MARKET COMMENTARY: FOURTH QUARTER 2018

EXECUTIVE SUMMARY

While 2017 felt like a golden year with positive returns and historically low volatility, we experienced a resurgence of stock market volatility in 2018. Whether it be from the Fed hiking interest rates, China trade war and tariff fears, Brexit challenges or other factors, investor uncertainty elevated, which negatively impacted stock markets. Despite all this, we still saw indicators that the US economy was on positive footing in 2018, such as historically low unemployment and increased GDP levels.

MARKET SPOTLIGHT: NOWHERE TO HIDE

This past December, the long-running bull market finally came to a halt—and some investors, perhaps for their first time since 2008, arguably found themselves in bear market territory (as defined by an approximate 20 percent drop from the S&P 500's all-time high on September 20).

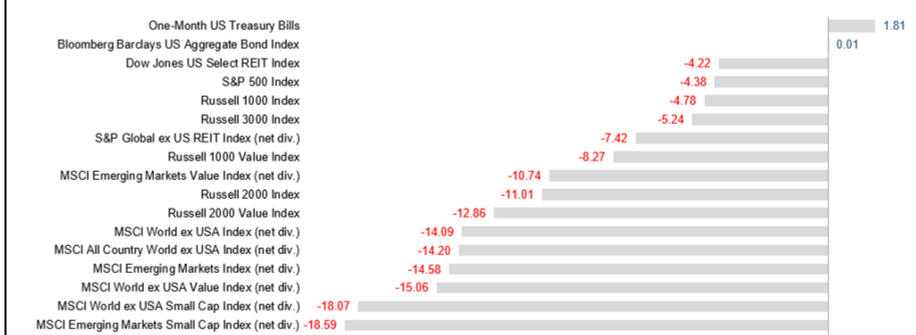
Earlier in the year, we saw plenty of excitement with the Bitcoin craze. The e-currency ran up in price to $20,000 per coin, before plummeting to $3,800. 2018 was a particularly frustrating year for investors as weakness across all asset classes made it difficult to find any respite from losses. This was a rare occurrence though, given when you look back over the past 93 years, there were only two years where both US stocks and bonds ended the year in negative territory (1931 and 1969). This past year narrowly avoided the same fate as bonds finished the year at +0.01 percent, measured by the Barclays Aggregate Index. Of those two years, the most similar to 2018 seems to be 1969—at which time stocks fell -8.5 percent and bonds fell -0.7 percent. The following year (1970) stocks rebounded 3.9 percent, compared to 16.9 percent for bonds, and over the following three years, stocks returned 10.1 percent, compared to 12.2 percent for bonds.

Not only were markets negative in 2018, but they could be emotionally draining as volatility increased. According to BlackRock, since 1950 the average number of +/- 2 percent trading days is 11. In 2018, we navigated 20 trading days with movements of that magnitude. While this is above a 68-year average, there have been years in recent memory that've been far more volatile, including

KEY TAKEAWAYS FOR INVESTORS

- Stocks were negative across the board, while bonds were slightly positive.
- Volatility was higher than normal but has been more extreme in the past.

WORLD ASSET CLASSES
2018 Index Returns (%)



Source: https: my.dimensional.com – DFA 2018 Annual Market Review
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2001 (25 days), 2002 (52 days), 2008 (72 days), 2009 (55 days), 2010 (22 days) and 2011 (35 days). We've benefited from a calmer market since 2012 and as a result, investors may have become accustomed to low volatility. It's likely, though, that investors experienced losses this past year. At The Mather Group, we encourage those in that situation to stay the course, and, when possible, we look to use pullbacks as an opportunity to harvest losses or rebalance a portfolio to buy assets at a discount.

DOMESTIC EQUITY PERSPECTIVE

There have been 32 bear markets since 1900, which averages one just about every 3.5 years. So far, the current decline of just under 20 percent is far from the 86 percent drop in the 1930s, or the 57 percent drop from 2008 to early 2009. Still, it's possible there could be further downside. With the government shutdown, trade wars, a rapidly growing federal deficit, political uncertainty and the looming possibility of a recession, investors are understandably nervous about the near-term future.

KEY TAKEAWAYS FOR INVESTORS

- Thanks to stock market volatility, some investors remain worried about the future, but the economy looks like it is still strong.
- The US market lagged international markets in the fourth quarter.
- Following a pullback of over 10 percent, stock markets historically tend to have positive returns.

However, the stock market is not a total representation of the US economy as a whole, and the economy still appears to be on strong footing, measured by several metrics. Manufacturing readings from December eased to a 53.8 reading, which is still expansionary. On the flipside, though, optimism is at a 15-month low despite exports being at their best level in 12 months. Amidst the global slowdown, the Institute for Supply Management index (ISM) reported that manufacturing slowed even more significantly, pulling back to 54.1 from 59.1. New orders also fell to 51.1, which is barely above the neutral 50 level.

S&P 500 VALUATION MEASURES

Valuation Measure	Description	Latest	25-Year Average*	Std. Deviation Over-/Under-Valued
P/E	Forward P/E	14.4x	16.1x	-0.5
CAPE	Shiller's P/E	29.0	26.8	0.3
Div. Yield	Dividend Yield	2.3%	2.0%	-0.8
P/B	Price to Book	2.7	2.9	-0.3
P/CF	Price To Cash Flow	10.6	10.7%	0.0
EY Spread	EY Minus Baa Yield	1.8%	-0.1%	-1.0

Source: FactSet, FRB, Robert Shiller, S&P Thomson Reuters, J.P Morgan Asset Management, Guide to the Markets as of December 31, 2018
*P/CF is a 20-year average due to cash flow availability.

ISM non-manufacturing readings moderated as well but remain solidly in expansionary territory as new orders posted one of the strongest readings in 10 years. Similarly, Purchasing Managers' Index (PMI) services were stronger than expected, but are expanding at a slower rate. Employment remains on solid footing as nonfarm payrolls had one of the strongest reports of the entire economic expansion in December, though jobless claims did trend higher to end the year before pulling back near the lows. Wage increases stand at about +3.2 percent year over year, which attracted workers into the job market. This caused the unemployment rate to rise to 3.9 percent from 3.7 percent.

Trade and other concerns have lowered expectations for consumer confidence and small business optimism, but readings are still elevated as current conditions have been favorable, with GDP tracking a healthy 3.4 percent quarter-over-quarter increase. However, 2018 GDP data that's scheduled to be released January 30 won't be issued if the shutdown continues much longer, which may distort the economic picture.

A big disappointment for the US economy in 2018 was the US housing market. New home sales, pending home sales and existing home sales all fell in December with existing home sales down -7 percent year over year. Additionally, a rebound is not anticipated with mortgage rates heading higher in correlation with rising interest rates. Despite market weakness, the US economic expansion remains intact and is now the second-longest in history at 114 months.

DOMESTIC MARKET RETURNS		
Equity Index	Q4 Return %	2018%
S&P 500	-13.52%	-4.38%
Dow Jones Industrial	-11.31%	-3.48%
NASDAQ	-16.48%	-0.29%
Russell 2000	-20.20%	-11.01%

Source: BlackRock Benchmark Returns Comparison as of December 31, 2018

Diving into performance, the US equity market posted the worst returns in December since 2009. The S&P 500 fell -13.5 percent in the fourth quarter, which lagged other developed and emerging markets. For the year, the S&P 500 ended the year down -4.4 percent, ending a run of nine consecutive years of positive returns. Within large-caps, growth was almost flat for the year at -0.01 percent, compared to -8.95 percent for value. Small-cap companies measured by the Russell 2000 were even weaker, down -20.20 percent in the quarter and down -11.01 percent for the year. Within small-caps, growth continued to lead only down -9.31 percent for the year compared to -12.86 percent for value. Diving into Dow Jones US sector performance, Utilities and Consumer Goods were the top performers for the quarter at +0.78 percent and -9.75 percent, respectfully. But Healthcare took over leadership at +6.25 percent for the year, surpassing Technology (now negative), Consumer Services and Utilities. The weakest sector was clearly Energy at -25.15 percent for the quarter and -18.91 percent for the year, amidst plummeting oil prices.

Despite market weakness, it seems the US economy is continuing to grow, but nobody can predict whether the markets will recover in 2019 or fall further. Looking forward, it's important to maintain perspective and keep in mind how markets have historically performed after a major pullback. According to research by Dimensional Fund Advisors, after a decline of 10 percent or more, equity returns over the subsequent 12 months have been positive 71 percent of the time, compared to 72 percent of the time in other developed markets.

INTERNATIONAL EQUITY PERSPECTIVE

Much like the US stock markets in 2018, there was plenty of weakness in international stocks, thanks to several contributing factors. In 2017, we were amid a synchronized global growth environment, but in 2018 growth slowed with lower expected global earnings. In developed markets, geopolitical headlines like Brexit, along with fiscal issues in southern Europe, and concerns that Germany could be sliding into a recession contributed to uncertainty. Furthermore, central banks began pursuing a normal interest rate policy, which looks to ween markets off easy money policies. Emerging markets were especially impacted by the continuing trade war and resulting slowdown in China.

KEY TAKEAWAYS FOR INVESTORS

- The selloff in international markets was widespread with 71 percent of stocks in MSCI ACWI 20 percent below their 52-week highs.
- 46 of 47 countries in the MSCI ACWI universe had negative returns for the year.
- Emerging markets outpaced the rest of the world in the fourth quarter, supporting that it remains important to be globally diversified.

The Morgan Stanley Capital International (MSCI) World Index ex-US fell -12.78 percent in the fourth quarter and fell -14.09 percent for the year. Global weakness was widespread with 46 of 47 countries posting negative returns for the year. Not only were markets negative, but the selloff was broad based with 71 percent of stocks in the universe trading 20 percent below their 52-week highs. According to MSCI ACWI, no developed markets had a positive return and only Qatar (+27.1 percent) had a positive return within emerging markets. Developed international stocks measured by MSCI Europe, Australasia and Far East (EAFE) fell -12.54 percent in the fourth quarter and -13.79

percent for the year. Of developed countries, Germany was one of the worst performers as they fell -22.17 percent for the year followed by Italy at -16.72 percent. Singapore and Hong Kong were two of the better performing areas, only down -9.37 percent and -7.83 percent, respectively.

Q4 INTERNATIONAL MARKET RETURNS		
Index	Q4 Return %	2018 Return %
World, ex-USA	-12.78%	-14.09%
Europe, Australasia and Far East (EAFE)	-12.54%	-13.79%
Europe	-12.72%	-14.86%
Japan	-14.20%	-12.58%
Emerging Markets	-7.47%	-14.58%
China	-10.73%	-18.75%

Source: BlackRock Benchmark Returns Comparison as of December 31, 2018

Emerging markets measured by MSCI Emerging Markets (EM) outpaced the rest of the world in the fourth quarter, only falling -7.47 percent, but down -14.58 percent for the year. Within the more popular emerging market countries, China and Korea were the weakest performers, down -18.75 percent and -20.01 percent for the year. Brazil and Russia held up much better, only down -0.99 percent and -2.04 percent, outpacing most of the world in 2018.

It's important to reiterate the importance of global diversification. This is illustrated by the fact that over the past 20 years, US equity markets have only outperformed half of the time. In a decade such as 2000 to 2009, the S&P 500 recorded its worst-ever 10-year cumulative total return of −9.1 percent, the MSCI World ex USA Index returned 17.5 percent, and the MSCI Emerging Markets Index returned 154.3 percent. That is a long period to experience underperformance if you're not globally diversified. The argument for investing in foreign markets remains attractive from a valuation perspective. Emerging markets are trading at a forward price-to-earnings ratio of 10.5, which is below the historical average of 11. Developed international is trading at 13.0 ratio, compared to a historical average of 13.8. From a qualitative standpoint, population growth has been twice that of developed markets, while labor productivity growth is projected to be higher in emerging markets than anywhere else, based on research by the World Bank. With those trends, it seems it would be an oversight to not have money invested in those potentially promising areas.

FIXED-INCOME PERSPECTIVE

While most fixed income assets were in the red for 2018, short-term bonds were the silver lining, providing positive returns. As outlined in prior commentaries, The Mather Group has continued to hold a material portion of fixed income exposure in short-duration bonds, which helps protect portfolios from rising interest rates.

As we've discussed, there weren't many places to hide in 2018. Historically, when equity markets suffer, fixed income acts as a ballast. Despite healthy corporate earnings, strong GDP growth and inflation in line with the Fed's 2 percent target, bond returns were in the red, with few exceptions. Underwhelming bond performance can be attributed to rising interest rates, which lowers bond prices, creating a negative price return, which is exacerbated the longer you are on the yield curve (i.e., long-term or long-duration bonds suffer most from rising interest rates).

KEY TAKEAWAYS FOR INVESTORS

- Short-term bonds were the silver lining, posting positive returns for the year
- Rising interest rates are the main driver of poor fixed income performance
- Short-duration bonds can benefit from yield pickup and help mitigate against price deterioration
- The yield curve continues to flatten as the Fed moves towards monetary policy normalization
- In this environment, we work with clients to maintain a focus on higher quality bonds (given elevated corporate leverage) and short-term bonds held to maturity (given rising rates).

Fixed Income Performance					
	4Q18	2018	2017	2016	2015
Broad Market Index					
Bloomberg Barclays US Aggregate Bond	1.64%	0.01%	3.54%	2.65%	0.55%
US Corporate Index					
Corporate Short	0.47%	0.55%	1.73%	2.08%	0.19%
Corporate Intermediate	0.86%	-1.75%	3.71%	3.23%	-0.26%
Corporate Long	0.21%	-5.53%	9.74%	6.05%	-2.58%
Corporate High Yield	-4.34%	-0.57%	6.47%	13.30%	-4.01%
US Government Index					
Government Short	1.11%	0.44%	0.56%	0.55%	0.17%
Government Intermediate	1.97%	-1.10%	1.58%	0.89%	0.49%
Government Long	4.21%	-6.80%	8.40%	1.18%	-1.10%
Inflation-Protected Securities	-0.95%	-1.91%	2.72%	4.59%	-2.36%
US Municipal Index					
Muni National Short	0.72%	0.75%	1.69%	-0.15%	0.70%
Muni National Intermediate	1.19%	-0.16%	4.61%	-0.20%	2.50%
Muni National Long	1.09%	-0.76%	5.71%	0.00%	3.07%
Muni High Yield	0.19%	1.27%	7.38%	0.90%	4.09%
Non-US Index					
Emerging Market Debt	-0.73%	-5.88%	10.25%	10.51%	-5.99%
International Bond	0.27%	-2.52%	6.87%	3.63%	-4.00%

Source: Morningstar, Inc. Data as of 12/31/2018

Fourth-quarter fixed income results were positive across the board, with few exceptions. While equity markets slid from their September 20 highs, bonds rallied to recoup much of their previous losses, as investors moved capital from higher risk investments such as equities and high-yield corporate bonds, to lower risk assets, such as government and higher-quality bonds. In the fourth quarter, US Government bonds were a bright spot, with short, intermediate and long-term government bonds posting 1.11 percent, 1.97 percent and 4.21 percent, respectively. Municipal bonds also showed strength, posting slightly stronger returns than Corporate bonds, which also were in positive territory. The laggards in the fourth quarter were Corporate High Yield, Inflation Protected Securities and Emerging Market (EM) Debt, with returns of -4.34 percent, -0.95 percent and -0.73 percent, respectively.

Last year's bond returns suffered from rising US interest rates, while strong corporate earnings and healthy economic fundamentals, in part, acted positively as a counterweight. Bond leaders for the year, were Muni High Yield, Muni National Short, Corporate Short and Government Short, posting, 1.27 percent, 0.75 percent, 0.55 percent and 0.44 percent, respectively. Short duration bonds historically perform better in a rising interest rate environment on two fronts. The first being that cash from maturing bonds can be reinvested at higher rates, the second being that short-term bonds have lower durations, which results in lower interest rate risk. So as rates rise, the negative price effect is less impactful than it would be for longer term bonds. Bond laggards for 2018 were Government Long, Emerging Market Debt, Corporate Long, International Bond, Inflation Protected Securities, Corporate Intermediate and Government Intermediate, posting returns of -6.80 percent, -5.88 percent, -5.53 percent, -2.52 percent, -1.91 percent, -1.75 percent, and -1.10 percent, respectively. EM debt has suffered, in part, from local EM currencies depreciating relative to the US dollar, due, in part, to the Fed raising interest rates, which strengthens the dollar relative to these currencies. Higher US interest rates create competition for EM debt, as investors can now receive decent low-risk returns with US short-duration bonds and avoid the duration and default risk of EM debt.

We work with clients to focus on shorter duration bonds to benefit from yield pickup and help mitigate against price deterioration as the Fed continues monetary policy normalization. Even in the face of below average and even negative bond returns, we should remember that fixed income plays an essential role in our overall long-term investment allocation—providing diversification benefits and a predictable stream of cashflow.

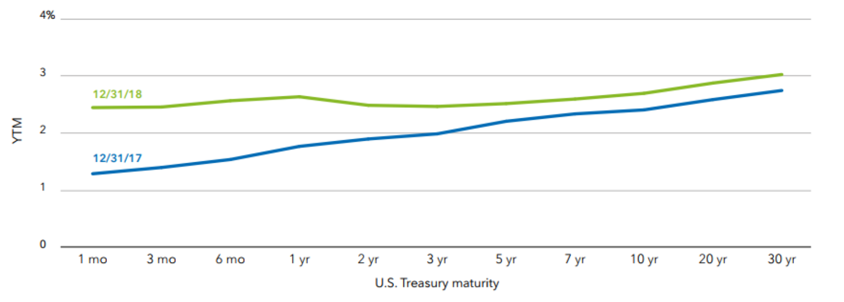
The Fed was quite active in 2018, raising rates by a total of 1 percent through four rate hikes, with the December hike bringing rates to 2.25 - 2.50 percent. This is the ninth interest rate increase since December of 2015—a tactic the Fed's using to curb strong economic growth, while simultaneously warding off the potential for excessive inflation. Currently, US inflation is near the Fed's 2 percent target. While the Fed had espoused a fairly hawkish tone throughout 2018 on continued rate hikes, the Fed expressed a patient tone in January, stating "We are in a place where we can be patient and flexible and wait and see what does evolve."

However, Fed Chairman Jerome Powell reiterated plans to substantially reduce the central bank's balance sheet, but it'll likely remain bigger than it was before the 2008 financial crisis, which was approximately $900 billion. At its peak, the balance sheet was at $4.5 trillion, and has tapered down to $4.1 trillion.

The Bank of England (BoE) voted unanimously to hold its bank rate at 0.75 percent in December, due primarily to increased Brexit uncertainties, coupled with subdued inflation expectations given falling oil prices. The European Central Bank (ECB) held rates at 0 percent in December and stated the end of its €2.6 trillion bond purchase program but will continue to reinvest cash from maturing bonds. The Bank of Japan (BoJ) held rates at -0.10 percent in December and remains optimistic about its domestic economy despite slowing economic growth in China. The US dollar continues to strengthen relative to the British pound and the euro but weakened relative to the Japanese yen.

The US Treasury yield curve continues to flatten as short-term interest rates are increasing at a faster rate than the long end of the curve. The 10-year treasury topped out at 3.24 percent in November and fell to 2.69 percent to end the year. The 10-year minus the 2-year treasury rates hit a new low below 20 basis points, while other areas of the yield curve have begun to invert. Yield curve inversions (i.e., short-term rates higher than long-term rates) historically have predicated recessions. It's important to note that the average length of time between yield curve inversion and an actual economic recession is on average two years. The yield curve inverted in December of 2005, and the economy entered a recession two years later in December 2007. We'll continue to closely monitor this development.

Yields have risen, especially on the short end



Source: U.S. Treasury.

The Bloomberg Barclays US Aggregate Bond Total Return Index, which is a proxy for the overall US bond market, similar to that of the S&P 500 for US equities, was flat for the year, posting a 0.01 percent return, but rallied in the fourth quarter 1.64 percent to do so.

The Mather Group will continue to keep a close eye on these market developments and implement rebalancing strategies for our clients, as needed. We'll remain vigilant as the year progresses, keeping you informed along the way.

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