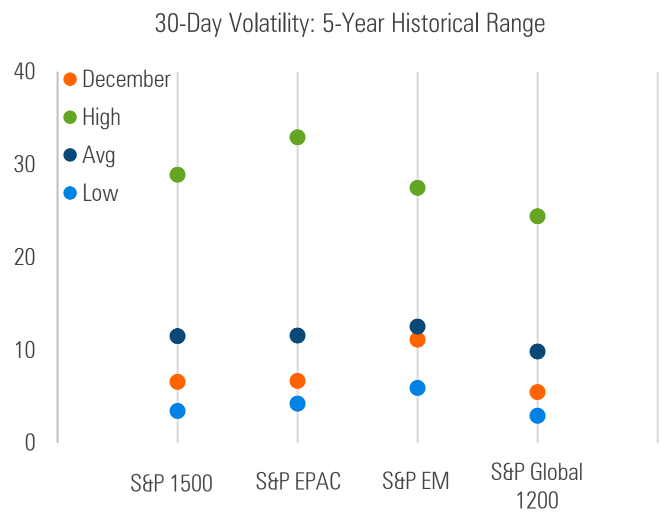
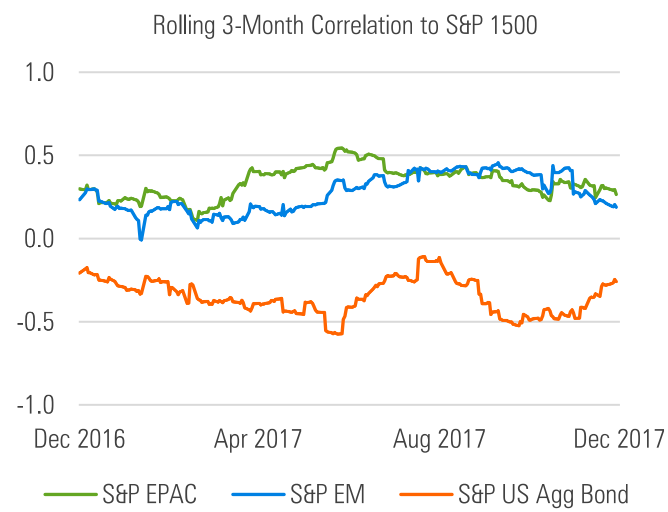
GLOBAL EQUITIES TALLY THEIR BEST YEARLY RETURN SINCE 2009

- Up 1.6% in December, the MSCI All Country World Index (ACWI) notched its 14th consecutive month of positive returns for the first time in its 30-year history, as well as its first full calendar year of positive monthly returns.
- With a standard deviation of 5.7%, it also set a record for its lowest level of volatility in a calendar year, helping it to lock in its highest risk-adjusted calendar-year return by a wide margin.
- Up 3.4% and 1.6% on the month, EM and EPAC stocks lead global equities, with both capping off their best year since 2009.
- With the exception of US large cap stocks, all major market segments saw volatility edge higher again in December.
- Prior to 2017, there had only been four years when the VIX closed below 10; the most in any year was four in 1993. In 2017, it did it 52 times.
- The correlation between US and foreign stocks declined in December, while that between US stocks and US bonds rose. Both finished the year largely unchanged.





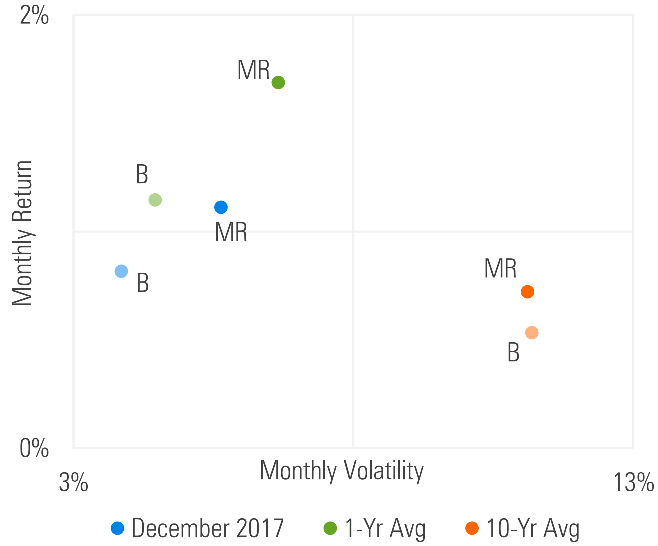
MANAGED RISK INVESTING

- Low equity-market volatility meant that the **S&P 500 Managed Risk Index**, which has an 18% vol cap and no fixed allocation to bonds, maintained its 100% equity allocation for the seventeenth consecutive month. It matched the return and volatility of the S&P 500 during the month while outperforming a 70/30 stock/bond* blend by 30 bps with slightly higher volatility.
- Over the last 10 years, the Managed Risk Index has exhibited a slightly lower average monthly volatility than a 70/30 blend, while generating an average excess monthly return of 19 bps.

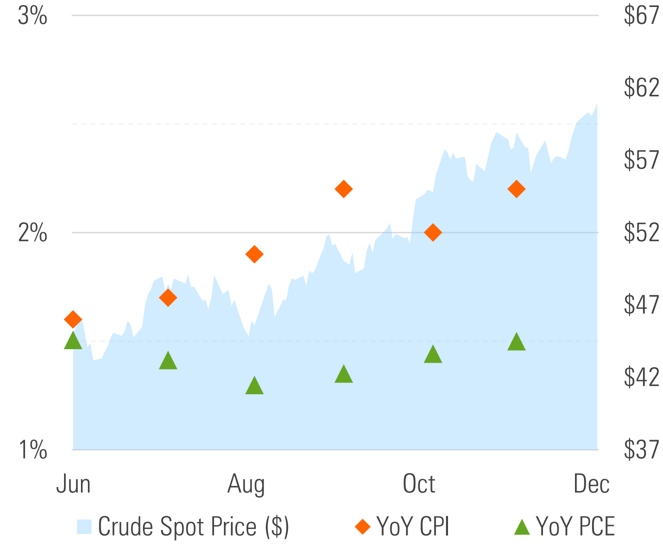
- The US dollar fell for the second straight month, finishing the year 8.5% lower.
- The spot price of crude oil climbed more than 5% for the second straight month, and 35% during the second half of 2017, which is likely to result in higher inflation later in 2018.
- In the meantime, the latest inflation readings saw both CPI and PCE tick slightly higher, while the five-year breakeven inflation rate finished the month unchanged.

*As measured by the S&P 500 Index and the S&P US Aggregate Bond Index.

S&P 500 Managed Risk (MR) vs. 70/30 Blend* (B)



Oil & Inflation: Trailing 6 Months



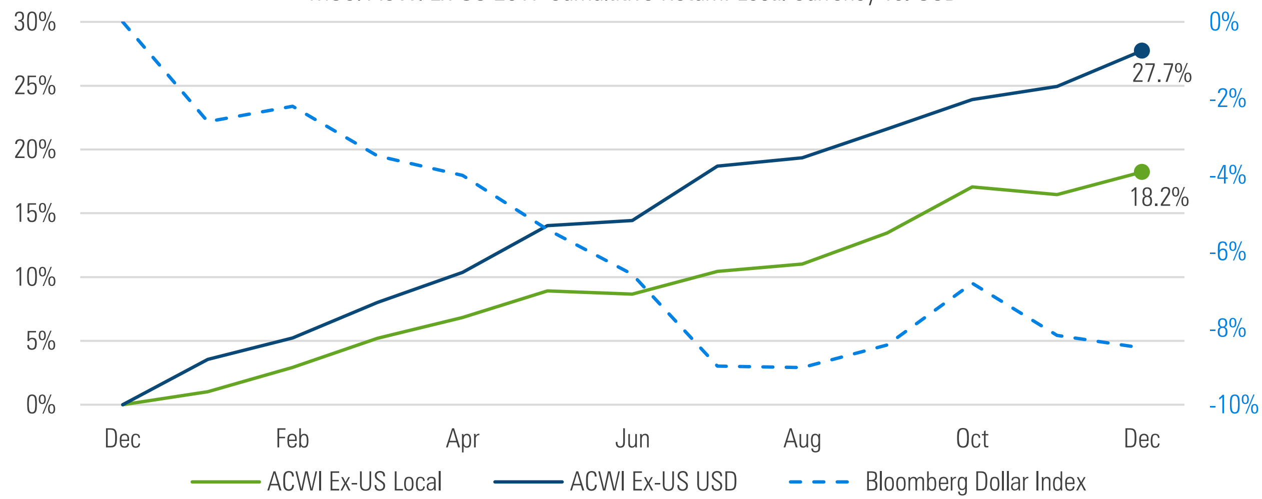
Total Returns as of December 31, 2017

	S&P 500	S&P 500 MR	S&P 400	S&P 600	S&P EPAC	S&P EM	S&P Global 1200	S&P US AGG	Crude Oil	US Dollar
1 Month	1.1%	1.1%	0.2%	-0.5%	1.6%	3.4%	1.5%	0.4%	5.4%	-0.4%
3 Months	6.6%	6.6%	6.3%	4.0%	4.4%	7.6%	5.7%	0.4%	19.0%	-0.1%
6 Months	11.4%	11.4%	9.7%	10.2%	10.0%	15.7%	11.2%	1.2%	35.2%	-2.1%
1 Year	21.8%	21.8%	16.2%	13.2%	25.5%	37.7%	23.8%	3.3%	11.5%	-8.5%
1M Volatility	6.3%	6.3%	8.3%	12.3%	6.9%	10.9%	5.2%	2.2%	20.6%	4.5%

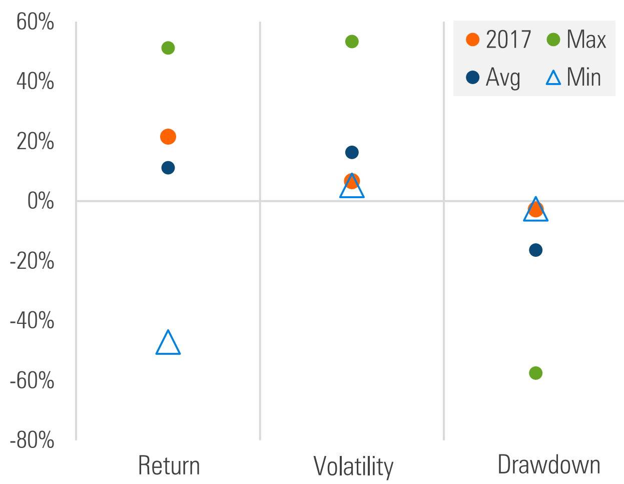
LOW VOL, TECH AND USD WERE DOMINANT THEMES OF 2017 EQUITY MARKETS

- For US investors, 2017 was a good year to have invested in foreign equities, having generated gains not only from their price increases, but also from the decline in the value of the US dollar, relative to the underlying currencies.
- The MSCI ACWI Ex-US was up 18.2% in local currency terms in 2017. By virtue of having shorted the dollar, US investors in the index earned an additional 9.5% for the year.
- In 2017 the S&P 500 generated nearly 2x its average calendar year return with less than half its average volatility and lowest ever drawdown. Investors would have to look all the way back to 1964 to find a better return per unit of risk.
- Info Tech's worst monthly return of the year didn't prevent it from being 2017's best-performing sector by a whopping 16 percent.
- Given its large weight in the index, IT contributed 8.1% to the S&P 500's 2017 return, more than double the contribution of any other sector.
- More than half of the sector's 2017 return came from just four companies: Apple 48.5%, Microsoft 40.7%, Facebook 53.4% and Alphabet 34.2%.

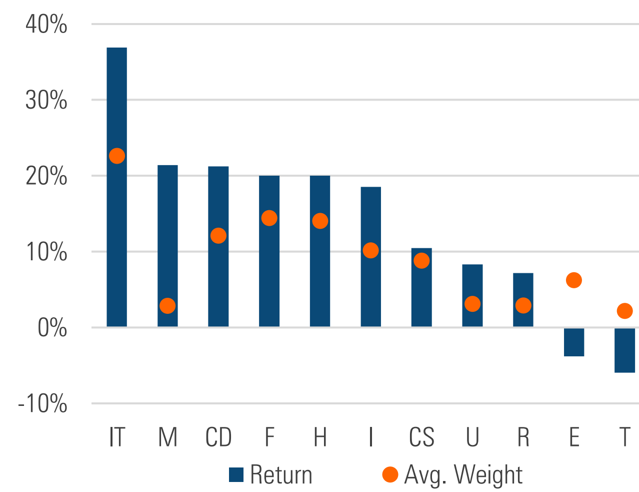
MSCI ACWI Ex-US 2017 Cumulative Return: Local Currency vs. USD



S&P 500 Calendar Year Stats: 1928 - 2017



2017 S&P 500 Sector Returns



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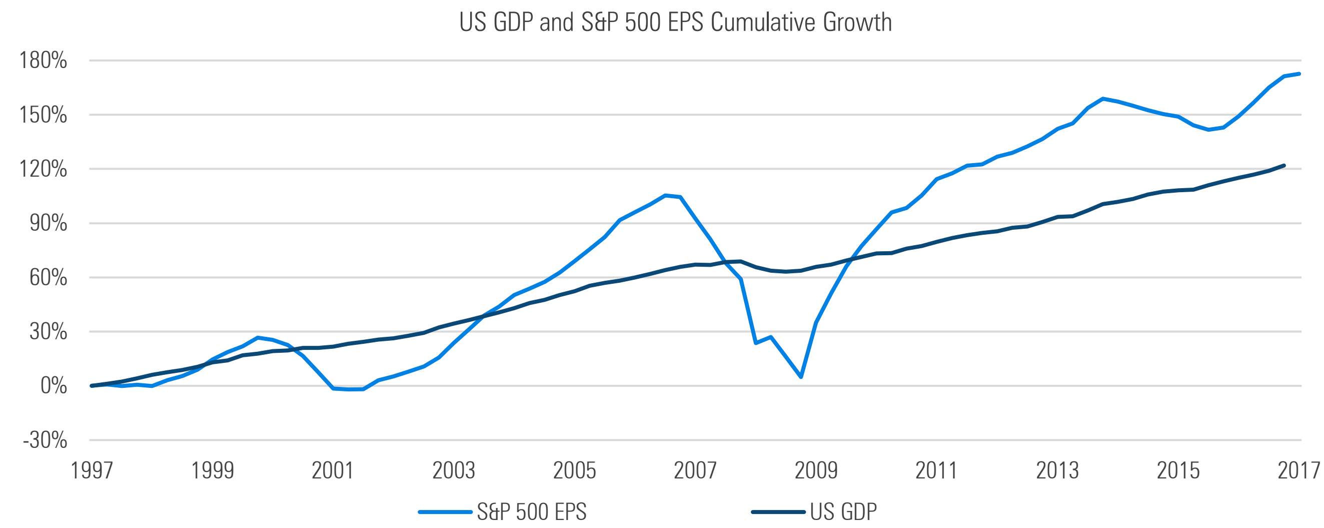
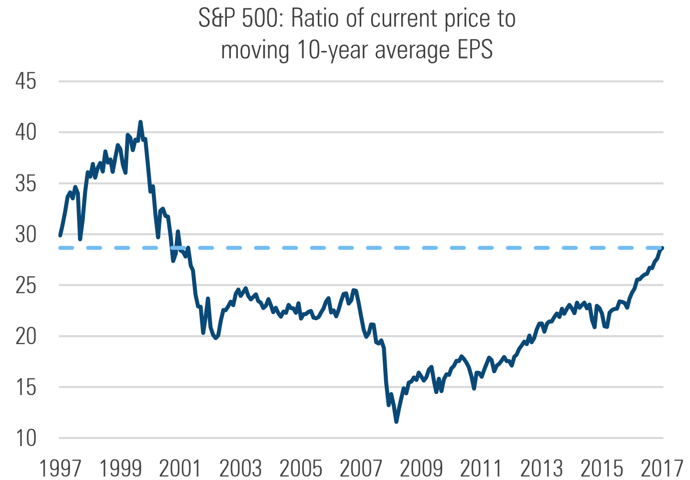
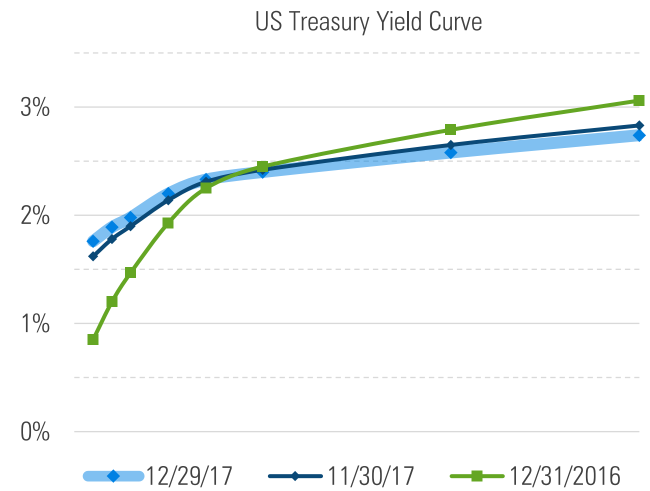
THINKING ABOUT 2018 IN LIGHT OF 2017

- S&P 500 earnings per share (EPS) increased 9.5% in 2017 and nominal US GDP grew 3.1% through the first three quarters of the year, both at the higher end of near-term ranges.
- The 10-year moving average PE ratio of the S&P 500 finished 2017 at 28.7, 18% higher than it was at the beginning of the year. By this metric, the price of earnings is now at a level not seen since 2002 and well above its level in 2007 just prior to the financial crisis.
- Considering current valuations, the flatness of the yield curve, and 2017's above average risk-adjusted returns, we believe markets will be hard-pressed to generate similar returns in 2018.
- This is not to suggest the market is on the brink of a sell off or that volatility is going to spike, or even that stock prices can't move higher in 2018.
- As valuations rise, however, higher prices are increasingly likely to be a function of earnings growth and less likely to be the result of an expanding earnings multiple. As the market becomes more sensitive to earnings, it may also grow more volatile, making risk management more valuable in the months ahead.







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FINANCIAL RISK MANAGEMENT

Creating transformational improvement in the retirement savings industry.

Milliman Financial Risk Management LLC is a global leader in financial risk management to the retirement savings industry. Milliman FRM provides investment advisory, hedging, and consulting services on over $152 billion in global assets (as of October 31, 2017).

Established in 1998, the practice includes professionals operating from three trading platforms around the world (Chicago, London, and Sydney).

Milliman is among the world's largest providers of actuarial and related products and services. The firm has consulting practices in healthcare, property & casualty insurance, life insurance and financial services, and employee benefits. Founded in 1947, Milliman is an independent firm with offices in major cities around the globe.

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