

Chronicling 100 Years of the U.S. Economy

November 2021

Volume 101, Number 11

Updated and Expanded Small Business Statistics

Wages, Employment, and Gross Output by Industry and Enterprise Size, 2012–2017

By Patrick Georgi, Lonna Morrow, and Tina Highfill

This paper presents newly released estimates of wages, employment, and gross output by industry and enterprise size for 2012 through 2017. These estimates expand on previous U.S. Bureau of Economic Analysis (BEA) estimates by enterprise size¹ in two ways. First, we increased the number of size class groupings from five to eight. Specifically, we split the small businesses category (less than 100 employees) into four subcategories: very small (0–9 employees), small 1 (10–19 employees), small 2 (20–49 employees), and small 3 (50–99 employees). We also expanded the level of detail for large businesses, splitting this category into three subcategories: large 1 (500–999 employees), large 2 (1,000–4,999 employees), and very large (5,000 or more employees). Second, we expanded the industry detail from about 20 sectors, or 2-digit North American Industry Classification System (NAICS) codes, to 63 industries, aligning with 3-digit NAICS codes. The full set of estimates is available on BEA's small business website.

Our estimates show enterprises with 5,000 or more employees garnered the largest share of private sector wages, employment, and gross output in 2017, generating more than one-third of overall economic activity for these estimates (38.4 percent, 33.8 percent, and 41.3 percent, respectively). We also find the major industries in the largest (5,000 or more employees) and smallest (0–9 employees) size classes differed from the industries prominent in the adjacent large (500–999 and 1,000–4,999 employees) and small (10–19, 20–49, 50–99 employees) size categories, highlighting the need for granular industry and size class data to understand the composition of the economy. Additional findings are discussed below, following a brief description of the methodology. The final section provides additional context to our results and describes possibilities for future research.

Data

The primary source data used to calculate wages, employment, and gross output by enterprise size were the U.S. Census Bureau's Statistics of U.S. Businesses (SUSB) and Nonemployer Statistics (NES). The SUSB is published annually and provides payroll and employment estimates by industry and enterprise size, as well as corresponding receipts, shipments, and sales data every 5 years (in line with the Economic Census publication years). The SUSB sample includes businesses with one or more employees during the year. The NES data by industry are used to capture receipts for businesses with no employees during the year.

The SUSB provides data for about two dozen employment size categories, ranging from less than 5 employees to 5,000 or more employees. Table 1 shows summary-level 2017 data for the agriculture, forestry, fishing, and hunting sector. The SUSB data show that of the 164,046 employees in this sector, 23,132 are employed in enterprises with fewer than 5 employees.

NAICS	NAICS description	Enterprise size	Establishments	Employment	Annual payroll (\$1,000)	Receipts (\$1,000)
		01. Total	23,363	164,046	7,013,892	34,742,794
		02. less than 5 employees	15,957	23,132	1,068,245	7,412,902
		03.5-9 employees	3,574	23,441	947,807	5,084,929
	Agriculture, forestry,	04.10–19 employees	1,664	21,870	957,566	4,535,258
11		05. less than 20 employees	21,195	68,443	2,973,618	17,033,089
11	fishing, and hunting	06.20–99 employees	1,221	41,314	1,823,162	7,577,963
		07.100-499 employees	450	26,834	1,051,899	4,360,433
		08. less than 500 employees	22,866	136,591	5,848,679	28,971,485
		09.500 or more employees	497	27,455	1,165,213	5,771,309

Table 1. Sample Data from U.S. Census Bureau's Statistics of U.S. Businesses, 2017

Source. U.S. Census Bureau Statistics of U.S. Businesses (2021)

There are a few private industries that are not included in the SUSB and have been excluded when creating these estimates, notably crop and animal production and rail transportation.²

Annual nominal wages, employment, and gross output by industry data from BEA's national accounts were used as the U.S. industry totals. BEA defines wages as money paid in regular intervals to employees by employers, employment as both part-time and full-time employees, and gross output as receipts plus other operating income and inventory change. In BEA's national accounting framework, nonemployers receive proprietors' income, a category distinct from wages. This means nonemployers are included in our gross output estimate, but the wage and employment estimates exclude nonemployers.³

Methods

To calculate wages, employment, and gross output by enterprise size, BEA nominal industry totals for these estimates were distributed to the SUSB and NES data according to their size categories. The distribution was calculated using each enterprise size category's share of total employment for a given industry. For example, if 10 percent of all manufacturing employment was represented in enterprises with 20–49 employees in the SUSB data, then 10 percent of the total BEA manufacturing employment figures were assigned to that enterprise size category. This process was similarly applied to the payroll data to estimate wages and to the receipts data to estimate gross output.

In some cases, industry and size category observations were suppressed in the SUSB data to avoid potential identification of individual firms. These suppressions occur when there are a small number of firms within an industry and size class combination, and the exact values for payroll, employment, or receipts are hidden to preserve confidentiality. Where these values are suppressed, the Census Bureau includes a lettered key to indicate that the suppressed employment figure falls within a certain range. The difference between the industry total and the sum of the unsuppressed data is the total suppressed value. The suppressed value was allocated to the suppressed cells using the midpoint of the supplied range.

New in this paper is the expansion of size classes to include more detail on both small and large businesses. The size categories are found in table 2.

Very small	Small 1	Small 2	Small 3	Medium	Large 1	Large 2	Very large
0-9	10-19	20-49	50-99	100-499	500-999	1,000-4,999	5,000 or more

Table 2. Size Class Categories by Number of Employees in an Enterprise

Another new piece of this paper is the expansion of the data to show 63 detailed industries. Previously, data were only estimated at a more aggregated two-digit or sector level of detail.

Wages, Employment, and Gross Output by Enterprise Size and Industry, 2012–2017

In this section, we describe the wages, employment, and gross output estimates separately. We start with a discussion of overall industry shares for the estimate, then focus on small enterprises, and end with a discussion of changes between 2012–2017 for all size classes. For the sake of brevity, many of the results are described at the sector level. The full industry-level data can be found in the tables that accompany this paper on BEA's small business website.

Wages

Top five sectors

Wages totaled almost \$7.1 trillion in 2017, an increase of \$1.4 trillion from 2012 (\$5.7 trillion). Ranking the sectors by their total share of overall wages, the top five sectors in 2017 remained unchanged from the 2012 rankings. The top five sectors by 2017 wages values were:

- 1. Health care and social assistance (\$976.2 billion)
- 2. Professional, scientific, and technical services (\$859.6 billion)
- 3. Finance and insurance (\$668.5 billion)
- 4. Durable goods manufacturing (\$559.6 billion)
- 5. Retail trade (\$510.5 billion)

Together, these sectors accounted for 50.4 percent (\$3.6 trillion) of overall wages earned in 2017.

Small enterprises

In 2017, small enterprises (less than 100 employees) made up 28.4 percent of overall U.S. wages (chart 1). The sector with the largest share of wages concentrated in small enterprises (less than 100 employees) was agriculture, forestry, fishing, and hunting (excluding farm) (69 percent) (chart 2). Within the size classes, professional, scientific, and technical services and health care and social assistance together accounted for 30.2 percent of wages in the very small (0–9 employees) size class and 28.6 percent of wages in the small 1 (10–19 employees) size class.

- **Professional, scientific, and technical services** ranked first in all four small size classes in 2017 (table 3). This sector represented 17.5 percent of wages in the very small (0–9 employees) size class and 14.8 percent of wages in the small 1 (10–19 employees). This sector includes a variety of services, including legal, accounting, and engineering services.
- Health care and social assistance ranked second in both the very small (0–9 employees) size class in 2017, representing 12.7 percent of wages, and the small 1 (10–19 employees) size class, representing 13.7 percent of wages. Most of this activity arose from the ambulatory health care services industry, which represented over 80 percent of wages in this sector in both the very small (0–9 employees) and small 1 (10–19 employees) size class.
- Despite not being ranked in the top five sectors in terms of total wages in 2017, Construction ranked second in both the small 2 (20–49 employees) size class, representing 13.1 percent of wages, and small 3 (50–99 employees) size class, representing 11.7 percent of wages.





Chart 2. Distribution of Wages by Size Class for Sectors, 2017

Utilities	<mark>© 396</mark>	798 (326	14%					69	%				
Management of companies and enterprises	9 728	635		19%						66%				
Information	3% 🕀 3 %	5 398	1025	5%	16%					58	%			
Transportation and warehousing (excluding rail)	5% 4%	G98	498	1025	496	1196					55%			
Finance and insurance	5% 8 4	198 498	1122	5 525		15%					54%			
Administrative and waste management services	6% 49	6 696	43%	1126	5%		14%				50%			
Retail trade	10%	6%	5 895	5798	112	8	396 <mark>6%</mark>				50%			
Durable goods manufacturing	3% 3%	798	798	1623		798		18%				39%		
Health care and social assistance	8%	5%	7798	526	1426		696	16%				39%		
Nondurable goods manufacturing	<mark>3%</mark> 3% 6	% G	86	1798		895		20%				38%		
Educational services	4% 3% 2	798	27986	192	5		796	20%				349	6	
Wholesale trade	8%	6%	1098	895		1728		698	14%			32	2%	
Professional, scientific, and technical services	12%		798	986	7786		16%	69%	12%			3	1%	
Accommodations and food services	8%	986		139%		1198		1298	596	10%			27%	
Mining	5% 4%	798	626	172	8	{	926	2	888				25%	
Real estate, rental, and leasing		22%		895	1095		895	1728		698	112%		19%	5
Arts, entertainment, and recreation	16	5%	.596	895	898		ź	2428		1126	14	496		13%
Construction	1	7%		1126	18	8 5		1226		20%		526	9%	9%
Other services, except government		269	6		1496		រ	G98	996		15%	498	6%	9%
Agriculture, forestry, fishing, and hunting (excluding farms)		2	9%		14	96		12798	99	6	15%		498 596	7%
	0	10	20) 3	0	40	Pe	50 ercent	60	70	:	80	90	100
	O Denot	es valu	es less th	nan 3 perce	nt; mav	apply		than one se	gment.					
	Very small (0-9 employees)								_					00-4,999)
U.S. Bureau of Economic Analysis	-	1 (10-19		- /			(20-49) (50-99)		arge 1 (5	00-99	9)	_		5,000+)

Table 3. Ranking Sectors by Largest Share of Wages in Each Enterprise Size Category,2012 and 2017

Sector		small -9 oyees)	Sma (10-		Sma (20-	all 2 -49)	Sma (50-	all 3 -99)	Med (100-		Lar; (500-		Lar; (1,000-		Very (5,00 mo	00 or
	2012	2017	2012	2017	2012	2017	2012	2017	2012	2017	2012	2017	2012	2017	2012	2017
Agriculture, forestry, fishing, and hunting (excluding farms)	17	16	18	17	18	18	20	19	20	20	20	20	20	20	20	20
Mining	18	18	17	18	17	17	17	17	18	18	17	18	15	15	15	18
Utilities	20	20	19	20	20	20	19	20	19	19	19	19	19	19	14	14
Construction	4	3	3	3	3	2	3	2	6	4	8	7	10	10	16	15
Durable goods manufacturing	11	11	8	8	5	7	4	4	3	3	3	3	2	4	5	5
Nondurable goods manufacturing	15	15	13	13	11	11	10	11	7	8	6	6	7	6	11	11
Wholesale trade	6	6	5	7	4	5	5	5	4	5	5	5	5	5	9	10
Retail trade	5	5	6	5	7	8	6	7	8	7	11	12	13	14	3	4
Transportation and warehousing (excluding rail)	12	13	11	11	12	12	12	12	13	14	14	15	14	13	10	9
Information	14	14	14	14	14	15	15	15	14	12	12	11	9	9	7	8
Finance and insurance	7	7	9	9	9	9	8	9	5	6	4	4	4	3	1	2
Real estate and rental and leasing	8	8	12	12	13	13	14	14	16	16	18	17	17	17	18	16
Professional, scientific, and technical services	1	1	1	1	1	1	1	1	2	2	2	2	3	2	4	3
Management of companies and enterprises	19	19	20	19	19	19	18	18	17	17	9	10	6	7	6	7
Administrative and waste management services	10	10	10	10	10	10	11	10	9	10	7	8	8	8	8	6
Educational services	16	17	16	16	15	14	13	13	12	13	13	14	12	12	13	13
Health care and social assistance	2	2	2	2	2	3	2	3	1	1	1	1	1	1	2	1
Arts, entertainment, and recreation	13	12	15	15	16	16	16	16	15	15	16	16	18	18	19	19
Accommodation and food services	9	9	7	6	6	4	7	6	11	9	10	9	11	11	12	12
Other services, except government	3	4	4	4	8	6	9	8	10	11	15	13	16	16	17	17

Small enterprises' (less than 100 employees) share of wages declined 1.6 percentage points between 2012 and 2017, from 30 percent to 28.4 percent, driven in part by declines in relative shares for wholesale trade and health care and social assistance. Wholesale trade saw a 3.8 percentage point decline in wage shares attributable to small enterprises between 2012 and 2017 (from 35.3 percent to 31.6 percent) and health care and social assistance experienced a 3.5 percentage points decline (from 29 percent to 25.6 percent).

Changes in size class ranking between 2012 and 2017

Two sectors out of 20, construction and accommodations and food services, experienced multiple increases in rankings within the size classes.

- **Construction** realized the greatest increase in rank by size class, moving up two spots in the medium (100–499 employees) size class, from the sixth largest sector to the fourth. Looking at construction's share of wages within size classes, the small 3 (50–99 employees) size class increased 2.2 percentage points between 2012 and 2017, from 9.5 percent to 11.7 percent, the largest percentage point increase of all the sectors and size classes.
- Accommodations and food services also saw a lot of upward movement within size classes. Rankings for the small 2 (20–49 employees) and medium (100–499 employees) size classes both jumped two spots. Rankings for the small 1 (10–19 employees), small 3 (50–99 employees), and large 1 (500–999 employees) size classes all moved up one spot. Food services accounted for the majority of wages in this sector, over 78 percent in 2017.

Some sectors saw large decreases in rank across size classes. Out of all the size classes, mining was the only sector to face a downward slide of three spots in rank in an individual size class. This sector's very large (5,000 or more employees) size class decreased three spots between 2012 and 2017, falling from the 15th largest sector to the 18th largest (out of 20). There was also a downward movement in ranking in the small 1 (10–19 employees) and large 1 (500–999 employees) size classes for this sector, also moving to 18th place in both cases. Many other sectors experienced changes in rank over the period:

- Wholesale trade decreased rank across many size classes. The ranking for small 1 (10–19 employees) moved down two spots to seventh place, and rankings for three other size classes moved down one spot: small 2 (20–49 employees), medium (100–499 employees), and very large (5,000 or more employees). Wholesale trade's share of wages by size class decreased in all size classes except large 1 (500–999 employees). The size class facing the largest loss in share was small 2 (20-49 employees), decreasing 1.1 percentage points to a 7.8 percent share.
- **Durable goods manufacturing** experienced two large downward movements in size class rankings, despite being one of the top five largest sectors. Rankings for the small 2 (20–49 employees) and large 2 (1,000–4,999 employees) size classes both moved down two spots, to seventh and fourth place, respectively. All size classes saw a decrease in share percentage, ranging from –1.3 percentage points to –0.2 percentage point.
- Health care and social assistance saw large decreases in wage share percentages for all but the largest size class (5,000 or more employees). Rankings for the small 2 (20–49 employees) and small 3 (50–99 employees) size classes went from second to third place. This sector's share of overall wages in the very small (0–9 employees) size class decreased 1.6 percentage points, from 14.3 percent to 12.7 percent.

The rankings of sectors by share of total wages remained unchanged for 13 out of 20 sectors between 2012 and 2017, though there was some movement within the individual size classes for these sectors. This means that despite having growth or loss within the size classes, the change wasn't enough to affect their overall ranking by total wages. Arts, entertainment, and recreation experienced the least movement in rank across size classes for any sector.

Employment

Top five sectors

In 2017, private employment was 126.5 million, an increase of 11.9 million from 2012. Similar to wages, the top five sectors ranked by their share of total employment stayed the same between 2012 and 2017. The top five sectors were:

- 1. Health care and social assistance (19.6 million employees)
- 2. Retail trade (16 million employees)
- 3. Accommodations and food services (13.7 million employees)
- 4. Administrative and waste management services (9.2 million employees)
- 5. Professional, scientific, and technical services (9.1 million employees)

Together, these sectors accounted for 53.4 percent of private employment in 2017.

Small enterprises

Small enterprises (less than 100 employees) made up 34.6 percent of private employment in 2017, a decrease of 1.2 percentage points from 2012 (chart 3). The sectors with the largest share of employment within the small (less than 100 employees) size classes were accommodations and food services and health care and social assistance, accounting for 15 percent and 12.9 percent of small enterprise employment, respectively. The sector with the largest share of employment concentrated in very small enterprises (0–9 employees) was other services, except government, representing 31 percent of this sector's employment (chart 4).

- Accommodations and food services held the largest share of employment in the small 1 (10–19 employees), small 2 (20–49 employees), and small 3 (50–99 employees) size classes in both 2012 and 2017 (table 4). Accommodations and food services also ranked as the second largest sector in three size classes: medium (100–499 employees), large 1 (500–999 employees), and large 2 (1,000–4,999 employees) size classes. As with wages, the majority of employment for this sector is concentrated in the food services industry (85.5 percent in 2017).
- Health care and social assistance ranked second in the small 1 (10–19 employees), small 2 (20–49 employees), and small 3 (50–99 employees) size classes in both 2012 and 2017, with all three size classes seeing minor increases in employment share percentages, ranging from 0.1 percentage point to 0.7 percentage point. Similar to wages, ambulatory health care services represented the majority of employment for small enterprises (less than 100 employees) within this sector (59.3 percent in 2017).
- **Other services, except government** represents the largest share (16.5 percent) of the very small (0–9) size class across all industries. This sector includes an assortment of services that are not classified elsewhere in the NAICS, such as automotive repair, barber shops, funeral homes, drycleaners, and parking garages.



Chart 3. Share of Total Employment by Size Class, 2012 and 2017

Chart 4. Distribution of Employment by Size Class for Sectors, 2017

Utilities	* 396 490	5 895	490	5 1	4%							65%					
Management of companies and enterprises	0 102	8 Z	796		19%							62	%				
Retail trade	10%	696	798	596	8	8 <mark>8</mark>	6%						58%				
Information	4% 3%	596 49	8	1226	5	26	14%						53%				
Finance and insurance	8%	3% 4%	43%	112%		5%	1	126					519	6			
Transportation and warehousing (excluding rail)	7%	596 79	6 E	96	1123	49	8	11%					50	%			
Administrative and waste management services	6% 49	6 69%	496	1292	5	7%		15%	5				d	16%			
Nondurable goods manufacturing	4% 4%	726	798		I	982		825		19	%				32%		
Durable goods manufacturing	4% 5%	998		895		18%	5	7	8	ſ	7%				32%		
Health care and social assistance	8%	696	896	798		1	89%		7%		15%				31%		
Professional, scientific, and technical services	17	%		896	119	6	7726		1528		596	109	5		27%	5	
Wholesale trade	10%	7%		1226		925		182	3	6	86	12%			269	6	
Mining	6% 5	396 8	36	7796		16%		896			26	8			24	%	
Accommodations and food services	7%	10%		Ð	96		ម	198		1526	5	8	10%		24	86	
Educational services	5% 4%	926		895		1892	5		996			23%			2	3%	
Arts, entertainment, and recreation	9%	798		1598		1035			2128		8	396	139	8		19%	
Real estate, rental, and leasing		25%			996		10%	2	798	1	696	Ę	596	9%		18%	
Construction		22%			1596			1895		1	198		12/28		49%	7%	7%
Other services, except government		3	1%				16%			11798		99	5	1298	396	5%	7%
Agriculture, forestry, fishing, and hunting (excluding farms)		29	%			149	5		1698		ę	98	٢	728	395	7%	5%
	0	10	20	D	30		40		50		60	1	70	80		90	100
									ercent								
	© Denot				ercen	_				_	-						
		mall (0-		oyees)				(20-49	-			n (100-		_	Large 2		
U.S. Bureau of Economic Analysis	Small 1	1 (10-19)				Sr	nall 3	(50-99	9	L	arge 1	(500-9	999)		Very la	′ge (5,0	00+)

Table 4. Ranking Sectors by Largest Share of Employment in Each Enterprise Size Category,2012 and 2017

Sector	Very : (0 emplo	-9	Sma (10-		Sma (20-			all 3 -99)		lium -499)	Lar (500-		Lar; (1,000-	ge 2 -4,999)	Very (5,00 mo	
	2012	2017	2012	2017	2012	2017	2012	2017	2012	2017	2012	2017	2012	2017	2012	2017
Agriculture, forestry, fishing, and hunting (excluding farms)	15	15	17	17	17	17	17	17	19	19	20	20	20	20	20	20
Mining	18	18	18	18	18	18	18	18	18	18	18	18	18	18	19	19
Utilities	19	19	19	19	20	20	20	20	20	20	19	19	19	19	16	18
Construction	4	2	5	4	4	3	6	3	8	5	11	11	13	12	15	14
Durable goods manufacturing	11	12	8	8	7	7	4	7	3	3	4	4	2	4	6	7
Nondurable goods manufacturing	13	14	12	12	10	10	10	10	9	9	6	6	8	8	10	10
Wholesale trade	7	7	7	7	8	8	8	8	7	8	9	8	10	10	11	9
Retail trade	2	3	4	5	5	5	3	4	6	6	7	7	5	7	1	1
Transportation and warehousing (excluding rail)	12	11	10	10	11	11	13	13	13	13	13	12	11	11	8	6
Information	17	17	16	16	16	16	16	16	16	16	16	16	14	14	9	11
Finance and insurance	10	9	13	13	13	14	12	14	11	11	10	9	7	6	4	5
Real estate and rental and leasing	9	8	11	11	15	15	15	15	15	15	17	17	17	17	17	17
Professional, scientific, and technical services	5	4	6	6	6	6	7	5	5	4	5	5	6	5	7	8
Management of companies and enterprises	20	20	20	20	19	19	19	19	17	17	15	15	12	13	12	12
Administrative and waste management services	8	10	9	9	9	9	9	9	4	7	3	3	3	3	3	3
Educational services	16	16	15	15	12	12	11	11	12	12	8	10	9	9	13	13
Health care and social assistance	3	5	2	2	2	2	2	2	1	1	1	1	1	1	2	2
Arts, entertainment, and recreation	14	13	14	14	14	13	14	12	14	14	14	14	16	16	18	16
Accommodation and food services	6	6	1	1	1	1	1	1	2	2	2	2	4	2	5	4
Other services, except government	1	1	3	3	3	4	5	6	10	10	12	13	15	15	14	15

Changes in size class ranking between 2012 and 2017

Two sectors experienced large upward movements within size classes between 2012 and 2017: construction and arts, entertainment, and recreation.

- **Construction** rankings increased for all but one size class, large 1 (500–999 employees). The small 3 (50–99 employees) and medium (100–499 employees) size classes both moved up three spots to rank third and fifth, respectively. For the very small (0–9 employees) size class, construction moved up two spots to second place. The remaining size classes all increased in rank by one spot. Construction's share of employment in all the size classes increased, ranging from 0.2 to 1.5 percentage point increases.
- Arts, entertainment, and recreation did not move in its ranking of overall share of employment, but it did see movement within the size classes. This sector's rankings for the small 3 (50–99 employees) and very large (5,000 or more employees) size classes moved up two spots to 12th and 16th place, respectively. Rankings in the very small (0–9 employees) and small 2 (20–49 employees) size classes moved up one spot each to claim 13th place for both.

Two of the three sectors that saw the largest downward movement within size classes are also in the top five sectors, speaking to the massive size of the sectors and how much weight they hold in terms of share of employment.

- Administrative and waste management services was one of two sectors where rankings moved down three places in an individual size class. The ranking for the medium (100–499 employees) size class moved down to seventh place in 2017 from fourth in 2012. Although the movement in rank was drastic, its share of the medium size class only fell by 0.7 percentage point, from 7 percent to 6.4 percent. This sector also saw a downward movement in the very small (0–9 employees) size class, falling in ranking from 8th to 10th place.
- **Retail trade** rankings also experienced downward movement in multiple size classes. The greatest movement in ranking was for the large 2 (1,000–4,999 employees) size class, falling two spots from fifth to seventh place. Three other size classes moved down one spot in the retail trade sector: very small (0–9 employees) fell to third place, small 1 (10–19 employees) decreased to fifth, and small 3 (50–99 employees) fell to fourth.
- **Durable goods manufacturing** rankings either declined or stayed the same over the period. The small 3 (50–99 employees) size class ranking for this sector fell three spots to seventh place. The ranking for the large 2 (1,000–4,999 employees) size class fell two spots, moving from second to fourth place, and the very small (0–9 employees) and very large (5,000 or more employees) sizes classes both fell one spot.

Similar to wages, 13 sectors remained unchanged in their ranking of total share of private employment.

Gross output

Top five sectors

Gross output totaled almost \$28.7 trillion in 2017, an increase of \$4.6 trillion from 2012 (\$24 trillion). Ranking the sectors by their total share of overall 2017 gross output, the top five sectors were:

- 1. Durable goods manufacturing (\$2.9 trillion)
- 2. Nondurable goods manufacturing (\$2.8 trillion)
- 3. Finance and insurance (\$2.8 trillion)
- 4. Health care and social assistance (\$2.4 trillion)
- 5. Professional, scientific, and technical services (\$2.2 trillion)

Together, these sectors accounted for 46.1 percent (\$13.2 trillion) of overall gross output generated in 2017. Unlike with wages and employment, the top five sectors in terms of gross output changed ranking between 2012 and 2017. Specifically, nondurable goods manufacturing and durable goods manufacturing switched places over the period.

Small enterprises

Small enterprises (less than 100 employees) made up 26.4 percent of total private output in 2017, a decrease of 1.8 percentage points from 2012 (28.2 percent) (chart 5). Within the small size classes, the three sectors with the greatest share of gross output were real estate, rental, and leasing (16.8 percent); professional, scientific, and technical services (12.2 percent); and construction (11.4 percent). The agriculture, forestry, fishing, and hunting (excluding farm) sector had the largest concentration of gross output in the very small (0–9 employees) size class at 56.1 percent (chart 6).

- **Real estate, rental, and leasing** ranked first in the smallest size class (0–9 employees), representing 26 percent of gross output, but ranged between 5th and 10th largest sector in the remaining small size classes in 2017 (table 5).
- **Construction** had the greatest share of gross output in three of the four smallest size classes in 2017. In the small 2 (20–49 employees) size class, construction accounted for 14 percent of total gross output.
- **Professional, scientific, and technical services** ranked second in all four small size classes in 2017. This sector represented 13.6 percent of gross output in the very small (0–9 employees) size class.



Chart 5. Share of Total Gross Output by Size Class

Chart 6. Distribution of Gross Output by Size Class for Sectors, 2017

Information	3% 🛞	8	26	498		14%							6	5 %					
Utilities	8 492	រ ប	23	6	86	8	4%							62%	5				
Finance and insurance	6%	8 39	5 8	893	49%		15%	5						59	9%				
Retail trade	12	2%	5%	398	696	1	10%	398	6	%				Į	55%				
Nondurable goods manufacturing	 8 9 8 9 8 9 8 9 9	19 5	1298		7%			21%							53%				
Durable goods manufacturing	<mark>3%</mark> 8	596		155%		7%			18%	6					50%				
Wholesale trade	7%	496	396 8	596	12	28	(39%		14%					48%				
Transportation and warehousing (excluding rail)		18%		4	86 3 86	596		1123	4	325	13%					42%			
Health care and social assistance	P	2%	5%	598	596		15%		5%	5	16%					41%			
Administrative and waste management services		16%		5%	396	596		1298		596	13%					40%			
Educational services	7%	396 G	698	5	15	26		798			22%					37%			
Management of companies and enterprises	5%	8 (1	8		2	428				926	ę	16%				36	6		
Accommodations and food services	1	4%		109	5	G25		1095		13%		G98	129	6			29%		
Mining	4% (8 - 198		15%	5	5	1196				37	96					27%	5	
Professional, scientific, and technical services		2	5%			7%	49	8 75	8	14	23	638		12%			25%	%	
Arts, entertainment, and recreation			29%	5			596	396	796		1893		88	5	14%	5		17%	
Real estate, rental, and leasing (excludes owner-occupied housing)					50	%					596	6 498	1	12%	596	8%		14%	6
Construction			26%				1126		798	12	26		202	5	E	86	10%		9%
Other services, except government				41	1%					12%	(396	998		1493	4	996	6%	8%
Agriculture, forestry, fishing, and hunting (excluding farms)						56%						្រ	1196	496	G98	102	5 <mark>3</mark>	96 <mark>4</mark> 96	6%
	0	10		20	D	3	0		40	5	60	60)	70		80		90	100
										Perc	cent								
	Der	notes v	alues	less t	han 3	perce	nt; m	ay ap	ply t	to more t	han on	e segm	ient.						
	Ven	y small	(0-9	empl	oyees)		Sma	ll 2 ((20-49)		Med	lium (10	00-49	9)	Li	arge 2	(1,000	-4,999)
U.S. Bureau of Economic Analysis	Sma	all 1 (10	-19)					Sma	II 3 ((50-99)		Larg	je 1 (50	0-99	9)	V	ery lar	rge (5,0	00+)

Table 5. Ranking Sectors by Largest Share of Gross Output in Each Enterprise Size Category,2012 and 2017

Sector		small -9 oyees)	Sma (10-		Sma (20-			all 3 -99)	Med (100-	lium -499)	Lar (500-			ge 2 -4,999)		large)0 or re)
	2012	2017	2012	2017	2012	2017	2012	2017	2012	2017	2012	2017	2012	2017	2012	2017
Agriculture, forestry, fishing, and hunting (excluding farms)	17	16	18	19	20	20	20	20	20	20	20	20	20	20	20	20
Mining	16	19	16	16	15	17	16	19	15	16	10	13	8	8	13	17
Utilities	20	20	19	20	18	19	17	18	19	19	16	16	16	17	10	11
Construction	3	3	2	1	1	1	3	1	7	5	9	8	12	10	17	15
Durable goods manufacturing	13	13	9	9	3	4	1	3	1	1	1	1	2	2	2	3
Nondurable goods manufacturing	14	15	13	13	9	10	5	8	2	2	2	2	1	1	1	2
Wholesale trade	8	11	4	8	5	6	6	7	4	7	6	6	5	6	6	7
Retail trade	6	6	7	6	7	7	7	6	9	9	14	14	15	14	5	6
Transportation and warehousing (excluding rail)	7	7	11	12	12	13	12	13	10	13	11	15	10	11	9	9
Information	15	14	14	14	14	14	14	14	12	12	8	9	7	7	4	4
Finance and insurance	10	8	12	11	11	8	10	9	6	8	5	5	3	3	3	1
Real estate and rental and leasing	1	1	5	5	8	9	9	10	8	6	7	7	9	9	15	13
Professional, scientific, and technical services	2	2	1	2	2	2	2	2	5	3	4	3	6	5	8	8
Management of companies and enterprises	19	17	20	17	19	15	19	15	16	11	15	11	11	15	12	14
Administrative and waste management services	9	9	10	10	13	12	13	12	13	14	12	12	13	12	11	10
Educational services	18	18	17	18	17	18	15	17	18	18	17	18	17	16	16	16
Health care and social assistance	4	4	3	3	4	5	4	4	3	4	3	4	4	4	7	5
Arts, entertainment, and recreation	12	12	15	15	16	16	18	16	17	17	18	17	19	18	19	18
Accommodation and food services	11	10	6	4	6	3	8	5	11	10	13	10	14	13	14	12
Other services, except government	5	5	8	7	10	11	11	11	14	15	19	19	18	19	18	19

Changes in size class ranking between 2012 and 2017

Gross output saw more changes in ranking within size classes than wages or employment. Durable goods manufacturing and nondurable goods manufacturing rankings decreased in almost half of the size classes. Conversely, rankings for construction and accommodation and food services either stayed constant or increased for every size class.

Although many sectors saw movement within the size classes, construction, management of companies and enterprises, and accommodation and food services all had large upward movements in rank within the size classes.

- **Construction** had upward movement in six of the eight size classes, with all but very small (0-9 employees) and small 2 (20–49 employees) increasing in rank. Small 3 (50–99 employees) gained two spots in rank for this sector, putting it first in this size class's ranking. Medium (100–499 employees), large 2 (1,000–4,999 employees), and very large (5,000 or more employees) size classes also gained two spots in rank, moved them to 5th, 10th, and 15th, place respectively. The small 1 (10–19 employees) and large 1 (500–999 employees) size classes moved up one spot each to first and eighth place.
- Management of companies and enterprises had the largest increases in rank within size classes. Its rank in the medium (100–499 employees) size class moving up five positions, from 16th to 11th place. This sector also saw an increase in rank for the very small (0–9 employees) and small 1 (10–19 employees) size classes, though it only ranked 17th in both cases.
- Accommodations and food services was the only sector to move up in rank within all the size classes. In three of the eight size classes, accommodations and food services moved up three spots: small 2 (20–49 employees), small 3 (50–99 employees), and large 1 (500–999 employees), moving up to 3rd, 5th, and 10th place, respectively. Accommodation and food services saw its share of gross output increase for all classes, ranging from 0.3 percentage point to 1.3 percentage points increase.

Only two sectors saw large downward slides throughout most of the size classes: mining and wholesale trade.

- **Mining's** share in the very large (5,000 or more employees) size class decreased four spots between 2012 and 2017, declining to 17th place. Mining saw three other size classes decrease three spots each: very small (0–9 employees), small 3 (50–99 employees), and large 1 (500–999 employees). Despite the large movements in ranking, mining didn't see large decreases in share percentages across the classes. The largest decrease in share of gross output occurred in the very large (5,000 or more employees) size class which decreased 1.5 percentage points, from 2.6 percent to 1.1 percent, driven mostly by oil and gas extraction.
- Wholesale trade decreased in ranking for all but the large 1 (500–999 employees) size class, which did not change over the period. Wholesale trade's share of the small 1 (10–19 employees) size class went down four places in 2017 to eighth, with very small (0–9 employees) and medium (100–499 employees) following with a decrease of three places. The rest of the size classes moved down one spot.

Twelve sectors remained unchanged in their ranking of overall share of gross output between 2012 and 2017. Agriculture, forestry, fishing, and hunting (excluding farms) saw the least amount of movement of all the sectors, with only the two smallest size classes changing rank by one spot.

Summary

These more granular estimates of 2012–2017 gross output, wages, and employment provide a better understanding of the contributions of the smallest and largest businesses to the overall economy compared to BEA's previous estimates. By disaggregating estimates for businesses with fewer than 20 employees into two size classes (0–9 and 10–19 employees), we see that businesses with 9 or fewer employees generated more than triple the gross output of businesses with 10–19 employees in 2017 (\$4 billion versus \$1.3 billion), much of this driven by the real estate, rental, and leasing and construction sectors. Additionally, we see that the industry distribution of employment for the smallest size class (0–9 employees) differed from the three other small size classes (10–19, 20–49, 50–99). Specifically, the other services, except government sector represented the largest share of employment in the smallest size class, whereas accommodations and food services was the biggest sector for the other small size classes.

Disaggregating the largest size class from a singular size class of 500 or more employees to three separate size classes showed enterprises with 5,000 or more employees garnered by far the largest share of private sector wages, employment, and gross output in 2017 across all size categories, more than one-third of economic activity in each case. As with the small size classes, the major industries in the largest (5,000 or more employees) size class differed from the industries prominent in the other two large size classes (500–999 and 1,000–4,999 employees). For the largest size class, retail trade was the leading sector in terms of share of employment, whereas health care and social assistance sector was the biggest employer in the other two large size classes. The detailed industry data also show that within the health care and social assistance sector, the ambulatory health care services industry was the biggest employer in the 500–999 employee size category, while hospitals led in the 1,000–4,999 employee size class. These examples highlight the need for granular industry and size class data to understand the underlying composition of economic activity within the economy. While the Census SUSB data are available at a finer level of detail than we estimate here, the tradeoff when using detailed data is the increased potential for skewing results due to a higher number of suppressions.

BEA is currently researching other ways to estimate small business statistics including using different size classes, datasets, and business characteristics. Additionally, BEA is investigating the use of private datasets to provide more timely estimates of small business statistics. We invite all interested data users to send feedback about these estimates or suggestions for future research to SmallBusiness@bea.gov.



^{1.} See Highfill and Strassner, 2017 and Highfill and others, 2020.

^{2.} See the U.S. Census Bureau SUSB "About This Program" webpage.

^{3.} See the National Income and Product Account handbook.