

INVESTMENT STRATEGY OUTLOOK

Q4 2018

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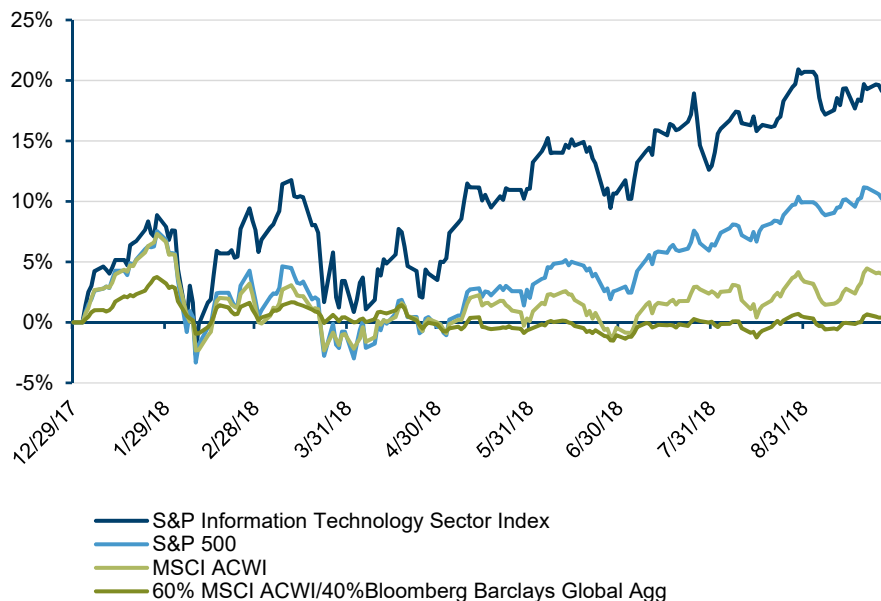
OCTOBER 2018

DIVERSIFICATION DISAPPOINTS

If “Asset Allocation Concepts” were a topic on the game show *Family Feud*, the number one answer on the board would be “Diversification”, but 2018 has felt like a year in which diversification has been associated with the big, ugly sound effect accompanying a red “X”. For this quarter’s investment strategy outlook, we look at the different ways that diversification has struggled in 2018, and offer thoughts on the future.

Diversification is one of the guiding principles of portfolio construction. Why buy a single stock when you can buy a sector? Why buy a sector when you can buy a U.S. stock portfolio? Why buy a U.S. stock portfolio when you can buy a global stock portfolio? Why buy a global stock portfolio when you can buy a global balanced portfolio? And on and on, but market performance year to date has subverted this well-established approach (exhibit 1).

Exhibit 1: 2018 YTD Total Return

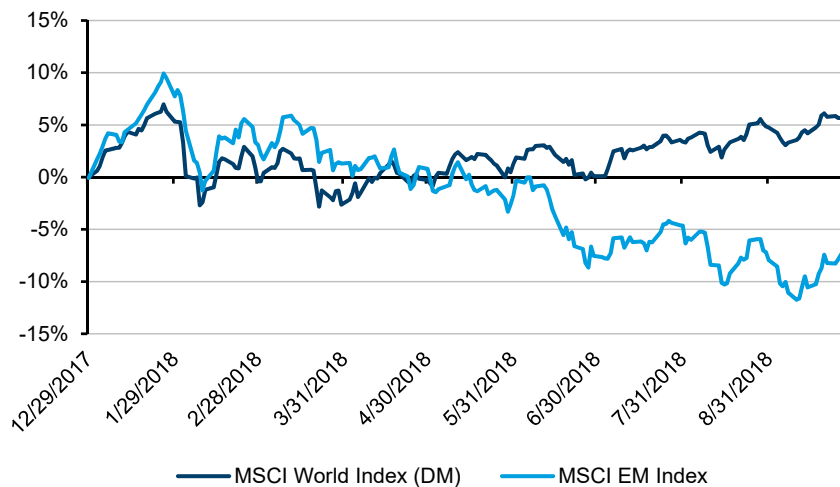


Source: Columbia Threadneedle Investments as of October 8, 2018

U.S. Technology stocks have led the market with a 20% return. The S&P 500 Index has been up a little over 10%, with the S&P ex-Technology up 7%. As we write, the MSCI ACWI Index is up 2%, but ex-US, the ACWI and the Barclays Global Aggregate Index are in negative territory, down 3% and 2%, respectively. The flat return from a global stock and bond portfolio is a disappointing result in the context of strong top line corporate earnings. Whether talking about traditional long-only equity portfolios, or asset allocation portfolios, the common refrain this year has been “diversification is not working”.

A number of factors are driving this unhappy outcome, but one common pain point for both stocks and bonds has been Emerging Markets (EM) as an asset class. The MSCI Emerging Markets Equity Index allocation to Asia is more than 70%, which means a significant exposure to China and other countries linked to the large Chinese economy. This exposure clearly began to weigh on EM performance as tariff rhetoric between China and the U.S. increased, creating a large gap between Emerging Market and Developed Market equity, which has yet to close (exhibit 2).

Exhibit 2: 2018 YTD Total Return

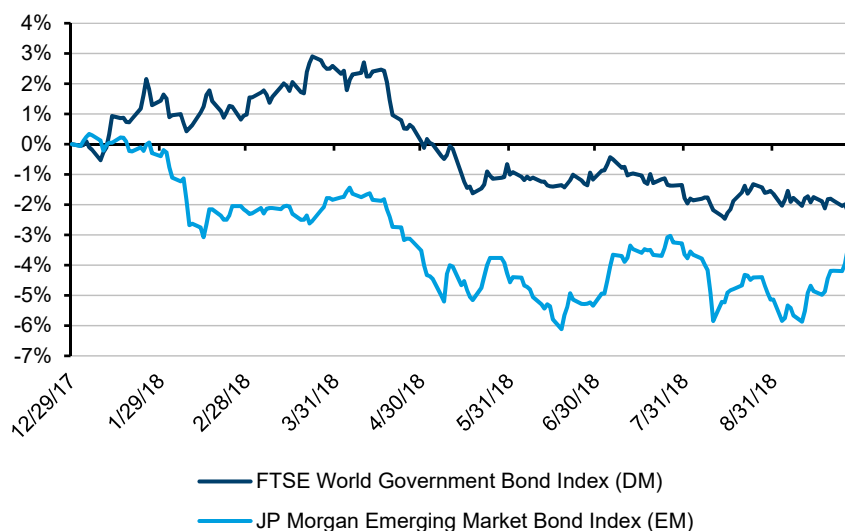


Source: Columbia Threadneedle Investments as of October 8, 2018

Looking at Emerging Market debt, we see a gap in performance that precedes trade issues. The country constituents of the JP Morgan EMBI Index (a common proxy for EM debt) differ substantially from its equity counterpart. Latin America, overall, has a much larger weight in the fixed income index, and Argentina, which has struggled this year with currency volatility, is weighing on index performance. The Turkish lira grabbed headlines as well this year, as have Turkey's struggles

with rampant inflation and huge currency fluctuations, which have also weighed on EM debt performance (exhibit 3).

Exhibit 3: 2018 YTD Total Return

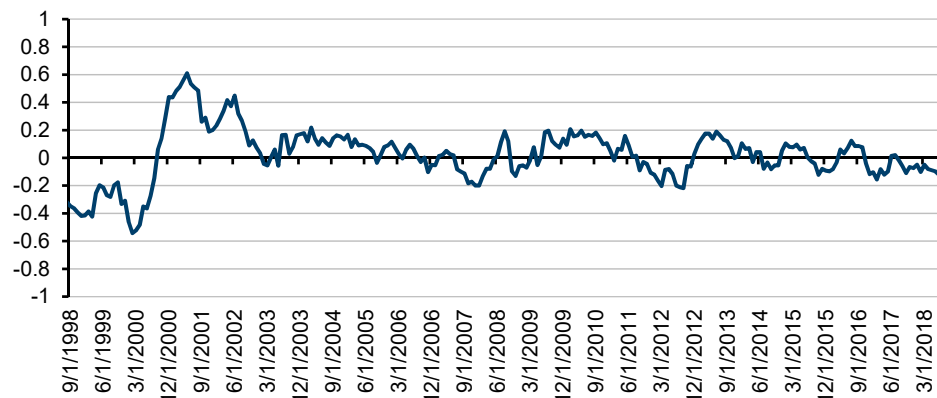


Source: Columbia Threadneedle Investments as of October 8, 2018

We can see a consistent story here: concentration, not diversification, has been rewarded in 2018. U.S. portfolios concentrated in a few key stocks (or Tech stocks), global portfolios concentrated in U.S. stocks, and asset allocation portfolios concentrated in equities have all been rewarded. Measuring the concentration of asset class performance is an important tool for understanding the historical context of the conditions that we have seen in 2018 (i.e., how unusual are the levels of narrow performance that we are seeing right now?) One tool that can help us measure the breadth of market performance is a diffusion index, which can be calculated as follows:

$$\frac{\text{Securities ahead of the Index} - \text{Securities behind the Index}}{\text{Securities ahead of the Index} + \text{Securities behind the Index}}$$

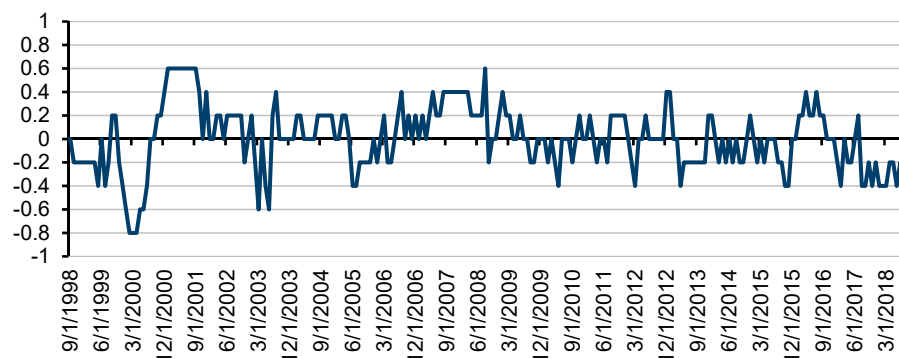
This measure can be used whether looking at individual stocks or broad assets in an asset allocation portfolio. When the measure is high, more than half of the securities or assets are doing better than the index, and when the measure is low, less than half are doing better than the index. Applying this tool, we can look at the historical level of concentrated performance among U.S. stocks using the S&P 500 Index as a proxy for the asset class (exhibit 4).

Exhibit 4: U.S. Stock Diffusion

Source: Columbia Threadneedle Investments as of October 8, 2018, based on rolling nine-month S&P 500 data calculated on a monthly basis.

In the context of the last 20 years, narrowness in the current market is equivalent to levels last seen in 2012. The only time levels were lower was during the tech run-up of the late 1990s, which reversed in spectacular fashion to the highest diffusion index readings over the 30-year historical period.

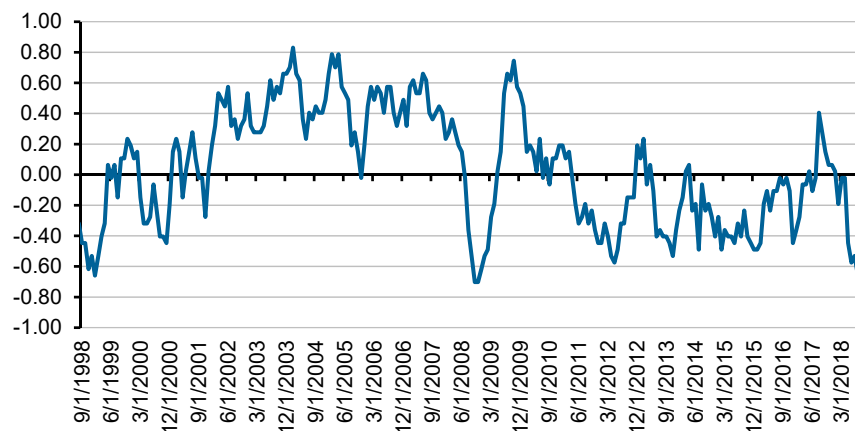
The sector version of the chart tells a similar story, both in terms of the current readings and the lows and highs prior around the tech bubble. In exhibit 5, we look at the 10 GICS sectors of the S&P 500 Index (excluding Real Estate for the purposes of extending the data history). While not at the historic lows seen in 2000, the current environment reflects the dominance of the tech sector since 2017.

Exhibit 5: U.S. Sector Diffusion

Source: Columbia Threadneedle Investments as of October 8, 2018, based on rolling nine-month S&P 500 data calculated on a monthly basis.

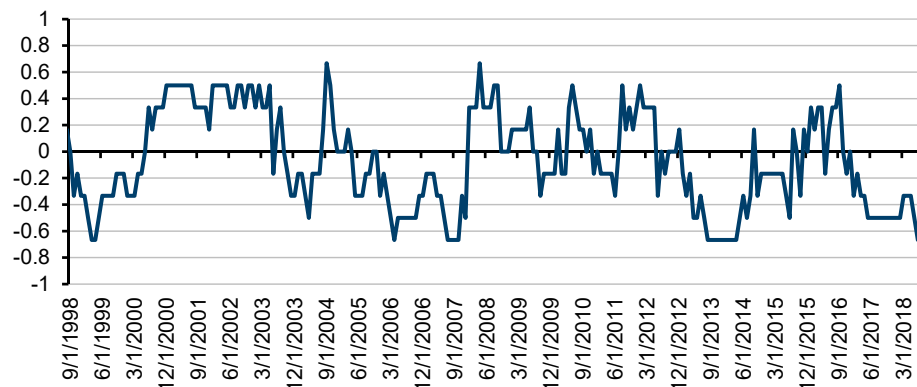
We can also apply a diffusion index at the country level, looking at the Developed and Emerging Market countries that comprise the MSCI ACWI Index. Here, looking at data going back to the 1990s, we are at near-historic low levels, which is consistent with our observations on the outperformance of the U.S. relative to most other markets and the underperformance of Emerging Markets relative to Developed Markets (exhibit 6).

Exhibit 6: Country Diffusion



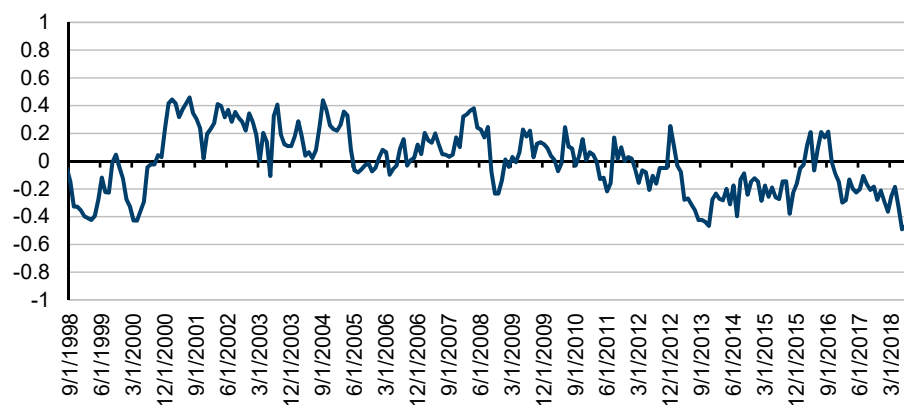
Source: Columbia Threadneedle Investments as of October 8, 2018, based on rolling nine-month MSCI ACWI data calculated on a monthly basis.

From an asset allocation perspective, we look at 12 different asset classes that frequently comprise a multi-asset approach: US Equity, International Developed Equity, Emerging Equity, US Treasuries, International Developed Treasuries, Emerging Market Bonds, US Investment Grade, US Mortgage-Backed Securities, US High Yield, Global Inflation-Linked Bonds, REITS and Commodities. The sum total of this analysis reveals a narrow market at a level not seen since 1998 (with a slight improvement in September). In this environment, a diversified approach suffered and any kind of risk allocation strategy – which favors lower volatility assets, such as bonds, against higher volatility assets, such as equity – will also have underperformed (exhibit 7).

Exhibit 7: Asset Diffusion

Source: Columbia Threadneedle Investments as of October 8, 2018, based on rolling nine-month data for the MSCI USA Index, MSCI EAFE Index, MSCI EM Index, Bloomberg Barclays US Treasury Index, FTSE WGBI x-US Index, JPM EMBI Global Index, Barclays US Corporate Index, Barclays US High Yield Index, Bloomberg Barclays US Mortgage-backed Securities Index, Bloomberg Barclays Global TIPS Index, FTSE NAREIT Equity REIT Index, Bloomberg Commodity Index, calculated on a monthly basis. Please see endnotes for index definitions.

Taking an equal-weighted average of our four diffusion indices together (stock, sector, country, asset), we can see that that the overall index is at a historic low (exhibit 8).

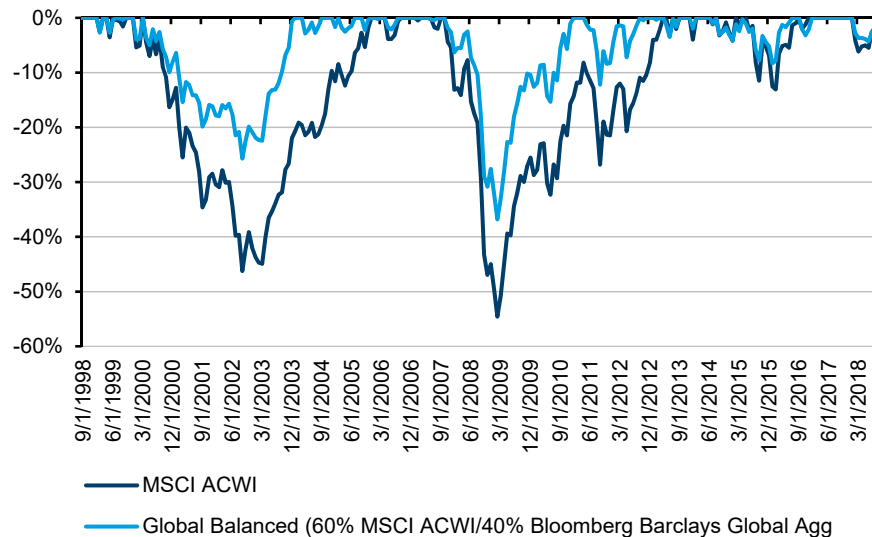
Exhibit 8: Combined Diffusion

Source: Columbia Threadneedle Investments as of October 8, 2018 based on rolling nine-month data calculated monthly. A simple average was applied to stock, sector, country, and asset data described earlier.

We belabor the point: diversification has not been working. The obvious question is what does one do from here? Should investors expect current conditions to persist and concentrate their positioning in U.S. equity? That is certainly not our

view. Of all the arguments for diversification, the one we believe is most important to remember in this environment is drawdown protection. Comparing the historical drawdown of the MSCI ACWI Index with that of a hypothetical global balanced portfolio of 60% MSCI ACWI and 40% Barclays Global Aggregate is instructive on this point (exhibit 9).

Exhibit 9: Drawdown of MSCI ACWI vs. Global Balanced



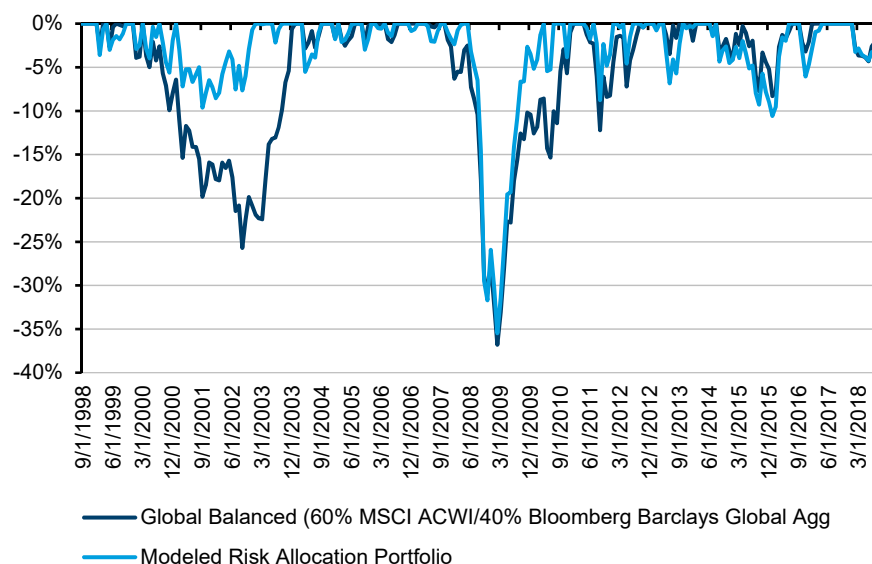
Source: Columbia Threadneedle Investments as of October 8, 2018. Data for the hypothetical 60/40 portfolio was calculated by retroactively applying monthly rebalancing and reinvestment of income and capital gains to historical index data with the benefit of hindsight. It does not represent the actual investment decisions of the advisor or the effect material economic, market factors or other factors may have had on decision-making during the period if the adviser had actually been managing client assets.

The fact that equities were in both portfolios resulted in largely concurrent drawdowns, but observe the beneficial impact of diversification in mitigating the drawdowns. At the end of the tech bubble, the comparative drawdown is 46% down for the MSCI ACWI Index versus only 26% for the diversified global balanced portfolio. During the 2008 financial crisis, the ACWI had a drawdown of 55% relative to 37% down for the global balanced portfolio.

Risk allocation, which assigns portfolio weights based on historic asset risk levels and may have a leveraged bond component, could further improve upon the drawdown benefit offered by a global balanced portfolio. In exhibit 10, we look at the drawdown of our hypothetical 60% MSCI ACWI /40% Bloomberg Barclays global aggregate portfolio and a static risk allocation (see note below on methodology). As shown below, the bonds and other asset classes meaningfully mitigated drawdown in the early 2000s. The benefit of this diversified risk allocation approach is less evident in the Global Financial Crisis, but the

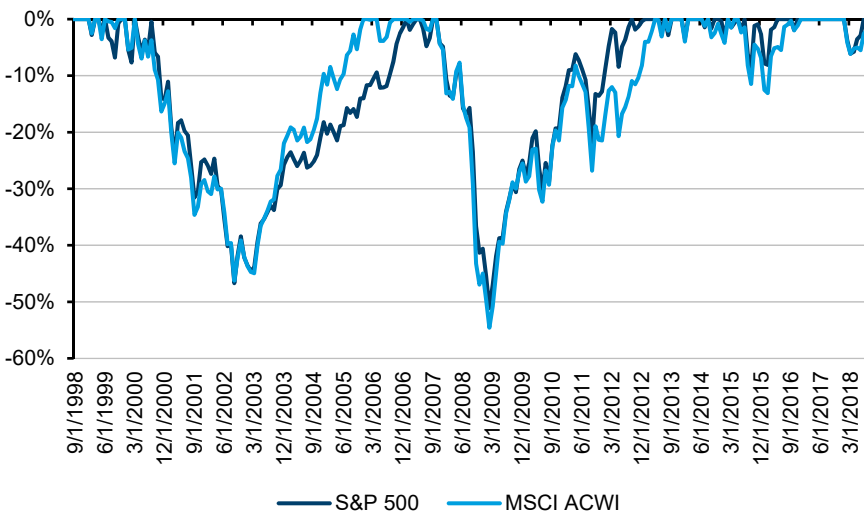
recovery from the depths of the drawdown occurred more quickly, benefitting the long-term results for the risk-balanced investor.

Exhibit 10: Drawdown of Hypothetical Global Balanced Portfolio and Modeled Risk Allocation Portfolio



Source: Columbia Threadneedle Investments as of October 8, 2018. The Modeled Risk Allocation portfolio was constructed using the following indices and weights: 35% MSCI ACWI Index, 25% Bloomberg Barclays US Treasury Index, 25% WGBI ex-US Index, 8% JPM EMBI Global Index, 8% Bloomberg Barclays US Corporate Index, 15% Bloomberg Barclays US High Yield Index, 5% Barclays US Mortgage Backed Securities Index, 15% Bloomberg Barclays Global TIPS Index, 7% FTSE NAREIT Equity REIT Index, 7% Bloomberg Commodities Index, -50% US 3m Libor. Data for these hypothetical portfolios was calculated by retroactively applying monthly rebalancing and reinvestment of income and capital gains to historical index data with the benefit of hindsight. It does not represent the actual investment decisions of the advisor or the effect material economic, market factors or other factors may have had on decision-making during the period if the adviser had actually been managing client assets.

Coming full circle, we can look at the comparative drawdown of the S&P 500 Index (a proxy for an all U.S. stock portfolio) with the MSCI ACWI portfolio (a proxy for a global diversified equity portfolio) (exhibit 11).

Exhibit 11: Drawdown of S&P 500 vs. MSCI ACWI

Source: Columbia Threadneedle Investments as of October 8, 2018.

Here, we see a slight improvement in drawdown recovery for the more diversified global index in the 2004-2007 range, but not the same favorable outcomes we saw in exhibit 10, for example. This is where the related ideas of diversification for an all equity portfolio and asset allocation portfolio tend to diverge: the MSCI ACWI Index might be less concentrated than a US index, but that does not mean it is less risky. By including Emerging Markets and even Developed stocks in areas such as Europe, which have been higher beta than U.S. stocks, we are not reducing risk as we would by combining stocks and bonds together.

And so we get to our recommendation: diversify, particularly when it comes to asset allocation. 2018 has rewarded investors with concentrated bets in equities, and we will see these periods again. But unless one can perfectly time the ebbs and flows of the market, the risk of significantly greater drawdowns is increased by staying concentrated.

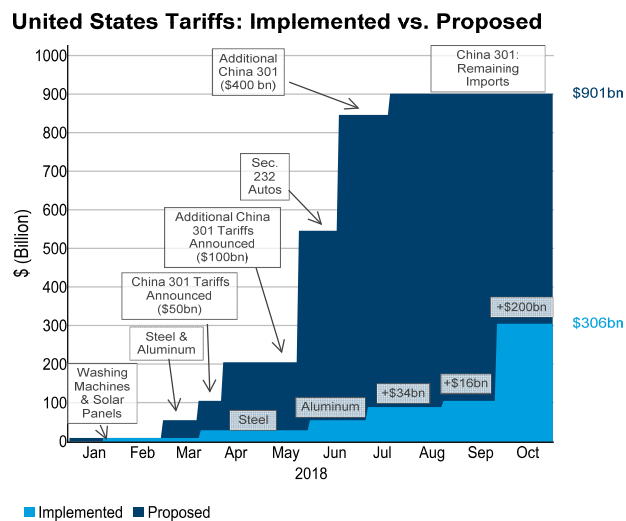
GROWTH VS TRADE: THE BATTLE CONTINUES

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Head of Multi Asset Strategy

Last quarter we wrote about the tug of war between strong U.S. growth and fears that an escalation of global trade tensions would impact future growth. There have been significant developments on the trade front since July. In addition to the previously announced tariffs on steel and aluminum imports, and section 301 tariffs on \$50b Chinese imports, on September 24, the Administration implemented tariffs on an additional \$200b worth of Chinese imports. Further escalation and imposition of tariffs on all Chinese imports is quite likely in the coming few months.

Exhibit 1: United States Tariffs: Implements vs. Proposed

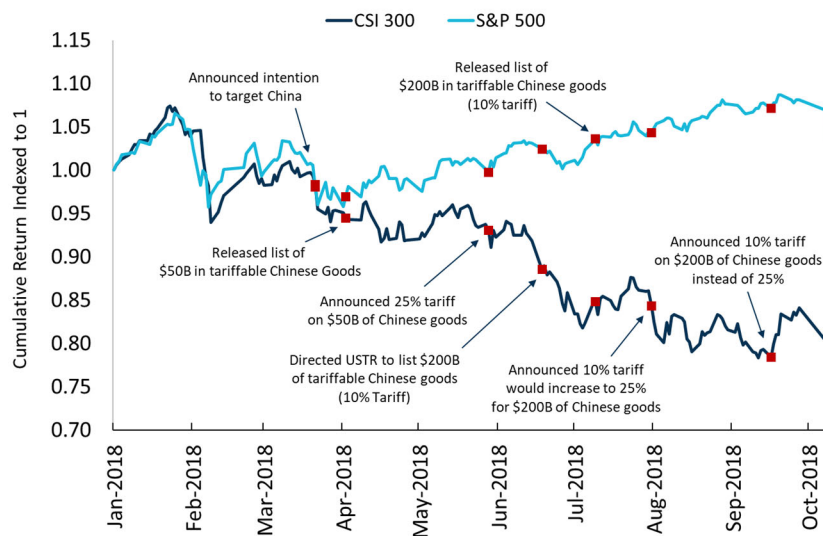


Source: Macrobond, Goldman Sachs Global Investment Research, USITC, Department of Commerce and Columbia Threadneedle Investments

The consensus top-down view on tariffs is that they will slow growth by approximately 0.2% in the U.S; the impact on inflation is also likely manageable. A complacent view may not be appropriate as the magnitude of implemented tariffs rise and tensions escalate. Tariffs are a tax on imports and will likely push up import prices for goods in the U.S., including intermediate goods, which go into the production of final goods and services sold to consumers and businesses. If producers in the U.S. elect to pass on the increased cost of inputs, then we should expect to see an increase in inflation. However, typically, firms faced with higher input costs try to find savings elsewhere or they try and absorb the increased costs. Therefore, import costs do not always equate to a one-to-one increase in the price of final goods and services. The market seems to have also concluded that, vis-à-vis tariffs, the U.S. is in a stronger position than the rest of the world,

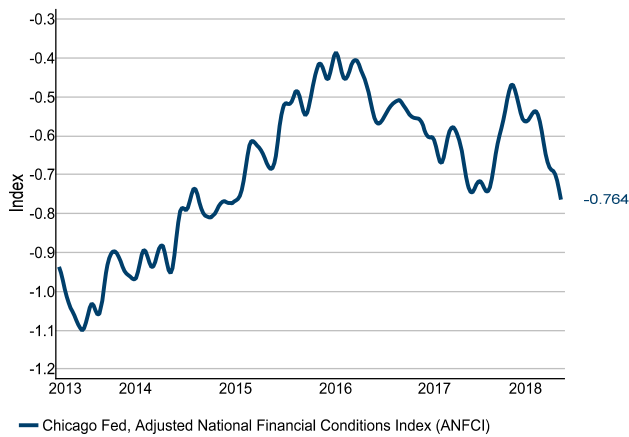
particularly China. This benign view of the economic impact on growth and inflation may not hold true when it comes to equity markets as the process of supply chain adjustment and input cost absorption may end up having a more meaningful impact on company earnings (see exhibit 2).

Exhibit 2: Growth of a Dollar/Yuan Invested in U.S. and Chinese Equity Markets



Source: Columbia Threadneedle Investments. CSI 300 is a capitalization-weighted stock market index designed to replicate the performance of top 300 stocks traded in the Shanghai and Shenzhen stock exchanges. S&P 500 used to represent U.S. equity markets.

Meanwhile, U.S. economic data continues to signal robust domestic growth despite trade tensions. Payroll growth remains strong and is steadily bringing down the unemployment rate. Forward-looking indicators of growth, such as the purchasing managers index (ISM), remain elevated and both consumer and business sentiment are high. Wage growth has picked up; however, at roughly 3%, wage growth is still moderate by historical standards. Federal Reserve (Fed) Board Chairman Jerome Powell recently commented that the economic environment could not get any better than this when growth is strong and inflation is moderate. The Fed also believes that there is little slack in the labor market at 3.7% unemployment rate, and is looking to raise the overnight rate steadily barring any exogenous shocks to the economy. So far, despite rising bond yields, escalating trade tensions, and a slowdown in growth globally, U.S. financial conditions have remained supportive. The Chicago Fed National Financial Conditions Index (adjusted) is at its lowest point over the past two years, signifying loose (or supportive) financial conditions.

Exhibit 3: Financial Conditions

Source: Macrobond, Federal Reserve Bank of Chicago and Columbia Threadneedle Investments
 Note: The ANFCI is constructed to have an average value of zero and a standard deviation of one over a sample period extending back to 1971. Positive values of the ANFCI have been historically associated with financial conditions that are tighter than what would be typically suggested by prevailing macroeconomic conditions, while negative values have been historically associated with the opposite.

Strong growth is likely to continue in the fourth quarter, before decelerating in 2019 as the positive impact of tax cuts and fiscal stimulus fade. However, trade tensions and increases in the Fed Fund rates are here to stay, and will likely be a source of continued market volatility in the near term.

The Bloomberg Barclays US Treasury Index includes public obligations of the U.S. Treasury.

The Bloomberg Barclays High Yield Index covers the universe of fixed rate, non-investment grade debt. Pay-in-kind (PIK) bonds, Eurobonds, and debt issues from countries designated as Emerging Markets (e.g., Argentina, Brazil, Venezuela, etc.) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, and 144-As are also included.

The Bloomberg Barclays U.S. Corporate Bond Index is a broad-based benchmark that measures the investment grade, U.S. dollar-denominated, fixed-rate, taxable corporate bond market.

The Bloomberg Barclays Global Inflation-Linked Index includes securities which offer the potential for protection against inflation as their cash flows are linked to an underlying inflation index.

Bloomberg Barclays Global TIPS Index consists of inflation-protection securities issued by the US Treasury. They must have at least one year until final maturity and at least \$250 million par amount outstanding

The Bloomberg Commodity Index is a broadly diversified index that allows investors to track commodity futures through a single, simple measure.

The Bloomberg Barclays Mortgage-backed Securities Index is a market value-weighted index which covers the mortgage-backed securities component of the Bloomberg Barclays U.S. Aggregate Bond Index is composed of agency mortgage-backed passthrough securities of the Government National Mortgage Association (Ginnie Mae), the Federal National Mortgage Association (Fannie Mae), and the Federal Home Loan Mortgage Corporation (Freddie Mac) with a minimum \$150 million par amount outstanding and a weighted-average maturity of at least 1 year. The index includes reinvestment of income.

The FTSE/NAREIT Index is an index that reflects performance of all publicly-traded equity REITs.

The FTSE 3-Month Treasury Bill Index is an unmanaged index that tracks short-term U.S. government debt instruments.

The FTSE World Government Bond Index (WGBI) is an index of bonds issued by governments in the U.S., Europe and Asia.

The JPMorgan EMBI Global Index tracks returns for actively traded external debt instruments in emerging market

The MSCI All Country World Index is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global Developed and Emerging Markets.

The MSCI USA Index is designed to measure the performance of the large and mid cap segments of the US market.

The MSCI EAFE Index captures large and mid cap representation across 21 Developed Markets countries* around the world, excluding the US and Canada.

The MSCI EM Index captures large and mid cap representation across 24 Emerging Markets (EM) countries.

The S&P 500 Index is a market-capitalization-weighted index of the 500 largest U.S. publicly traded companies by market value.

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