

Last week's summary

- Global equities rose; fifth straight week of gains
- S&P 500 climbed 0.93%; set new all-time high at 3093.08
- U.S. Factory Orders fell 0.6% in September
- U.S. Nonfarm productivity declined in the third quarter vs estimate of 0.9% increase
- U.S. denied China's claim of tariff rollbacks as part of U.S.-China trade deal
- U.S. 10-Year Treasury yield rose to 1.94%

To watch for this week

- M, 11/11/19 Bonds Market Closes for Veterans Day
- T, 11/12/19 NFIB Small Business Optimism
- W, 11/13/19 Fed Powell addresses Congress, CPI, Monthly Budget Statement
- Th, 11/14/19 PPI Final Demand, EIA crude oil inventory
- F, 11/15/19 Retail Sales, Empire Manufacturing, Industrial Production

Weekly market recap

Global equities extended their rally for a fifth straight week. The S&P 500 index and the Dow Jones Industrial Average rose to all-time highs. The rally was driven primary by trade optimism, despite news that the U.S. has not yet agreed to rollback tariffs, and relatively stable corporate earnings. However, economic data showed additional signs of a global slowdown. U.S. durable goods orders and nonfarm productivity data was lower than expected. U.S. productivity fell, marking the first quarterly decline since 2015. The U.S. 10-Year Treasury yield rose sharply by 23 basis points to 1.94%.

WEEKLY MARKET DATA

Equities	Level	Index Returns (%)								
		1 Week	QTD	YTD	1 YR	3 YR	5 YR	10 YR	Max DD	
S&P 500	3,093.08	0.93	4.12	25.52	14.32	14.90	10.76	13.68	-55.22	
Dow Jones Industrial Avg.	27,681.24	1.37	3.10	21.15	10.32	16.97	11.91	13.59	-51.78	
Nasdaq Composite	8,475.31	1.11	6.06	28.92	14.80	18.26	13.73	16.43	-55.03	
Russell 2000	1,598.86	0.63	5.06	19.93	4.87	10.93	7.35	12.25	-50.62	
MSCI EAFE	1,976.65	0.54	4.75	18.83	11.74	9.11	4.90	5.99	-60.08	
MSCI ACWI ex USA	291.55	0.85	5.02	17.73	11.91	8.65	4.38	5.49	-60.53	
MSCI Emerging Market	1,064.85	1.50	6.53	13.11	12.27	7.74	3.33	4.15	-65.13	
S&P 500 Growth	1,855.71	0.34	2.71	24.34	14.28	17.23	12.55	14.92	-49.03	
S&P 500 Value	1,241.17	1.59	5.74	26.90	14.44	12.13	8.62	12.24	-61.20	
S&P High Dividend	7,112.82	1.00	3.51	21.23	15.15	13.02	10.95	13.84	-52.74	
S&P 500 Buy Backs	29,101.48	2.25	6.89	28.42	12.96	14.51	9.69	15.79	-45.90	
S&P 500 Low Volatility	9,134.02	-1.29	-1.67	24.35	23.01	15.21	12.20	14.55	-43.48	

Fixed Income	Yield	Levels (%)								
		1 Week	QTD	YTD	1 YR	3 YR	5 YR	10 YR	Max DD	
Barclays U.S. Aggregate	2.40	-0.87	-0.72	7.74	11.51	3.29	3.24	3.73	-5.08	
IG U.S. Corporates	2.95	-1.04	-0.64	11.89	14.88	4.83	4.43	5.31	-14.09	
Municipals	2.84	-0.52	-0.38	6.17	9.07	3.44	3.55	4.49	-15.11	
High Yield Municipals	4.15	-0.65	-0.44	9.21	11.65	6.40	6.11	7.17	-30.59	
High Yield Corporates	5.68	0.07	0.46	11.92	8.38	6.03	5.18	7.77	-35.34	
S&P/LSTA Leveraged Loan	6.18	0.20	0.05	8.27	3.44	4.01	3.42	4.91	-33.03	
S&P U.S. Preferred Stock	4.95	-0.74	0.11	15.17	11.61	5.53	5.61	7.99	-65.75	

Key Rates	Levels (%)					
	11/8/19	12/31/18	12/31/17	12/31/16	12/31/15	11/8/16
5 Year U.S. Treasuries	1.75	2.51	2.21	1.93	1.76	1.33
10-Year U.S. Treasuries	1.94	2.68	2.41	2.44	2.27	1.85
10-Year German Bund	-0.26	0.24	0.43	0.21	0.63	0.19
6-mo. CD rate	1.92	2.86	1.85	1.50	0.85	1.45
3-mo. USD Libor	1.90	2.81	1.69	1.00	0.61	0.88
Prime Rate	4.75	5.50	4.50	3.75	3.50	3.50

Index Characteristics			
Div. Yld (%)	FCF Yld (%)	P/E	P/B
1.87	3.99	20.52	3.34
2.24	2.75	19.06	3.96
1.03	3.36	32.69	4.64
1.51	1.11	42.31	1.93
3.41	5.16	17.91	1.59
3.24	5.65	16.80	1.60
2.82	7.08	14.70	1.56
1.45	3.74	25.69	5.17
2.34	4.28	16.75	2.39
2.86	4.00	17.87	2.70
1.92	6.03	14.60	2.44
2.53	1.79	23.39	2.70

Currencies	Levels		
	11/8/19	12/31/18	12/31/17
\$ per €	1.10	1.15	1.20
¥ per \$	109.26	109.69	112.69
\$ per £	1.28	1.28	1.35

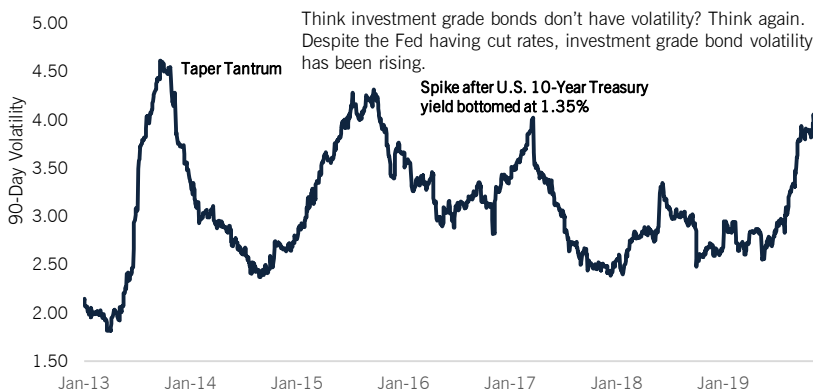
Commodities	Levels		
	11/8/19	12/31/18	12/31/17
Oil (WTI)	57.24	45.41	60.42
Natural Gas	2.79	2.94	2.95
Gold	1459.00	1282.49	1302.80
Silver	16.81	15.50	16.94
Copper	268.20	263.10	330.05

Fund Flows	Net Flows (\$ Millions)		
	1 Week	YTD	1 Year
Equities	-6787	-182250	-232722
Fixed Income	11300	366541	305893
Commodities	-319	10304	11594

CHART OF THE WEEK

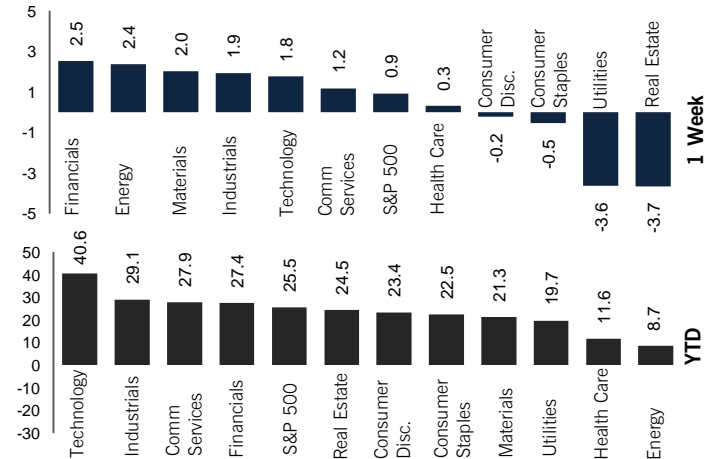
IG Bond Volatility Spikes Like Rates Are Going Up Again

Barclays U.S. Aggregate Bond Index 90-Day Historical Volatility

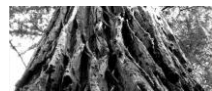


Source: Bloomberg. Data as of 11/08/19.

S&P 500 SECTOR RETURNS (%)



Sources for all charts and tables: Bloomberg, S&P, Redwood. Data for all tables and charts is as of 11/08/19, excluding, 1 YR, 3 YR, 5 YR, 10 YR, MAX DD, which is as of 10/31/19. For illustration purposes only. Past performance is not a guarantee of future results. Please see disclosures on the next page for important additional information.



## Definitions and Disclosures

**Market Recap and Chart of the Week:** 90-Day Historical Volatility is the historical volatility (measured by standard deviation) of a series using a 90-day window. For the S&P 500 Index, Dow Jones Industrial Avg. (Index), Barclays U.S. Aggregate Bond Index, U.S. 10-Year Treasury yield, see below.

**Abbreviations:** MAX DD refers to Maximum Drawdown of the last 12 years ending with the as of data date indicated. A drawdown is a measure of peak to trough loss in a given period; maximum drawdown is a measure of the maximum peak to trough percentage loss in any given period. YTD refers to year to date and QTD refers to quarter to date.

**Indices and Data:** *Equities:* S&P 500 refers to the S&P 500 Index which is a stock market index based on the market capitalization of 500 leading companies publicly traded in the U.S. stock market, as determined by Standard & Poor's. Dow Jones Industrial Avg. (Average) is an index by Standard & Poor's that tracks 30 widely-traded blue chip stocks with large market capitalization. Nasdaq Composite (Index) is a broad-based capitalization-weighted index of stocks in all three Nasdaq tiers: Global Select, Global Market and Capital Market. Russell 2000 Index is an index that measures the performance of the small-cap segment of the U.S. equity universe, including approximately 2000 of the smallest securities based on a combination of their market cap and current index membership. MSCI EAFE refers to the Morgan Stanley Capital International Index that is designed to measure the equity market performance of developed markets outside of the U.S. & Canada and includes Europe, Australia, and the Far East. MSCI ACWI ex USA refers to the Morgan Stanley Capital International All Country World Index, which is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets; the MSCI ACWI ex USA Index does not include the U.S. MSCI Emerging Market Index is an equity index that captures large and mid cap representation across Emerging Market (EM) countries. S&P 500 Growth Index is an index that tracks stocks with growth characteristics in the S&P 500 Index; growth stocks are typically company stock that tends to increase in capital value rather than yield high income. S&P 500 Value Index is an index that tracks stocks with value characteristics in the S&P 500 Index; value stocks are typically company stock that tends to have fundamentals that are priced below those of its peers, based on analysis of price/earnings ratio, yield, and other factors. S&P High Dividend refers to the S&P High Yield Dividend Aristocrats Index and is designed to measure the performance of the S&P 500 Index constituents that have followed a policy of consistently increasing dividends every year for at least 25 years. S&P 500 Buy Backs refers to the S&P 500 Buyback Index, which is designed to measure the performance of the top 100 stocks with the highest buyback ratios in the S&P 500. S&P 500 Low Volatility refers to the S&P 500 Low Volatility Index, which is designed to measure the performance of the 100 least volatile stocks in the S&P 500 Index. *Equities Characteristics:* Calculations and data for characteristics for indices are supplied by Bloomberg. Div. Yld refers to Dividend Yield and is the annual dividends per share divided by the price per share, expressed as a percentage. FCF Yld refers to Free Cash Flow Yield and is an overall return evaluation ratio of a stock, which standardizes the free cash flow per share a company is expected to earn against its market price per share; this ratio is calculated by taking the free cash flow per share divided by the share price. P/E refers to the Price-Earnings Ratio, which is a valuation ratio of a company's current share price compared to its per-share earnings. P/B refers to the Price/Book, which is a ratio of a stock's price divided by the book value per share; for indices, the price-to book value ratio is the average of the index member's capitalization divided by their book value. *Fixed Income:* Performance of these indices reflect total-return, which includes both price and dividends and reinvestments of dividends. "Yield" shown may represent different yield types and calculations and varies from index (or asset class) to index determined by availability of data. Barclays U.S. Aggregate refers to the Barclays U.S. Capital Aggregate Bond Index, which is an index that consists of investment grade U.S. Government bonds, investment grade corporate bonds, mortgage pass-through securities, and asset-backed securities. It is often considered representative of the U.S. investment-grade fixed rate bond market. IG ("Investment Grade") U.S. Corporates is represented by the Barclays U.S. Aggregate Credit Total Return Index, which measures performance from corporate bonds within the Barclays U.S. Aggregate Bond Index. Municipals is represented by the S&P Municipal Bond Index, which is a broad, comprehensive, market value-weighted index that tracks bond issues that are exempt from U.S. federal income taxes or subject to the alternative minimum tax. High Yield Municipals is represented by the Barclays Municipal High Yield Index, which is an index that seeks to track the performance of non-investment grade municipals. High Yield Corporates is represented by the Barclays High Yield Corporate Bond Index, which is an index that consists of U.S. corporate debt that are non-investment grade to reflect the performance of U.S. dollar denominated non-investment grade debt. The S&P/LSTA Leveraged Loan Index is designed to reflect the performance of the largest facilities in the leveraged loan market. S&P U.S. Preferred Stock Index is an index designed to represent the U.S. preferred stock market. Yield shown for Barclays U.S. Aggregate and IG Corporates, High Yield Municipal, and High Yield Corporates is Yield To Worst as provided by Bloomberg. Yield shown for Municipals and S&P/LSTA Leveraged Loan is Yield To Maturity as provided by S&P. Yield shown for S&P U.S. Preferred Stock is the Dividend Yield as provided by S&P on a monthly basis – data shown is as of the last day of the previous month this piece is dated. MSCI All Country World Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. *Key Rates:* Key rate data are provided by Bloomberg. 2-Year, 5-Year, 10-Year U.S. Treasuries are the yield of a debt obligation by the United States government that matures at the year indicated. 10-Year German Bund is a debt obligation issued by the German government that matures in 10-years. A 6-mo CD is a certificate of deposit with a 6 month maturity, 3-mo. USD LIBOR is the "London Inter-Bank Offered Rate, often used as a benchmark for borrowing between banks. The Prime Rate is the lowest rate of interest at which money may be borrowed commercially. *Currencies and Commodities:* \$ per € is the Dollar per Euro and ¥ per \$ is the Yen per Euro, calculated using spot prices. For commodities, the spot price is per common unit (barrel for WTI (West Texas Intermediate) Oil, thermal units for natural gas ounce for precious metals). Data and quotes provided by Bloomberg. *Fund Flows:* Aggregate net amount of flows per investment type in both mutual funds and exchange traded funds; data is as of 10/30/19 as provided by Investment Company Institute. *S&P 500 Sector Returns:* Returns within the S&P 500 Index broken down by GICS (Global Industry Classification Standards). Indices used to show performance are the S&P 500 Utilities Sector Index (Utilities), S&P 500 Telecommunications Sector Index (Communication Services), S&P Consumer Staples Sector Index (Consumer Staples), S&P 500 Health Care Sector Index (Health Care), S&P 500 Industrial Sector Index (Industrials), S&P 500 Technology Sector Index (Technology), S&P 500 Consumer Discretionary Sector Index (Consumer Disc.), S&P 500 Materials Sector Index (Materials), S&P 500 Energy Sector Index (Energy), S&P 500 Financials Sector Index (Financials). UNLESS OTHERWISE NOTED, INDEX RETURNS REFLECT THE REINVESTMENT OF INCOME DIVIDENDS AND CAPITAL GAINS, IF ANY, BUT DO NOT REFLECT FEES, BROKERATE COMMISSIONS OR OTHER EXPENSES OF INVESTING. INVESTORS CANNOT MAKE DIRECT INVESTMENTS INTO ANY INDEX.

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