PCM
PEAK CAPITAL MANAGEMENT

# INSURMOUNTABLE

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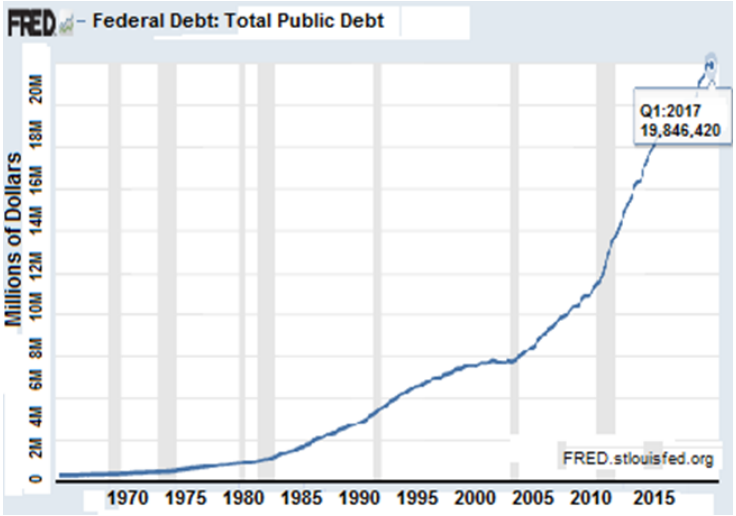
Financial headlines in September were dominated by the news that the debt of the U.S. government exceeded $20 trillion ($20T) once the President was able to sign legislation removing the debt ceiling until December 8, 2017. I think we are largely immune to the impact that large numbers represent. Our national debt represents more than $80,000 for every person over 18 years old in the U.S. It is enough $1 bills to reach from the Federal Reserve to the moon almost 6 times and if laid end to end would cover the circumference of the earth a mere 93 million times.

As many of you know, the $20T does not even tell the whole story. According to a recent report from the American Enterprise Institute the government has an additional $70 trillion in "off-balance debt." That would bring the per capita debt burden of every adult in the U.S. to nearly 20% of their lifetime earnings.




What is likely to become a crisis before the U.S. government debt is the debt and unfunded liabilities of State and local governments. According to a study by Moody's, these jurisdictions have accumulated more than $4 trillion in debt and they do not have the ability to print money like the Federal government. Many localities are entering a death spiral where taxes have to be raised to unsustainable levels to balance budgets which will only drive people to leave the area in search of lower taxes. The pain threshold is higher in places like California where you have beaches, mountains and high wages than Illinois, Ohio or Kentucky where wages are lower and taxes will are likely to continue to rise.

The pension problem will only grow worse when the next recession and bear market occur. The Moody's survey of 56 of the largest pension plans showed the average investment return in 2016 was 1% even though the plans project on average 7.5% annual returns. Pensions are decimated by the ultra-low interest rates since much of their portfolios are invested in fixed income. And contrary to popular opinion, interest rates are very unlikely to move much higher because the U.S. government simply cannot afford that.

***"How long can the world's biggest borrower remain the world's biggest power?"***
-Former Treasury Secretary Larry Summers

According to OMB data, the U.S. paid $315B in interest payments in the latest fiscal year. Every 1% increase in rates paid by the government increases debt service by $200B. The government spends 79% of its revenues on Social Security, Medicare and the military. Add the 8% spent on interest on the debt and that only leaves 13% of revenues to fund all other government programs. If the average rate paid rose just 2% from current levels it would mean debt service would increase 126% to over 10% of revenues.

***"Interest rates will remain low because they have to, not because anyone wants them to."***

Former Treasury Secretary Larry Summers famously stated, "How long can the world's biggest borrower remain the world's biggest power?" There was great optimism that policies promoted by the Trump administration would lead to higher economic growth and more revenues for the government. The suffocating impact of debt makes this unlikely, especially given the latest U.S. Treasury figures showing that debt grew 7.84% last year when the economy barely managed 2% growth.

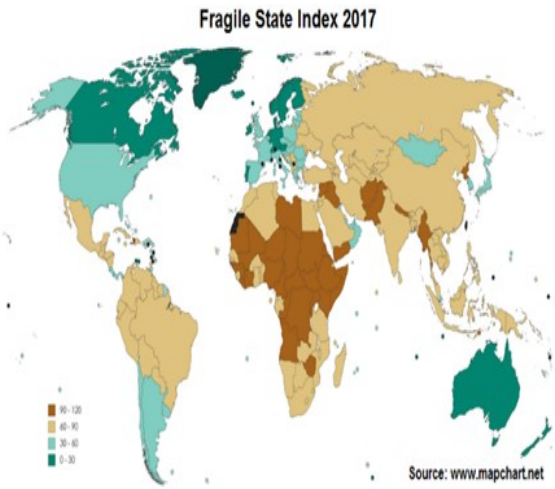
The Treasury department missed their opportunity to pay off the debt by investing some of the Social Security Trust funds into Bitcoins in 2009. It would have only taken about $600,000,000 invested in Bitcoins in October 2009 to pay off the $20T debt today. Joking aside, we are not recommending investing in a cryptocurrency, there are significant investment implications to today's debt.

First, long-term interest rates are going to remain low for much longer than most people expect. I do not believe we have seen the cycle low in rates that should occur during the next recession. Long duration bonds should continue to generate attractive returns and be an effective hedge against equity market risk for the foreseeable future.

Second, interest rate sensitive sectors like utilities and REIT's will continue to be attractive if rates remain low. This is particularly true when you consider that pension plans will need to take higher levels of risk to achieve target rates of return. Money should continue to flow into dividend paying stocks and high yielding equity investments.

Last, growth will be more difficult to achieve without financial engineering. Companies trading at high multiples based on projected future growth may not be able to achieve those targets and see their stock prices fall precipitously.

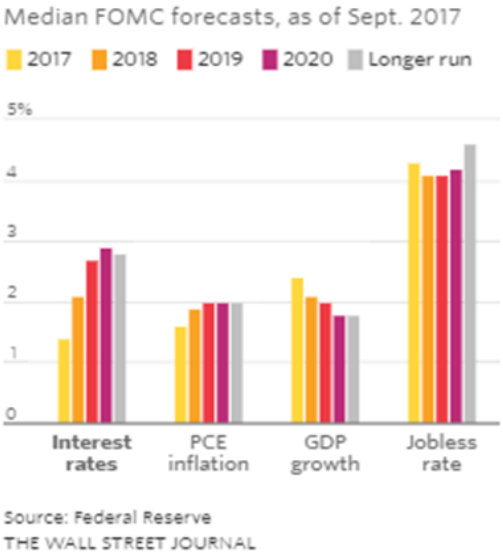
## Fault Lines




"Bull markets don't die of old age but are killed by Central Bankers." While the Fed may take the blame, the actual cause of economic deterioration is typically fragilities that are not accounted for. Foreign Policy magazine publishes an annual index called the Fragile State Index which analyzes 178 countries on 12 categories to determine how fragile a country might be. On this basis, the world is becoming more economically fragile with the greatest concern in some of the Eastern European countries. As noted in the introduction, rising global debt levels are contributing more to fragility than any other single measure. When the burden becomes too great, it only takes a single piece of straw to break a camel's back. The same may prove to be true economically.

- The United States ranks as just the 21st most sustainable nation among the list of 178 countries, trailing our northern neighbor Canada and most of the Scandinavian countries.
- Factors like deep political division, gridlock among national leaders, and public unrest and police violence hurt the U.S. score on indicators like group grievance and fictionalization.
- Countries scoring at the most fragile were predominately across the Sahel Belt of Africa and the Middle East. Haiti was the worst score in the Western Hemisphere and N. Korea was the worst in Asia.

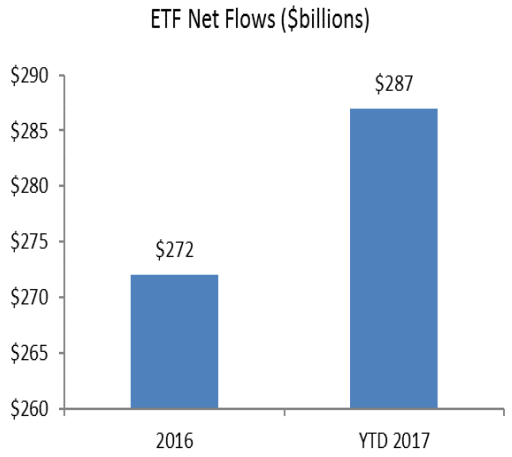
## Heartburn for Central Bankers




Central banks have made it clear that as economies stabilize, they anticipate inflation to tick up. This has held true historically and maintains academic merit. Traditionally, moderate inflation has moved in coordination with moderate economic growth as a result of increasing demand for goods and services. The recent dislocation between economic growth and low inflation is leaving central banks and investors in a quandary because conventional wisdom central banks typically lower rates to spur demand while falling rates are often a bellwether to investors of weak growth. This paradigm lends itself to the relationship and movement investors make between stocks and bonds. This confounds investors that often rotate based on risk. Possible causes include globalization and disruptive technology such as Amazon.

- In the second quarter of 2017, the U.S. economy grew at an annualized 3% while annual consumer price inflation as of July 2017 grew by 1.7% (Bloomberg)
- Japan's economy grew by 4% in annualized terms for the second quarter of 2017 while inflation is around zero (Bloomberg)
- Despite the traditional inverse relationship between stocks and bonds, both asset classes have witnessed appreciation in 2017 with the S&P 500 approaching 10% at times for the year and the 10 year Treasury gaining as much as 6% at times for the year while pushing the yield to around 2%.

## The Market Impact of ETF Flows

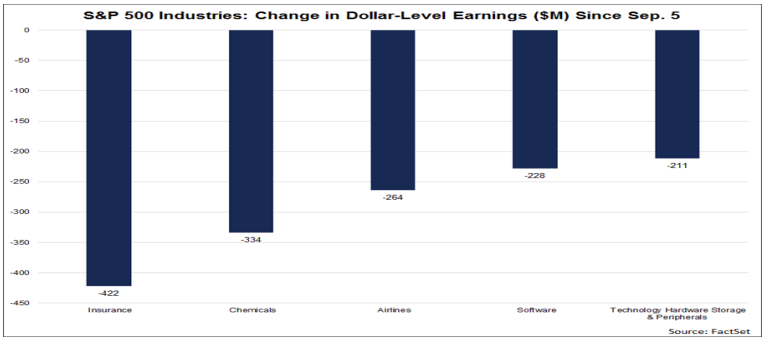



Exchange Traded Funds (ETFs) are more widely held by investors today than ever before. Based on data from ETF.com, an industry research firm, inflows into ETFs topped $272 billion through July, compared to $287 billion in inflows for all of last year. In aggregate, the total market value of all ETF assets stands at roughly $3 trillion, its highest point ever. At one point, ETFs were taking in roughly $1billion per day in net new inflows. So naturally, some market participants are wondering if there is an underlying structural risk developing, given the recent flow activity. What might happen if investors become risk adverse, and capital suddenly flows out of ETFs?

- It's important to recognize that while ETF assets have grown, they still represent a small fraction of overall market assets (roughly 8% of total stock market assets and less than 1% of total bond market assets). Much of the investible universe is held directly through institutions, rather than through an ETF structure.
- ETFs are simply a pass through vehicle which reflects the value of an underlying basket of securities (e.g. stocks and bonds). Unlike closed end mutual funds, which have a fixed number of shares, ETF shares can be created and redeemed based on market demand. This mechanism can provide price discovery in volatile markets.

## Macro View – Quantifying Irma and Harvey

Analysts certainly took note of the devastation surrounding hurricanes Harvey and Irma, contemplating the impact of the storms on the economy and industries likely to get hit as dramatically as the cities themselves that were struck. There have been guesses as to the impact on GDP, with Goldman Sachs lowering its 3rd quarter estimate by .8%. Moody's estimates that combined cost of both storms will total between $150 billion and $200 billion. This is a result of property damage and lost output. FactSet quantified the impact on specific industries by tracking the decrease in estimated earnings growth following the hurricanes. The insurance industry demonstrated the largest decline in earnings since September 5th, totaling $422 million. Further effects anticipated include are short term surge in jobless claims while inflation may tick upward as a result of surging gasoline prices. Many economists are in agreement, though, that fourth quarter GDP will rebound as a result of rebuilding.




## Fixed Income – Overly Sensitive

Because most bonds are not held to maturity by the purchaser, an important measure of risk in a bond portfolio is the duration, or the expected time before the bond will be repaid. When duration is extended, such as the case today with the Barclays Global Aggregate Bond Index, prices become ultra-sensitive to changes in yields. The 30-year U.S. Treasury, for example, with a current yield of 2.76% has a duration just over 20 years. If rates were to climb just back to 2.90%, the price of the bond would drop 2.75% or an entire year's worth of interest. The Taylor Rule is often used to determine where interest rates should be given inflation and economic growth and suggests a natural rate for 30-year Treasuries around 4.25%. A rise to that level would result in more than a decade of lost yield.


## Taking Stock – Possible Impact of Tax Reform

Part of President Trump's tax reform initiative is to incentivize U.S. companies holding billions of dollars outside the U.S. to bring that capital back to the United States. Many companies create subsidiaries or offices in countries such as Ireland because of the tax benefits of doing business in a more corporate tax friendly country. Currently, 40% of S&P 500 companies keep a total of more than $900 billion in cash overseas. (Bloomberg). Possible tax reform may draw the cash back through favorable tax consequences on share buybacks, dividends, mergers, and how capital is spent. Further, reform may come in the form of creating tax breaks on repatriated foreign earnings. The chart below shows that Apple leads the way in amount of cash held outside the U.S. at $216 billion, followed by Microsoft at $128 billion. Rounding out the top ten is Gilead Sciences at $27 billion (Bloomberg).

| S&P 500 Companies Holding the Greatest Amount of Cash Outside the U.S. | |
|---|---|
| Apple | $ 216,000,000,000.00 |
| Microsoft | $ 128,000,000,000.00 |
| Cisco Systems | $ 60,000,000,000.00 |
| Oracle | $ 54,000,000,000.00 |
| Alphabet | $ 52,000,000,000.00 |
| Johnson and Johnson | $ 41,000,000,000.00 |
| General Electric | $ 39,000,000,000.00 |
| Amgen | $ 36,000,000,000.00 |
| Qualcomm | $ 30,000,000,000.00 |
| Gilead Sciences | $ 27,000,000,000.00 |

## Technical – Trading on Stochastics

You will often hear technical traders refer to the stochastics of the stock or markets they are trading. The Stochastic Oscillator is a measure of momentum created by Dr. George Lane in the late 1950's. The indicator establishes support and resistance levels to provide guidance for when to buy or sell a position. Traders look for divergence or convergence in the pattern of where today's price is in relation to the recent price history to gauge when a security will reverse or break out. Lane designed the Stochastics indicator to be used in conjunction with longer-term cycles like the Elliot Wave Theory or Fibonacci retracement levels. The 14-day Stochastic indicator on the S&P 500 is slightly overbought at a reading of 85 while the longer 30-day indicator is above 91 suggesting the broad market is trading near strong resistance.

## What is Risk Parity?

Clint Pekrul, CFA

In this section we provide a brief description of risk parity, and highlight the similarities and differences between risk parity and our framework portfolio construction – Dynamic Risk Hedging. As portfolio managers, there are countless ways to construct and trade an investment strategy. In our view, risk parity is a broad category that describes a portfolio construction process whereby the underlying holdings are weighted based on the risk that they present to the overall investment strategy. As a practical matter, risk parity strategies can be more difficult to implement than more conventional methods.

As a broad category, risk parity can take many forms. But one common thread is that the investor is required, at a minimum, to estimate the volatility of each asset in the portfolio. Typically, volatility is expressed as the likely variability of the asset's price (i.e. the degree to which the up and down movements vary around the average, often expressed as standard deviation). Another common thread is that with risk parity strategies, investors are not required to specify a rate of return assumption about each asset in the portfolio, only the expected variability of the return.

One form of risk parity that is relatively straightforward to implement and commonly used in practice is to weight assets in the portfolio inversely proportional to their volatilities. For example, if the expected volatility of assets A and B are 10% and 20%, respectively, then the investor would allocate 66% of their cash to asset A and the remaining 34% of cash to asset B. Since the expected returns of asset A are twice as uncertain as asset B, it receives half the cash weight as asset B. By weighting inversely proportional to the asset volatilities, the portfolio is assumed to be in "parity" from a risk standpoint. The volatility of each asset impacts the portfolio to the same degree.

Another extension of risk parity is to equate the volatilities of each asset in the portfolio. Under this construct, the portfolio might be required to use leverage. Continuing with the prior example, where asset A had an expected volatility of 10% and asset B had an expected volatility of 20%, the investor could leverage asset A by a factor of two. By using leverage, the volatility of asset A would increase to 20% and equal the volatility of asset B. The investor would then allocate half (50%) of their cash to each asset. As before, this portfolio is assumed to be in "parity" from a risk standpoint.

Risk parity can be applied to portfolios that contain more than two assets. When dealing with multi-asset portfolios, where the investor might hold five to seven securities, it's important to consider not only the volatilities or each asset, but also the correlation of returns across the assets. Correlation measures the frequency with which asset prices move together (i.e. a correlation of 1 assumes that the prices on a pair of assets always move in tandem, while a correlation of -1 assumes that the prices on a pair of assets tend to move in opposite directions).

Constructing a risk parity portfolio on a larger universe of holdings (i.e. something greater than two) becomes more complex. In order to achieve parity, the investor must not only estimate the volatility of each asset, but all of the paired correlations. For a portfolio of five holdings, there are ten pairs of correlations. Furthermore, solving for the optimal cash weights becomes an iterative process. The investor must dial up and down the cash weights until the portfolio achieves parity, and the risk that each asset contributes to the portfolio is equal.

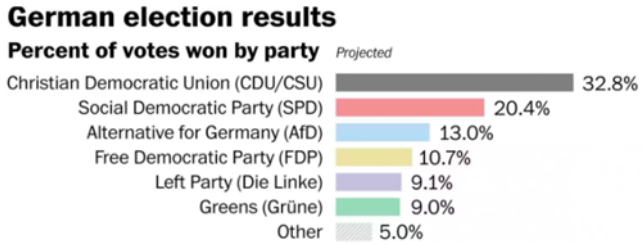
Yet another extension of risk parity is the so called target risk portfolio. Under this construct, assets in the portfolio might be weighted so that the relative risk contributions from the underlying assets are equal. Then, the investor can use leverage or cash to achieve an absolute level of total portfolio risk. In other words, if total portfolio risk is too low, the investor might apply leverage to achieve the desired risk target. If portfolio risk is too high, the investor might use cash to remove excess volatility.

As we've mentioned in prior reports, we use a framework we call Dynamic Risk Hedging, which borrows from the concepts of the broader risk parity concept. First, we weight our portfolio by risk contribution, which is in the spirit of risk parity. However, our portfolios are not necessarily equally weighted by risk. We can make tilts so that our portfolios are more or less influenced by the returns of a single asset. Our tilts can be based on investment objective or market outlook. Furthermore, our portfolios do not leverage up lower risk assets to achieve parity. However, we can use cash if volatility exceeds certain thresholds.

Ultimately, risk parity strategies can be useful if future returns are highly uncertain. They can help gauge a portfolio's sensitivity to changes in the value of the underlying holdings, and provide a framework for reallocating capital when market conditions change.

## Q: How will the Merkel election impact Europe and the markets?

Angela Merkel was recently elected to a record-tying 4th term as Chancellor of Germany but the results fell well short of what she and her Christian Democrat Union had hoped for. The results saw the upstart parties of Alternative for Germany and Free Democratic Party generate significant gains that will make the coalition that Merkel has to establish to govern much more difficult. The far-right nationalist AfD in particular, will see their seats increase threefold post-election. With Merkel's influence in decline, some will look increasingly to French President Emmanuel Macron for leadership. Macron wants more centralized control in the eurozone but that seems unlikely after the German result as Merkel will be forced to deal with her right flank. The pro-business Free Democrat leader vehemently opposes plans for a eurozone -wide budget that Macron in pushing. A stronger result for Merkel would have led to more power in Brussels for the two largest European economies.

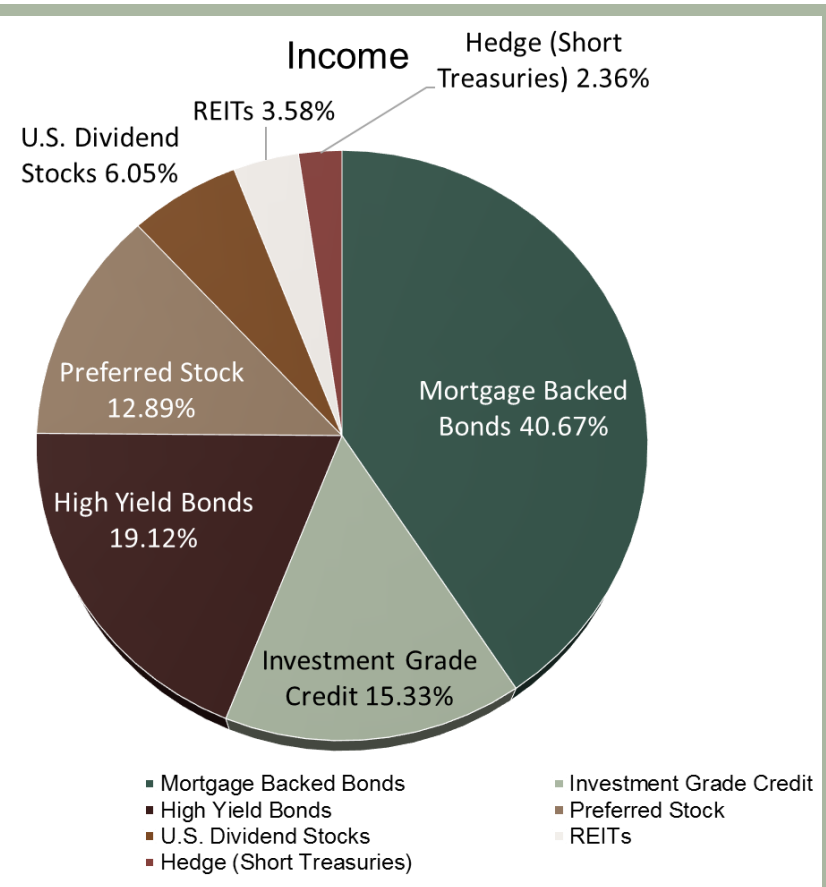


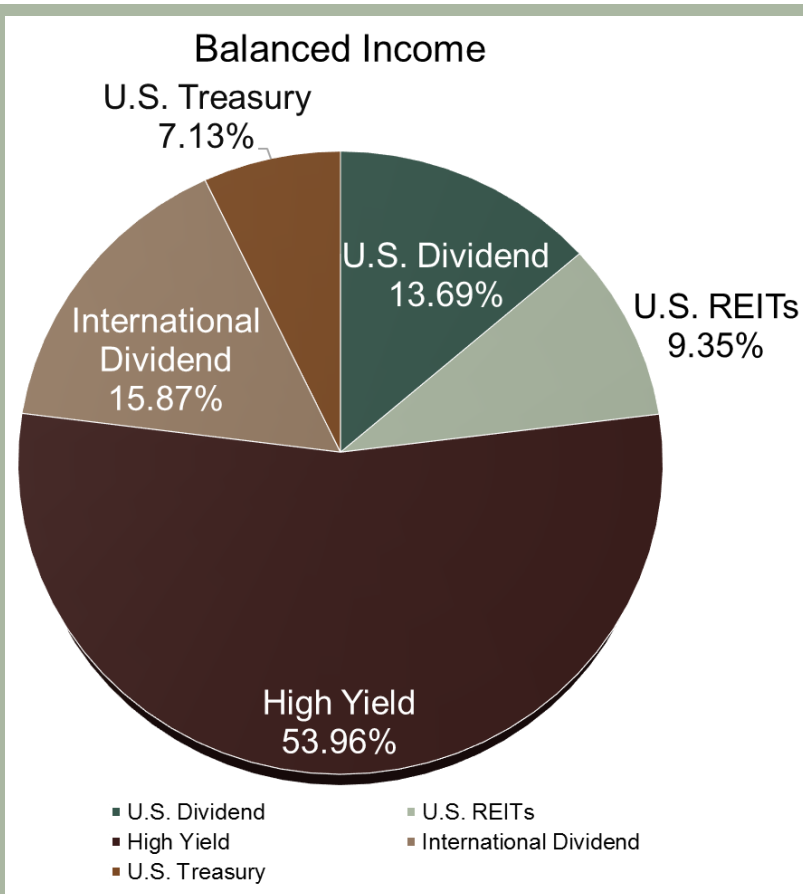

Overall I think the markets will look upon a Merkel election favorably. The DAX, which represents the German stock market, has done well this year. What I believe the market sees in Merkel is stability, as she tends to govern from the center. And she's had an admirable track record relative to her peers in the larger Eurozone. So I don't think the Merkel election will cause any major disruptions. What is noteworthy, however, are the votes gained by the far right Alternative for Germany party, which gained about 13% of the vote. This is the first time since World War II that the far right party has had a presence in the German parliament. If that coalition continues to grow, then the markets might start to view Germany, and broader Europe, with more uncertainty.

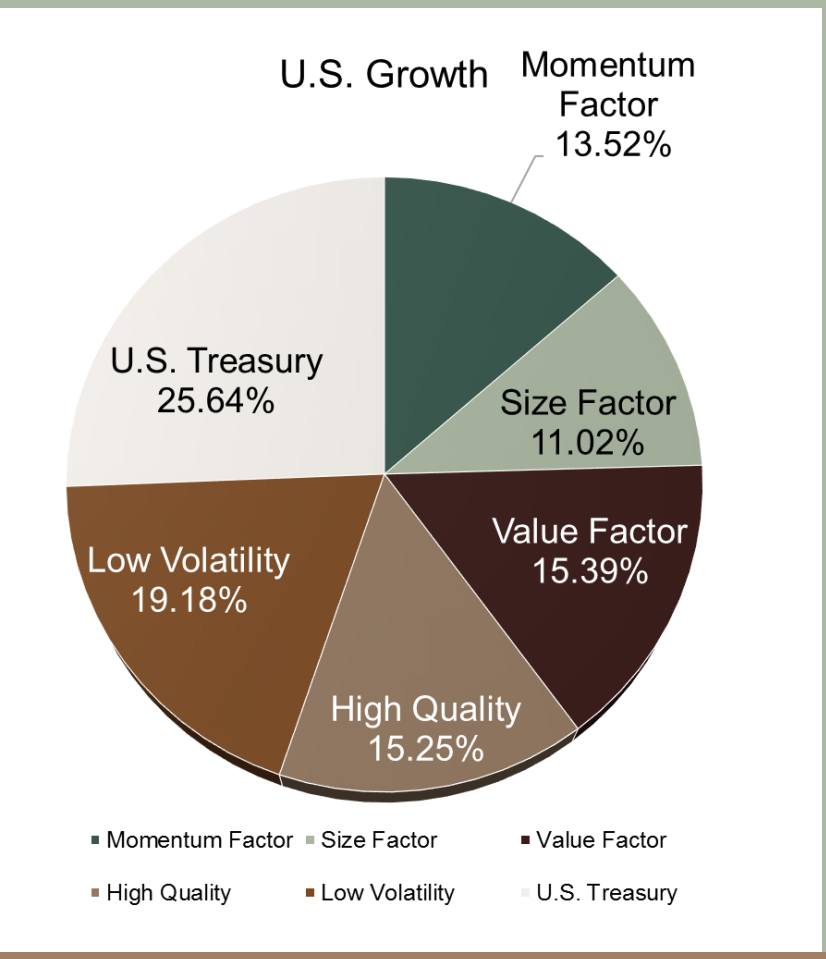
## Q: Should I be concerned about the Equifax hack?

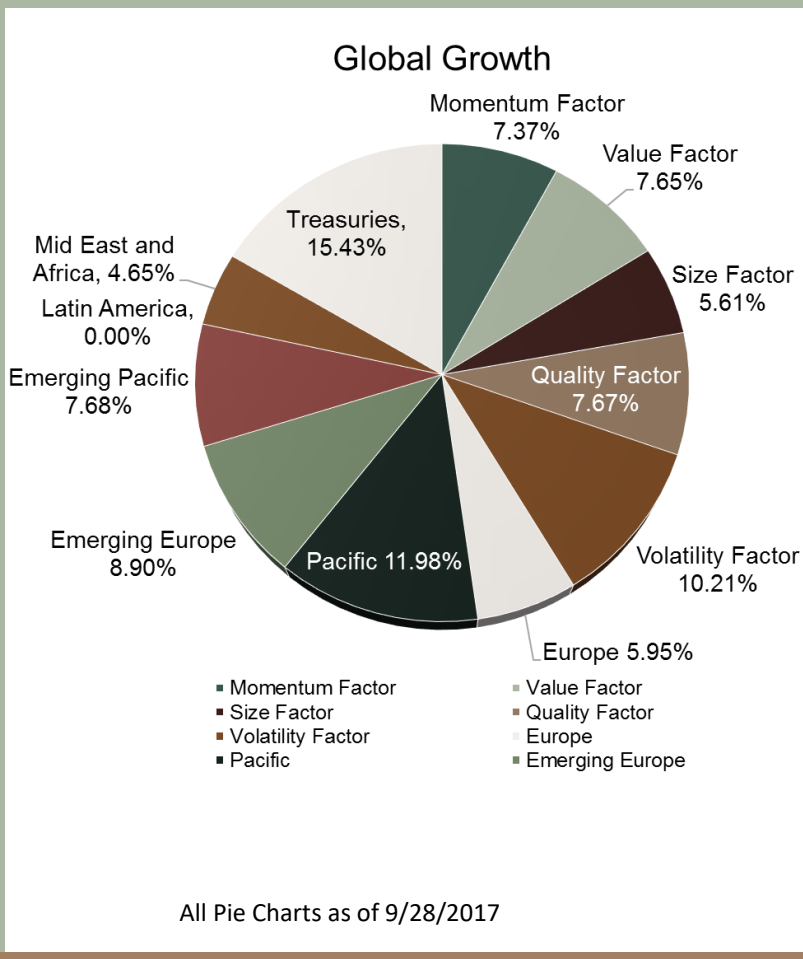
In a word, yes. The security breach at Equifax that exposed the personal data of more than 143 million Americans to hackers and identity thieves is by far the worst in U.S. history. While there will always be a battle between hackers and security professionals, the details of the Equifax breach leave me shaking my head. The fact that Equifax was notified by the firm that protects their client data months in advance of the hack of the need to implement a security patch and those instructions were ignored leaves me incredulous. To gain access to certain systems within Equifax, the user name and password were set to Admin/Admin, not exactly creative. Even more troublesome is that Equifax took 6 weeks to disclose to the public that a breach had occurred. This is critical because it was not just a little bit of data that was stolen, it was social security numbers, names addresses, birthdates, driver's licenses, mother's maiden names, etc. Virtually everything a sophisticated identity thief would need to commit fraud on a massive scale. There will be reports in the coming months of mortgages being taken out by hackers and credit cards issued to thieves. The CEO has already resigned and hopefully the executives that sold stock before the news was released will end up behind bars. If you don't have identity protection, now would be a good time to acquire it.

The news of the attack from a company like Equifax, whose principal line of business was protecting their client's identity, is indeed troubling. You'd like to think that your private information remains confidential, but I guess at the end of the day we shouldn't assume that confidentiality. The concern, obviously, is that your information was part of what the hackers stole, and that the hackers will try to steal your identity or financial assets. Since there is really no way to know for sure if your private information was stolen, I think the best you can do is to closely monitor all of your accounts (e.g. credit card statements, brokerage accounts, etc.). I know at Peak we have taken several cybersecurity measures to help protect our client's information.




All Pie Charts as of 9/28/2017

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