Q4 REVIEW, 2017 OUTLOOK, ALLOCATION AND OPPORTUNITIES

December, 2016

"Since the 1970's, only George H.W. Bush and Jimmy Carter assumed the office with higher GDP growth rates."

Donald Trump is inheriting one of the strongest economies that has been handed to a new President in recent history (based on 3Q GDP). Since the 1970's, only George H.W. Bush and Jimmy Carter assumed the office with higher GDP growth rates. Further, investors have been cheered by Trump's anticipated business-friendly ambitions on taxes, trade and regulations and have driven U.S. stocks to record highs. The S&P 500 Index gained 3.8% for the fourth quarter of 2016 and 12% for the year. Small stocks, as measured by the Russell 2000, roared 8.8% for the quarter and surged 21.3% for the year. The bond market did not fare as well, especially post-election. The prospect of tax reform and increased fiscal spending sparked concerns over higher inflation and tighter monetary policy, leading to a sharp sell-off in U.S. Treasuries. While this may be positives for the U.S. economy, it may also create disruption in the short-term. The 10-year Treasury yield climbed 85 bps, the largest quarterly increase since 1994. The year was a volatile one for bonds; the 10-year Treasury yield started the year at 2.27%, hit an all-time low of 1.37% in July (post-Brexit) and ended the year sharply higher at 2.45%.

The U.S. economic picture continued to improve during the final quarters of 2016

Third quarter GDP was revised up to 3.5% (1.7% year-over-year), the sharpest quarterly increase in two years. Unemployment reached a nine-year low of 4.6% in November and jobless claims remained relatively muted. Initial jobless claims fell to less than 300,000 in early 2015 and remained below this key level for more than 90 weeks, the longest streak since 1970. The Atlanta Fed's wage growth tracker index showed that wages advanced 3.9% in October, the fastest since November of 2008.

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Home prices hit a record high in October; the S&P CoreLogic Case-Shiller U.S. National Home Price Index rose 5.6% in October for the trailing 12-month period. The average price for an existing single family home was $282,341 in November, the highest ever. New and existing home sales also posted strong gains, perhaps fueled by buyers rushing to lock in mortgage rates. Consumer confidence, as measured by the Conference Board Consumer Confidence Index, hit its highest level in 15 years in December. Auto sales are on pace to beat last year's record of 17.5 million light vehicles. Even the manufacturing sector showed signs of improvement with the ISM Composite Index of factory sector activity showing consistent gains through the quarter.

Inflation, while still benign, is rising

For the trailing 12-month period, the CPI rose 1.7% in November, the most since 2014. Core CPI (excluding food and energy) was slightly higher at 2.1%. The Fed's preferred metric, the Personal Consumption Expenditures Index, rose 1.4% over the same time period but remains short of the 2% target. Oil prices surged to their highest level in 17 months to close the year at $54 per barrel. The U.S. dollar soared, hitting a multi-year high versus the euro and the yen and appreciating roughly 7% versus a basket of currencies for the quarter.

The Fed, in a widely anticipated move, raised the Fed Funds rate 25 bps to a range of 0.50% – 0.75% in December. This turned out to be the Fed's only move for the year although at the end of 2015 it had projected four hikes in 2016. As communicated in its "dot plot," the Fed expects three additional hikes in 2017, though the markets expect fewer. Interest rates began to creep up early in the fourth quarter as investors gained confidence that the Fed would make a move in response to encouraging U.S. economic data. Trump's win propelled rates sharply higher fueled by expectations for escalating inflation in tandem with more debt. The 10-year U.S. Treasury closed the year at 2.45% but hit an intra-quarter high of 2.60%, the highest since September 2014.

The European Central Bank announced that it would extend its asset purchase program beyond March, 2017

It was set to expire, but purchases will be lower (€60 billion per month down from €80 billion per month).Italians voted "no" to reforms and a rescue fund was created for troubled banks in response to acute challenges at Monte dei Paschi di Siena. Deutsche Bank settled with the U.S. Department of Justice for its role in selling mortgages during the crisis, agreeing to a $7.2 billion payment (roughly half of what was originally suggested). The unemployment rate in the euro zone declined to 9.8% in October, the lowest since July, 2009; it has been falling since reaching a record high of 12.1% in April, 2013. The range in unemployment rates is highly divergent among euro zone countries, with Spain's at 19% and Germany's at a 35-year low of 4%. Consumer prices in the euro zone increased 0.6% year-over-year in November, the highest since April 2014, but well below the 2% target. GDP is expected to have picked up in the final months of the year from the 0.3% (1.6% year-over-year) pace registered in the third quarter to 0.4% – 0.5%.

In Asia, the Japanese economy advanced 0.3% (1.0% year-over-year) in the third quarter

This is below the preliminary estimate of 0.5%. The economy continues to struggle in spite of aggressive stimulus measures. The Bank of Japan made no changes to its monetary policy but upgraded the outlook for 2017 given the yen's weakness versus the U.S. dollar, which should provide a boost to exports. The dollar reached a 14-year high versus the yen.

Despite worries at the start of 2016, China ended the year with growth expected to be in line with its target of 6.5%. Its stock market stabilized and is up 19% since its low in late January, 2016. Its currency has depreciated, but in an orderly fashion. However, challenges remain in the form of a high debt load and an overheated property sector.

U.S. Equities posted strong returns in the fourth quarter

Cheered by relatively good economic data, a rebound in corporate earnings, and speculation that Trump's presidency will bring lower taxes, lighter regulation and increased spending. The S&P 500 climbed to an all-time high of 2,239 on December 30 and closed up 3.8% for the quarter. However, there were stark differences in sector returns. Financials (+21.1%) were beneficiaries of Trumponomics, riding expectations for a more lenient regulatory environment and higher interest rates, while Health Care (-4.0%) was one of the worst performing sectors. While smaller cap bio tech stocks performed well, uncertainty over the future of Obamacare hurt hospitals. The newly established REIT sector (-4.4%) was punished by rising interest rates. Small capitalization stocks outperformed large by a wide margin; the Russell 2000 rose 8.8% in the quarter and is up 21.3% for the year while the Russell 1000 gained 3.8% and 12.1% for the same periods. Value gained favor after prolonged underperformance. While this trend was in place before the election, Trump's win boosted Financials and Energy stocks, which make up a significant portion of the value indices. The largest difference between growth and value was in small caps. The Russell 2000 Value outperformed its Growth counterpart by 10.5% (+14.1% versus +3.6%) in the quarter and by double that amount, 20.4%, over the year (+31.7% versus +11.3%).

Foreign developed and emerging market indices trailed the S&P 500. The MSCI ACWI ex-US fell 1.3%, modestly below the MSCI EAFE's -0.7% result. Dollar strength was broad-based and thus detracted from returns for U.S. investors. In developed markets, Italy (+11%) was the top performer in the fourth quarter, although it remains at the bottom of the pack for the year (-11%). The MSCI Emerging Markets Index dropped 4.2% for the quarter. Among emerging markets, Russia posted the best return (+19%), while Turkey (-14%) sank. Turkey's economy shrank 1.8% in the third quarter, its first year-over-year decline since 2009. Mexico, hurt by Trumponomic concerns, was down 8%.

Split fundamentals will drive differentiated performance

In addition to the bifurcation between US central banks tightening and Europe/China/Japan central banks easing, 2017 presents us with a similar divergence between Consumer Sector strength and defensive sector weakness; stock specific issues like equities with high US vs. foreign sales, etc.

2017 expectations: Rising rates, higher rates, split returns, multiple contraction

With rates rising, strong balance sheet companies should outperform, PE multiples could come under pressure, and stocks able to boost margins should be rewarded. With higher rates and a stronger US dollar, sectors and companies with higher US sales vs. international sales, and growth vs. value should outperform.

Themes that we expect to dominate the 2017 US Equity Market

1. Rising and higher interest rates - The pace of future increases is promised to be steady, gradual and would go alongside a growing U.S. economy. The inflation outlook is another key consideration for the timing of the next increase. Some economists have a more bearish view on interest rates (GS has 100 bp of tightening in 2017) than the futures market now implies (about 60 bp). Interest rate moves have important implications for investors. When the market eventually realizes the tightening process could be more sustained than originally anticipated the P/E multiple may contract and offset the otherwise positive impact of 10% earnings growth.

Asset Class	Opportunity	Change	Negative	Neutral	Positive
Main Asset Classes	Equities	↑	○ ○ ○	○	● ○ ○
	Bonds	↓	○ ● ●	○	○ ○ ○
	Credit	↑	○ ○ ○	○	● ● ○
	Commodities	↑	○ ○ ○	○	● ○ ○
	Cash		○ ○ ○	●	○ ○ ○

Asset Class	Opportunity	Change	Negative	Neutral	Positive
Satellite Asset Classes	Longevity Bonds	↑	○ ○ ○	○	● ● ●
	Direct Lending	↑	○ ○ ○	○	● ● ●
	Catastrophe Bonds	↑	○ ○ ○	○	● ● ○
	Senior Loans	↑	○ ○ ○	○	● ○ ○
	Emerging Market	↑	○ ○ ○	○	● ○ ○

a. Satellite ideas for strategies in a rising interest rate environment (track 1)
    i. High quality balance sheet equities
    ii. Floating rate/Bank loan ETFs (SRLN)
    iii. Inflation protection ETFs (TIP)

b. Satellite ideas for strategies in a flat interest rate environment (track 2)
    i. High quality, solid dividend paying equities (SPHQ, OUSA)
    ii. Direct Lending – (LENDX)
    iii. Catastrophe Bonds – (SRRIX)

2. Bifurcated theme - Divergent monetary policies (Fed tightening vs. ECB, China and BoJ easing) may strengthen the US Dollar which could benefit some stocks and harm others. The domestic consumer economy is strong, but many industrial companies cite a contraction in business activity. Growth equities have been outperforming value which is a pattern that occurs when economic growth is modest. Cyclicals have surged sharply recently led by Financials and Materials and defensive sectors trade at stretched valuations.

    a. Strategies for a divided market:
        i. Strong dollar regime: Stocks with high US sales should outperform firms with high international sales.
        ii. Style: Growth should outperform value given muted economic growth (S&P 500 Growth IVW)
        iii. Size: Slight preference for small-cap (Russell 2000 or IWN) relative to Large-cap (S&P 500).
        iv. Europe and Japan vs S&P 500 (IEV, EWJ)
        v. Emerging Markets: (EMQQ)

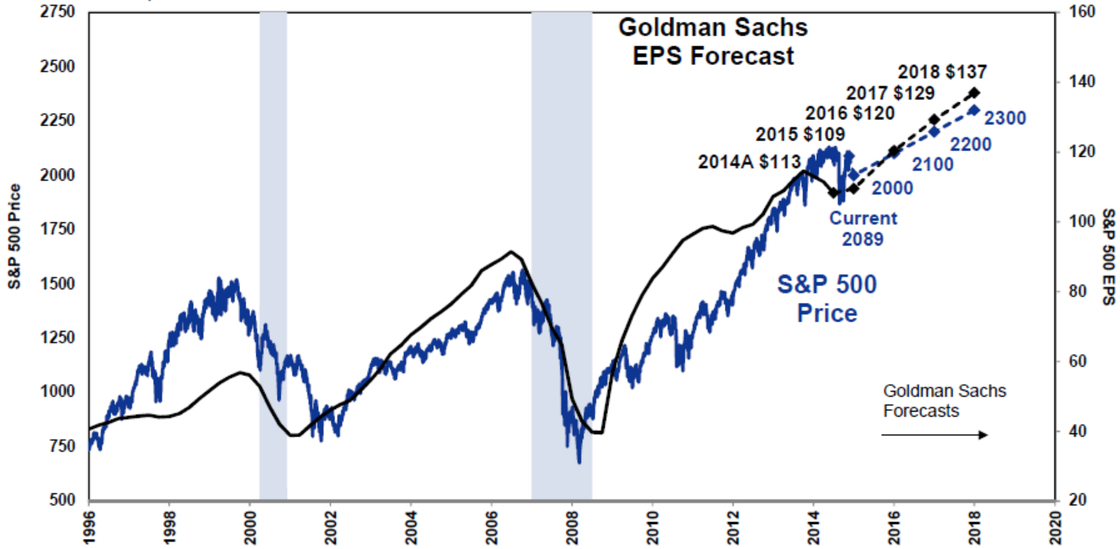
    b. Strategies for a strengthening dollar
        i. High quality higher paying dividend equities (SPHQ, OUSA)
        ii. Banks (KBE)

Factors likely to support higher inflation include fiscal stimulus, less regulation, tax reform, and a tightening labor market, which will drive higher wages (nonfarm payrolls are up 2.8 million in the past twelve months (through October) which represents the strongest one-year increase leading up to a holiday shopping season since Christmas 1999), a strengthening in apartment rental rate growth, and rising healthcare inflation. If these dynamics hold true, TIPS implied 5-year forward inflation recently reached its lowest level outside the 2008-2009 financial crisis. If the bearish macro rates outlook comes true, then too little inflation has been priced in and may experience mean-reversion.

Deflation is also a potential outcome driven by lower energy prices, pricing pressure in the overall commodity complex and the potential of a border adjustment tax/protectionist policy. Excess capacity of new materials is a theme that is woven through energy, copper, steel, etc. The median S&P 500 company currently trades at a forward P/E of 17.2x, ranking in the 94th percentile of the past 40 years. Low interest rates have supported elevated equity valuations, but the S&P 500 forward P/E could begin to contract if the Fed follows track 1 and continues to raise interest rates. Given that track, the multiple should continue to compress as the Fed gradually “normalizes” policy. While the S&P 500 index level is typically higher one year after the Fed begins to tighten, the P/E multiple can contract.

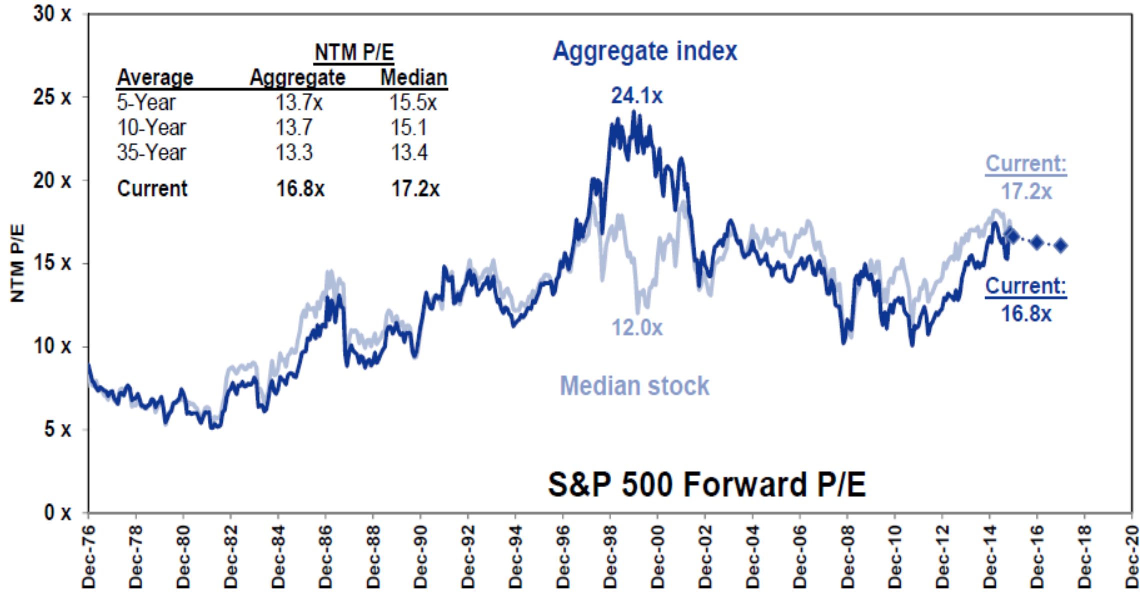
Looking at the alternative of a muted interest rate environment, the markets may see a flattening of the yield curve or even see interest rates go down which suggests the correct amount of inflation has been priced in and capital would have to seek yield by taking on more risk, or alternative forms of yield, i.e. healthy balance sheet companies with strong and improving dividends.

Exhibit 2: Our S&P 500 year-end 2016 target equals 2100; our multi-year index targets reflect a fading P/E multiple
as of November 20, 2015



Source: Compustat, IDC via FactSet, and Goldman Sachs Global Investment Research.

Exhibit 3: S&P 500 aggregate and median forward P/E ratios since 1976
as of November 20, 2015

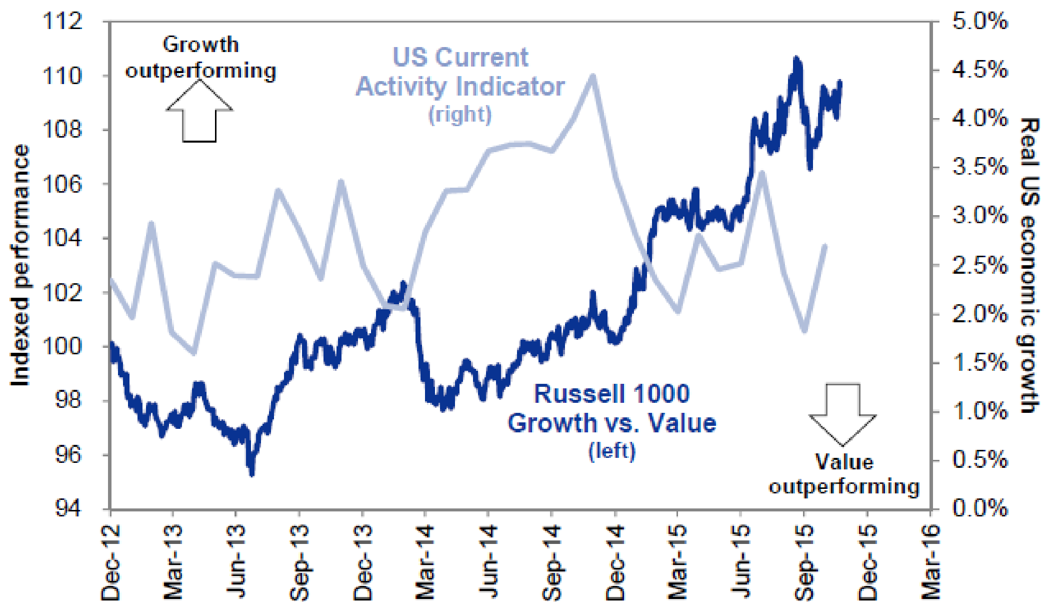


Source: Compustat, I/B/E/S, and Goldman Sachs Global Investment Research.

Within the US equity market, select parts of the Financials sector are the most likely industries to benefit from track 1 rising rates, deregulation and lower corporate tax rates. At the top of the list are Diversified Financials, Regional Banks, and Insurance companies, which receive earnings boosts from higher rates. The US equities whose performance suffers most from rising interest rates are "bond proxy" sectors and stocks with low betas and high dividend yields. The firms that benefit from rising yields tend to receive a fundamental earnings boost from higher rates. However, the stocks that underperform lag not because of changing fundamentals but because their high dividend yields become less attractive relative to rising Treasury yields.

Under the alternative rate scenario, the reciprocal is true. REITs and Utilities are the high dividend industry groups with the strongest negative correlations to Treasury yields. Other stocks at risk include companies from Telecom Services and industries in the Consumer Staples sector as well as other equities with exceptionally high dividend yields, regardless of sector classification.

a. Sector themes to focus on assuming rising rates
    i. Diversified Financials (XLF)
    ii. Banks (KBE)
    iii. Insurance companies
b. Sector themes to focus on assuming flat to lower rates
    i. Utilities (XLU)
    ii. REITs (IYR)
    iii. Telecom (IYZ)



Source: FactSet and Goldman Sachs Global Investment Research.

Fixed Income

Interest rates in the U.S. rose sharply in the fourth quarter, driven both by encouraging economic data and worries that the pro-growth agenda put forth by President-elect Donald Trump will have an inflationary effect. The 10-year U.S. Treasury yield rose 85 bps and returned -6.8% for the quarter in the sharpest quarterly selloff in more than two decades. TIPS outperformed nominal Treasuries, bolstered by rising expectations for inflation. The Bloomberg Barclays TIPS Index returned -2.4% for the quarter but ended the year up 4.7%. The 10-year inflation breakeven rate was 1.95% as of December 30th.

The Bloomberg Barclays U.S. Aggregate returned -3.0% for the quarter but was up 2.6% for the year. The Corporate sector returned -2.8% and +6.1% for the same periods. Issuance by U.S. corporations hit another record high in 2016 at roughly $1.3 trillion. Long maturity bonds performed the best, in relative terms, with long corporates outperforming like-duration Treasuries by 436 bps. Mortgages underperformed Treasuries as durations extended with the increase in interest rates. The Bloomberg Barclays High Yield Index gained 1.8% in the quarter and more than 17% for the year.

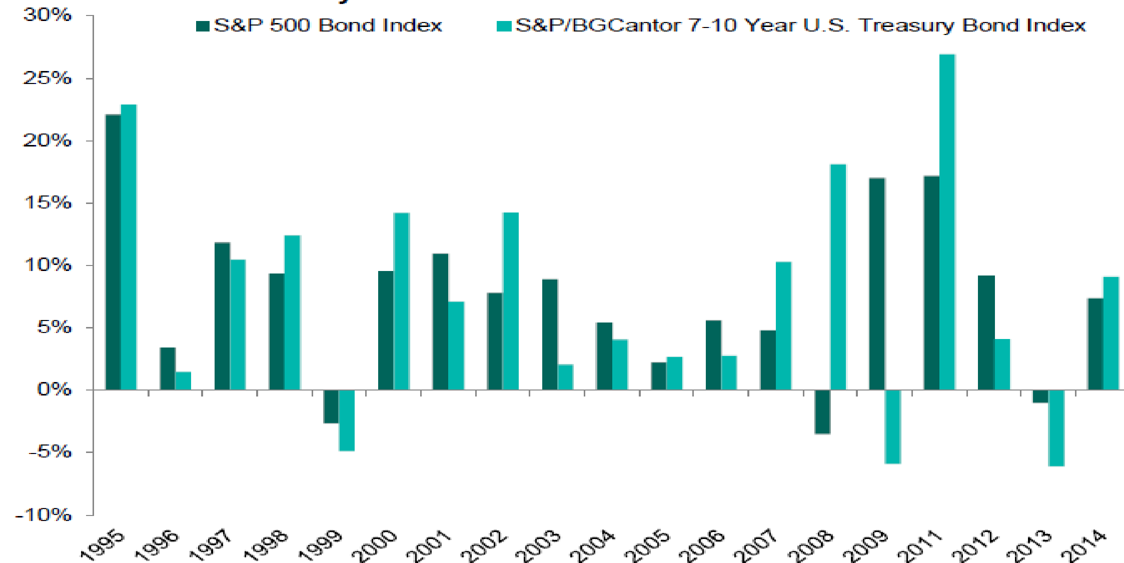
The municipal bond sector faced headwinds in the fourth quarter with robust supply, concerns over Trump's desire for lower taxes, and rising interest rates contributing to outflows from the sector. Supply in 2016 was $445 billion, breaking its record from 2010 ($443 billion). The Bloomberg Barclays Municipal Bond Index fell 3.6% for the quarter and was essentially flat (+0.2%) for the year.

Overseas, yields were also higher though dollar strength was the primary driver of sharply negative returns for unhedged indices. The Bloomberg Barclays Global Aggregate ex-US Index fell 10.3% for the quarter (-1.9% on a hedged basis). The U.S. dollar benefited from higher interest rates as well as prospects for growth. The yen lost more than 13% versus the dollar over the course of the quarter and the euro depreciated by more than 6%. Emerging markets debt underperformed developed markets. The JP Morgan EMBI Global Diversified Index dropped 4.0% for the quarter and the local currency GBI-EM Global Diversified lost 6.1%.

Source: U.S. Federal Reserve. Data from April 1953 through September 2015. Chart is provided for illustrative purposes.

When interest rates rise, by definition bond values will fall, but different types of bonds move with different characteristics. The type of bond an advisor utilizes for their client depends heavily on client circumstances.

Exhibit 3: Annual Performance of the S&P 500 Bond Index and S&P/BGCantor 7-10 Year U.S. Treasury Bond Index



Source: S&P Dow Jones Indices LLC. Data from Dec. 31, 1994, through Dec. 31, 2014. Past performance is no guarantee of future results. It is not possible to invest directly in an index, and index returns do not reflect expenses an investor would pay. Chart is provided for illustrative purposes and reflects hypothetical historical performance. Please see the Performance Disclosures at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

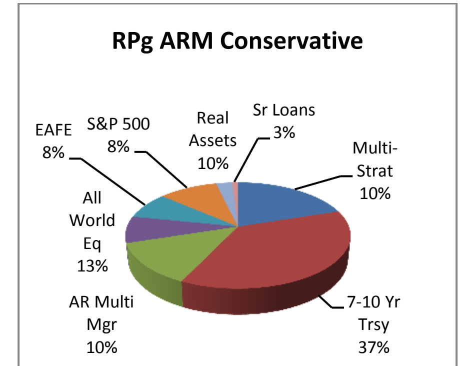
Under certain circumstances, investors may prefer corporate bonds to US Treasury Bonds. Generally speaking, corporate bonds come with greater risk, but relative to US Treasuries, corporate bonds generally have greater return potential. Between 1995 and 2015, in the months when US Treasuries delivered their worst performance, corporate bonds actually outperformed US Treasuries. In the worst quartile, US Treasuries showed an average monthly decline of 2.04%, while the S&P 500 Bond Index's average decline was only 0.79%. In those same months, a typical 60/40 allocation with corporate bonds yielded outperformance over the same allocation with US Treasuries[1]. Themes to consider:

1. For dedicated bond allocations, consider building a cash-bond portfolio including investment grade corporate bonds.
2. Consider IG Corporates, US TIPS & Floating rate securities.
3. International may be riskier than we thought.

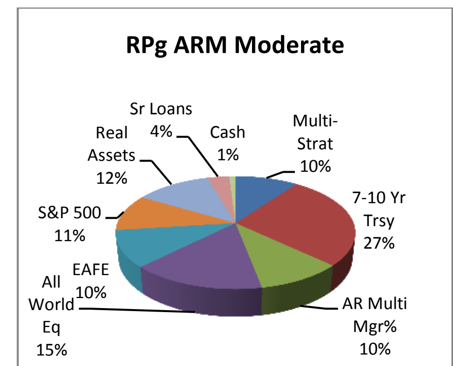
1 – Goldman Sachs

RPg FWA Advisor Research Models (ARM) - 2017

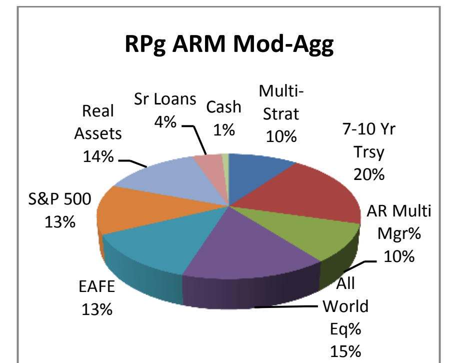
RPg ARM - Conservative				
Ticker	Investment Product Name	Product Type	Weight	Expense Ratio
QAI	IQ Hedge Multi-Strat Tracker ETF	ETF	20.00%	0.75%
IEF	iShares 7-10 Year Treasury	ETF	37.10%	0.15%
ACWI	iShares All World ETF	ETF	13.00%	0.33%
EFA	iShares MSCI EAFE ETF	ETF	8.10%	0.33%
VOO	Vanguard S&P 500 ETF	ETF	8.10%	0.50%
PRDAX	Principal Diversified Real Asset	Mutual Fund	10.00	1.25%
WSMNX	William Blair SMID Gr Fund	Mutual Fund	2.70%	1.35%
Cash	Cash	Cash	1.00	0.18%



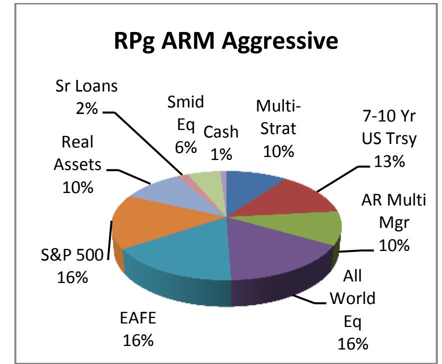
RPg ARM - Moderate				
Ticker	Investment Product Name	Product Type	Weight	Expense Ratio
QAI	IQ Hedge Multi-Strat Tracker ETF	ETF	20.00%	0.75%
IEF	iShares 7-10 Year Treasury	ETF	27.00%	0.15%
ACWI	iShares All World ETF	ETF	15.50%	0.33%
EFA	iShares MSCI EAFE ETF	ETF	10.50%	0.33%
VOO	Vanguard S&P 500 ETF	ETF	10.50%	0.50%
PRDAX	Principal Diversified Real Asset	Mutual Fund	12.00%	1.25%
WSMNX	William Blair SMID Gr Fund	Mutual Fund	3.50%	1.35%
Cash	Cash	Cash	1.00	0.18%



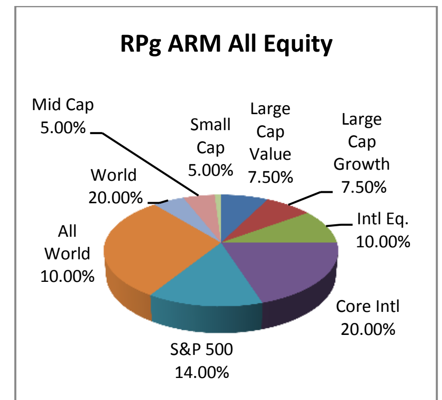
RPg ARM – Moderate Aggressive				
Ticker	Investment Product Name	Product Type	Weight	Expense Ratio
QAI	IQ Hedge Multi-Strat Tracker ETF	ETF	20.00%	0.75%
IEF	iShares 7-10 Year Treasury	ETF	19.45%	0.15%
ACWI	iShares All World ETF	ETF	15.45%	0.33%
EFA	iShares MSCI EAFE ETF	ETF	12.90%	0.33%
VOO	Vanguard S&P 500 ETF	ETF	12.90%	0.50%
PRDAX	Principal Diversified Real Asset	Mutual Fund	14.00%	1.25%
WSMNX	William Blair SMID Gr Fund	Mutual Fund	4.30%	1.35%
Cash	Cash	Cash	1.00	0.18%



RPg ARM –Aggressive				
Ticker	Investment Product Name	Product Type	Weight	Expense Ratio
QAI	IQ Hedge Multi-Strat Tracker ETF	ETF	20.00%	0.75%
IEF	iShares 7-10 Year Treasury	ETF	19.45%	0.15%
ACWI	iShares All World ETF	ETF	15.45%	0.33%
EFA	iShares MSCI EAFE ETF	ETF	12.90%	0.33%
VOO	Vanguard S&P 500 ETF	ETF	12.90%	0.50%
PRDAX	Principal Diversified Real Asset	Mutual Fund	14.00%	1.25%
WSMNX	William Blair SMID Gr Fund	Mutual Fund	4.30%	1.35%
Cash	Cash	Cash	1.00	0.18%



RPg ARM –All Equity Strategy				
Ticker	Investment Product Name	Product Type	Weight	Expense Ratio
IWD	iShares Russell 1000 Value ETF	ETF	7.50%	0.20%
IWF	iShares Russell 1000 Growth ETF	ETF	7.50%	0.20%
HLMNX	Harding Loevner Int Eq Portfolio	ETF	7.50%	1.17%
IEFA	iShares Core MSCI EAFE ETF	ETF	20.00%	0.12%
IVV	iShares Core S&P 500	ETF	14.00%	0.07%
ACWI	iShares MSCI ACWI ETF	ETF	30.00%	0.33%
IWR	iShares Russell Mid-Cap ETF	ETF	5.00%	0.20%
IJR	iShares Core Small-Cap ETF	ETF	5.00%	0.12%
Cash	Cash	Cash	1.00	0.18%



Closing Thoughts

We enter 2017 with U.S. stock markets at new highs, rising interest rates and historically low volatility. The U.S. economy continues to gain traction and there are glimmers of hope that a bottom has been reached overseas. However, a whole host of geopolitical challenges continue to cause angst. Further, the election of Donald Trump has resulted in widespread speculation as to the impact his policies will have on markets, but much uncertainty remains with respect to the scope, implementation and timing of these policies. With this in mind, we caution investors to maintain a long-term perspective. As always, prudent asset allocation with appropriate levels of diversification remains RPg's recommended course.

Sources: Callan, Goldman Sachs, Federal Reserve

Important Disclosures

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