

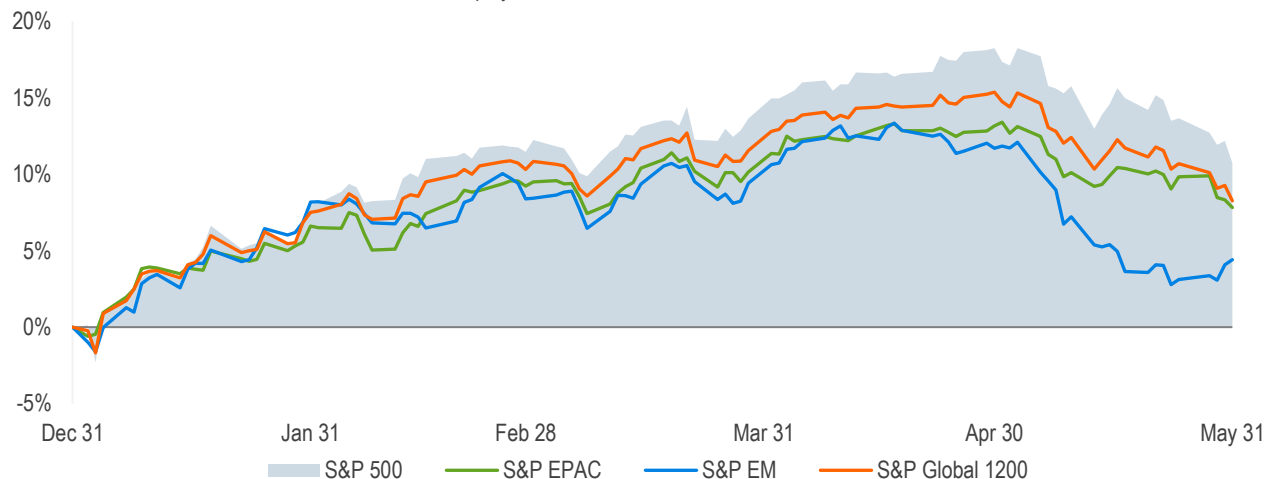
**MAY DAY: GLOBAL EQUITY RALLY
ABRUPTLY INTERRUPTED AS TRADE
CONCERNS MOUNT**

Interest rates followed stocks lower in a classic display of risk off and flight to quality.

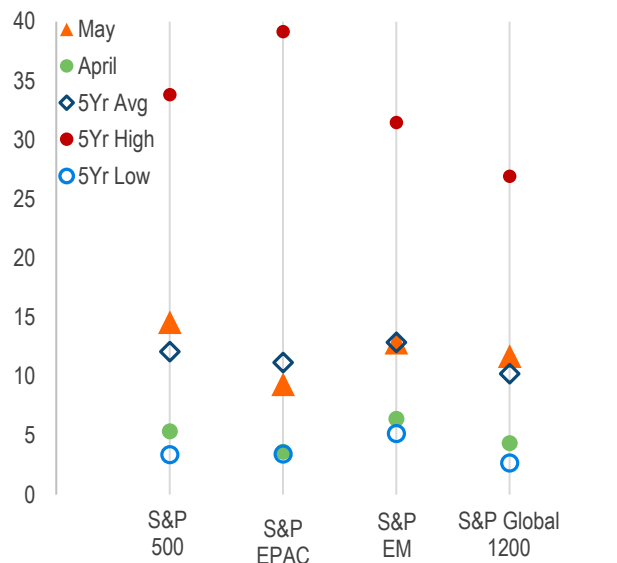
- After a record-setting first four months of 2019, the S&P Global 1200 Index gave back nearly half its YTD return in May's decline.
- The loss was broad based, with domestic (large, mid and small caps), international developed, and emerging markets all finishing the month sharply lower.
- The increase of tariffs from 10% to 25% on another \$200 billion in Chinese imports weighed on stocks:
 - Real estate was the only sector to generate a positive return in May (1.2%), due in no small part to its sensitivity to interest rates.
 - The energy sector was hit hardest (-11.7%) in May as the trade war dimmed the outlook for global economic growth.
 - After energy, IT was the next worst performing sector, falling 8.7% on the month, its worst monthly return since November 2008.
- Given the magnitude of the selloff, equity market volatility was surprisingly low. The VIX rose briefly above 20 early in May, but averaged just 16.7 for the month, while S&P 500 realized volatility was just slightly higher than its five-year average.
- The S&P 500's correlation to developed and emerging markets climbed during the month, while its correlation with the U.S. aggregate bond market moved sharply lower amidst declining interest rates.

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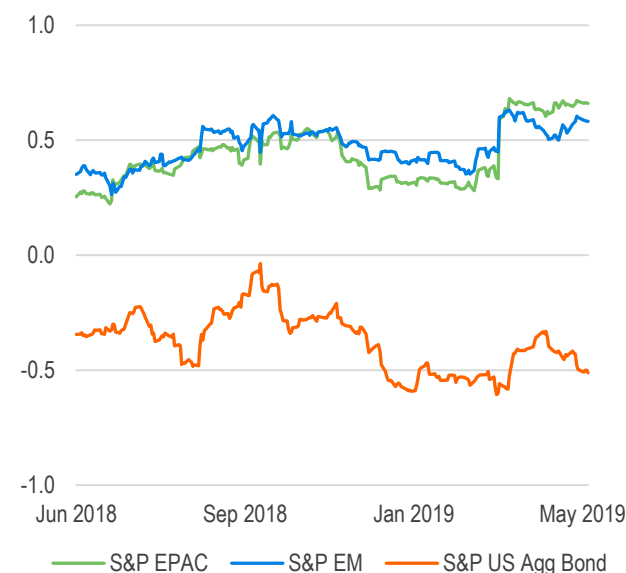
Global Equity Markets: 2019 YTD Cumulative Total Return



20-Day Volatility: 5-Year Historical Range



Rolling 3-Month Correlation to S&P 500

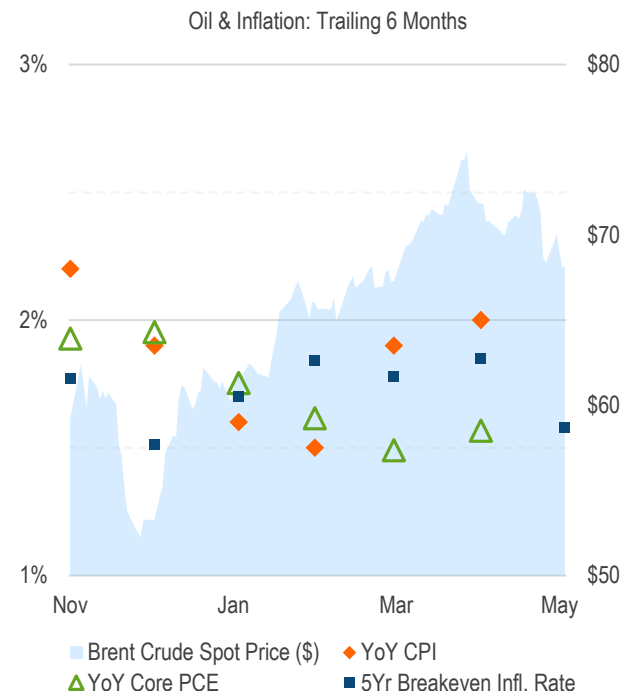


MANAGED RISK INVESTING

Managed Risk Benchmarks maintained their maximum equity exposure in May.

- The volatility of the S&P 500 began the month below the 18% volatility threshold of the [S&P 500 Managed Risk Index](#) and remained below it the entire month.
 - Having begun the month at a 100% equity allocation, the index maintained it through the entire month.
 - Over the last 10 years, the average monthly return of the Managed Risk Index has exceeded the return of a 70/30* blend by 10 bps, generating an annualized excess return of 103 bps.
-
- After rising 35% during the first four months of 2019, the price of oil fell 5% in May as trade wars obscured the path to global economic growth.
 - The most recent CPI data show annual inflation climbed to 2%; the Fed's preferred inflation measure (PCE) also increased, but remains below its 2% target.
 - While realized inflation moved higher, inflation expectations fell by nearly 30 basis points in May.
 - The probability of a 2019 Fed rate cut, as indicated by Fed funds futures, climbed from 50% early in the month to 95% at month end.
 - The yield curve shifted sharply lower and a greater portion of it tilted into inversion. At 2.39%, the yield on a 20-yr Treasury finished May lower than the 2.5% Fed funds target rate, something that hasn't happened since December 2007.
 - Widening investment-grade credit spreads weren't enough to offset the drastic downward shift in the yield curve that lifted the US aggregate bond market to its best monthly return since December.

*Measured by the S&P 500 and the S&P US Agg Bond Index

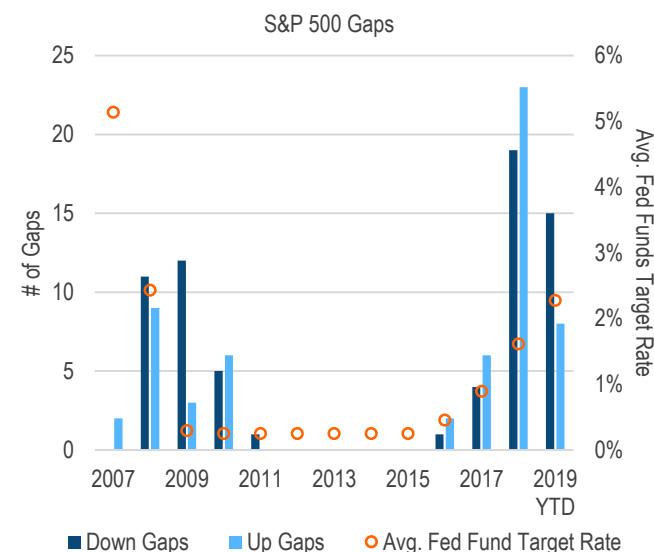
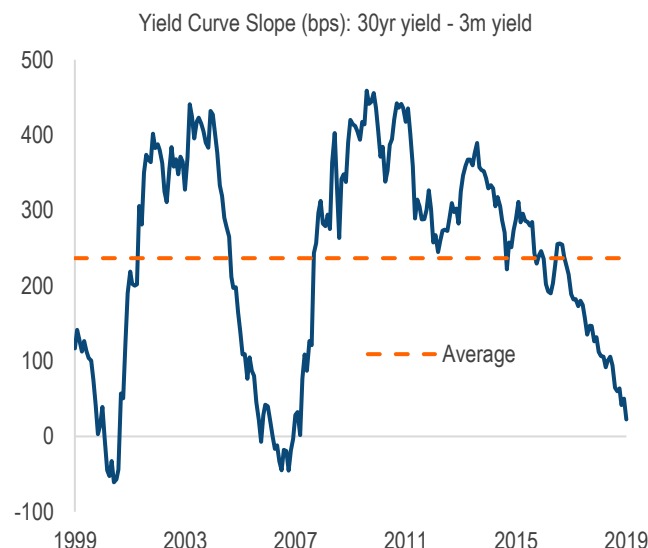
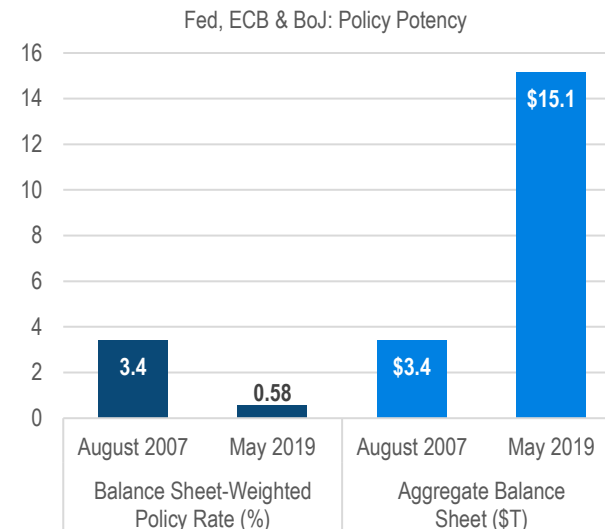
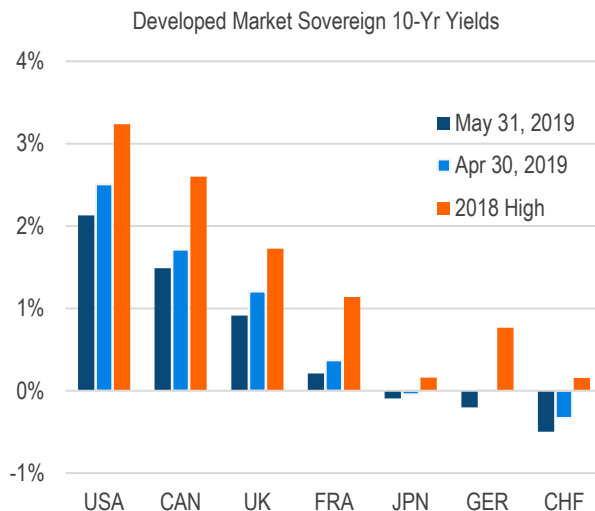


Total Returns as of May 31, 2019											
	S&P 500	S&P 500 MR	S&P 400	S&P 600	S&P EPAC	S&P EM	S&P Global 1200	S&P US AGG	Crude Oil (Brent)	US Dollar	70/30 Stock/Bond*
1 Month	-6.4%	-6.4%	-8.0%	-8.7%	-4.7%	-6.5%	-5.8%	1.50%	-5.2%	0.5%	-4.2%
3 Months	-0.7%	-1.0%	-4.8%	-8.4%	-1.3%	-3.7%	-0.9%	3.1%	3.1%	1.4%	0.2%
6 Months	0.7%	-1.1%	-2.8%	-7.0%	2.6%	1.8%	1.7%	5.6%	15.2%	-0.2%	1.6%
1 Year	3.8%	1.6%	-5.4%	-10.5%	-5.4%	-7.5%	0.2%	5.5%	-11.0%	3.0%	3.1%
1M Volatility	14.6%	14.6%	16.9%	18.5%	9.3%	12.9%	11.7%	2.2%	33.8%	2.5%	9.5%

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PRECIPITOUS DROP IN GLOBAL YIELDS PORTENDS A SLOWDOWN AHEAD

- From their highs in 2018, developed market sovereign bond yields are markedly lower. As of the end of May, the 10-yr French bond offers just 20% of the yield it offered at its peak in 2018.
- In Japan, Germany and Switzerland, positive yields have disappeared altogether and investors are again giving money to those governments for the privilege of owning their sovereign bonds.
- In addition to shifting lower, yield curves have become increasingly inverted. In the US, the difference between the 3-month and 30-year yields is now 22 bps, the lowest it's been since 2007.
- These falling yields indicate some measure of declining confidence in the outlook for global economic growth. This waning confidence comes in spite of more than 10 years of highly accommodative monetary policy by the world's biggest central banks.
- In August 2007, before the onset of the financial crisis, the Fed, European Central Bank (ECB) and the Bank of Japan (BoJ) held a total of \$3.4 trillion in assets on their balance sheets. Today they hold more than \$15 trillion.
- Similarly, their balance sheet-weighted average policy rate was 3.4% in August 2007. Today it's 0.6%. Relative to 2007, central banks in 2019 have much less fire power with which to respond to financial crises and economic downturns.
- The Fed has been the only central bank of the three to attempt to normalize its monetary policy by raising its policy rate and reducing the size of its balance sheet. Over the last few years, the more the Fed has tightened, the more the stock market has gapped (i.e. opened 0.50% above or below the previous close).
- This more erratic stock market behavior may be the analog to the bond market's ongoing inversion of the yield curve. Both instruments seem to be conveying a message that is reverberating through the global capital markets: that the world is not yet able or willing to endure tighter monetary policy.



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