

Matt's Market Update



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Market Review

Global equities plunged in Q4 as previous year-to-date gains as of Q3 were wiped away. The S&P 500 declined -9.03% in December, thus breaking the streak of 9

consecutive "up" years for the index. This was the worst December performance for the index since 1931. According to FactSet research, the month of December had never finished a calendar year as the worst individual monthly performer going back to 1950. This streak was also broken with ease. The index finished with a -4.40% total return in calendar 2018. Other major stock indexes fared worse in 2018. The total return for the Russell 2000 Index of small-cap stocks was -11.11% in 2018. This represents a decline of -22.50% from the recent index highs. Total return for the MSCI ACWI ex USA index was -14.20% for the year as foreign stocks continued to suffer more than their U.S. counterparts in 2018. The downdraft in equities during Q4 resulted in a flight to safety in

high quality fixed-income. The Bloomberg Barclays Aggregate Index rallied +1.84% in December to eke out a +0.01% return for calendar 2018. The benchmark 10-year treasury yield peaked at 3.26% in October, but declined for the remainder of the

year to finish with a yield of 2.68%. The yield at the start of 2018 was 2.41%. The Federal Reserve raised short-term interest rates by an additional 0.25% at their December meeting. This was the fourth rate hike in 2018. Expectations for rate

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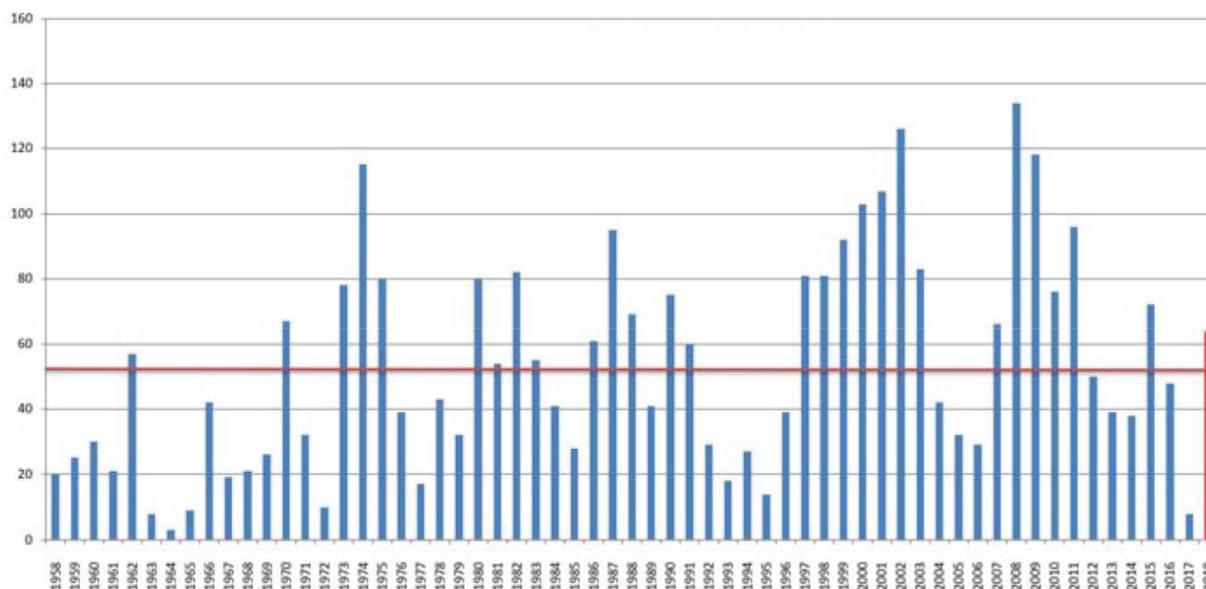
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VOLATILITY RETURNED IN 2018
S&P 500: # of +/-1 Moves (1958-2018)



Source: Yahoo Finance

hikes in 2019 have fallen dramatically in recent months. While another 3 to 4 hikes in 2019 were widely expected by the market as recently as September, the consensus now is expecting just one additional hike in 2019.

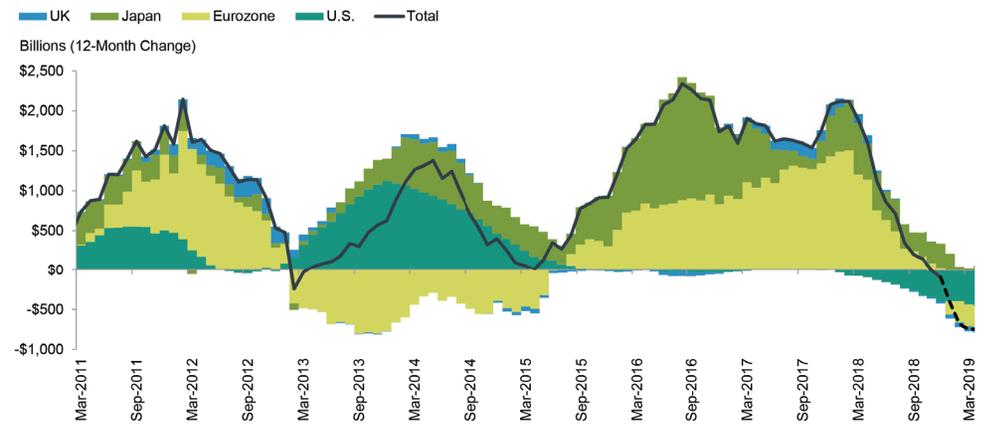
In many ways, the return of market volatility following a relatively tranquil 2017 was the most prominent market story of 2018. The chart on the previous page shows the number of days the S&P 500 index gained or lost 1% during each calendar year going back to 1958. You'll note that 2018 was above the long-term average in terms of the number of up or down 1% days, but certainly not record setting. The real anomaly was calendar 2017 due to its near record lack of volatility. According to DataTrek Research, 2018 was the most volatile year for the index since 2015; the S&P gained or lost 1% on 64 days compared to 72 in 2015 and the annual average of 53 days since 1958 (the first full year of data). Volatility was punctuated in Q4 as the index rose or fell 1% during 28 trading days. This was double the Q4 average of 14 days over the last six decades, and the most number of one percent days since Q4 2011. Not surprisingly, there were more 1% down days (16) than up days (12). Finally, for the full year, the index gained or lost 1% on 64 days, but actually had the same number of up and down 1% days (32 each). When you consider the wide array of risk factors currently impacting markets: slowing global growth, ongoing trade disputes, political discord and fears over global central bank policy;

it's hard not to think that 2019 won't feature a similar amount of equity volatility.

Turning Point in Central Bank Policy

U.S. Federal Reserve and global central bank policy received much attention from the markets in 2018. In our opinion, this was the most influential factor on global equity markets last year. We'll repeat what was written in our Q2 commentary from last year: "We continue to believe that Fed policy is the key to equity market performance going forward. If you believe (as we do) that the Fed's QE (Quantitative Easing, aka money printing) policies since 2009 were a key factor in moving stock markets higher, then you have to believe that QT (Quantitative Tightening, aka removing liquidity from the markets) will have a negative influence on stock prices going forward. In fact, the Fed's QT policy has been ramping up rapidly this year. To put some real numbers on this issue, consider that the Fed's current campaign to raise interest rates and shrink their balance sheet (QT) amounted to \$30 billion per month in Q2. This progresses to \$40 billion per month during Q3 and \$50 billion per month in Q4."

CENTRAL BANK BALANCE SHEETS



Dotted line estimates future central bank assets: Federal Reserve to roll off balance sheet assets by lesser of stated caps or total bonds maturing each month; European Central Bank (ECB) and Bank of England to maintain constant balance sheets in 2019; Bank of Japan to purchase at annualized rate of average purchases over last 12 months; Source: Haver Analytics, Fidelity Investments (AART), as of 11/30/18. Source: Birinya Associates, Goldman Sachs Global Investment Research

The Fed actually carried through on this plan of shrinking their balance sheet in 2018 and this process continues as we begin 2019. While the Fed rate hikes get most of the attention, it's their policy of also draining liquidity from the market through the ongoing QT program that has served as an additional (and likely larger) headwind for equities. Now, other global central banks are following suit with the European Central Bank (ECB) ending its QE program in December. As you'll note from the chart on this page, the amount of assets held on central bank balance sheets varied, but generally grew, from 2011 through 2017. Remember, central banks acquired these assets by creating reserves

(essentially printing money) in order to purchase financial assets and support world equity and fixed-income markets coming out of the 2008 crisis. These massive asset purchases were very instrumental, in our opinion, in moving asset prices higher post-crises. Interestingly, the growth rate of total central bank assets went negative in Q4. After a decade of unprecedented stimulus to support the markets by central banks, global QE has peaked. Is it a coincidence that volatility surged and markets were extremely weak in Q4? We don't think so. To make an analogy, think of the global equity market as a patient who is gradually being weaned off of very strong medicine. As the doctor (central banks) removes the medicine (stimulus in the form of extraordinarily low interest rates) from the patient, unexpected reactions can occur. Up until now, only the U.S. Fed has taken serious steps to reduce their balance sheet and take liquidity out of the market. The ECB and Japanese central bank have simply slowed down their pace of stimulus to practically zero. Should other global central banks actually follow the same path as the U.S. to shrink their balance sheets, the impact on global equity markets certainly will be negative in the absence of strongly positive economic growth to balance the removal of stimulus. Needless to say, the actions taken by the central banks will be closely scrutinized and highly influential to global equities going forward.

Long-term Investing: A case study

We recently read a fund manager's Q3 (info as of 9/30/18) letter to shareholders and thought it contained some interesting lessons regarding

investing for the long-term. While most investors are quick to agree with the idea of investing for the long-term, it's often difficult in practice. This is especially so in periods like Q4 which featured a dramatic drop in equity prices. The specific fund in question isn't important so we'll just refer to it as fund X. We will disclose that this manager invests in large-cap U.S. stocks. This particular manager started managing fund X in 1991. Needless to say he's been through a variety of bull and bear markets. An investor who bought and held the S&P 500 index from this starting point through the end of Q3 made 13 times their initial investment. An investor who bought and held fund X made 27 times their initial investment over the same time period. Put another way, fund X returned more than twice the return of the index. Despite the impressive long-term returns, fund X has endured many periods of lagging performance versus the S&P 500. Fund X trailed the S&P 500 in 50% of the trailing 12-month periods, 47% of the trailing 3-year periods and 31% of the trailing 5-year periods. In fact, as of 9/30/18, fund X lagged the S&P 500 index for the trailing one-, three- and five-year periods.

Be honest, would you be interested in buying into a fund that trailed the index over these recent time periods? Many investors likely wouldn't give a fund with recent lagging performance a second look, despite the excellent long-term record under the same manager. They might say there's no excuse for a five-year period of lagging performance.

Buying a fund that has outperformed the index recently feels better. It's just human nature. Back to the shareholder letter, the manager then went on to analyze how an investor would have done by selling fund X when its trailing 5-year results lagged the index and buying fund X when results beat the index on a trailing 5-year period. Buys and sells were assumed at month end periods. Essentially, the example assumes the investor would be selling fund X and investing the proceeds into the index at certain month end periods and vice versa in other periods. Following this approach over the historical period since August 1991 resulted in eight round trips for the investor. We bet you can guess how that investor did. Based on an initial investment of \$10,000 in August of 1991, the trading strategy of moving in and out of the fund resulted in a final balance of \$122,200. The strategy of simply buying the S&P 500 index would have resulted in a final balance of \$132,000. A strategy of buying and holding fund X resulted in a final balance of \$268,700. While this example may be a little unique due to the long track record under the same manager, we can assure you that situations like this (where a manager with an otherwise excellent long-term record suffers a period of lagging performance in any five-year period) is not unique. In fact, it's ordinary. Here are our key takeaways from this example:

- Market timing by moving in and out of funds doesn't work. The numbers above don't take into account the impact of taxes. So the

example of trading the fund would result in even smaller gains for taxable accounts.

- › Whether it's a fund you own or are considering, a lagging 5-year result versus a benchmark doesn't tell you anywhere near the whole story, nor is it predictive of the future results for the fund. Much more investigation is needed regarding the track record and the question of buy versus sell.
- › No manager outperforms their benchmark consistently over all time periods. Periods of lagging performance are normal for even the best managers.
- › Sometimes (if not very often), a buy and hold strategy is the best approach.
- › Read the annual reports or quarterly commentaries for the funds you own. While many follow a certain boilerplate script, sometimes you'll find letters that make you think in a different manner.

Wealth Management Corner



David Batchelder, CFA, CFP
Senior Investment Officer

As the saying goes, there are two things guaranteed in life...death and taxes. Not to get morbid on folks so we'll concentrate on the second part of that famous saying...taxes. Taxes impact

everything...from what you buy, to where you

live, to where you work. What about taxes when it comes to investing your assets?

With recent stock market volatility, we thought it might be a good idea to go back to basics. In our opinion, there are two distinct elements necessary to develop a well-diversified portfolio for tax challenged investors. These elements are asset allocation and asset location. An appropriate asset allocation strategy takes time and experience to appropriately develop. When it comes to investing, legendary investor Gary Brinson once said you want to consider including investments in your portfolio that are as diverse in what taxes apply to them as well as which asset class they're invested in.

When it comes to real estate, we've all heard the phrase...location, location, location. Taxes impact specific investments in different ways. That is why some of us invest in tax-deferred vehicles through our 401(k) contributions to defer taxes on gains, while others invest in ways to earn tax-free income. Either way, investors recognize that taxes do impact our investment strategies. As Brinson noted, consideration applies to the location where

	Tax treatment of expected returns	Taxable	Tax-deferred	Tax-exempt
Tax-free municipal securities and municipal mutual funds	Exempt	More appropriate	Less Appropriate	Less Appropriate
Equity securities held long-term for growth	Taxed at long-term capital gain rates	More appropriate	Appropriate	Appropriate
Equity index funds/ETFs (other than REITs)		More appropriate	Appropriate	Appropriate
Tax-managed mutual funds and managed accounts		More appropriate	Less Appropriate	Less Appropriate
Real estate investment trusts (REITs)	Taxed at ordinary income rates	Less Appropriate	More appropriate	More appropriate
High-turnover stock mutual funds that deliver effectively all returns as short-term capital gains		Less Appropriate	More appropriate	More appropriate
Fully taxable bonds and bond funds (i.e., corporates)		Less Appropriate	More appropriate	More appropriate

■ More appropriate
 ● Appropriate
 ▲ Less Appropriate

Source: Fidelity Investments

you also hold your investments. Some investments are built to be held in taxable accounts (such as equity index funds, most exchange-traded funds (ETFs) and municipal bonds), while other investments are better suited for tax-deferred accounts (such as high yielding investments and actively managed strategies with higher turnover).

Note the chart above and let's examine a bit further. According to Fidelity's research, when it comes to taxable accounts, the most appropriate investments tend to be ones that focus on tax-free income, low income and low turnover. Generally, equity index funds and various ETFs tend to favor investors who plan to hold the investment over time to deter short term capital gains, which

are taxed at a higher rate. Most prefer to hold until the investment qualifies as long-term capital gains, which are taxed at a lower rate.

So, which investments are preferable in tax-deferred IRAs or tax-free accounts in the case of Roth IRAs? These types of accounts tend to favor holding investments that pay taxable dividends and taxable interest income. They also could be subject to higher turnover actively managed strategies, which tend to create taxable events. This is because nominal interest income and certain types of dividends are taxed at an investor's ordinary income tax rates.

Whichever type of investment accounts suits your financial strategy, there could be tax implications. How to mitigate them or keep them at bay is a prudent long term strategy. If you have questions or need portfolio tax planning ideas as part of your financial plan, please discuss further with your financial advisor or set up a call with one of our financial planners. You should always consult your own tax advisor before engaging in any transaction.

Our Portfolio Strategy & Allocation Outlook

We made no changes to our managed accounts during the quarter. Several portfolio ideas will be implemented in Q1 and this information will be communicated to clients during our upcoming meetings and recapped in these pages in the next commentary. This seems like a good

time to take stock of the issues most on our minds as they relate to the various asset classes in the portfolios.

Fixed-Income:

Our main thesis for fixed-income continues to be that return expectations are low and playing defense with a tilt towards shorter term bonds makes the most sense. While this positioning certainly helped early in the quarter, the dramatic decline in long-term treasury yields in November and December were a tailwind for the highest quality U.S. government bonds (which are underweight overall in our holdings). At the end of Q3, the Bloomberg Barclay's U.S. Aggregate Bond index was sporting a decline of -1.60%, but rallied to finish the year flat. Generally speaking, the rally in rates wasn't as beneficial to corporate debt or foreign bonds. That being said, we view the higher current rates for corporate bonds and the lower prices on foreign debt as opportunities going forward. Having core index exposure will aid our portfolios during the inevitable "risk off" periods in the markets, but we view opportunities outside of treasuries as having the most favorable risk / reward after a difficult 2018.

U.S. Equity:

While the large Q4 decline in equities has certainly made stocks cheaper from a valuation standpoint, we're also witnessing U.S. earnings estimates being reduced in response to an obvious slowdown in global growth. The net

result is that U.S. stocks are still trading at elevated valuations. In terms of the Fed, while they seemed to have backed down on the idea of more rate hikes in the near-term, they continue to remove stimulus from the markets via QT (as described above). Finally, a high level of uncertainty for investors continues related to geopolitical tensions and trade negotiations with China. Timing and resolution of these conflicts will likely have a major impact on the economy and earnings estimates going forward. In short, caution remains the best strategy.

Foreign Equity:

The foreign markets lagged the U.S. in 2018 and this reflected the generally weaker economic profile for overseas economies. A slowdown in Chinese growth, in conjunction with trade and tariff concerns, is having a ripple effect through global markets. We expect continued volatility as long as fears over trade issues remain. The good news is that valuations for foreign stocks are not as stretched as they are in the U.S. There are two areas we continue to feel strongly about for long-term investors. First, the emerging markets sector is attractive, but obviously volatile. Tapping into the growing middle-class consumer in these emerging economies is a theme our managers continue to favor. Second, foreign small company investing remains a focus area. Despite the general gloom around the markets coming out of 2018, there continues to be a large opportunity to find unique growth companies or those companies

going through strategic changes that will unlock value for shareholders.

Please let us know if you'd like to discuss your personal investing and financial planning needs.

Matthew H. McPhail, CFA David Batchelder, CFA, CFP
 Chief Investment Officer Senior Investment Officer

Market Scoreboard

Index Returns (%)	Q4 2018	YTD	1 Year	3 Year	5 Year	10 Year
S&P 500	-13.52	-4.38	-4.38	9.26	8.50	13.12
DJIA	-11.31	-3.48	-3.48	12.93	9.70	13.16
NASDAQ	-17.54	-3.88	-3.88	9.83	9.70	15.45
Russell 2000	-20.20	-11.01	-11.01	7.36	4.41	11.97
MSCI ACWI Ex USA	-11.46	-14.20	-14.20	4.48	0.68	6.57
Barclays Aggregate Bond	1.64	0.01	0.01	2.06	2.52	3.48
Bloomberg Commodity TR	-9.41	-11.25	-11.25	0.30	-8.80	-3.78

Source: Morningstar

S&P 500 TR: A market capitalization-weighted index of 500 widely held stocks often used as a proxy for the large-cap segment of stock market.

Russell 2000 TR: Consists of the smallest 2000 companies in the Russell 3000 Index, representing approximately 7% of the Russell 3000 total market capitalization often used as a proxy for the small-cap segment of the stock market.

Barcap Aggregate Bond TR: The Barclays Capital Aggregate Bond Index is a market capitalization-weighted index, meaning the securities in the index are weighted according to the market size of each bond type. Most U.S. traded investment grade bonds are represented. The index includes Treasury securities, Government agency bonds, Mortgage-backed bonds, Corporate bonds, and a small amount of foreign bonds traded in U.S.

MSCI EAFE NR USD: Widely accepted as a benchmark for international stock performance, the EAFE Index is an aggregate of 21 individual country indexes that collectively represent many of the major markets of the world.

DJ US Industrials TR USD: Computed by summing the prices of the stocks of 30 U.S. companies and then dividing that total by an adjusted value--one which has been adjusted over the years to account for the effects of stock splits on the prices of the 30 companies.

NASDAQ: Measures the performance of all issues listed in the Nasdaq Stock Market and is often used as a proxy for the large-cap technology segment of the U.S. stock market.

DJ/UBS Commodity: The DJ-UBSCI is composed of futures contracts on physical commodities and is often used as a proxy for broad-based exposure to the commodity markets.

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