	0	99	99	50	0

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	Company-funded R&D performed outside of the 50 United States and DC							
		Total	By organizations more than 50% owned by the company						
			Puerto Rico	Canada	China	France	Germany	India	Ireland
Company size (employees)									
All companies	-	10	10	10	10	10	10	10	10
5-24	-	10	0	0	0	0	0	0	0
25-49	-	10	0	0	0	0	10	40	90
50-99	-	20	0	0	0	0	10	10	99
100-249	-	10	0	10	0	10	10	10	0
250-499	-	20	0	20	30	20	40	20	20
500-999	-	20	100	20	10	10	30	20	10
1,000-4,999	-	10	30	10	20	10	10	20	10
5,000-9,999	-	10	0	10	10	10	10	10	0
10,000-24,999	-	10	0	20	20	10	10	20	10
25,000 or more	-	10	0	10	0	10	10	10	0

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	Company-funded R&D performed outside of the 50 United States and DC						
		By organizations more than 50% owned by the company						
		Israel	Italy	Japan	Singapore	Sweden	United Kingdom	Other locations
All industries	21–23, 31–33, 42, 44–81	10	10	10	20	10	10	20
Manufacturing industries	31–33	10	10	10	30	10	10	20
Food	311	0	10	0	30	40	20	10
Beverage and tobacco products	312	0	0	0	0	0	0	0
Textiles, apparel, and leather	313–16	0	0	0	0	0	0	10
Wood products	321	0	0	0	0	0	0	0
Paper, printing, and support activities	322, 323	0	0	0	0	0	0	0
Petroleum and coal products	324	0	0	0	0	0	0	0
Chemicals	325	0	10	10	50	10	10	10
Basic chemicals	3251	0	0	0	0	0	0	10
Resin, synthetic rubber, fibers, and filament	3252	0	0	0	0	0	0	10
Pharmaceuticals and medicines	3254	0	0	10	60	10	10	10
Other chemicals	other 325	0	10	0	0	0	0	30
Plastics and rubber products	326	0	0	0	0	0	30	50
Nonmetallic mineral products	327	0	0	0	0	0	0	0
Primary metals	331	0	0	0	0	0	0	0
Fabricated metal products	332	0	50	0	0	0	10	20
Machinery	333	0	30	0	0	10	10	30
Computer and electronic products	334	10	40	10	10	20	20	70
Computers and peripheral equipment	3341	0	30	0	0	10	10	90
Communications equipment	3342	80	100	99	100	100	50	50
Semiconductor and other electronic components	3344	0	0	10	0	40	30	70
Navigational, measuring, electromedical, and control instruments	3345	10	0	30	40	0	10	30
Other computer and electronic products	other 334	0	0	10	0	0	10	0
Electrical equipment, appliances, and components	335	0	0	0	0	0	50	10
Transportation equipment	336	0	0	0	10	0	10	20
Motor vehicles, trailers, and parts	3361–63	0	0	0	30	0	10	20
Aerospace products and parts	3364	0	0	0	0	0	0	20
Other transportation equipment	other 336	0	0	0	0	0	0	0
Furniture and related products	337	0	0	0	0	0	0	0
Miscellaneous manufacturing	339	0	0	10	0	0	10	10
Medical equipment and supplies	3391	0	0	0	0	0	0	0
Other miscellaneous manufacturing	other 339	0	0	10	0	0	10	10

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	Company-funded R&D performed outside of the 50 United States and DC						
		By organizations more than 50% owned by the company						
		Israel	Italy	Japan	Singapore	Sweden	United Kingdom	Other locations
Nonmanufacturing industries	21–23, 42, 44–81	10	20	10	10	10	10	20
Mining, extraction, and support activities	21	0	0	0	0	0	0	90
Utilities	22	0	0	0	0	0	0	0
Construction	23	0	0	0	0	0	0	0
Wholesale trade	42	0	0	0	0	0	0	10
Retail trade	44, 45	0	0	0	0	0	0	0
Transportation and warehousing	48, 49	0	0	0	0	0	0	0
Information	51	10	10	10	10	10	10	10
Publishing	511	10	10	20	10	10	10	20
Newspaper, periodical, book, and directory	5111	0	0	0	0	0	10	0
Software	5112	10	10	20	10	10	10	20
Telecommunications	517	0	0	0	0	0	0	0
Wired and wireless (except satellite) telecommunications carriers	5171, 5172	0	0	0	0	0	0	0
Satellite telecommunications	5174	0	0	0	0	0	0	0
Other telecommunications	other 517	0	0	0	0	0	0	0
Internet service providers, Web search portals, and data-processing services	518	0	0	0	0	0	10	0
Internet service providers and Web search portals	5181	0	0	0	0	0	0	0
Data-processing, hosting, and related services	5182	0	0	0	0	0	10	0
Other information	other 51	0	0	0	0	0	0	100
Finance, insurance, and real estate	52, 53	0	0	0	0	0	10	0
Professional, scientific, and technical services	54	0	0	10	10	0	10	10
Architectural, engineering, and related services	5413	0	0	0	0	0	0	0
Computer systems design and related services	5415	0	0	10	99	0	20	10
Scientific R&D services	5417	0	0	0	0	0	10	10
Other professional, scientific, and technical services	other 54	0	0	0	0	0	30	70
Health care services	621–23	0	0	0	0	0	0	0
Other nonmanufacturing <sup>a</sup>	55, 56, 61, 624, 71, 72, 81	100	70	0	100	0	80	70

TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	Company-funded R&D performed outside of the 50 United States and DC						
		By organizations more than 50% owned by the company						
		Israel	Italy	Japan	Singapore	Sweden	United Kingdom	Other locations
Company size (employees)								
All companies	-	10	10	10	20	10	10	20
5-24	-	0	0	0	0	0	0	0
25-49	-	0	0	0	0	0	90	0
50-99	-	0	0	10	0	0	20	10
100-249	-	0	0	0	30	0	30	20
250-499	-	0	0	10	90	0	10	10
500-999	-	0	0	30	50	30	10	20
1,000-4,999	-	30	30	10	10	20	20	20
5,000-9,999	-	0	10	0	10	10	10	20
10,000-24,999	-	10	10	10	10	10	10	20
25,000 or more	-	10	10	10	10	10	10	20





TABLE A-12. Imputation rates for survey items, by industry and company size: 2007  
(Percent)

Industry and company size	NAICS codes	Energy R&D							
		Total				Federally funded			
		Fossil fuels	Geothermal and solar	Nuclear	All other energy sources	Fossil fuels	Geothermal and solar	Nuclear	All other energy sources
Company size (employees)									
All companies	-	10	20	20	10	0	0	0	50
5-24	-	0	0	0	0	0	0	0	0
25-49	-	0	0	0	0	0	0	0	0
50-99	-	0	0	0	0	0	0	0	0
100-249	-	0	0	0	10	0	0	0	0
250-499	-	0	0	0	0	0	0	0	0
500-999	-	0	0	0	90	0	0	0	100
1,000-4,999	-	20	40	30	20	0	0	0	0
5,000-9,999	-	0	0	0	20	0	0	0	0
10,000-24,999	-	10	0	20	10	0	0	0	0
25,000 or more	-	0	0	0	0	0	0	0	0

- = not applicable.

<sup>a</sup> Estimates for management of companies and enterprises (NAICS 55), formerly shown separately, now are included in other nonmanufacturing.

NOTES: Method used to assign industry classifications has changed; industry-specific estimates are not directly comparable with those for years prior to 2004. Percentages in this table are imputation rates that represent the weighted proportion of imputed data to the estimate in a given table cell in the detailed statistical tables. In those tables, cells for which more than 50% of the estimate is imputed are noted with i. In this table, imputation rates greater than 0% and less than 100% are rounded up to the nearest 10%, except rates greater than 90% and less than 100% are rounded to 99% to distinguish these rates from 100%. An imputation rate of 0% indicates that no nonzero imputed data are used in the calculation of the estimate. For definitions and more information about year-to-year comparability of statistics, see "Technical Notes," appendix A.

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Industrial Research and Development: 2007.