

# 100 Years Chronicling the U.S. Economy

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# **Returns for Domestic Nonfinancial Business**

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Once a year, the Bureau of Economic Analysis (BEA) reports on sector rates of return for domestic nonfinancial corporations, for nonfinancial industries, and for 14 major nonfinancial industry sectors, including mining, utilities, construction, manufacturing, wholesale trade, and retail trade. These broad measures of profitability, based on returns on produced assets, may be useful to economists and policymakers. Industry sector and corporate business rates of return are available through 2018; these rates of return reflect revised statistics from both the 2019 annual update of the National Income and Product Accounts (NIPAs) and the 2019 annual update of the Industry Economic Accounts (IEAs).¹ Various Tobin's Q ratios, which compare the financial market value of assets with the replacement-cost value of produced assets, are also presented in this article.

The after-tax profitability of domestic nonfinancial corporations increased in 2018 after remaining unchanged in 2017, according to updated statistics from BEA. The after-tax rate of return for nonfinancial domestic corporations—a similar but broader measure of profitability—increased in 2018, growing for the first time since 2012.

The rates of return presented in this article are calculated as the ratio of the net operating surplus to the net stock of produced assets.<sup>2</sup> The net operating surplus reflects the return to capital and is presented in table A. Produced assets are presented in table B. For nonfinancial corporations, the net operating surplus reflects statistics from the NIPAs and is defined as the sum of corporate profits from current production, net interest payments, and net business current transfer payments.<sup>3</sup> The net operating surplus for nonfinancial industries reflects statistics from the IEAs and is a broader concept that includes proprietors' income. For both nonfinancial corporations and nonfinancial industries, the statistics on net stock of produced assets are from BEA's fixed assets accounts. To calculate the Q ratios, additional statistics on financial market values are drawn from the Federal Reserve Board's financial accounts of the United States.

Table A. Net Operating Surplus of Domestic Nonfinancial Corporations and Nonfinancial Industries, 1999–2018—Continues

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Nonfinancial corporations	756.1	728.0	660.7	728.8	822.3	980.0	1,144.4	1,281.4	1,237.4	1,180.0
Total nonfinancial industries	1,417.3	1,422.5	1,394.2	1,512.8	1,717.5	1,959.3	2,106.0	2,256.0	2,295.1	2,400.0
Agriculture, forestry, fishing, and hunting	51.0	57.3	57.4	43.0	63.4	84.3	77.5	61.0	70.7	70.8
Mining	-4.8	16.5	20.8	7.0	26.6	40.0	70.3	83.7	104.9	151.6
Utilities	57.6	51.9	55.1	41.1	46.3	54.2	46.8	63.2	58.5	57.1
Construction	113.2	125.0	131.4	135.6	157.4	192.4	226.7	235.3	232.2	170.2
Manufacturing	325.6	320.4	268.2	292.4	344.5	393.8	442.9	499.6	510.7	456.0
Durable-goods manufacturing	124.9	123.5	56.9	83.8	117.6	133.1	160.4	174.7	176.7	144.7
Nondurable-goods manufacturing	200.6	196.9	211.3	208.6	226.8	260.7	282.5	324.9	333.9	311.3
Wholesale trade	108.3	115.2	105.8	104.7	118.9	142.9	163.6	181.6	200.9	220.7
Retail trade	116.8	113.7	116.0	121.4	130.2	126.0	134.1	132.9	111.6	96.2
Transportation and warehousing	28.3	29.0	30.6	24.5	40.3	53.7	63.7	85.0	68.0	78.4
Information	118.8	60.1	73.0	134.3	145.7	188.6	199.5	193.5	228.5	264.2
Real estate and rental and leasing <sup>1</sup>	131.2	154.4	159.2	183.1	205.2	214.4	200.6	222.3	204.0	253.5
Professional and business services <sup>2</sup>	174.4	162.3	182.0	211.6	229.5	246.1	255.5	260.0	287.7	348.4
Educational services, health care, and social assistance	58.1	62.3	70.7	72.1	76.0	82.5	75.9	80.5	74.4	105.2
Arts, entertainment, recreation, accommodation, and food services	64.2	75.2	65.6	77.7	78.9	84.7	86.0	92.4	87.4	83.3
Other services, except government	74.7	79.3	58.4	64.5	54.5	55.7	63.0	65.0	55.5	44.3

<sup>1.</sup> The housing component of real estate and rental and leasing is excluded from these estimates to allow for better comparison with nonfinancial corporate returns.

<sup>2.</sup> To preserve the nonfinancial focus of this article, management of companies and enterprises is excluded from this sector.

Table A. Net Operating Surplus of Domestic Nonfinancial Corporations and Nonfinancial Industries, 1999–2018—Table Ends

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Nonfinancial corporations	1,050.4	1,318.6	1,402.4	1,525.1	1,584.3	1,643.8	1,658.9	1,578.2	1,578.2	1,603.9
Total nonfinancial industries	2,270.7	2,518.8	2,618.4	2,648.9	2,842.9	2,894.8	2,883.2	2,895.3	3,027.2	3,252.3
Agriculture, forestry, fishing, and hunting	52.4	68.8	99.5	88.2	119.8	95.9	75.0	57.2	62.2	49.7
Mining	62.7	83.7	109.4	82.8	99.7	97.3	-48.7	-61.9	4.1	50.1
Utilities	69.1	84.4	84.6	73.6	74.3	80.9	76.4	72.0	77.7	79.7
Construction	153.9	140.1	135.8	144.6	154.6	167.1	187.1	206.8	218.2	226.6
Manufacturing	438.2	516.9	537.1	547.6	580.5	582.9	611.5	574.7	593.2	658.6
Durable-goods manufacturing	99.9	177.0	188.4	200.7	223.6	220.3	238.1	240.3	237.7	252.1
Nondurable-goods manufacturing	338.3	339.9	348.8	346.9	356.9	362.6	373.4	334.4	355.4	406.5
Wholesale trade	215.5	252.0	257.2	287.6	308.8	327.3	355.1	342.0	341.2	352.1
Retail trade	114.5	122.8	114.8	125.4	136.4	131.1	141.4	151.4	149.5	156.1
Transportation and warehousing	70.2	96.2	96.6	98.6	103.3	114.2	126.1	124.0	129.8	142.9
Information	247.6	275.2	257.1	235.5	278.3	259.0	286.7	325.5	321.3	338.7
Real estate and rental and leasing <sup>1</sup>	257.7	242.4	272.9	299.0	330.9	365.2	363.8	359.2	366.1	381.5
Professional and business services <sup>2</sup>	324.0	345.2	355.1	361.8	349.5	359.1	370.6	387.5	402.2	432.5
Educational services, health care, and social assistance	133.1	141.0	142.7	136.6	133.1	132.1	139.8	152.6	155.2	162.6
Arts, entertainment, recreation, accommodation, and food services	86.5	99.7	109.4	119.7	126.2	132.2	147.6	154.8	157.4	167.5
Other services, except government	45.3	50.1	46.2	47.9	47.4	50.8	51.0	49.5	49.0	53.8

<sup>1.</sup> The housing component of real estate and rental and leasing is excluded from these estimates to allow for better comparison with nonfinancial corporate returns.

<sup>2.</sup> To preserve the nonfinancial focus of this article, management of companies and enterprises is excluded from this sector.

Table B. Produced Assets of Domestic Nonfinancial Corporations and Nonfinancial Industries, 1999-2018—Continues

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Nonfinancial corporations	8,579.0	9,132.3	9,603.2	9,921.3	10,237.6	10,834.2	11,769.0	12,752.5	13,623.8	14,388.5
Total nonfinancial industries	11,260.3	12,034.1	12,500.5	12,944.0	13,403.4	14,557.4	15,877.2	17,162.7	18,198.6	19,197.2
Agriculture, forestry, fishing, and hunting	453.6	470.3	473.7	492.3	520.5	556.5	596.4	622.0	661.8	676.0
Mining	541.4	588.2	666.3	739.4	793.6	947.3	1,242.3	1,441.3	1,532.3	1,669.4
Utilities	1,001.2	1,059.6	1,113.2	1,152.7	1,202.7	1,332.7	1,425.3	1,524.8	1,648.2	1,803.2
Construction	170.9	183.8	190.9	200.6	206.6	229.2	252.6	276.4	290.0	304.2
Manufacturing	2,665.7	2,791.1	2,823.8	2,861.1	2,908.7	3,059.7	3,242.5	3,414.6	3,648.4	3,800.8
Durable-goods manufacturing	1,506.5	1,581.2	1,600.8	1,601.3	1,608.8	1,679.3	1,768.6	1,858.9	1,951.7	2,046.3
Nondurable- goods manufacturing	1,159.1	1,209.9	1,223.0	1,259.8	1,299.8	1,380.4	1,473.9	1,555.6	1,696.7	1,754.5
Wholesale trade	665.2	705.4	688.0	698.8	719.1	784.6	864.8	940.4	998.6	1,033.6
Retail trade	984.3	1,057.8	1,088.4	1,152.6	1,212.7	1,338.0	1,432.2	1,536.4	1,617.3	1,668.3
Transportation and warehousing	780.9	820.7	853.1	859.5	867.8	917.2	957.4	1,005.6	1,036.8	1,098.4
Information	1,084.5	1,201.0	1,268.3	1,289.2	1,303.2	1,380.0	1,470.8	1,603.8	1,656.3	1,722.2
Real estate and rental and leasing <sup>1</sup>	857.5	928.3	965.0	995.8	1,023.5	1,122.1	1,231.2	1,350.2	1,435.4	1,518.0
Professional and business services <sup>2</sup>	412.4	464.2	493.6	519.9	551.9	597.2	648.4	700.6	742.7	787.8
Educational services, health care, and social assistance	853.0	911.4	969.0	1,032.0	1,093.4	1,203.2	1,324.2	1,456.3	1,559.7	1,669.1
Arts, entertainment, recreation, accommodation, and food services	467.5	505.6	537.6	562.4	588.4	639.3	696.1	756.4	809.5	862.4
Other services, except government	322.3	346.7	369.5	387.7	411.3	450.4	492.9	533.9	561.6	583.8

<sup>1.</sup> The housing component of real estate and rental and leasing is excluded from these estimates to allow for better comparison with nonfinancial corporate returns.

<sup>2.</sup> To preserve the nonfinancial focus of this article, management of companies and enterprises is excluded from this sector.

Table B. Produced Assets of Domestic Nonfinancial Corporations and Nonfinancial Industries, 1999–2018—Table Ends

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Nonfinancial corporations	14,536.0	14,551.8	15,191.9	15,882.3	16,506.7	17,224.8	17,765.6	18,139.7	18,770.1	19,636.2
Total nonfinancial industries	18,604.0	19,249.9	20,233.2	20,506.6	21,861.3	22,849.2	23,244.3	23,856.2	24,939.1	26,026.0
Agriculture, forestry, fishing, and hunting	646.7	680.0	731.9	752.1	797.7	860.3	835.1	833.5	861.0	886.9
Mining	1,513.9	1,599.1	1,779.4	1,915.1	2,079.5	2,347.0	2,273.4	2,184.2	2,256.4	2,229.0
Utilities	1,789.1	1,918.3	2,039.3	2,129.0	2,184.0	2,281.5	2,322.5	2,419.9	2,514.7	2,592.6
Construction	279.9	272.8	277.3	284.5	295.6	307.3	320.5	337.9	338.7	359.1
Manufacturing	3,756.5	3,872.5	4,053.3	4,168.5	4,324.6	4,425.7	4,470.4	4,578.0	4,785.5	4,965.3
Durable-goods manufacturing	1,985.0	2,031.5	2,127.4	2,191.6	2,269.7	2,331.5	2,350.9	2,379.6	2,471.4	2,572.0
Nondurable- goods manufacturing	1,771.5	1,841.1	1,925.8	1,976.9	2,054.8	2,094.2	2,119.4	2,198.3	2,314.1	2,393.2
Wholesale trade	969.6	1,036.1	1,112.7	1,174.1	1,206.3	1,258.6	1,285.7	1,328.5	1,407.6	1,492.9
Retail trade	1,571.2	1,602.6	1,669.0	1,731.0	1,799.3	1,848.7	1,899.3	1,957.7	2,036.7	2,129.6
Transportation and warehousing	1,072.5	1,095.2	1,136.4	1,170.2	1,209.0	1,274.5	1,320.0	1,366.2	1,422.9	1,497.7
Information	1,722.9	1,829.8	1,908.3	1,948.4	2,007.6	2,073.9	2,129.1	2,210.2	2,342.1	2,479.4
Real estate and rental and leasing <sup>1</sup>	1,442.5	1,444.4	1,489.7	1,541.1	1,604.9	1,668.9	1,739.3	1,813.4	1,909.4	2,029.0
Professional and business services <sup>2</sup>	795.3	820.9	853.9	882.2	860.0	941.3	969.1	1,010.0	1,062.8	1,126.2
Educational services, health care, and social assistance	1,650.8	1,689.9	1,765.4	1,820.8	1,913.4	1,974.7	2,032.1	2,074.9	2,170.0	2,301.8
Arts, entertainment, recreation, accommodation, and food services	835.6	831.0	848.4	871.8	920.4	965.3	1,007.9	1,073.8	1,143.3	1,223.3
Other services, except government	557.5	557.3	568.2	578.4	601.1	621.6	639.8	668.0	688.0	713.2

<sup>1.</sup> The housing component of real estate and rental and leasing is excluded from these estimates to allow for better comparison with nonfinancial corporate returns.

<sup>2.</sup> To preserve the nonfinancial focus of this article, management of companies and enterprises is excluded from this sector.

#### **Corporate Returns**

Nonfinancial corporate rates of return increased on an after-tax basis and decreased on a before-tax basis in 2018. The after-tax rate of return was 7.4 percent in 2018, an increase of 0.2 percentage point from 2017 (chart 1 and table C). The before-tax rate of return was 8.2 percent in 2018, a decrease of 0.2 percentage point. Since 1970, before-tax rates of return have ranged from 6.9 percent in both 1982 and 2001 to 10.0 percent in 2006. In the 1960s, average rates of return were higher, peaking at 13.6 percent in 1965 and 1966. Net operating surplus as a share of net value added increased on an after-tax basis and decreased on a before-tax basis (table D) in 2018.

Other measures of profitability—such as BEA's measure of corporate profits from current production—increased in 2018. The measures presented in this article exclude the volatile financial sector and compare returns of nonfinancial corporations with their assets rather than with gross domestic product.

Percent Rates of return Before tax After tax Percent Shares of net value added Before tax After tax 

U.S. Bureau of Economic Analysis

Chart 1. Rates of Return and Shares of Value Added for Nonfinancial Corporations, 1960–2018

Table C. Rates of Return for Domestic Nonfinancial Corporations and Nonfinancial Industries, 1999–2018—Continues

[Percent]

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Nonfinancial corporations—after tax	6.9	6.2	5.8	6.4	6.8	7.4	7.5	7.7	7.0	6.8
Nonfinancial corporations—before tax	8.8	8.0	6.9	7.3	8.0	9.0	9.7	10.0	9.1	8.2
Total nonfinancial industries	13.0	12.2	11.4	11.9	13.0	14.0	13.8	13.7	13.0	12.8
Agriculture, forestry, fishing, and hunting	11.4	12.4	12.2	8.9	12.5	15.7	13.4	10.0	11.0	10.6
Mining	-0.9	2.9	3.3	1.0	3.5	4.6	6.4	6.2	7.1	9.5
Utilities	5.9	5.0	5.1	3.6	3.9	4.3	3.4	4.3	3.7	3.3
Construction	70.0	70.5	70.1	69.3	77.3	88.3	94.1	89.0	82.0	57.3
Manufacturing	12.5	11.7	9.6	10.3	11.9	13.2	14.1	15.0	14.5	12.2
Durable-goods manufacturing	8.5	8.0	3.6	5.2	7.3	8.1	9.3	9.6	9.3	7.2
Nondurable-goods manufacturing	17.7	16.6	17.4	16.8	17.7	19.5	19.8	21.5	20.5	18.0
Wholesale trade	16.8	16.8	15.2	15.1	16.8	19.0	19.8	20.1	20.7	21.7
Retail trade	12.3	11.1	10.8	10.8	11.0	9.9	9.7	9.0	7.1	5.9
Transportation and warehousing	3.7	3.6	3.7	2.9	4.7	6.0	6.8	8.7	6.7	7.3
Information	11.4	5.3	5.9	10.5	11.2	14.1	14.0	12.6	14.0	15.6
Real estate and rental and leasing <sup>1</sup>	16.0	17.3	16.8	18.7	20.3	20.0	17.0	17.2	14.6	17.2
Professional and business services <sup>2</sup>	45.1	37.0	38.0	41.8	42.8	42.8	41.0	38.5	39.9	45.5
Educational services, health care, and social assistance	7.0	7.1	7.5	7.2	7.2	7.2	6.0	5.8	4.9	6.5
Arts, entertainment, recreation, accommodation, and food services	14.3	15.5	12.6	14.1	13.7	13.8	12.9	12.7	11.2	10.0
Other services, except government	24.0	23.7	16.3	17.4	13.7	12.9	13.3	12.7	10.1	7.7

<sup>1.</sup> The housing component of real estate and rental and leasing is excluded from these estimates to allow for better comparison with nonfinancial corporate returns.

Table C. Rates of Return for Domestic Nonfinancial Corporations and Nonfinancial Industries, 1999-2018—Table Ends

[Percent]

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Nonfinancial corporations—after tax	6.1	7.7	7.9	8.1	8.0	7.9	7.7	7.3	7.2	7.4
Nonfinancial corporations—before tax	7.2	9.1	9.2	9.6	9.6	9.5	9.3	8.7	8.4	8.2
Total nonfinancial industries	12.0	13.3	13.3	12.9	13.3	12.9	12.5	12.3	12.4	12.8
Agriculture, forestry, fishing, and hunting	7.9	10.4	14.1	11.9	15.5	11.6	8.8	6.9	7.3	5.7
Mining	3.9	5.4	6.5	4.5	5.0	4.4	-2.1	-2.8	0.2	2.2
Utilities	3.8	4.6	4.3	3.5	3.4	3.6	3.3	3.0	3.1	3.1
Construction	52.7	50.7	49.4	65.5	53.3	55.4	59.6	62.8	64.5	64.9
Manufacturing	11.6	13.6	13.6	13.3	13.7	13.3	13.7	12.7	12.7	13.5
Durable-goods manufacturing	5.0	8.8	9.1	9.3	10.0	9.6	10.2	10.2	9.8	10.0
Nondurable-goods manufacturing	19.2	18.8	18.5	17.8	17.7	17.5	17.7	15.5	15.8	17.3
Wholesale trade	21.5	25.1	23.9	25.2	25.9	26.6	27.9	26.2	24.9	24.3
Retail trade	7.1	7.7	7.0	7.4	7.7	7.2	7.5	7.9	7.5	7.5
Transportation and warehousing	6.5	8.9	8.7	8.5	8.7	9.2	9.7	9.2	9.3	9.8
Information	14.4	15.5	13.8	12.2	14.1	12.7	13.6	15.0	14.1	14.0
Real estate and rental and leasing <sup>1</sup>	17.4	16.8	18.6	19.7	21.0	22.3	21.3	20.2	19.7	19.4
Professional and business services <sup>2</sup>	40.9	42.7	42.4	41.7	38.8	38.6	38.8	39.2	38.8	39.5
Educational services, health care, and social assistance	8.0	8.4	8.3	7.6	7.1	6.8	7.0	7.4	7.3	7.3
Arts, entertainment, recreation, accommodation, and food services	10.2	12.0	13.0	13.9	14.1	14.0	15.0	14.9	14.2	14.2
Other services, except government	7.9	9.0	8.2	8.4	8.0	8.3	8.1	7.6	7.2	7.7

<sup>1.</sup> The housing component of real estate and rental and leasing is excluded from these estimates to allow for better comparison with nonfinancial corporate returns.

<sup>2.</sup> To preserve the nonfinancial focus of this article, management of companies and enterprises is excluded from this sector.

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Table D. Net Operating Surplus Share of Net Value Added for Domestic Nonfinancial Corporations and Nonfinancial Industries, 1999-2018—Continues

[Percent]

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Nonfinancial corporations—after tax	13.1	11.8	11.8	13.5	14.2	15.2	15.6	16.4	15.5	15.7
Nonfinancial corporations—before tax	16.8	15.2	14.1	15.4	16.8	18.6	20.3	21.3	20.0	19.1
Total nonfinancial industries	24.1	22.3	20.1	21.0	23.0	24.8	24.6	24.2	22.9	22.7
Agriculture, forestry, fishing, and hunting	67.8	84.9	78.6	58.0	91.2	96.9	67.7	62.5	76.4	64.3
Mining	-12.6	39.3	31.1	9.4	46.4	49.5	69.0	58.2	61.4	75.3
Utilities	47.2	37.5	40.1	30.0	35.0	39.3	31.0	43.0	34.0	33.0
Construction	31.3	31.5	30.0	29.3	33.6	38.5	40.7	37.8	34.9	25.0
Manufacturing	27.2	25.8	20.9	24.4	28.9	31.6	33.5	35.7	34.4	30.0
Durable-goods manufacturing	17.7	17.2	7.5	12.7	17.9	19.3	22.0	22.6	21.7	17.4
Nondurable-goods manufacturing	40.9	37.8	40.1	38.6	42.5	46.8	47.4	52.0	49.7	45.2
Wholesale trade	20.6	21.2	18.3	18.4	20.9	23.9	25.1	25.8	26.5	27.5
Retail trade	19.7	18.4	18.0	18.2	19.0	17.5	18.1	17.0	13.9	12.0
Transportation and warehousing	12.2	12.1	12.0	9.7	16.1	20.1	21.4	26.7	19.5	22.4
Information	35.6	16.0	21.2	36.9	35.8	44.8	42.2	39.5	46.6	49.2
Real estate and rental and leasing <sup>1</sup>	61.8	63.7	63.8	66.5	67.5	67.4	63.5	64.1	60.4	65.0
Professional and business services <sup>2</sup>	23.2	19.8	20.3	22.5	23.6	24.2	23.5	22.1	22.9	25.8
Educational services, health care, and social assistance	10.2	10.3	11.0	10.4	10.2	10.3	8.8	9.0	7.8	10.5
Arts, entertainment, recreation, accommodation, and food services	21.2	22.5	17.9	21.0	20.1	20.6	19.6	20.2	18.0	16.5
Other services, except government	31.8	32.2	22.2	26.0	20.5	21.1	22.8	22.6	18.5	14.6

<sup>1.</sup> The housing component of real estate and rental and leasing is excluded from these estimates to allow for better comparison with nonfinancial corporate returns.

<sup>2.</sup> To preserve the nonfinancial focus of this article, management of companies and enterprises is excluded from this sector.

Table D. Net Operating Surplus Share of Net Value Added for Domestic Nonfinancial Corporations and Nonfinancial Industries, 1999-2018—Table Ends

[Percent]

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Nonfinancial corporations—after tax	15.4	18.2	18.5	18.7	18.6	18.2	17.8	16.9	16.6	17.1
Nonfinancial corporations—before tax	18.3	21.5	21.8	22.3	22.3	22.1	21.5	20.2	19.5	18.9
Total nonfinancial industries	21.2	24.2	24.1	23.2	23.6	23.0	21.8	20.9	21.2	21.6
Agriculture, forestry, fishing, and hunting	47.1	74.0	91.5	62.4	87.2	56.4	49.7	44.8	56.3	41.6
Mining	23.5	53.3	58.8	36.4	46.6	41.4	-19.9	-75.5	8.5	41.7
Utilities	39.1	44.2	40.5	34.4	36.7	39.2	35.5	33.6	36.1	35.5
Construction	25.1	26.5	27.6	29.5	29.8	30.4	31.3	31.6	31.1	30.4
Manufacturing	30.2	38.3	37.3	36.5	37.6	36.5	37.3	33.7	35.5	37.9
Durable-goods manufacturing	12.7	26.6	25.2	25.3	26.9	25.5	26.8	25.8	25.4	26.1
Nondurable-goods manufacturing	50.7	49.7	50.4	49.1	50.1	49.5	49.7	43.3	48.2	52.6
Wholesale trade	26.0	32.4	30.8	32.7	32.9	33.4	34.6	31.7	32.0	32.1
Retail trade	14.8	16.3	14.7	15.7	16.4	15.1	15.9	16.1	15.5	15.8
Transportation and warehousing	19.5	28.5	26.3	25.7	25.7	27.3	28.4	25.8	26.3	27.4
Information	43.7	50.7	45.2	41.9	50.4	42.3	46.8	49.7	45.6	46.8
Real estate and rental and leasing <sup>1</sup>	66.5	66.4	68.2	69.3	69.9	71.2	69.8	67.9	67.7	67.4
Professional and business services <sup>2</sup>	22.3	25.1	24.9	24.0	22.0	22.1	21.7	21.4	21.5	21.9
Educational services, health care, and social assistance	12.2	12.1	11.8	11.0	10.3	9.9	10.2	10.6	10.2	10.3
Arts, entertainment, recreation, accommodation, and food services	16.9	19.8	20.8	21.7	21.4	21.3	22.4	21.9	21.1	21.5
Other services, except government	15.0	16.8	15.4	15.8	14.9	15.6	14.8	13.8	13.4	14.3

<sup>1.</sup> The housing component of real estate and rental and leasing is excluded from these estimates to allow for better comparison with nonfinancial corporate returns.

## **Industry Returns**

Rates of return can also be calculated for industry sectors using statistics from the IEAs, which provide annual statistics for 71 industries that together account for all U.S. economic activity. Similar to the method used to calculate the rates for nonfinancial corporations, the rates of return for industry sectors are calculated as the net operating surplus divided by the net stock of produced assets. For nonfinancial industries, net operating surplus as a share of net value added is calculated as net operating surplus divided by net value added. The balance for each published sector represents the share of net value added attributable to compensation of employees and taxes on production and imports less subsidies.

Similar to the net operating surplus of nonfinancial corporations, the net operating surplus of nonfinancial industries reflects corporate profits from current production, business transfer payments (net), and net interest payments. However, as noted, it also reflects proprietors' income, which includes the income of sole proprietorships and partnerships. For this article, the housing component of the real estate sector, which includes owner-occupied housing, is excluded from the nonfinancial industry statistics to allow for a better comparison with the nonfinancial corporate returns data, which do not reflect home ownership.

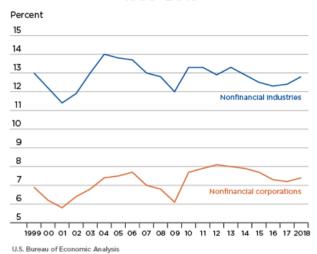
Much of the difference between the sum of the nonfinancial industries rates of return and the corresponding corporate rates of return can be attributed to the inclusion of proprietors' income in the industry net operating surplus. However, several statistical differences between the IEAs and the NIPAs also affect the estimates. Notably, all IEA statistics are presented on an establishment basis, whereas the NIPA measure of corporate nonfinancial net operating surplus is presented on a company basis. As a result, the nonfinancial industry measures reflect adjustments that (1) exclude the financial services-

<sup>2.</sup> To preserve the nonfinancial focus of this article, management of companies and enterprises is excluded from this sector.

producing establishments of primarily nonfinancial corporations and (2) include the nonfinancial services-producing establishments of primarily financial corporations. In addition, the IEA net operating statistics also include a share of the NIPA statistical discrepancy. Despite the differences between the IEA nonfinancial industries aggregate rate of return and the NIPA nonfinancial corporate rate of return, the annual patterns of change of each are similar (chart 2).

The overall rate of return for nonfinancial industries in 2018 was 12.8 percent, increasing slightly from the 2017 rate (table C). Net operating surplus as a share of net value added increased 0.4 percentage point after a 0.3 percentage point increase in 2017 (table D).

Chart 2. Rates of Return for Domestic Nonfinancial Industries and Corporations, 1999–2018



**Specific Industry Groups** 

This article presents a disaggregation of the rates of return for several industry groups—for example, manufacturing, transportation and warehousing, information, and professional and business services, among others (table C).

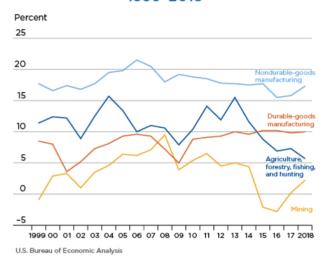
The statistics show that 6 of the 14 industry groups had higher rates of return in 2018 compared to 2017, while 4 groups had lower rates of return and 4 groups remained at the same level. The largest increase of 2.0 percentage points came in mining, while manufacturing and professional and business services also showed increases larger than 0.5 percentage point. Returns for agriculture, forestry, fishing, and hunting decreased 1.7 percentage points, while returns for wholesale trade decreased 0.7 percentage point. Highlights include the following (chart 3):

- The mining industry, which includes oil and gas extraction, had negative rates of return in 2015 (-2.1 percent) and 2016 (-2.8 percent). The rate of return turned positive in 2017 (0.2 percent) and improved further in 2018 (2.2 percent), showing the largest increase among the 14 industry groups.
- The rate of return for agriculture, forestry, fishing, and hunting decreased to 5.7 percent in 2018, which is the lowest rate since 1998, when the series started. The rate of return for this industry group has decreased in 4 out of the last 5 years.
- Returns to nondurable-goods manufacturing, which includes petroleum refineries, have shown consecutive increases of 0.3 and 1.5 percentage points in 2017 and 2018, respectively. This is after a sharp decrease in 2016 of 2.2 percentage points to a series low of 15.5 percent.
- In comparison, the rate of return to durable-goods manufacturing of 10.0 percent has been relatively unchanged in the last several years. After rebounding from a low of 5.0 percent in 2009 to 10.0

percent in 2013, the rate of return for this industry group has remained stable between 9.6 and 10.2 percent.<sup>4</sup>

- Returns to retail trade are consistent, ranging from 7.0 percent to 7.9 percent since 2009.
- After increasing for 4 consecutive years and reaching a high point of 27.9 percent in 2015, the rate of return for wholesale trade has decreased for the last 3 years, reaching 24.3 percent in 2018.

Chart 3. Rates of Return for Selected Domestic Nonfinancial Industry Groups, 1999–2018



## **Q** Ratios

Tobin's Q, or simply "Q" is the ratio of financial-market valuation of corporate assets to the current-cost value of the assets. A Q ratio above 1 indicates that financial markets value corporate assets above their replacement cost; as a Q ratio rises above 1, companies may be more inclined to make direct investments in plant and equipment. A value of Q below 1 indicates that the financial markets value corporate assets below the replacement cost; as Q falls below 1, companies may be more inclined to buy other companies for their capacity rather than make direct investments.

The three Q-type ratios for domestic nonfinancial corporations presented here are defined as follows:

- Q1 is calculated as the market value of outstanding equity divided by the net stock of produced assets.
- Q2 adds the book value of outstanding corporate bonds to the numerator used in Q1. The inclusion of bonds makes Q2 a more complete measure of invested capital, but including them at historical cost is clearly inconsistent with the underlying rationale for Q, which is to provide a comparison of market valuation with replacement cost.
- ullet Q3 adds an estimate of the market value of outstanding corporate bonds and net liquid assets to the numerator used in Q1.<sup>5</sup>

All three Q ratios decreased in 2018 (chart 4 and table E) after increasing for the previous 2 years but still remain above their decade lows reached in 2008, when they fell below 1, partly reflecting recession-related stock market declines.

Chart 4. Q-Type Ratios and Market Capitalization of Domestic Nonfinancial Corporations, 1960–2018

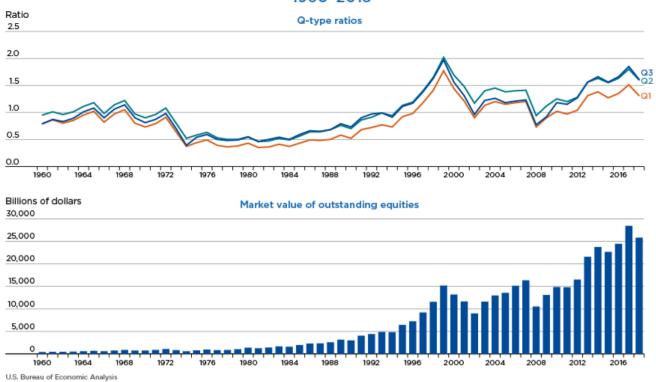


Table E. Q-Type Ratios, 1960-2018

1960 1961 1962	Q1 <sup>1</sup>	<b>Q2</b> <sup>2</sup>	<b>Q3</b> <sup>3</sup>
1962			0.79
	0.86	1.01	0.87
	0.80	0.96	0.83
1963	0.85	1.01	0.89
1964	0.95	1.11	1.01
1965	1.02	1.18	1.08
1966	0.82	0.98	0.90
1967	0.97	1.14	1.06
1968	1.05	1.22	1.14
1969	0.80	0.97	0.90
1970	0.73	0.90	0.81
1971	0.79	0.96	0.87
1972	0.91	1.08	0.98
1973	0.64	0.80	0.70
1974	0.37	0.52	0.39
1975	0.44	0.58	0.54
1976	0.49	0.63	0.59
1977	0.39	0.53	0.50
1978	0.36	0.50	0.48
1979	0.38	0.50	0.49
1980	0.43	0.55	0.54
1981	0.35	0.46	0.46
1982	0.36	0.47	0.50
1983	0.41	0.52	0.54
1984	0.37	0.49	0.50
1985	0.43	0.56	0.59
1986	0.49	0.64	0.66
1987	0.48	0.64	0.65
1988	0.50	0.68	0.68
1989	0.58	0.76	0.79
1990 1991	0.52 0.68	0.70 0.86	0.73 0.90
1992	0.68	0.86	0.90
1993	0.72	0.99	0.97
1994	0.77	0.94	0.99
1995	0.73	1.13	1.11
1996	0.98	1.19	1.17
1997	1.18	1.40	1.38
1998	1.41	1.65	1.63
1999	1.77	2.02	1.03
2000	1.44	1.69	1.56
2001	1.21	1.48	1.31
2002	0.90	1.17	0.96
2003	1.13	1.40	1.22
2004	1.20	1.45	1.26
2005	1.15	1.38	1.18
2006	1.18	1.40	1.21
2007	1.20	1.41	1.23
2008	0.73	0.94	0.77
2009	0.90	1.12	0.92
2010	1.02	1.25	1.18
2011	0.97	1.20	1.15
2012	1.04	1.28	1.27
2013	1.31	1.56	1.56
2014	1.38	1.63	1.66
2015	1.27	1.55	1.56
2016	1.35	1.63	1.66
2017	1.51	1.80	1.85
2018	1.31	1.60	1.61

- Q1 is the market value of outstanding equity divided by the net stock of produced assets valued at current cost.
   Q2 is the market value of outstanding equity plus book value of outstanding corporate bonds divided by the net stock of produced assets valued at current cost.
- 3. Q3 is the market value of outstanding equity plus market value of outstanding corporate bonds plus net liquid assets divided by the net stock of produced assets valued at current cost.

- 1. See Stephanie H. McCulla, Marissa J. Crawford, and Harvey L. Davis Jr., "The 2019 Annual Update of the National Income and Product Accounts," *Survey of Current Business* 99 (August 2019) and Kevin B. Barefoot and Casey W. Ross, "The 2019 Annual Update of the Industry Economic Accounts," *Survey* 99 (November 2019).
- 2. Produced assets refer to the net stock of capital plus inventories valued at current (replacement) cost.
- 3. Corporate profits and net interest are based on tabulations of "company" data rather than "establishment" data. As a result, net operating surplus of nonfinancial corporations includes the income earned by the corporation's financial services-producing establishments, and it excludes income earned by the nonfinancial establishments of financial corporations.
- 4. The National Bureau of Economic Research (NBER) Business Cycle Dating Committee has determined the peak to trough of the last three business cycles: December 2007–June 2009, March 2001–November 2001, and July 1990–March 1991. The NBER business cycle reference dates are available on NBER's website.
- 5. The market value of bonds outstanding is approximated by a procedure developed by James Tobin and Dan Sommers. In brief, the process begins with published book values of bonds outstanding and the assumption that a bond matures in 10 years and carries a coupon rate equal to the Baa rate that prevailed in the year the bond was issued. Net liquid assets are estimated as financial assets less liabilities other than municipal securities, corporate bonds, and mortgages. The data are from the Board of Governors of the Federal Reserve System, *Flow of Funds Accounts of the United States*, statistical release Z.1 and Moody's Seasoned Baa Corporate Bond Yield [BAA], retrieved from FRED, Federal Reserve Bank of St. Louis.

