GLOBAL EQUITIES DIVERGED IN JULY AMIDST LOW EQUITY MARKET VOLATILITY

U.S. stocks continued to rally heading into July's highly anticipated FOMC meeting

- After posting its best first half of a year since 1998, the global equity market eked out a positive return to start the second half of 2019.
- Domestic equity returns were strong out of the gate and remained in positive territory throughout the month. In contrast, both developed and emerging market equities teetered back and forth between positive and negative territory, ultimately giving way to losses in the month's final week.
- All three segments endured a negative return on the last day of July after the Fed made its first rate cut since December 2008, when it cut the rate from 1% to 0.25%, but offered guidance that was less dovish than had been hoped for.
- In the U.S., large, mid and small-cap stocks all finished the month higher, while results across sectors were mixed:
  - IT led all sectors, climbing 3.3% and bringing its YTD return to a staggering 30.2%.
  - Communication services was a close second, driven higher by strong returns from Alphabet and Twitter.
  - The energy sector lagged amidst falling oil prices and growing uncertainty about the global economy.
- Across the major market segments, volatility was lower in July than it was in June and well below its 5-yr average. The VIX averaged 13.3 in July, not even breaching 15 until the last day of the month when it closed at 16.1.
- The S&P 500's correlation to developed markets was largely unchanged during the month, while its correlations to EM equities and the U.S. bond market declined and increased, respectively.

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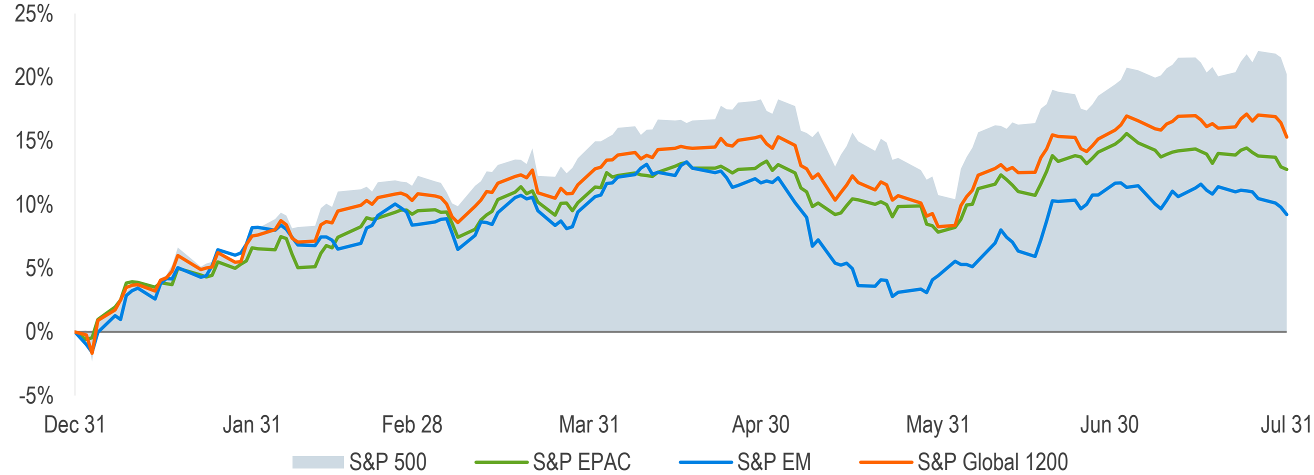
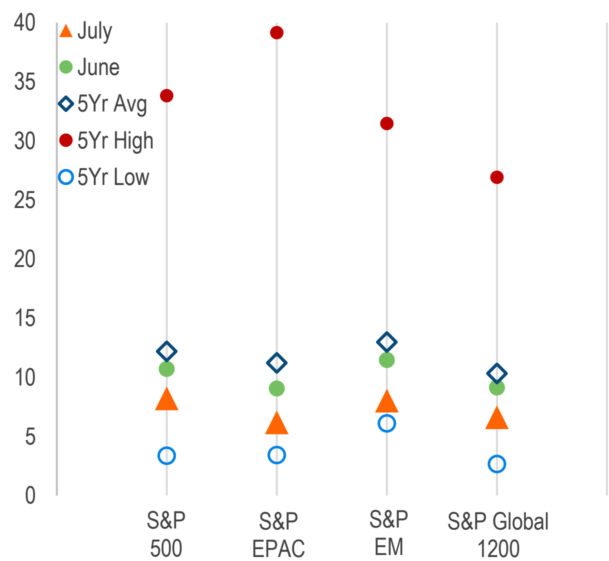
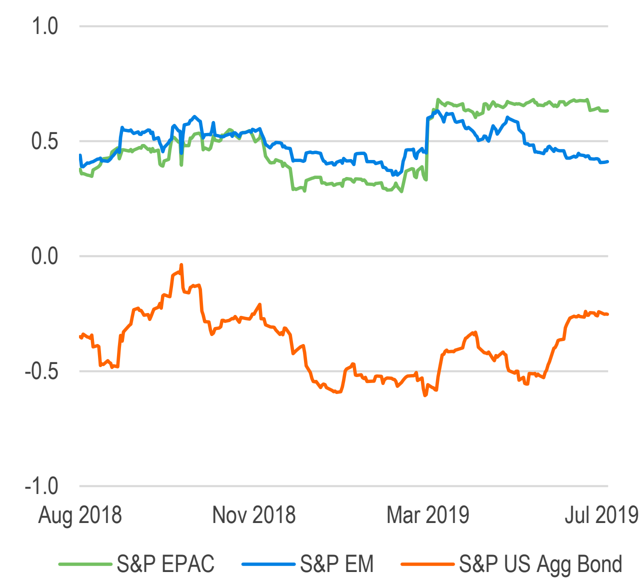
Global Equity Markets: 2019 YTD Cumulative Total Return



20-Day Volatility: 5-Year Historical Range



Rolling 3-Month Correlation to S&P 500



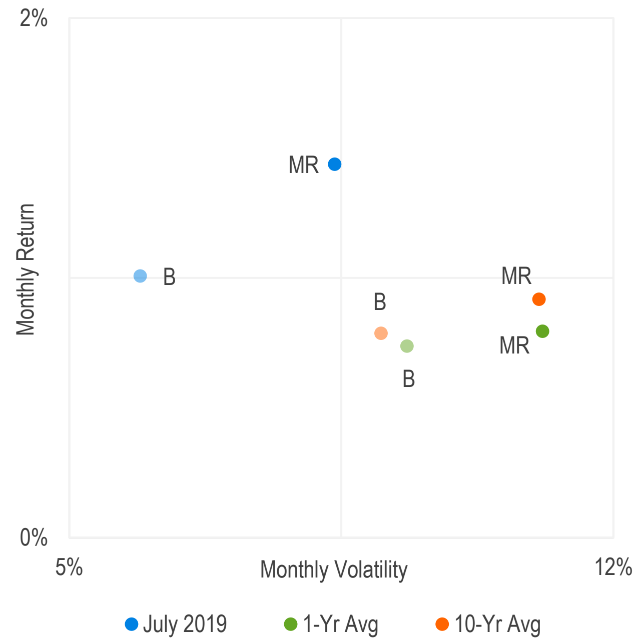
MANAGED RISK INVESTING

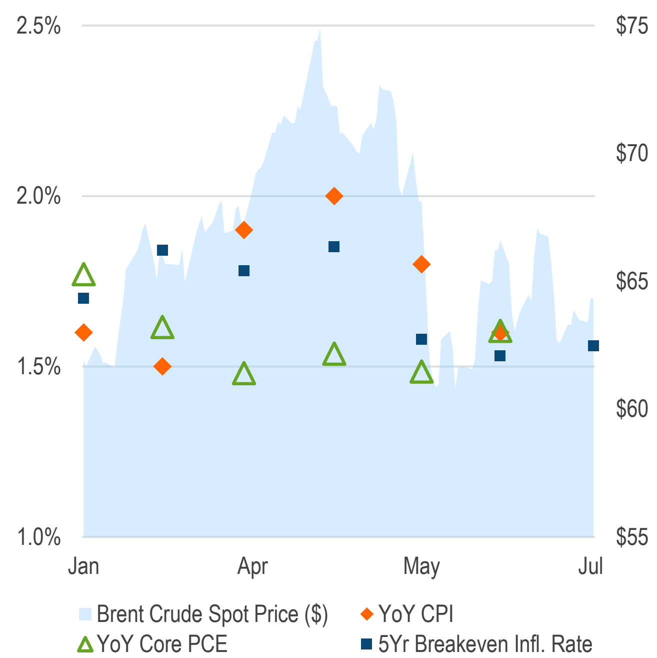
Managed Risk Benchmarks maintained their maximum equity exposure in July.

- 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 Managed Risk 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 13 bps, generating an annualized excess return of 152 bps.

- The price of oil fell for the third straight month as prospects of limited demand were met with growing supply.
- The most recent CPI data show annual inflation fell again in June to 1.6% while the Fed's preferred inflation measure (PCE) increased to the same level, but remains below its 2% target.
- As CPI and PCE converged at 1.6%, five-year inflation expectations continued to hover at the same level.
- Following the Fed's end-of-month 25-bp rate cut, the futures market reflected an 85% probability of another rate cut before the end of 2019.
- The belly of the yield curve became less swollen (i.e., less inverted) as most of the curve shifted higher, with the 2-yr and 3-yr yields making the largest upward moves, while the 3-month yield edged slightly lower.
- After declining in June, the U.S. dollar rose in July, notwithstanding Fed guidance of easier policy, as market participants anticipate even greater accommodation across the Atlantic from the ECB.

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





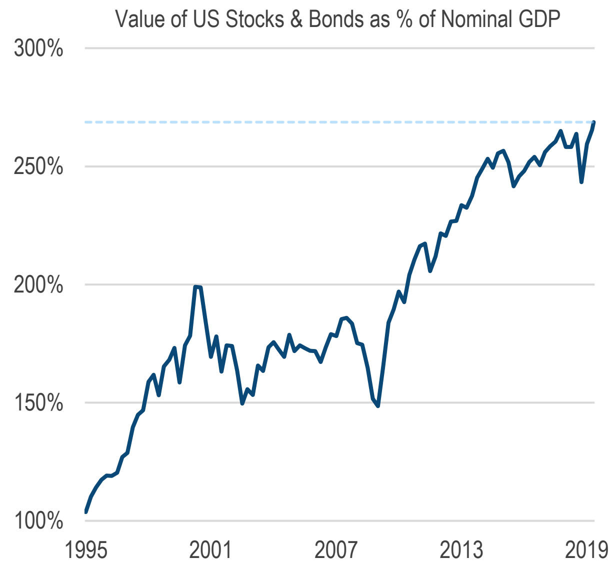
Total Returns as of July 31, 2019

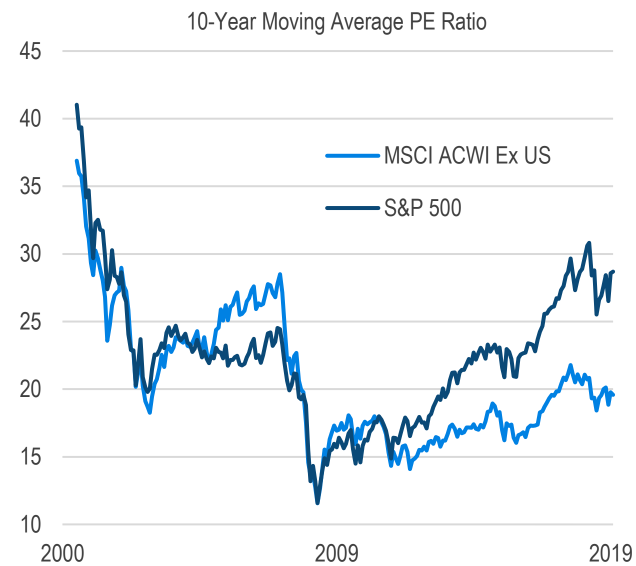
	S&P 500	S&P 500 MR	S&P 400	S&P 600	S&P EPAC	S&P EM	S&P Global 1200	S&P US AGG	Crude Oil (Brent)	US Dollar	70/30 Stock/Bond*
1 Month	1.4%	1.4%	1.2%	1.1%	-1.2%	-1.4%	0.2%	0.3%	-3.4%	1.8%	1.0%
3 Months	1.7%	1.6%	0.2%	-0.8%	-0.4%	-2.2%	0.7%	2.9%	-10.5%	0.8%	1.7%
6 Months	11.3%	9.8%	8.1%	3.9%	5.8%	1.0%	8.8%	4.5%	3.9%	2.4%	8.5%
1 Year	8.0%	5.6%	0.8%	-6.7%	-2.1%	-1.7%	3.8%	6.9%	-14.1%	2.9%	6.4%
1M Volatility	8.2%	8.2%	11.8%	12.4%	6.2%	8.0%	6.6%	2.1%	25.5%	4.5%	5.9%

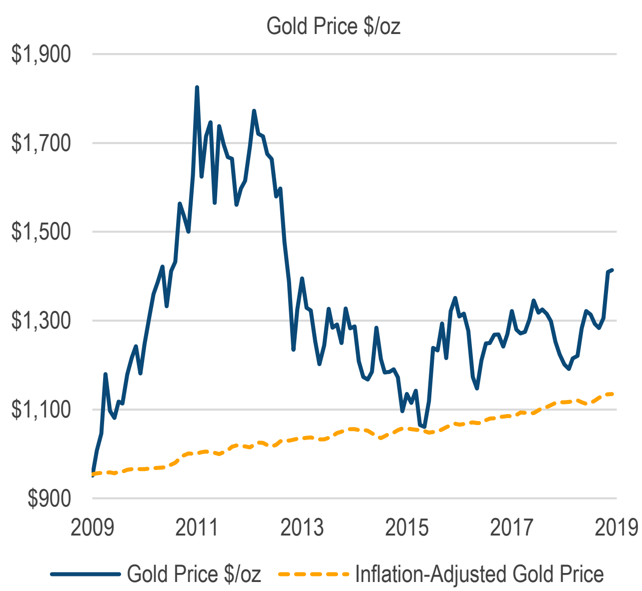
CENTRAL BANK ACCOMODATION CONTINUES TO PUSH ASSET PRICES HIGHER

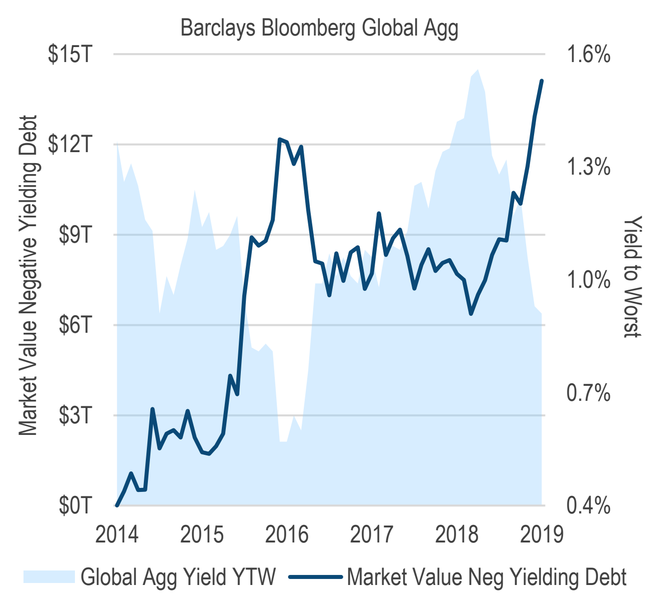
- The market value of US stocks and bonds* as a % of nominal GDP sits at an all-time high. This is a function of a combination of three factors: stocks trading at relatively high multiples, increased bond issuance, and rising bond prices (i.e., falling interest rates).
- One salient feature of current U.S. stock valuations is that they are much higher than valuations of stocks outside the U.S. In terms of earnings multiples, the premium of U.S. equities over those of developed and EM countries is at one of its widest points in recent history.
- The price of gold is up 10% YTD and up 35% since its post-crisis low. If the price of gold had risen only as a function of inflation, it would only be 19% higher since July 2009.
- While it may be difficult to determine the precise reason for the increase in demand for gold, it seems fairly safe to say that it's not being driven by demand for an inflation hedge. The bond market is predicting sub-2% inflation for the foreseeable future. To the extent that the demand emanates from its appeal as a safe asset, portfolio risk management may prove to be increasingly important in the weeks and months ahead.
- One of the strangest conditions of financial markets in the second half of the year must be the global bond market and the ever increasing amount of negative-yielding debt. Year to date, 296 bonds with a face value of $460 billion have been issued with a negative yield.
- The lower right chart shows that the total amount outstanding of negative-yielding debt has moved well past its previous peak, when rates bottomed out in 2016, and now surpasses $14 trillion. One can only wonder how large it will get if rates continue to decline and get back to that level.

*Measured by the market cap of the Russell 1000 and the market value of the ICE BofAML US Municipal, High Yield, and Corporate, Government, and Mortgage Indexes.



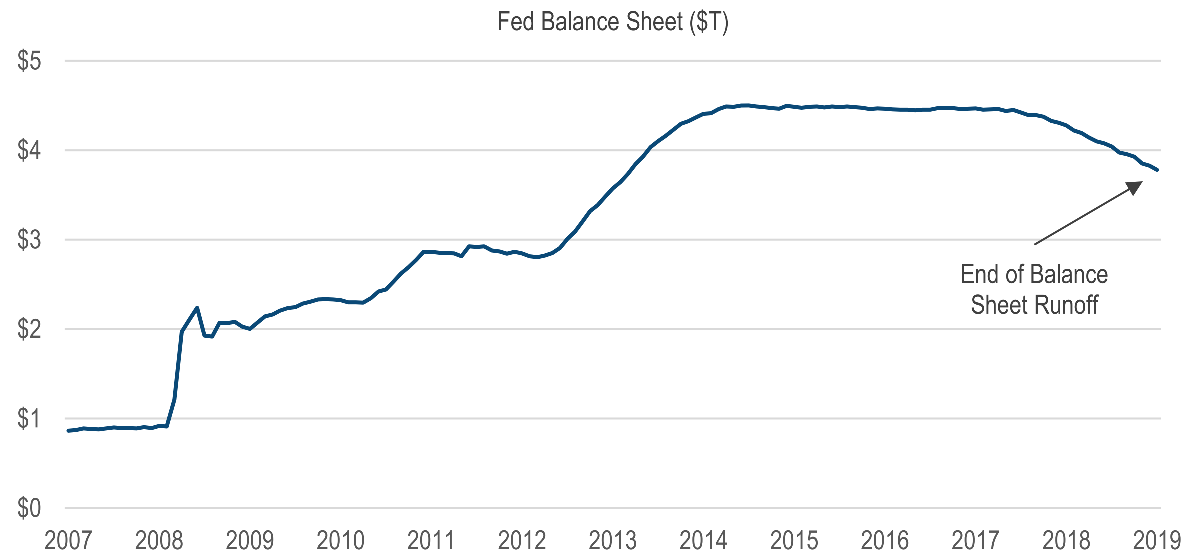


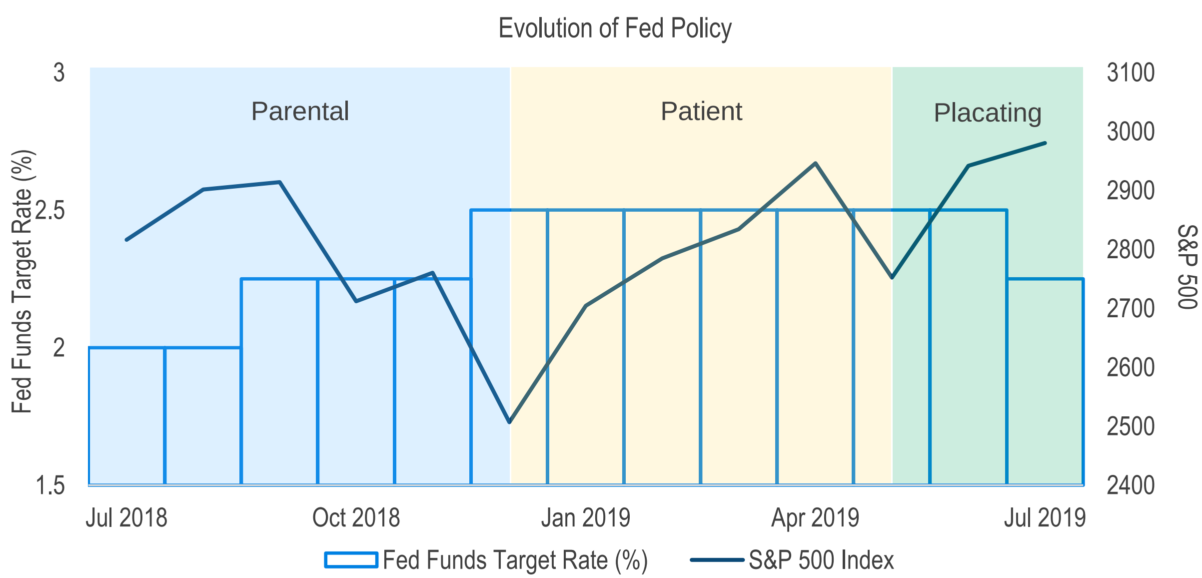




THE EVOLUTION OF A MANIC MARKET AND A FICKLE FED

- The evolution of the policy stance of Chairman Powell and the Fed over the last nine months has been remarkable, as have the market's reactions to it. This evolution has been marked by a number of phases that might reasonably be labelled as, **parental, patient and placating**.
  - **Parental**: In early October 2018, in the midst of a succession of rate hikes, Powell noted that rates were still "a long way from neutral," indicating that more Fed rate increases were warranted and the Fed was responsibly committed to staying the course. That comment marked the beginning of a 3-month, 19% decline in the S&P 500.
  - Less than two months later at the end of November, Powell showed the first signs of conceding on rate hikes, hinting that rates were "just below neutral."
  - The market seemed to view that response as insufficient and continued to sell off. The Fed increased rates in December.
  - **Patient**: In January 2019, the Fed finally relented, indicating it would take a "patient, wait-and-see approach" to further rate hikes, to which the stock market responded positively with a 4-month, 20% rally.
  - In late May, however, "patient" was no longer adequate and the market began demanding more. Stocks sold off and the yield curve became increasingly inverted.
  - **Placating**: At a Fed conference in early June, Powell commented publicly that the Fed would "act as appropriate to sustain the expansion." Stocks reversed course, logging their best June in more than 60 years, followed by another positive return in July.
  - After announcing both the first rate cut in more than a decade, and an early end to the balance sheet runoff, Powell commented at his July 31 press conference that this cut did not necessarily mark the beginning of a series of rate cuts. The market was again not satisfied and within an hour stocks were down nearly 2%.
- Chairman Powell's words that the July rate cut won't turn into an extended series of cuts may prove true, but given his recent track record and the market's response to his comment, it isn't unreasonable to think otherwise. The market's appetite for more accommodation seems insatiable, and to date, Chairman Powell and the Fed have exhibited a willingness to give it.





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