



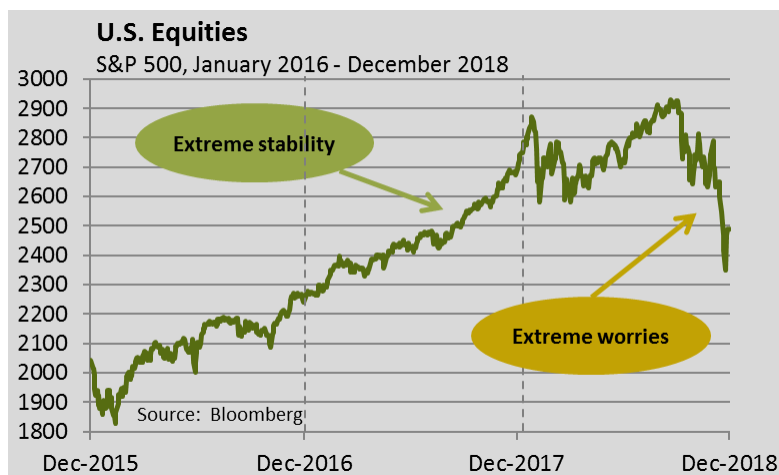
From Stability to Fragility

January 2019

Summary

While 2017 was a year of stability, comfort and strong stock market gains, 2018 was essentially the opposite with higher volatility, increased anxiety, and poor stock returns. The S&P 500 finished the year down -4% and international stocks were down -14% (another contrast to 2017 where international returns exceeded those in the U.S.). While the slide in foreign stocks began earlier in the year, U.S. stocks held up fairly well until October, leading to a dramatic -19% drawdown in the fourth quarter. Much of this volatility was to be expected since, as economist Hyman Minsky wrote, "stability breeds instability," as relative calm encourages more risk-taking until a tipping point is reached. However, it has been seven years since financial markets have seen such a drawdown in stocks, and it can be difficult to transition from 2017's calm to 2018's chaos. Adding to the shock of volatile markets was widespread overconfidence. Optimism was higher than any period except 1999-2000.

It is important to acknowledge that the stock market is inherently volatile, even if it is not always apparent or perceived that way. This is also something that is normal, necessary, and cannot be diminished by new technology or tools. In 1974, Minsky wrote, "A fundamental characteristic of our economy is that the financial system swings between robustness and fragility and these swings are an integral part of the process that generates business cycles."

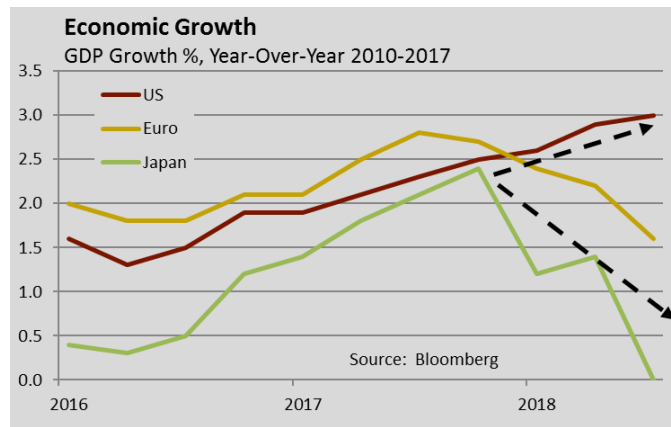


The renewed stock market volatility is driven by multiple factors; below is a brief summary of a few of the most important influences:

- ❖ **The economy is slowing. It is not collapsing.** Economic growth at 3% is strong in the U.S. Unemployment hit 3.7%, a level not seen since 1965. The economy will not suddenly drop into a recession for no reason, but markets are assessing what slower means in today's economy.
- ❖ **No more training wheels... the Fed is not as accommodating as it was just a few years ago.** It is raising interest rates and is no longer stimulating the economy. Rates are not punitive yet and are far from levels considered restrictive, but markets are evaluating two key questions: How much further will the Fed raise rates? And how much did prior stimulus really help the economy?
- ❖ **The drawdown in the fourth quarter was swift and steady.** It was the fifth fastest decline in 70 years, and similar drawdowns outside of a recession have recovered within about nine months.



- ✧ **Nowhere to hide...** 2018 was the first year since 1970 that no major asset class returned at least 5%. In fact, none of the 10 major asset classes even had positive returns.
- ✧ **Peak profit growth was ushered in by corporate tax cuts.** Corporate profits grew by 25% in 2018 and should continue to grow, but at a reduced pace.
- ✧ **Interest rates are rising, and the yield curve is flattening.** This trend will continue to pressure investors with low bond returns and housing with the highest mortgage rates in over 10 years. Companies that borrowed heavily when rates were at generational lows may need to refinance at higher rates.
- ✧ **A global economic slowdown is destabilizing financial markets.** Economic growth in Europe and Japan was well synchronized with the U.S. in 2016 and 2017 but diverged in 2018. Similar environments occurred in 2011 and 2016, resulting in drawdowns of 19% and 13%, respectively. In both prior cases, the U.S. was able to withstand international weakness and avoid a recession.



Current Positioning

Over the summer, client equity allocations were reduced from the maximum equity level to neutral. Today, client portfolios remain at their neutral equity positions and will likely stay there until the market shows signs that it is stabilizing and our indicators change.

In our Outlook from a year ago, our expectations were as follows, "While 2017 was unnaturally stable, a more normal year should follow in 2018. It is unlikely that a recession occurs in the near term, but markets should return to a more common pattern where positive advances are followed by healthy pullbacks. Historically, 5% corrections occur every 2.5 months, and 10% corrections occur every 9 months. A more normal year means swings of at least that magnitude are likely."

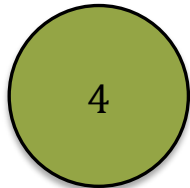
While the normal summer pullback was a bit overdue, it arrived in October and continued through the end of the year. October has historically been a scary month, with a reputation for being an important factor in the outcome of bull and bear market runs. This October lived up to that reputation, including a period where the U.S. stock market fell in 15 out of 18 trading days, totaling -9.5% over that stretch. Although it is often wise to use market lows in the fall as a buying opportunity, many of our indicators were still signaling caution, so we held client portfolios at neutral. This was fortunate as December proved to be the worst month for stocks since 1931. Just as the normal summer pullback was delayed, it is likely that a better and higher confidence buying opportunity will present itself in coming months.

Although volatility is likely to continue and the market may go down further before it recovers, client portfolios (at a neutral equity level) are positioned well to withstand the rough stock market ride. When the environment and our indicators change, we will consider changing equity allocations accordingly.

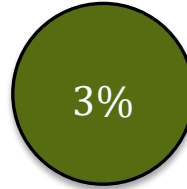


The Year in Numbers

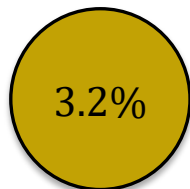
Below is a compilation of statistics that demonstrate some of the most interesting aspects of the year.



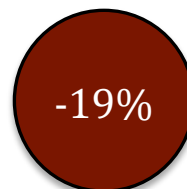
The Federal Reserve raised interest rates four times in 2018. The December increase was the ninth since the Fed began raising rates in 2015.



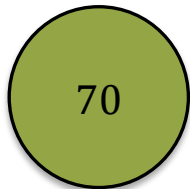
Year-over-year GDP growth hit 3% in September, only the third time that GDP growth has reached 3% since the financial crisis.



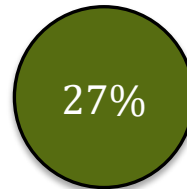
The yield on the 10-year Treasury Bond hit 3.2% in October, the highest interest rate on government bonds since 2011.



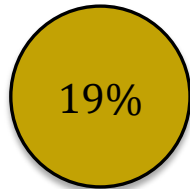
Stocks hit a rough patch, falling by 19% in the fourth quarter of the year. The drawdown, a big change after 2017's stability, was the worst since 2011.



The pullback in the fourth quarter was one of the quickest in 70 years (19% over 95 days).



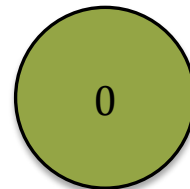
Consensus estimates for earnings growth for the S&P 500 is 27% for 2018.



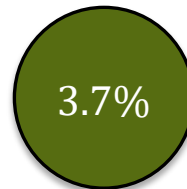
The average earnings growth impact in 2018 from the tax cuts passed one year ago.



The Federal Reserve reduced its holdings of bond securities by \$380 billion in 2018 (tightening monetary policy) versus purchases of \$450 billion in 2014 (easing).



Zero of the ten major asset classes had positive returns in 2018.



Unemployment hit 3.7%, the lowest level since the 1960s.



Nowhere to Hide

While 2017 set a record for low stock market volatility, 2018 set a much more dubious record – nothing performed well. It was the first year since 1970 that no major asset class returned at least 5%. In fact, none of the 10 major asset classes even had positive returns... unless you include core bonds (the Barclays Aggregate Bond Index) which squeaked out a meager 0.01%. Financial markets can often be a battle of extremes, and the contrast between 2017 and 2018 illustrates that concept well.

Asset Class Returns

2000-2018

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Large caps	-9.1%	-11.9%	-22.1%	28.7%	10.9%	4.9%	15.8%	5.5%	-37.0%	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%
Small caps	-3.0%	2.5%	-20.5%	47.3%	18.3%	4.6%	18.4%	-1.6%	-33.8%	27.2%	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	21.3%	14.6%	-11.0%
International	-14.2%	-21.4%	-15.9%	38.6%	20.2%	13.5%	26.3%	11.2%	-43.4%	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	25.0%	-13.8%
Emerging markets	-30.8%	-2.6%	-6.2%	55.8%	25.6%	34.0%	32.1%	39.4%	-53.3%	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	-14.6%
Core bond	11.6%	8.4%	10.3%	4.1%	4.3%	2.4%	4.3%	7.0%	5.2%	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%
High yield bond	-5.9%	5.3%	-1.4%	29.0%	11.1%	2.7%	11.8%	1.9%	-26.2%	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	7.5%	-2.1%
Corp bond	9.1%	10.3%	10.1%	8.2%	5.4%	1.7%	4.3%	4.6%	-4.9%	18.7%	9.0%	8.1%	9.8%	-1.5%	7.5%	-0.7%	6.1%	6.4%	-2.5%
Long-term treasury	20.3%	4.2%	16.8%	2.5%	7.7%	6.5%	1.9%	9.8%	24.0%	-12.9%	9.4%	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	8.5%	-1.8%
Commodity	49.7%	-31.9%	32.1%	20.7%	17.3%	25.6%	-15.1%	32.7%	-46.5%	13.5%	9.0%	-1.2%	0.1%	-1.2%	-33.1%	-32.9%	11.4%	5.8%	-13.8%
Real estate	31.0%	10.3%	3.3%	37.5%	36.0%	15.1%	39.9%	-18.0%	-40.9%	24.9%	29.6%	10.4%	15.6%	-1.4%	34.6%	6.4%	4.9%	5.3%	-2.1%
Worst return	-30.8%	-31.9%	-22.1%	2.5%	4.3%	1.7%	-15.1%	-18.0%	-53.3%	-12.9%	6.5%	-18.4%	0.1%	-12.7%	-33.1%	-32.9%	1.0%	3.5%	-14.6%
Best return	49.7%	10.3%	32.1%	55.8%	36.0%	34.0%	39.9%	39.4%	24.0%	78.5%	29.6%	29.9%	18.2%	38.8%	34.6%	6.4%	21.3%	37.3%	0.0%
Best asset class	Com	Corp	Com	EM	RE	EM	RE	EM	LT Tr	EM	RE	LT Tr	EM	SC	RE	RE	SC	EM	Core

Source: Bloomberg

2018 also marked the first year since the financial crisis that U.S. large cap stocks were negative. 2011 and 2015 were lackluster years, but they did muster a slight positive return. Technology stocks (such as Apple, Amazon, Facebook, Netflix, Google) saw a roller coaster ride. The technology-heavy NASDAQ index was up 17% through August, but ended the year down -0.3%. Although Amazon and Netflix ended 2018 with positive returns, their stock prices fell significantly in the back half of the year, losing -25% and -36%, respectively.

Large cap stocks in the U.S. were slightly positive for most of the year until December losses pulled the indices negative for the year by -4%. International stocks were down for most of the year, ending with losses of -14%. The strong dollar was a big drag on most international investments, which were positive for the year in local currencies. While emerging market equities saw the largest negatives at -15% for the year, they began to perform better than U.S. large caps in the fourth quarter. When U.S. large caps were down -17% in the final three months of the year, emerging markets were down roughly half of U.S. stocks at -9%.

Most bond returns were negative in 2018 as well. Typically, bonds are a ballast when stocks turn negative; however, rising interest rates kept bond returns in the red. As interest rates rise, bond prices fall. In 2018, falling bond prices more than offset the coupon (or interest rate) earned throughout the year.

Note, for this study, included asset classes were: U.S. large caps (S&P 500), small caps (Russell 2000), international (MSCI EAFE), emerging markets (MSCI Emerging Markets), core bonds (Barclays Aggregate Bond Index), high yield bonds (Barclays U.S. Corporate High Yield Index), corporate bonds (Barclays U.S. Corporate Index), long-term treasuries (Barclays U.S. Long Treasury Index), commodities (S&P Goldman Sachs Commodity Index), and real estate (Cohen and Steers Global Realty Majors Portfolio).



Fifth Fastest Correction Since 1950

Most stock markets had a rough time in the fourth quarter, a marked shift from the relative calm that existed a year ago. At the end of September, the S&P 500 stood at a new high of 2,931. The environment changed quickly, and numerous fears that were on the periphery for most of the year became the focus for the last three months. During a stretch in October, stocks fell in 15 out of 18 days. November saw many ups and downs, ending up essentially flat. December was punctuated by a drubbing where stocks fell by almost 8% in the four days leading up to Christmas.

The correction may not be over, but so far the maximum drawdown was -19.8%. It is never pleasant to see stocks turn so negative, but that anxiety is compounded by the relative stability that existed just one year ago.

U.S. Stock Drawdowns of 15% or Greater

S&P 500, 1950-2018

Year	S&P 500 high point	S&P 500 low point	# days peak to trough	# days to 15% drawdown	Total drawdown	Occurred during recession
1957	50	39	446	431	-21.6%	Yes
1962	73	52	196	162	-28.0%	No
1966	94	73	240	191	-22.2%	No
1970	108	69	543	238	-36.1%	Yes
1974	120	62	630	173	-48.2%	Yes
1977	108	91	407	398	-15.9%	No
1980	118	98	43	40	-17.1%	Yes
1982	141	103	621	284	-27.0%	Yes
1987	337	224	101	52	-33.5%	No
1990	369	295	87	38	-19.9%	Yes
1998	1187	957	45	45	-19.3%	No
2002	1521	798	690	110	-47.5%	Yes
2009	1565	677	517	101	-56.8%	Yes
2011	1364	1099	157	101	-19.4%	No
2018	2931	2351	95	91	-19.8%	???
Median of all cases			324	136	-24.6%	
Median of recessions			530	142	-31.5%	
Median of non-recessions			177	132	-20.8%	

Source: Bloomberg

This recent drawdown was the fifth fastest pullback of 15% since 1950, taking just 91 days to fall 19.8%. Drawdowns associated with recessions tend to be slower and deeper (-31.5% over 530 days), while drawdowns not associated with recessions (think of them as “recession scares”) tend to be swifter but also shallower (-20.8% over 177 days). In more recent periods (1987, 1998, and 2011), non-recession drawdowns have occurred even more quickly, taking only 2 months (66 days) on average to fall by -15%. The average recovery period in recent periods (1987, 1998, and 2011) was also shorter at roughly 9 months (276 days).

Although most forward-looking data indicates that a recession is unlikely in the near term, stock market volatility is likely to continue, and more downside activity may appear in early 2019. However, absent a recession, a strong recovery with double-digit returns has historically occurred after non-recessionary drawdowns of 15% or greater.



Comparing Recent Volatile Periods

The recent correction in the U.S. stock market has received a lot of attention. While big swings in stock returns are common, they have been much smaller in recent periods. Last year (2017) was the most stable year in the history of the U.S. stock market and was also clearly an anomaly. On average, a 10% correction in stocks occurs once every 9 months or so. 2018 was much more “normal,” encountering two corrections exceeding 10%. A 20% “bear market” occurs every 2.5 years on average, but it has been almost 10 years since such a drawdown occurred.

Since the worst drawdowns in stocks occur during a recession, there is a fair amount of speculation on whether the current slide is the beginning of a recessionary period. The potential for a recession in the near term exists; however, when compared to recent volatile periods, the current environment is more similar to the non-recessionary pullbacks, which tend to be shallower in terms of stock market drawdown and faster in terms of recovery.

Recent Corrections Over 10%

	2008	2011	2016	2018
GDP growth	Falling from 2% to -3%	Bouncing from 2% to 1% and up again	Flat at 1.5%	Rising from 2 to 3%
Inflation	Falling from 2% to 1%	Rising from 1% to 2%	Flat at 2.2%	Flat at 2.2%
Fed funds rate	5 decreases from 4.25% to 0.25%	Flat at 0.25%	1 increase from 0.5% to 0.75%	4 increases from 1.5 to 2.5%
10-year treasury yield	Hovered between 3.8% and 4.2% for most of the year, then fell by 2% in 2 mos.	Hovered between 3.0% and 3.5%, then fell to 2%.	Bounced between 1.5% and 2.5% throughout the year	Rose from 2.5% to over 3% but fell by 0.5% in Dec.
Yield curve (10-yr minus 2-yr)	Widening, rising from 1.8% to 2.4%	Narrowing, fell from 2.7% to 1.8%	Narrowing, fell from 1.5% to 1.0%	Narrow, fell to 0.2%
Unemployment	Rising from 5% to 7%	Falling from 9% to 8.5%	Steady at 5%	Hit a low of 3.7%
Initial jobless claims	Rising from 350k to 550k	Falling from 425k to 375k	Flat at 260k	Flat at 220k
Recession	Yes	No	No	No / ???
Maximum drawdown	-55%	-19%	-13%	-19%

See next page for analysis.

Definitions:

GDP growth - represents US economic growth

Fed funds rate - the rate at which banks loan to each other overnight; the Fed lowers rates to stimulate the economy (making it cheaper to borrow).

Yield curve - the difference between short and long-term treasury borrowing rates; longer rates are normally high due to higher risk over time.

Initial jobless claims -people filing for unemployment for the first time.



There are many factors to consider when gauging the health of the economy. Below is a comparison of the current environment to the past two corrections and the financial crisis in 2008.

- ✧ **GDP Growth was strong in 2018**, rising from 2 to 3%. It is at a higher clip than both 2011 and 2016. Even a modest slowdown would be far different from the 2008 financial crisis when growth was negative by -3%.
- ✧ **Inflation was flat at 2.2%** in 2018 and has been low / steady for several years. The Fed's target inflation rate is 2.0-2.5%. High inflation would be a concern since the Fed would have to increase interest rates rapidly. Low inflation would be a concern since it would signal a recession. Neither is a problem today.
- ✧ **The Fed has been raising the Fed Funds Rate since 2015**. Rates were extremely low for several years after the financial crisis. The ninth Fed increase caused the Fed Funds Rate to hit 2.5% in December; at the beginning of the 2008 financial crisis, rates were much higher, and the Fed had to lower rates in hopes of stimulating the economy. The Fed Funds rate is still low in historical terms and not yet restricting economic growth.
- ✧ **Interest rates rose for most of 2018** but were disrupted by recent economic worries. The 10-year Treasury yield exceeded 3% for the first time since 2011. Rising rates imply good economic growth and some risk of inflation. A slow and steady upward move in rates would suggest good economic prospects. A sharp rise or fall over 1% within a year would be concerning. No issues here yet.
- ✧ **The yield curve has been tightening** (see page 10), but it is not yet negative. It was not close to tight in 2016 or 2011. It is normal for the curve to tighten as the Fed raises rates; however, it would become a concern if it turns negative.
- ✧ **Unemployment hit 3.7% this year, the lowest level since the 1960s**. It has been trending down slowly since the financial crisis (when it increased rapidly from 5% to 7%). This is a sign of economic strength; however, if unemployment momentum shifts (jumps up by 0.5% or more on a sustained basis), it could become a concern.
- ✧ **Initial jobless claims can be volatile** and also an early warning indicator. Such claims have been decreasing steadily since the financial crisis and remained low in 2018. Before the financial crisis in 2008, claims rose dramatically. No issues here yet.

An additional stress in the current environment is the focus on trade and tariffs. While most political activity has little lasting impact on financial markets, trade and tariffs could have a meaningful economic impact. Interestingly, the Trump fiscal policy is inconsistent with his trade policy. The fiscal stimulus from tax cuts during a full employment economy will attract more imports and create a stronger dollar; this creates a larger trade deficit, not smaller. With the new USMCA agreement (NAFTA replacement) in place, all of the remaining trade focus will be on China. Therefore, the tariff and trade war headlines are likely to persist and continue to destabilize markets in 2019.

In evaluating the various economic factors above, the current environment looks favorable. Economic growth is stronger, and inflation is subdued. Rates are rising but are not yet worrisome. Most indicators are not yet signaling recession. While volatility is likely to continue, the potential downside risk is less for periods of turmoil outside of a recession.

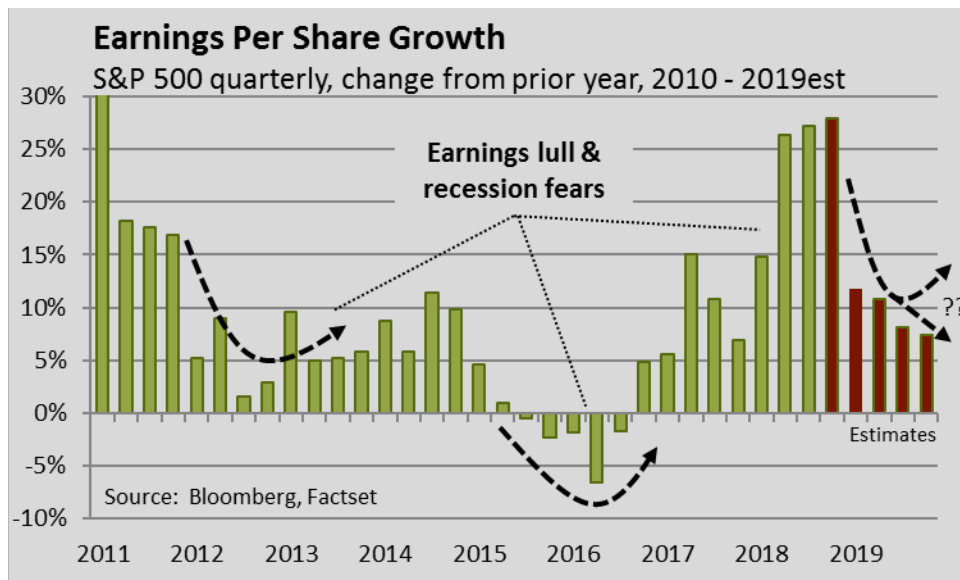


Earnings, Tax Cuts & Recession Worries

Current and future expectations for corporate profits are an important component in determining stock prices. Lower future profits likely mean lower stock prices (and vice versa). In recessionary periods, both earnings and stock prices tend to fall dramatically. During the past few months, analysts shifted their focus to concerns about 2019 earnings growth, particularly compared to 2018's strong showing of 25%.

The corporate tax cuts passed a year ago had two important impacts on earnings growth. The first impact was an immediate boost to EPS (earnings per share) growth. Corporate tax rates dropped from 35% to 21%, and those profits fell directly to the bottom line. When comparing to prior periods, 2018 growth looked quite favorable.

The second impact was establishing a "higher bar" for future growth. Despite knowing that the tax cuts provided a one-time increase to EPS growth (roughly 25% for most of 2018), it is still disappointing to see growth return to single digit levels. Investors are concerned that profits will fall further, and the higher bar makes the comparison more difficult.

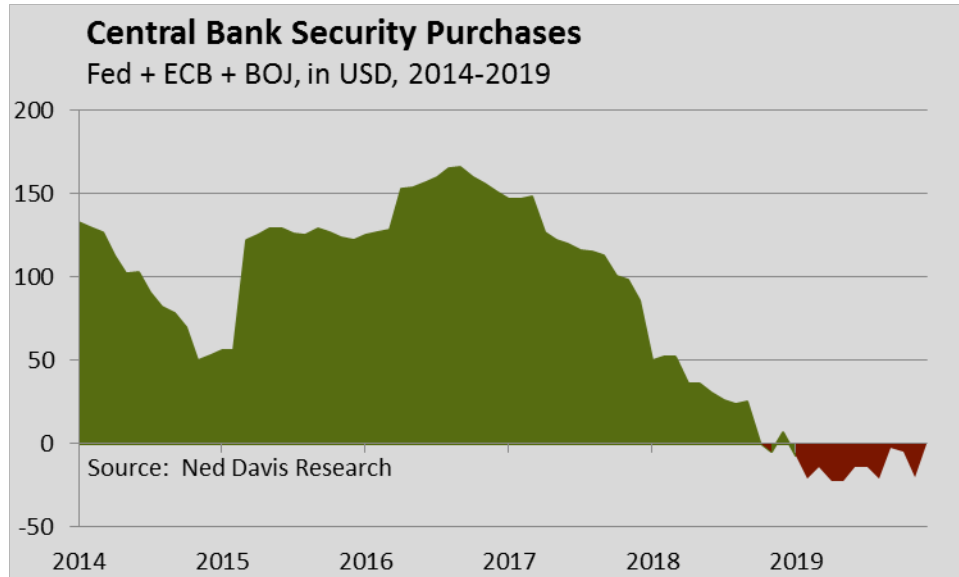


Earnings slowdowns outside of a recession are not uncommon. Similar earnings contractions occurred in 2011 and 2016, and those environments have several parallels to 2018. Both 2011 and 2016 saw weakness with international economies which raised concerns that such weakness would change the trajectory of the U.S. economy. U.S. earnings did decline somewhat in the short run, but it did not change the longer-term trajectory. A similar environment exists in 2018-2019 where international weakness is creeping into U.S. economic expectations, but the analytics around corporate earnings is complicated by the tax cut boost.



No More Training Wheels

Since the financial crisis in 2008, central banks around the world have been working to stabilize financial markets by purchasing various bond securities. The technical term for this approach is “quantitative easing,” or “QE.” The Federal Reserve, European Central Bank (ECB), and Bank of Japan (BOJ) averaged purchases of \$120 billion per month between 2014 and 2017. The specific impacts of QE are difficult to quantify, but it seems clear that such programs kept interest rates low, stabilized economic growth and boosted financial markets.



David Kelly of JP Morgan described the current, collective mindset of central banks as “taking off the training wheels.” Just like a parent removing training wheels from a bike, the Fed feels like the economy can continue successfully without its support. For over a year, the Fed has been reducing its ownership of assets, and November 2018 was the first month where the combined actions of all three central banks were negative. The ECB began reducing its purchases in early 2018, and the ECB plans to discontinue purchases in January 2019. The BOJ has been slowly reducing its purchases since 2015 but is likely to continue purchases in the future. For most of 2019, Fed reductions will outweigh BOJ purchases.

While the reduction of central bank assets should be viewed as a positive statement about economic health, it will also bring increased volatility in financial markets. At the same time, interest rates may continue to rise as central banks stop buying securities (bond offerings may have to come with higher rates to attract new buyers).

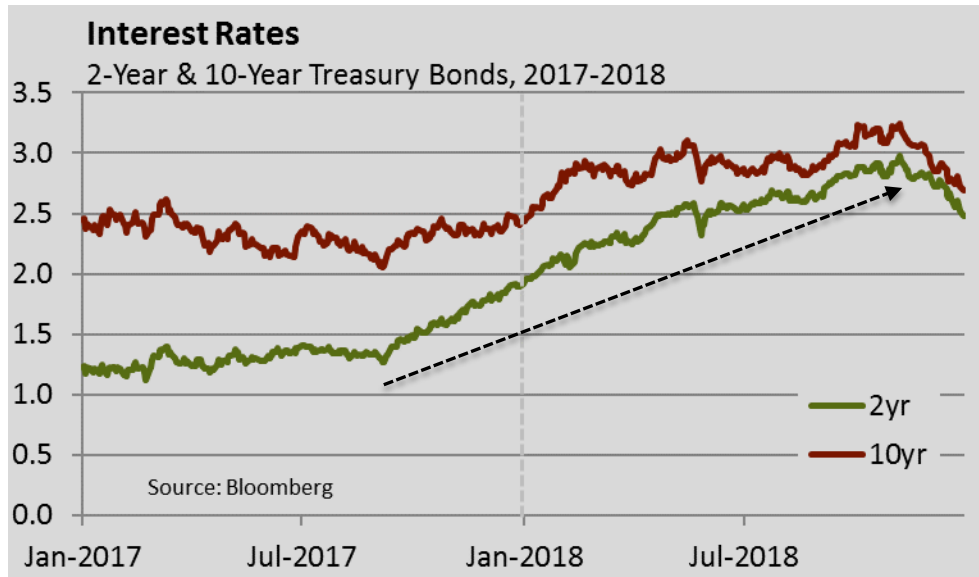
Quantitative easing was an unprecedented approach to monetary policy. The unwinding of central balance sheets is equally untested and likely to add to market volatility.



The Story of Rising Interest Rates

The Federal Reserve has been raising interest rates since 2015. Although the Fed only controls short-term interest rates, higher short-term rates should lead to higher intermediate and long-term rates. This makes sense intuitively since longer-term rates also encompass the shorter-term period.

Despite a consistent trend over the past two years of rising rates, interest rates fell meaningfully at the end of 2018. When stocks are perceived as risky, some investors prefer the relative safety of bond investments, and they are willing to accept lower compensation in the form of interest.



There are a few noteworthy aspects of this interest rate environment:

Rising rates lead to poor bond returns: As interest rates rise, the price of those bonds will fall. This is because bonds with the “older” and lower interest rate are not as attractive due to their lower rate. Interest rates have been falling for almost 40 years, so this presents investors with a “new” bond investing environment.

Watch out for the yield curve: It is normal for longer-term bonds to have higher interest rates than shorter-term bonds. This makes sense intuitively since a longer bond maturity entails more risk (not getting repaid or inflation eroding the value of interest payments). The difference between long and short rates is known as the yield curve. When longer term bond rates are lower than short term bonds, it is known as an “inverted yield curve,” and this rare state has occurred before each of the last seven recessions. Over the past two years (see chart, above) the yield curve has flattened, but it is not yet inverted.

Impact on borrowing: While the topic of interest rates may seem mundane, they have a real impact on borrowing and the economy. As interest rates have risen over the past few years, mortgage rates have followed suit. The average mortgage rate exceeded 5% in October and November, a level not seen since before the financial crisis. The interest cost for government borrowing could create a potential budget problems in the future.



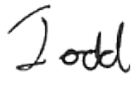






Summary

Financial markets saw big drawdowns for the first time since 2011, and bond investments lagged due to rising interest rates. High volatility is associated with this later stage in the business cycle and is likely to continue in early 2019 as markets grapple with rising rates, Fed actions, and trade concerns. Client portfolios at neutral equity levels should continue to provide a buffer against large stock market swings.

Most indicators have not signaled that a recession is likely in the near term. When the environment and our indicators change, we will consider changing equity allocations accordingly.

If you have questions on the investment environment or your portfolio, please call us at 734-769-7727. To find an electronic copy of this document and other recent commentaries, please visit our website at www.risadvisory.com.

			
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These data are for illustrative purposes only and is not indicative of any investment or strategy result. The S&P 500 is an index of 500 stocks representing major U.S. industry sectors. The Dow Jones Industrial Average is an index made up of 30 large U.S. company stocks. Small Cap is represented by Russell 2000 Index, which is an index of the 2000 smallest companies in the Russell 3000 Index of 3000 broad-based U.S. companies. Mid Cap is represented by S&P Mid-Cap 400 Index, which tracks medium-sized U.S. firms, which is broadly defined as a company with a market capitalization ranging from about \$2 billion to \$10 billion. Developed Int'l is represented by MSCI EAFE Index, which is an index of major international equity markets as represented by 21 major MSCI indexes from Europe, Australia and Southeast Asia. Emerging Markets is represented by MSCI Emerging Markets Index, which is an index that is designed to measure equity market performance in global emerging markets (over 20 countries including Brazil, Russia, India, and China). World stocks (the All Cap World index) are represented by the MSCI ACWI index and is designed to measure the equity market performance of developed and emerging markets. The MSCI ACWI consists of 45 country indices comprising 24 developed and 21 emerging market country indices. High-Yield is represented by the Barclays U.S. Corporate High-Yield Index, which measures the market of USD-denominated, non-investment grade, fixed-rate, taxable corporate bonds. Securities are classified as high yield if the middle rating of Moody's Fitch, and S&P is Ba1/BB+/BB+ or below, excluding emerging market debt. Investment grade and broad market bonds are represented by the Barclays Aggregate Bond Index includes most U.S. traded investment grade bonds, including Treasury securities, government agency bonds, mortgage-backed bonds, corporate bonds, and a small amount of foreign bonds traded in U.S. Treasuries are represented by the Barclays Capital U.S. 7-10 Year Treasury index, which measures the performance of U.S. Treasury securities that have a remaining maturity of at least seven years and less than 10 years. TIPS are represented by the Barclays U.S. Government Inflation-linked Bond Index, which includes publicly issued, U.S. Treasury inflation protected securities that have at least 1 year remaining to maturity. Commodities are represented by the S&P GSCI is a world-production weighted index designed to track investable commodities representing the price movements of the world economy.