

VALUE Quarterly

12/31/2017

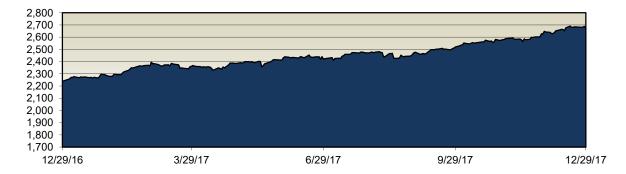
The Dow Jones Industrial Average finished the year at 24,719, up 25.1% for the year. It was the largest increase since 2013 (26.5%), and only the third time the Dow gained over 20.0% since the turn of the century. Despite the Federal Reserve rate hikes, long and intermediate interest rates decreased during the year. The thirty-year Treasury bond yield decreased 33 basis points to 2.74% while the one-year Treasury bill increased 88 basis points to 1.72%.

Real GDP grew by 3.2% during the third quarter after a 3.1% increase in the second quarter. This marked the first time since 2014 the economy produced back-to-back quarters of at least 3.0% real growth. Inflation remained flat at around 2.0% for the last twelve months as the consumer price index showed a small increase for November resulting from increased in oil prices.

Though the Fed has been increasing interest rates, the money supply maintained steady growth of 4.9% during 2017, as measured by Money Zero Maturity (MZM). Reserve balances maintained a range of \$2.2 to \$2.4 trillion during 2017, down from the peak reserves in 2014 of \$2.8 trillion (which is often referred to as the Fed's bloated balance sheet). The current interest rate the Fed pays banks on excess reserve balances is 1.50%, which remains more than the Fed Funds rate banks are paid for lending reserves to other banks (currently 1.41%).

S&P 500

Year Ended 12/29/17		Quarter Ende	ed 12/29/17	As of 12/29/17	
12-Mo. Low	2,238.8	3-Mo. Low	2,519.4	Current Level	2,673.6
12-Mo. High	2,690.2	3-Mo. High	2,690.2	30-Day Avg.	2,644.5
12-Mo. ∆	19.4%	3-Mo. ∆	6.1%	200-Day Avg.	2,482.2



As of 12/31/16		As of 9/30/17		As of 12/29/17	
Price to Earnings	21.03	Price to Earnings	21.62	Price to Earnings	22.45
Price to Book	2.89	Price to Book	3.19	Price to Book	3.30
Price to Sales	2.00	Price to Sales	2.15	Price to Sales	2.24
Dividend Yield	2.1%	Dividend Yield	2.0%	Dividend Yield	1.9%



U.S. Stock Market Indices

	Current	30-Day Avg.	200-Day Avg.	Quarterly Δ:	12-Month Δ:
S&P Barra Value Index	1,127.0	1,108.6	1,052.5	5.7%	12.3%
S&P Barra Growth Index	1,533.4	1,524.4	1,418.2	6.4%	24.5%
Dow Jones Industrial Avg	24,719.2	24,248.7	22,109.3	10.3%	24.7%
Russell 1000 Index	1,481.8	1,465.5	1,375.6	6.1%	18.8%
Russell 2000 Index	1,535.5	1,526.6	1,435.4	3.0%	12.6%
CBOE SPX Volatility Index	11.0	10.3	11.0	16.1%	-17.4%

U.S. Stock Market Sectors

Standard & Poor's 500:	Current	30-Day Avg.	200-Day Avg.	Quarterly ∆:	12-Month Δ :
Aerospace & Defense	1,177.1	1,145.9	1,035.1	7.5%	38.0%
Airlines Index	366.3	347.5	339.2	12.6%	10.5%
Automobiles Index	110.7	112.6	103.1	3.0%	7.5%
Chemicals Index	630.1	624.9	580.1	5.4%	23.5%
Computers & Peri.	2,042.6	2,075.2	1,890.5	9.0%	41.3%
Div. Financials Index	679.2	664.6	600.5	9.1%	23.5%
Energy Index	533.4	511.6	494.4	5.3%	-4.1%
Food/Staples Retail	401.9	395.9	372.3	9.5%	10.5%
Health Care Index	956.3	955.7	917.2	1.1%	19.6%
Insurance Index	402.1	403.6	384.6	2.9%	13.8%
Real Estate Index	203.9	204.7	200.1	2.3%	8.1%
Software Index	1,642.2	1,643.7	1,483.0	9.3%	37.3%
Semiconductors	937.8	947.0	825.2	10.2%	33.8%
Utilities	267.4	277.8	271.2	-0.6%	7.8%

	12/29/	2017	9/29/	2017	12/29/	2016
	Price	e to	Pric	e to	Price	e to
Standard & Poor's 500:	Earnings	Sales	Earnings	Sales	Earnings	Sales
Aerospace & Defense	23.5	1.9	22.2	1.8	18.5	1.5
Airlines Index	12.3	0.9	10.4	0.9	8.7	0.9
Automobiles Index	7.3	0.4	7.2	0.4	5.9	0.4
Chemicals Index	23.6	2.4	22.8	2.3	18.8	2.1
Computers & Peri.	17.7	2.8	17.0	2.6	14.5	2.2
Div. Financials Index	20.9	2.9	19.3	2.7	18.2	2.6
Energy Index	41.5	1.6	50.7	1.6	143.8	2.0
Food/Staples Retail	19.8	0.5	18.1	0.5	18.7	0.5
Health Care Index	20.9	1.9	21.2	1.9	19.6	1.6
Insurance Index	19.4	1.3	15.4	1.3	16.0	1.2
Real Estate Index	46.5	7.0	45.1	6.9	43.1	6.4
Software Index	34.5	6.8	32.7	6.4	30.6	5.5
Semiconductors	18.8	4.5	18.9	4.2	22.6	3.9
Utilities	18.7	2.1	18.6	2.1	17.2	2.0

Macro-Economic Indicators

	Money	New Orders	Housing	Consumer	Personal	GDP	CPI-U
	Supply (MZM)	(Durables)	Starts	Confidence	Income	(Chain Wtd.)	CFI-U
Annual Rates:	12/18/2017	11/30/2017	11/30/2017	11/30/2017	11/30/2017	9/30/2017	11/30/2017
3-Month Δ :	4.9%	13.7%	50.0%	6.8%	4.7%	3.2%	4.2%
12-Month Δ :	4.9%	7.9%	2.3%	13.5%	3.8%	2.3%	2.0%



Interest Rates as of 12/29/2017

	1-Year	5-Year	10-Year	20-Year	30-Year
US Treasury	1.72%	2.20%	2.42%	2.72%	2.74%
AA Corporate	1.91%	2.54%	3.09%	3.56%	3.61%
A Corporate	2.04%	2.68%	3.23%	3.75%	3.72%
BBB Corporate	2.24%	3.04%	3.71%	4.21%	4.16%
BB Corporate	3.02%	4.37%	5.40%	6.33%	6.33%
B Corporate	3.33%	5.17%	6.38%	8.20%	8.19%

Interest Rates as of 9/29/2017

	1-Year	5-Year	10-Year	20-Year	30-Year
US Treasury	1.31%	1.94%	2.34%	2.82%	2.87%
AA Corporate	1.51%	2.33%	3.06%	3.78%	3.84%
A Corporate	1.65%	2.50%	3.22%	3.93%	3.91%
BBB Corporate	1.88%	2.86%	3.70%	4.41%	4.35%
BB Corporate	2.59%	4.15%	5.29%	6.43%	6.42%
B Corporate	2.86%	4.88%	6.06%	7.37%	7.36%

Federal Reserve Watch **US Dollar LIBOR Rates** 12/29/2017 9/29/2017 1.48% 1.21% Current Rate (Overnight) 1.41% 7-Day 1.50% 1.56% 1.23% Current Target (12/13/17) 1-Month 1/31/2018 1.69% 1.33% **Next Meeting** 3-Month

6-Month

1.84%

1.51%

Currency & Commodity Spot Prices

Fed Funds Futures (Feb)

	Current (\$)	Quarterly ∆:	12-Month ∆:
Euro Spot	\$ 1.20	1.6%	14.4%
Japanese Yen Spot	¥ 112.69	0.2%	-3.3%
Gold Spot \$/oz	1,303.05	1.8%	12.5%
Silver Spot \$/oz	16.94	1.7%	4.8%
DRAM (computer memory) Price Index	1.83	7.0%	18.1%
Bloomberg West Texas Intermediate	60.42	16.9%	12.4%
U.S. Average Gasoline Price	2.48	-3.0%	7.2%
USDA Cattle	120.00	10.9%	2.2%

1.41%

Top Quarterly Merger and Acquisition Announcements

Date	Target	Acquiror	Offer (\$MMs)
11/3/2017	QUALCOMM Inc.	Broadcom Ltd*	\$ 86,865.6
12/3/2017	Aetna Inc.	CVS Health Corp.	68,660.5
12/14/2017	Twenty-First Century Fox Inc.	Walt Disney Co.	65,943.1
12/20/2016	Linde AG	Praxair Inc.	41,396.6
10/31/2016	Level 3 Communications Inc.	CenturyLink Inc.	33,500.2
1/26/2017	Actelion Ltd.	Johnson & Johnson	29,762.2
11/13/2017	GGP Inc.	Brookfield Property Partners LP*	27,640.0
4/23/2017	CR Bard Inc.	Becton Dickinson and Co.	24,119.2
11/29/2017	Juniper Networks Inc.	Nokia OYJ*	16,000.0
12/22/2017	XPO Logistics Inc.	Home Depot Inc.*	10,700.0
10/30/2017	Dynegy Inc.	Vistra Energy Corp.	10,515.4
8/28/2017	Kite Pharma Inc.	Gilead Sciences Inc.	10,104.6
10/30/2017	CalAtlantic Group Inc.	Lennar Corp.	9,248.3
12/15/2017	Spreads unit/Unilever	Multiple	8,029.6
8/10/2017	Starwood Waypoint Homes	Invitation Homes Inc	7,811.0

^{*} Proposed or Rumored



Will Lower Corporate Taxes Mean Higher Valuations?

One of the methods commonly used to determine the value of a business is the income approach. Using this method, we calculate the present value of the future net cash flow that a business will generate for its owners, using a discount rate that adequately considers the riskiness of this future performance. This present value is the amount a buyer would be willing to pay to own the business and be the recipient of these future payments.

The decrease in the corporate tax rate means that a greater percentage of the future profit generated by the business is available as cash flow to owners, because they don't have to write as large a check to Uncle Sam. The math is easy, more cash flow equals higher value. At the old 35% corporate tax rate, \$1 million in pre-tax earnings created \$650,000 in net income. At the new 21% corporate tax rate, the same \$1 million in pre-tax earnings will create \$790,000 in net income, or an increase of 22%. I recalculated the valuation of a company from a recently completed report, using the new rates. I found that the value conclusion from the income approach increased by more than 20%.

The example above applies to a C-Corp, but there is a benefit to S-Corps, partnerships and LLCs as well. It has been generally accepted that interests in pass-through entities have higher values because of the tax benefit associated with avoiding corporate taxes. Generally, we calculated the value of the tax savings between owning an interest in a C-Corp (and therefore paying taxes at both the corporate and personal levels), and owning an interest in a pass-through entity (paying only personal taxes). With the new rates, this advantage is much narrower than it used to be. In fact, the value of the pass-through tax benefit decreased by 78% in the recalculation mentioned above. The net effect in the recalculated valuation was an increase in value of 8%, assuming pass-through tax treatment.

Another commonly-used valuation method is the market approach. This method is based on market data from various sources, including comparable public company prices and multiples, and comparable merger and acquisition transactions. Buyers should reflect value increases associated with the new tax rates in higher prices and higher multiples in deals going forward.

While most of the conversation about tax rates is focused on the annual savings, the real story is the significant increase that the new tax rates will generate in company valuations.

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VALUE Incorporated is a financial valuation consulting firm focused on providing valuations of businesses, securities, intellectual property and economic damages, for purposes relating to transactions, financial and tax reporting requirements, and litigation. Value is located in Irving, Texas and completes approximately 250 engage- ments each year in Texas and throughout the United States. Our clients include companies in virtually every industry and of a wide range of sizes.

Our transaction practice provides valuations and financial advisory services, fairness and solvency opinions, and assistance with transaction-related financial reporting and tax issues such as purchase price allocation studies. Please contact our firm when these issues come up. We'd be delighted to assist you.