

Market Bulletin

November 9, 2018

Get invested, stay invested: Navigating volatile markets

In brief

- Market volatility has come back with a vengeance. In October, U.S. equities finished the month down -6.9%, after recovering slightly from a -9.9% pullback from its September peak marking the worst month since September 2011.
- However, higher market volatility is normal in the later stages of an economic cycle. As the current expansion and bull market continue to age, we expect market volatility to remain elevated, although we do not believe this is the end of the bull-run.
- Volatility is likely to remain episodic, marked by short stints of big price moves followed by periods of relative calmness. Investors should be reminded to avoid the emotional impulse to sell on days volatility spikes.
- Investing with a long time horizon and through a diversified portfolio are the best ways to batten down the hatches against volatility and avoid emotional investing errors like selling the market at the bottom.

“A smooth sea never made a skilled sailor”

A market without volatility would be unnatural, like an ocean without waves. The free market, like the open ocean, is constantly churning. For some investors, market moving waves can be exciting, providing a buying opportunity of mispriced securities. But for most investors who focus on their long-term financial goals, the waves in the market can feel violent and threatening.

The degree of market volatility varies from small ripples, to rolling waves, to a financial crisis-sized tsunami. While all volatility feels uncomfortable in the near-term, the important question for long-term investors is how to respond to it. This paper will put volatility in context relative to historic trends, and then outline five things to keep in mind when the market gets choppy.



Samantha M. Azzarello
Global Market Strategist



Jordan Jackson
Market Analyst

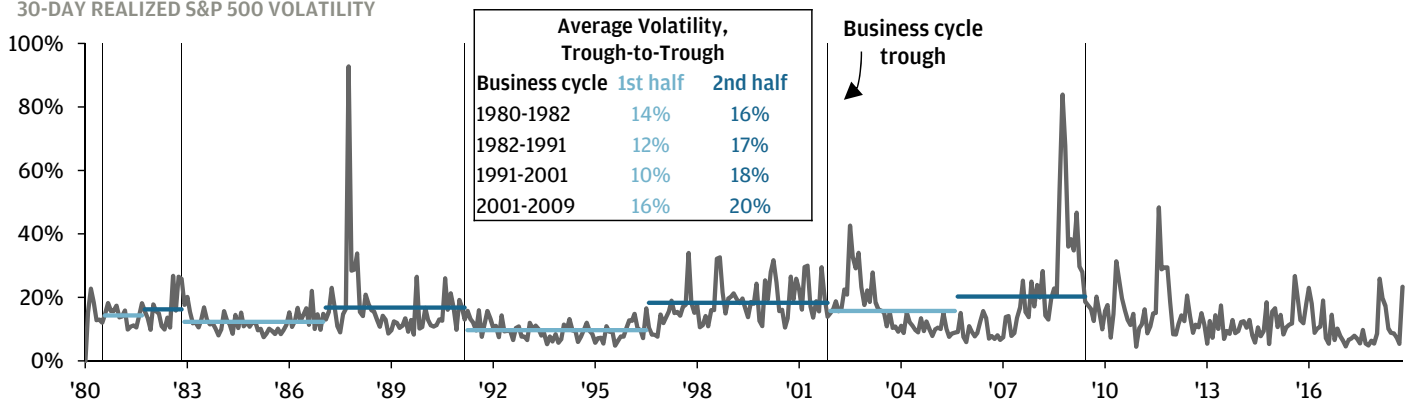
Navigating bigger waves:

We are in the later-stages of a long economic expansion. While we expect above-trend growth through the first half of 2019, then moderating to 2% thereafter, it is important to acknowledge that volatility tends to be elevated in the second half of the business cycle. To expand upon our nautical metaphor, we liken the cyclical nature of volatility to the ocean tide. Volatility ebbs with the positive and steadfast economic news that characterizes the beginning of the business cycle, and it flows when the market is mired by slowing economic momentum and fears of recession. The first chart illustrates this concept over the previous three business cycles.

Volatility tends to be higher in the later stages of the business cycle

EXHIBIT 1: BUSINESS CYCLE TROUGH-TO-TROUGH ANALYSIS

30-DAY REALIZED S&P 500 VOLATILITY



Source: Standard & Poor's, FactSet, J.P. Morgan Asset Management. Data are as of October 31, 2018. For illustrative purposes only.

Skittish investors who are skeptical of the prospects of economic growth are the main cause of the bigger waves at the end of the cycle. As the labor market continues to tighten, interest rates continue to rise, and the impacts of fiscal stimulus begin to fade in the second half of 2019, the risks of a recession increase in 2020. Moreover, the beginning of the 4th quarter saw a combination of mixed corporate earnings, ongoing trade tensions and softer economic data which have weighed on sentiment. When there are fears of a recession, investors' "edge of seat" mentality causes quick and sometimes irrational decision-making, and the subsequent herd behavior by investors can amplify the market drawdown and ultimately cause tsunami-magnitude volatility.

Grab an oar! Here is what you will need to do: Actually, less than you would think. If you are a long-term investor, then think of yourself as a cruise liner. Your diversified portfolio was built to feel steady in rough seas.

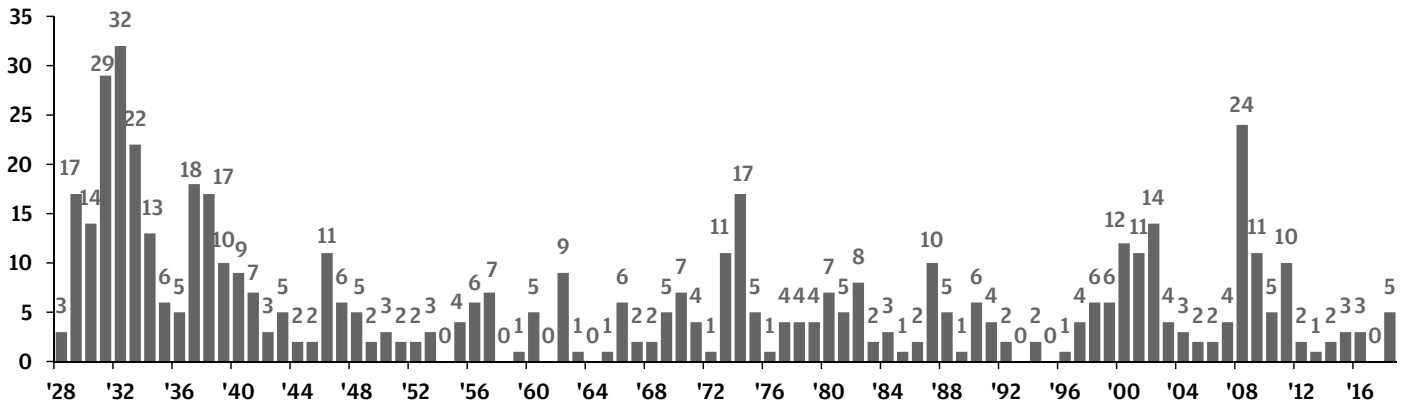
1. Remember that volatility is normal. Even though it makes us feel seasick.

Volatility in the market is normal, and feeling uneasy about a lower portfolio value is normal too. Illustrating how often we experience moderate pullbacks is simple enough - **Exhibit 2** shows the number of 5% pullbacks experienced each year. This shows that even in years with outstanding equity returns there are rolling waves of volatility in the market. What we cannot show in a graph is the seasickness an investor feels while riding these waves to a lower portfolio value.

Historical analysis shows that pullbacks of 5% have occurred about once a quarter, and pullbacks of 10% are likely to occur once per year. Large pullbacks greater than 20% tend to occur just once per market cycle. A savvy investor will recognize the high frequency of equity market volatility, and will look to the source of the volatility before making a quick reaction to it.

Moderate pullbacks happen frequently, even in normal times

EXHIBIT 2: NUMBER OF 5% PULLBACKS EXPERIENCED IN THE S&P 500, PER YEAR



Source: Standard & Poor's, FactSet, J.P. Morgan Asset Management. For illustrative purposes only. Returns are based on price index only and do not include dividends. Data are as of October 31, 2018.

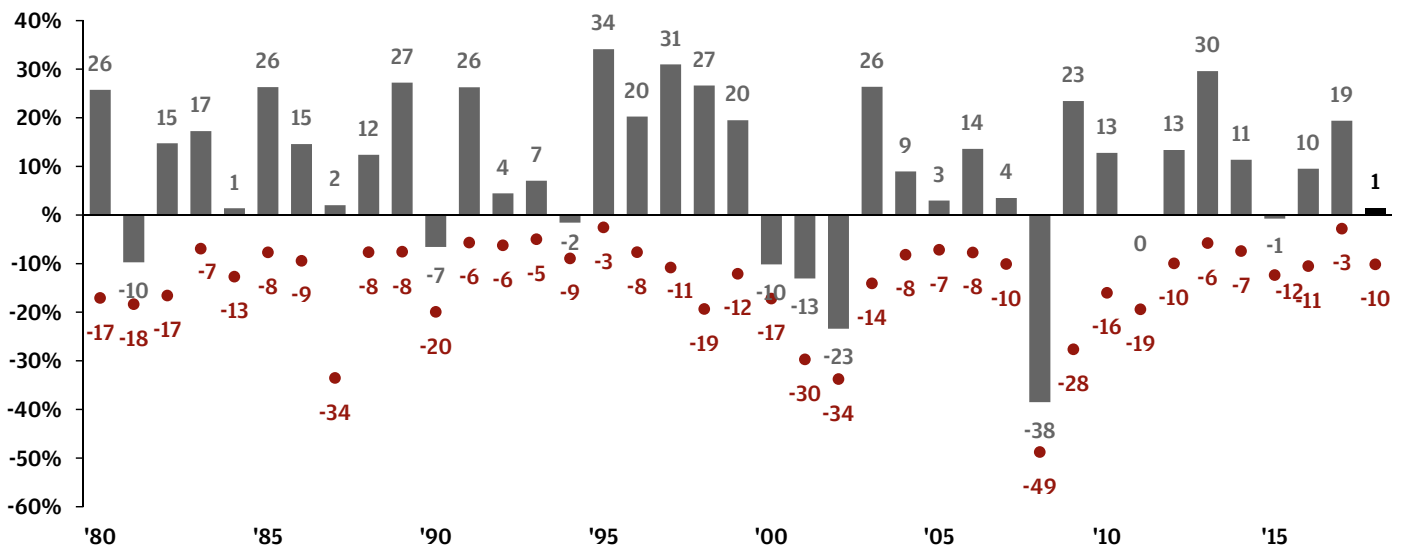
2. Do not jump ship at the bottom: Markets tend to rebound after bouts of volatility.

Focusing on the long-term trends of the market rather than the short term gyrations should give investors the confidence to ride the waves of volatility. When examining historic equity market data, we see a trend of rebounds following equity market pullbacks. That means that investors who jump ship after a big wave may have broken the cardinal rule of investing by “selling low.”

Exhibit 3 shows the largest intra-year decline and the calendar year return every year since 1980. Despite an average drop of 14.2%, the market ended the year higher than it began it 76% of the time. That is why it is important for investors to ride the wave of volatility through its full cycle.

Despite average intra-year drops of 13.8%, annual returns are positive in 29 of 38 years

EXHIBIT 3: S&P 500 INTRA-YEAR DECLINES AND CALENDAR YEAR RETURNS



Source: FactSet, Standard & Poor's, J.P. Morgan Asset Management. Returns are based on price index only and do not include dividends. Intra-year drops refers to the largest market drops from a peak to a trough during the year. For illustrative purposes only. Returns shown are calendar year returns from 1980 to 2017, over which time period the average annual return was 8.8%. Data are as of October 31, 2018.

We recognize with painful familiarity some of the deep market pullbacks in **Exhibit 3**. The pullback of nearly 50% in 2008, for example, occurred in the wake of the global financial crisis. And the three consecutive years of negative returns in the early 2000s were the devastation left after the tech bubble burst. These tsunamis of volatility occurred because of massive market dislocations, a fundamental swing and the end of a business cycle. However, for many of the smaller pullbacks over the past 40 years, there is no coincident fundamental trend. Much of the volatility in the market represents noise that is irrelevant to the economic bedrock and fundamental landscape for equities.

An extreme example of equity market noise occurred in 1987 on Black Monday, when the stock market experienced its single worst day, losing over 20% of its value. The causes of Black Monday are disputed somewhat, however a commonly cited culprit is program trading which intensified a global selloff. Remarkably, the market finished the year up 2% because, despite the volatility, economic growth continued and equity market fundamentals remained intact. Investors with the fortitude to stay invested through Black Monday would have experienced a positive return in 1987.

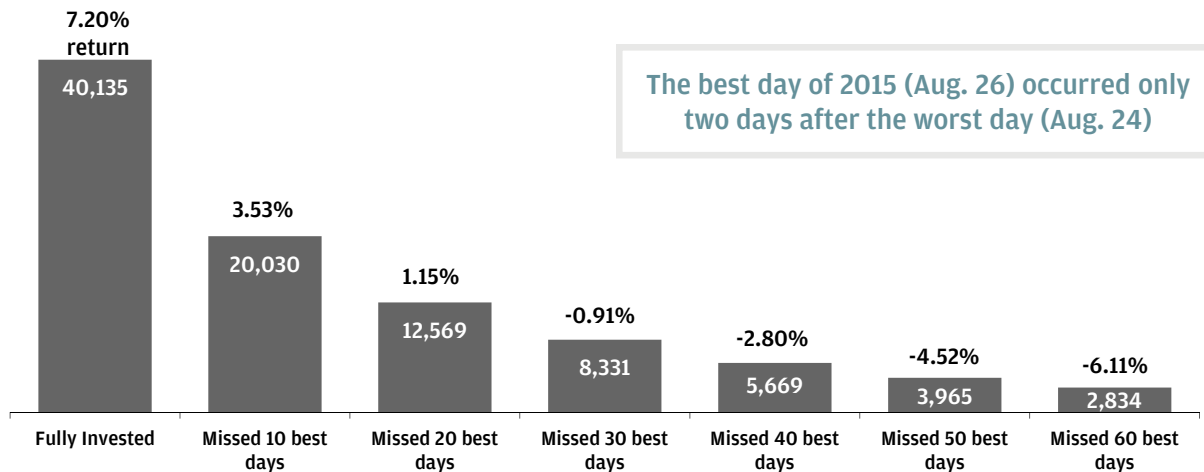
Frequent pullbacks in the market can be unsettling, and can encourage market timing, but investors should not jump ship. Being fully invested is especially important when there is market volatility, because the best and the worst days of the market tend to cluster together. If you are lucky enough to miss the bad days, you will also likely miss the best days.

Although as you examine your quarterly statement it is difficult to synthesize the portfolio impact of missing the best days in the market, missing these days has a real impact on investment performance. As **Exhibit 4** shows, a fully invested portfolio would have returned nearly double one that missed the ten best days in the market. The majority of those days occur within two weeks of the ten worst days in the market, so selling equity because of investing seasickness after a bad day in the market often means that you will miss a big rebound.

Six of the 10 best days occurred within two weeks of the 10 worst days

EXHIBIT 4: RETURNS OF S&P 500 in USD

PERFORMANCE OF A \$10,000 INVESTMENT BETWEEN JANUARY 1, 1998 AND DECEMBER 29, 2017



This chart is for illustrative purposes only and does not represent the performance of any investment or group of investments.

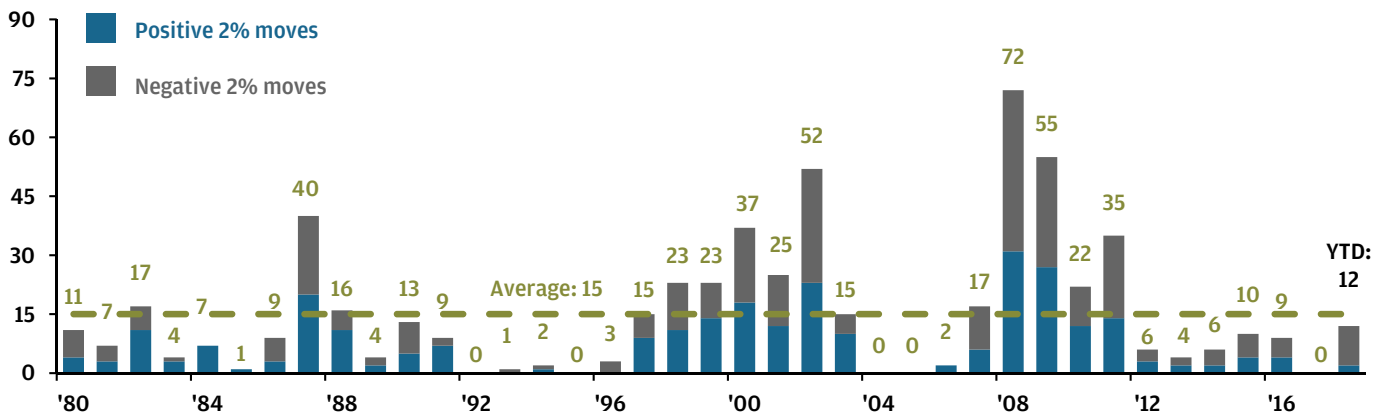
Source: J.P. Morgan Asset Management analysis using data from Bloomberg. Returns are based on the S&P Total Return Index, an unmanaged, capitalization-weighted index that measures the performance of 500 large capitalization domestic stocks representing all major industries. Past performance is not indicative of future returns. An individual cannot invest directly in an index. Data as of December 31, 2017.

3. Expect market moves to be episodic

While big day-to-day market swings can feel violent, the reality is that they are not all that uncommon. Since 1980, U.S. equities have averaged 15 days in which markets moved greater than 2% up or down, with years of above-average incidents tending to be clustered together. Starting in 2012, markets went through a stretch of more muted daily price swings, which led to the abnormally calm year of 2017 when there were no such occurrences. This year has seen a return to more normal behavior, with 12 such days so far. Interestingly however, while days in which the markets are down 2% grab headlines, historically, on average there has been the same number of days in a given year where returns were greater than 2%.

2% daily moves are not all that common

EXHIBIT 5: NUMBER OF DAILY MOVES GREATER THAN 2% UP OR DOWN, S&P 500 PRICE INDEX



Source: Standard & Poor's, FactSet, J.P. Morgan Asset Management. Data are as of October 31, 2018.

We can expect large daily moves to continue from time to time this year. Investors are now debating the effects of higher interest rates, the direction of inflation, the impact of fiscal stimulus, mixed corporate earnings, the evolution of trade tensions and the timing of the next recession. Given this, investors should expect this episodic volatility to remain, however while the market may swing meaningfully from one day to the next, investors should be careful not to overreact to new information one way or the other.

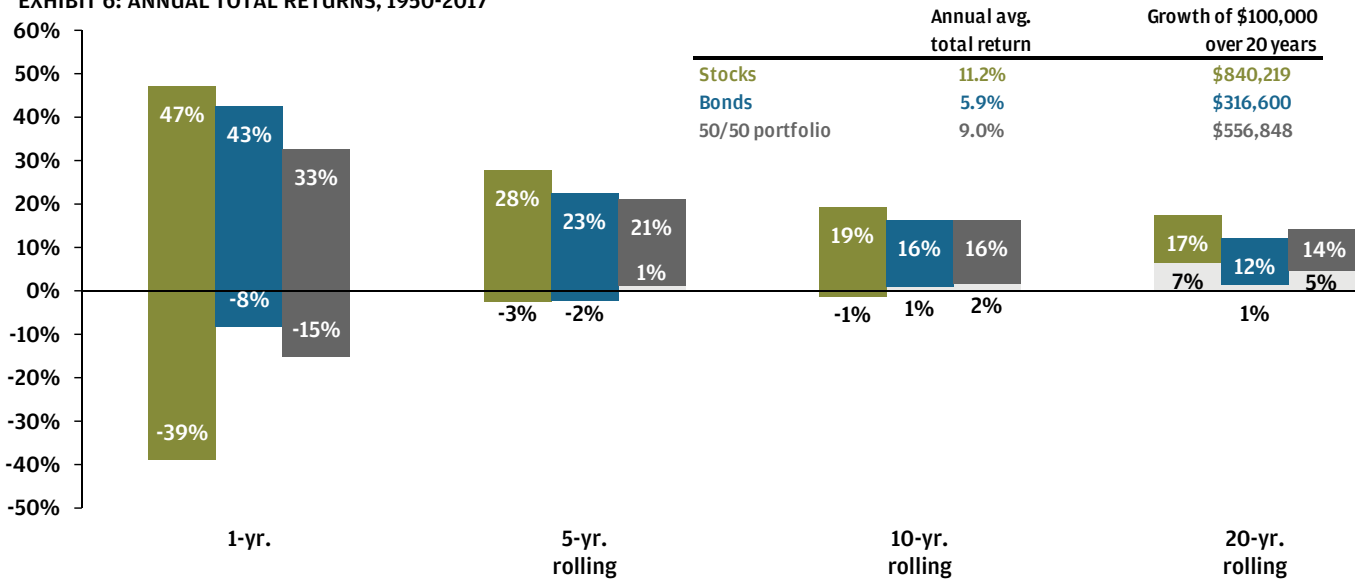
4. Focus on the destination. Investors with the luxury of a long time horizon are rewarded with infrequent negative equity returns.

While volatility can cause major deviations in the near-term for equity markets, investors should focus on their destination. Examining rolling returns for equities, in **Exhibit 6**, shows that historic annual returns have varied from -39% to +47%, while rolling annualized returns over a 20-year period are always positive.

Unfortunately, short-term investors are much more likely to realize the waves of volatility that occur over the one-year investment horizon. Investors with long-term goals who are able to shift their focus to the long-term return potential of equity investments have the luxury of realizing infrequent negative equity market returns.

The range of annualized returns becomes less volatile with an extended investment horizon

EXHIBIT 6: ANNUAL TOTAL RETURNS, 1950-2017



Source: Barclays, FactSet, Federal Reserve, Robert Shiller, Strategas/Ibbotson, J.P. Morgan Asset Management. Returns shown are based on calendar year returns from 1950 to 2017. Stocks represent the S&P 500 Shiller Composite and Bonds represent Strategas/Ibbotson for periods from 1950 to 2010 and Barclays Aggregate thereafter. Data are as of October 31, 2018.

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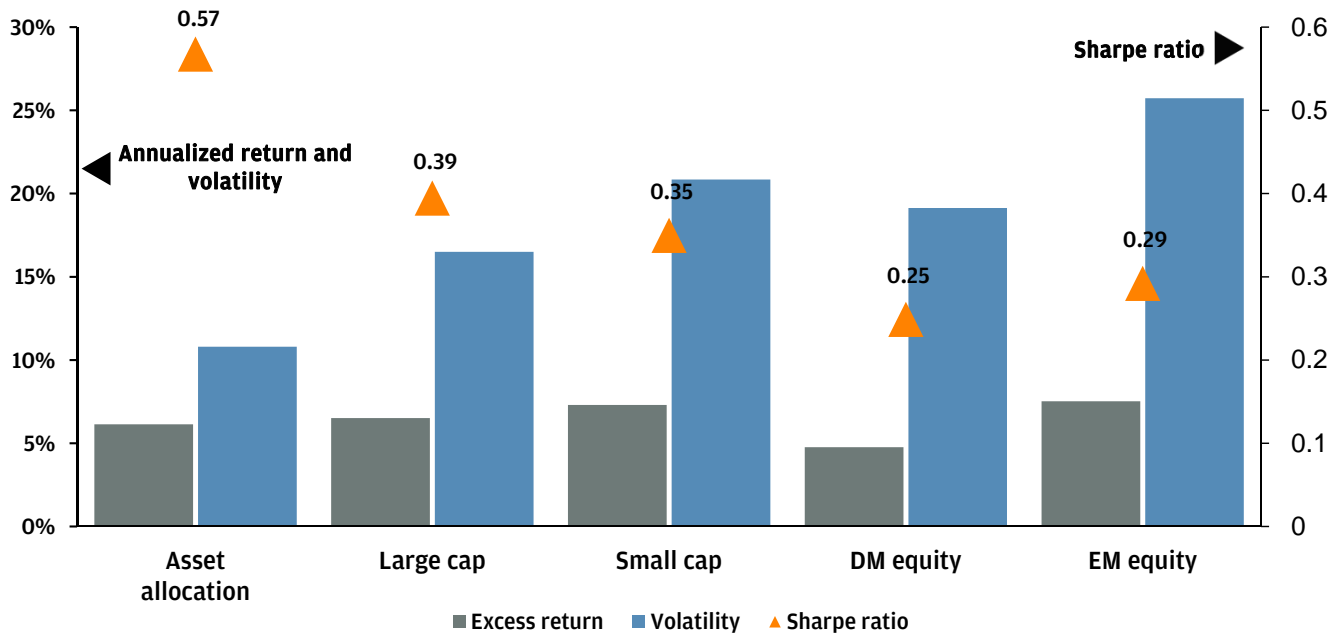
5. Your portfolio was built for this. Just as a cruise ship does not feel every wave tearing past, a diversified portfolio is buffered from market volatility.

We live in a headline-driven world, where media often impacts equity prices in the near term. But your portfolio should not be a kayak tossed and turned by market churn; it is possible to gain portfolio stability through diversification. While equities tend to perform better with economic growth and moderate levels of inflation, rate-sensitive fixed income is important when economic growth falters. Although we have a positive outlook on U.S. equities in the coming year, other developed market equities give your portfolio exposure to risk factors outside the U.S. economy, and exposure to faster-growing emerging market economies can help boost portfolio returns. Small cap stocks provide a pro-cyclical tilt to a portfolio, though they can also be most sensitive to growth scares.

The combination of various asset classes may improve portfolio returns, but diversification most importantly keeps your portfolio on an even keel. Although it is no guarantee of positive returns, **Exhibit 7** shows that diversification has improved the risk-return profile of the Asset allocation portfolio relative to equities in a historic analysis over the past 20 years. That means your portfolio can cruise past market volatility feeling the fewest waves possible.

Diversification gives your portfolio stability, enhancing the risk/return tradeoff

EXHIBIT 7: Annualized returns, volatility and Sharpe ratio from 12/31/1997-12/31/2017



Source: Barclays, Bloomberg, FactSet, MSCI, NAREIT, Russell, Standard & Poor's, J.P. Morgan Asset Management. Large cap: S&P 500, Small cap: Russell 2000, EM Equity: MSCI EME, DM Equity: MSCI EAFE, The "Asset Allocation" portfolio assumes the following weights: 25% in the S&P 500, 10% in the Russell 2000, 15% in the MSCI EAFE, 5% in the MSCI EME, 25% in the Barclays Aggregate, 5% in the Barclays 1-3m Treasury, 5% in the Barclays Global High Yield Index, 5% in the Bloomberg Commodity Index and 5% in the NAREIT Equity REIT Index. Balanced portfolio assumes annual rebalancing. Annualized (Ann.) return and volatility (Vol.) represents period of 12/31/97 - 12/31/17. All data represents total return for stated period. Excess return is calculated using the Barclays 1-3m Treasury as a proxy for the risk-free rate. Data are as of October 31, 2018.

Though it is impossible to predict the future, expecting market volatility in the coming years is a safe bet. Just as the last 20 years have favored the diversified investor, we expect the next 20 will do the same. Investors need risk assets to reach long-term investment goals, and staying invested throughout that time horizon can be an investors' biggest challenge. History shows that diversification and rebalancing are the best tools for reducing volatility and providing a gentler ride through sometimes difficult seas.

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