MAKENA STRATEGY INSIGHTS – June 30, 2016

Equity and Bond Markets: 60/40 Portfolio's "Glory Days" May Be Nearing Their End

Q2
PERIOD ENDING
June 30, 2016

Objects in Mirror May Be Closer Than They Appear

As we cross the halfway mark of the calendar year, the U.S. 60/40 portfolio continues its heroic performance. For the last 5 years, the 60/40 has returned almost 9%[1] annually, a commendable performance given the hurdles along the way. We had several systemic issues arise from Europe in 2012 and again in 2014, a handful of federal budget issues from the U.S. government, and lately, several reverberations from China's equity market returning to earth and subsequent internalization of a slower growth path. Earning 9% running with those events in the rear view is impressive. Certainly, more than a handful of existential conversations have been held about the efficacy of active management with passive performance posting such figures. For time's sake, we will assume the middle ground on both the efficient market hypothesis and the need for active management. What follows is a brief discussion on the bond markets, the equity markets and how we should think about the risk of a U.S. 60/40 portfolio going forward.

The fact that sovereign bonds nowadays yield little to nothing in terms of interest payments is not news. With most central banks in developed economies pursuing zero to negative interest rate policies and/or some form of quantitative easing via bond purchases, low yields have not prevented bonds from achieving excellent returns over the recent past through price appreciation. However, as they say, the jig is up – with zero or negative yields across much of the sovereign universe, the risk-return profile of bonds must change, and those changes will have profound impacts on portfolios. In the following pages, we will attempt to understand both the changes to bonds and the change to the 60/40 portfolio. Our experience has been that whenever an asset class undergoes a regime change, many investors often face a difficult time as the historic purpose and behavior of those assets no longer holds true – given the natural tendency to use history as a guide for many investors, a regime change implies significant risk to many portfolios in the near future.

While bonds have performed particularly well since 2009, this trend dates back much further, with bond yields steadily declining since the 1980s. Figure 1 below is a reminder of the incredible tailwind that bonds have enjoyed, seeing yields drop an average of 30 basis points per year for the past 30 years (excluding the high rates of the 80s).

Figure 1: 10-Year Yield Continues Historic Decline

[1] Total Return calculated from 2011/07/01 to 2016/06/30 on a weekly basis.

Despite this sustained decline, U.S. Treasury yields remain higher than those observed in most developed economies. As a brief reminder, Figure 2 below shows the latest 10-year government bond yields across the developed markets. As we have noted many times in these pages, given the low growth outlook in the developing world (largely driven by ageing populations), low bond yields are not surprising or inappropriate. They are most likely here to stay.

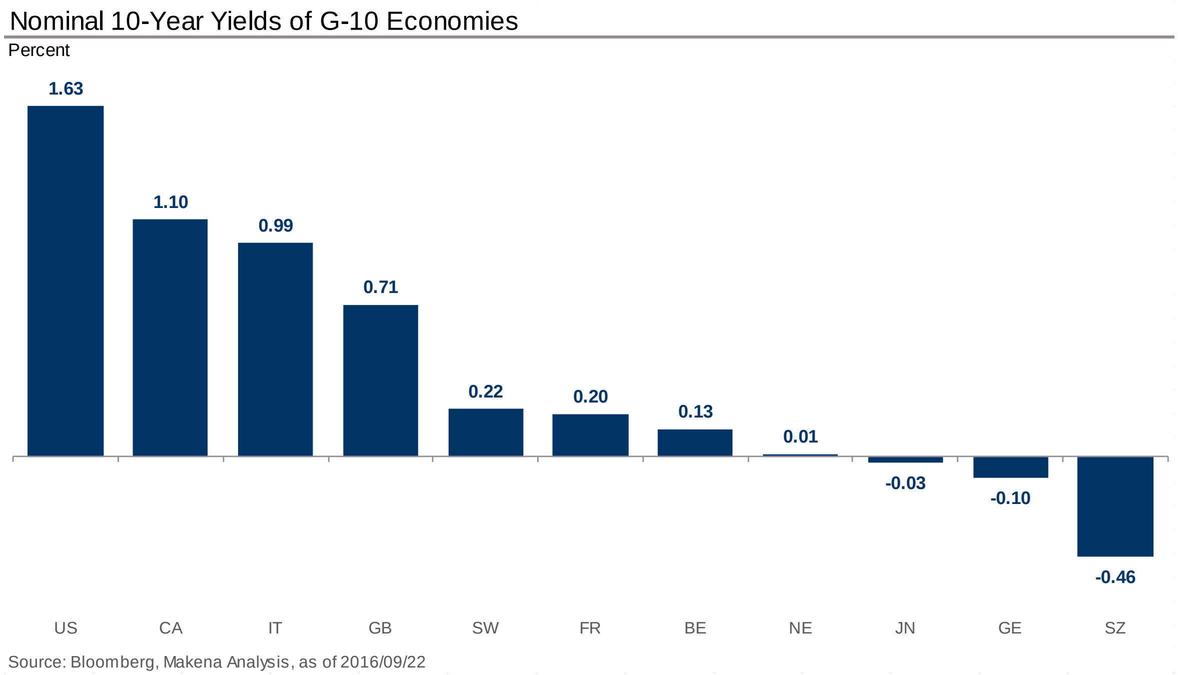

Figure 2: G-10 Yields Not Sending Upbeat Message

For an important segment of bond owners who will hold bonds to maturity, typically pensions and insurance companies looking to defease specific liability profiles, the bond yields in Figure 5 above will be equal to the return of the bonds – in other words, yield serves as a reasonable proxy for expected bond returns for many investors. Given that most institutional portfolios have significant bond exposure, with the 60/40 portfolio (60% equities, 40% bonds) being the industry-standard benchmark, it makes sense for us to not look at bonds in isolation but rather relative to equities and as a key component of the 60/40.

Declining bond yields have sent institutional investors further into the equity markets, allowing the S&P 500 to continue its rally despite lagging fundamentals. As developed market sovereign yields push deeper into negative territory and U.S. 10 year Treasuries continue their gradual march towards 0%, investors have been forced to purchase equities that would likely be considered overvalued under less abnormal circumstances. It is no mystery that S&P 500 earnings have been in decline since the end of 2014. While much of this contraction in EPS growth is attributable to the pain being felt by multinational oil companies, the direction of net income growth paints a similar story regardless of whether you include or exclude the energy sector. In Figure 3, we see that S&P 500 net income growth is flat ex energy and negative with energy included.

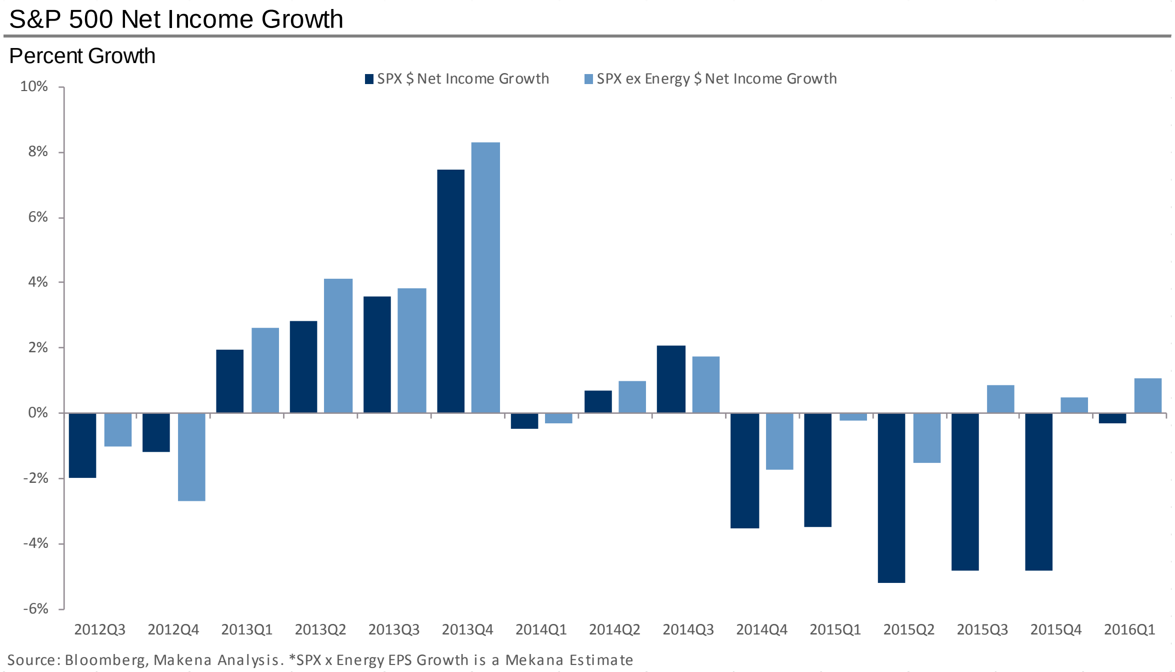

Figure 3: Net Income Flat Excluding Energy

Furthermore, these poor fundamentals have been highlighted by sustained increases in share buybacks across U.S. equity markets. On a quarterly basis, the S&P 500 is rapidly approaching the pre-Global Financial Crisis highs with just over $160 billion in share buybacks in Q2 2016. The share buybacks not only prop up earnings growth for S&P 500 companies, but they also spell a somewhat grim prospect for business growth: managers see share buybacks as adding more value than growing the business through NPV positive projects. The implication is that businesses are projecting a slowdown in consumer demand for their goods and services, another bearish sign for EPS growth in U.S. equities. Even under the assumption of short term-ism, the level of buybacks remains concerning with regard to the opportunity set decision makers face.

Indeed, it is unlikely that an equity rally fueled by low discount rates and collapsing bond yields rather than earnings growth and productive capital expenditures will last much longer. Sovereign yields may bottom out near 0%, as investors refuse to pay to protect themselves from extreme downside events. With bond prices stopping their meteoric rise, U.S. equities may become less attractive, prompting investors to consider their fundamental weaknesses. The price of equities would therefore begin to fall as bond yields stabilize at asymptotic levels or even begin to rise, implying a shift from negative correlation between these two assets towards flat or positive correlation. The passive 60/40 portfolio, which has benefited from these conditions over the past few years, could run into trouble as a result.

Returns of the 60/40[2]

Figure 4 below shows the trailing 12 month return of the 60/40 since 1989 (about as far back as we could get reliable data). The 60/40 has notched an impressive average annual return of 9% over the period, versus 11% for the S&P 500 and 6.5% for the Aggregate Bond Index. Since the beginning of 2009, the 60/40 has notched an equally impressive average annual return of 8.6%, versus 11% for the S&P 500 and 4.6% for the Aggregate Bond Index.

[2] 60/40 refers to the U.S. 60/40 in this section; however, the principles also apply to the Global 60/40.

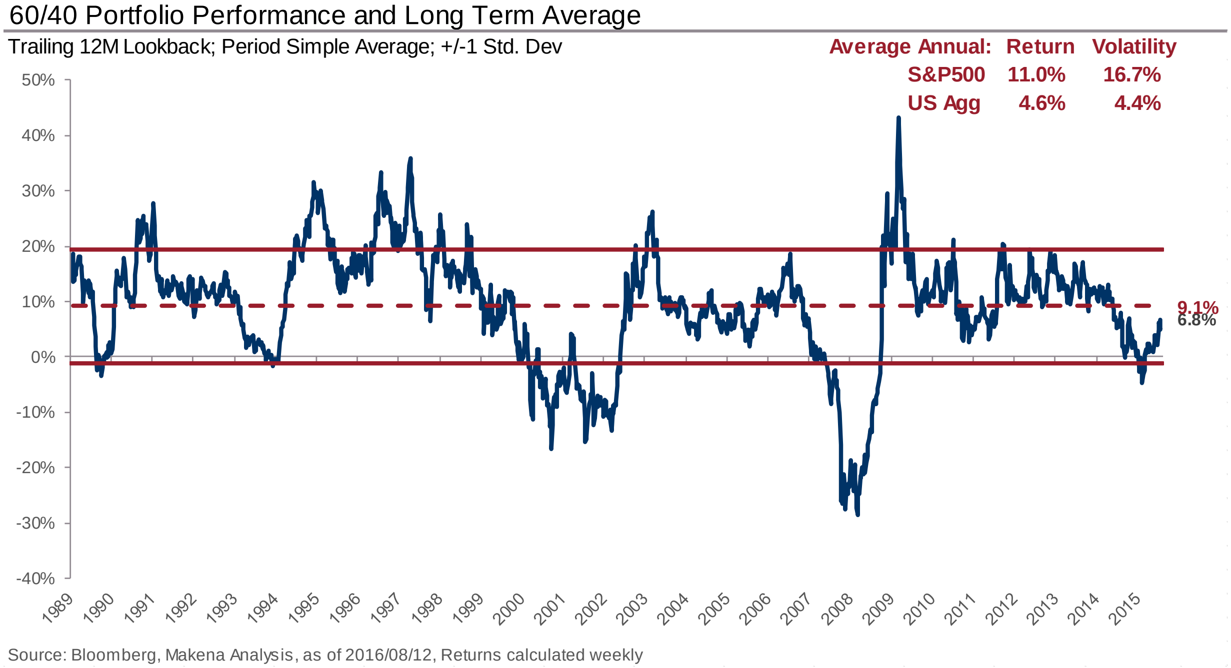

Figure 4: Nothing Disappointing In U.S. 60/40 Performance

However, as every good analyst knows, returns are only part of the story. More important is the amount of risk that was taken to achieve those returns, which is represented by the Sharpe Ratio on an ex-post basis. Figure 5 below shows the Sharpe Ratio of the 60/40 over time, which has averaged a respectable 0.9 since the beginning of our sample in 1989. More impressive, however, is the Sharpe Ratio since the beginning of 2009, averaging 1.48, vs. 1.13 for the S&P 500, 1.6 for the Agg and 0.85 for Hedge Funds (who are often very focused on the Sharpe Ratio).

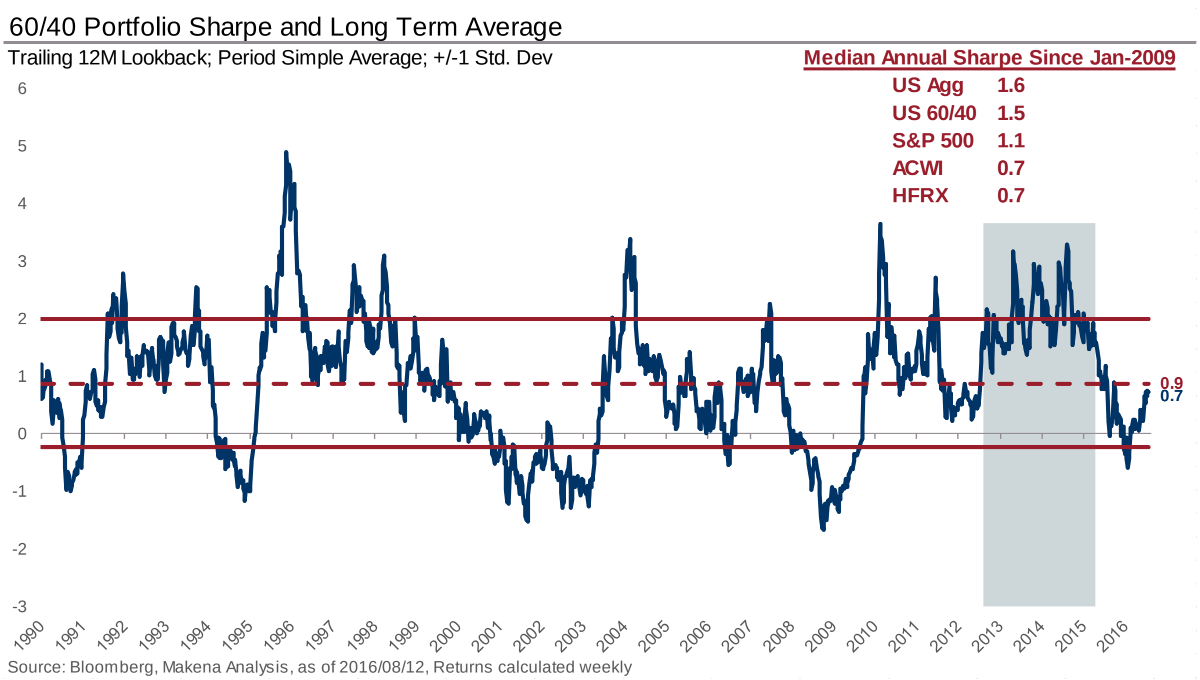

Figure 5: From 8/2012 to 4/2015, Annual Sharpe Averaged 2 (1σ)

Correlations between stocks and bonds

While the returns aspect of the 60/40 has been well documented, with both stocks and bonds performing exceptionally well since 2009, the correlation between these two assets has been far less extensively documented. This is most likely because no one has questioned that bonds serve defensive purposes in portfolios – and indeed they have done so brilliantly in the past. Figure 6 below shows an analysis of stock/bond correlation in three different time periods, the 90s, the 2000s and the 2010s.

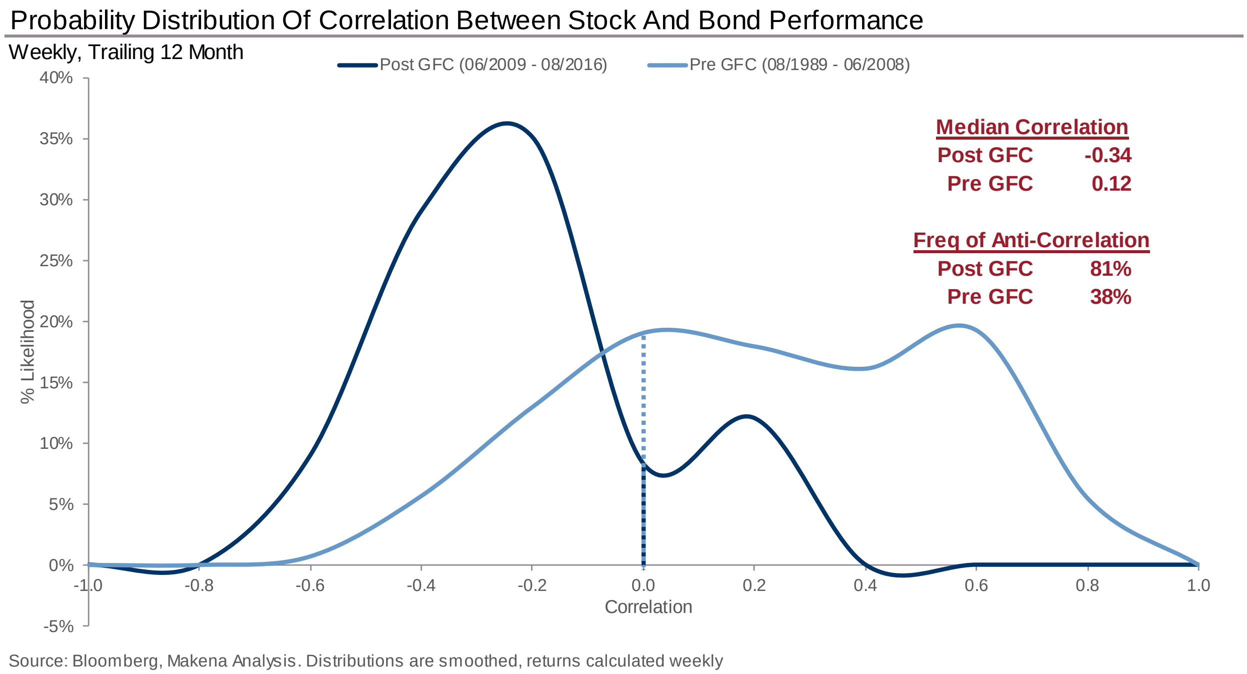

Figure 6: Stock and Bond Relationship Has Changed

Let us first focus on the dark blue line, representing our most recent experience in the markets. Note how approximately only 20% of the time stocks and bonds are positively correlated; in other words, *since 2010, stocks and bonds have been negatively correlated 80% of the time*. This is of course the underlying reason why the 60/40 has had such a high Sharpe Ratio for the last several years. Also, such a strong negative correlation is in general a surprising observation – why should stocks and bonds be such perfect offsets? Shouldn't bonds only provide safety in extreme situations? Despite these surprising observations, investors today take the nearly perfect negative relationship as almost an axiomatic truth.

Looking back in history, we can see that in fact this strong negative correlation was not present in the 2000s or in the 1990s. The light blue line in the figure above represents the experience of the 1990s and 2000s, and the relationship between stocks and bonds is almost opposite of the current relationship – *in the 1990s-2000s, stocks and bonds were positively correlated over 60% of the time*. Not surprisingly, the 60/40 portfolio was much less formidable in that period, with Sharpe Ratios consistently below 1 for most of the 1990s.

This analysis begs an important question: why have stock / bond correlations changed so dramatically? And perhaps more importantly, will this strong negative stock / bond correlation end, and if so, when? These are impossible questions to answer precisely, but let us offer a few thoughts.

As to why the correlations have changed to be so dramatically offsetting in the 2010s, we will point our finger to the usual culprit: heavy-handed intervention in bond markets. Quantitative easing programs in place across the U.S.[3], EU, UK and Japan (and perhaps shortly in China) generally increase their bond buying activity precisely when the equity markets start

[3] As we have described in past letters, while the Fed is not growing its balance sheet, it is maintaining the size of the balance sheet by constantly replacing maturing bonds with new purchases, thereby providing additional demand for U.S. government bonds in the market.

wavering. In other words, an enormous market participant moves the markets precisely to ensure that these negative stock / bond correlations persist.

Turning to the question of if and when the negative stock bond correlation might weaken, we have one important observation to make. With yields now close to zero if not negative, the right tail of bond returns must shrink – said differently, it is less and less easy for bonds to rally and yields to fall given where yields currently are. For instance, let us assume that bonds were yielding -2%. For bond yields to rally to -3% would imply that the bond holder would be willing to hold a bond that has an expected return of -3% on the off chance that a very bad event happens, in which case… the yield would fall to say -4%. Continue that chain of reasoning with a starting yield of -4% or -5%. At some point, only the most cataclysmic event would have bonds giving investors a positive return. In other words, bonds nowadays are almost a form of tail insurance: one pays for the privilege of insuring against extreme events. Figure 7 below is an illustrative chart of this phenomenon. As yields fall, the right side of the distribution gets smaller and smaller, since the likelihood of an even lower yield must decrease.

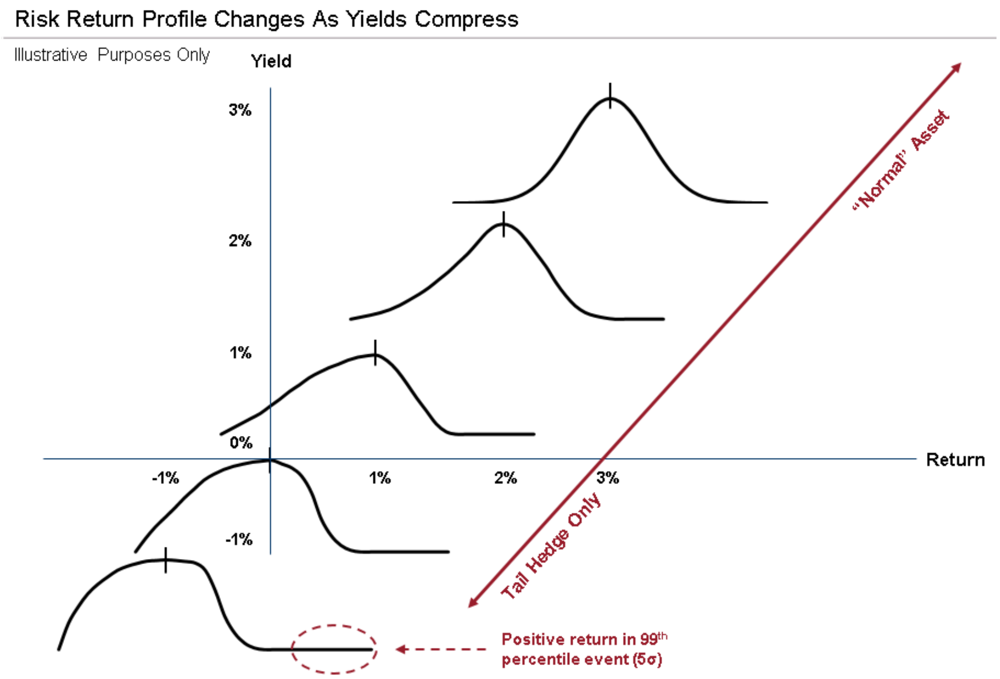

Figure 7: Role of Fixed Income Changes as Yields Move

An important corollary of the transformation of bonds into tail insurance is that as the likelihood of generating negative returns increases, the very thing that made bonds an interesting addition to a portfolio, i.e. the negative correlation we described above, decreases. Should bonds have a negative return 70% or 80% of the time, then bonds would only serve as an offset to a sell-off in equities in more and more extreme situations, but in "normal" situations the correlations would no longer be negative. In other words, we may find ourselves back in a situation similar to that of the 1990s, where persistently positive stock/bond correlations mitigate the bond's protective role in the 60/40 style portfolio. Said differently, *the 60/40 portfolio's "glory days" may be nearing their end*. And given that so many portfolios are now blindly allocated to the 60/40 or other similar stock / bond blends (e.g. the explosion in risk parity portfolio allocations) there will be trouble ahead.

Another important implication is that *active strategies may finally come back into vogue.* One of the main criticisms of active strategies and of hedge funds has been that their performance has trailed the 60/40. Given the situation we described above, that is not surprising – the largest pools of money in the world (central banks) worked to make the 60/40 the formidable portfolio that it is. If, as we surmise, the 60/40s glory days are over, active strategies and hedge funds should finally be able to outperform the simplistic mechanical 60/40 or risk-parity style portfolios.

In this type of environment, it is justified to wonder how a portfolio manager is to achieve the stated return targets. Nevertheless, there are tools in the portfolio manager's tool belt that can alleviate some of the downside concern.

- **Real Assets** engender several qualities that are attractive in environments of "correlation going to one." Real assets respond well to inflation because their utility is readily identifiable and often the output is commoditized allowing for easier price adjustment. Having a resource asset as collateral during periods of uncertainty provides protection because it helps limit the downside, e.g. a farm is very unlikely to go to zero ever.
- **Hedge Funds** have come under the most scrutiny during the 60/40's recent celebrity but their diverse strategies and ability to position quickly can provide an orthogonal return stream compared to the 60/40. When bonds and equity correlation turn positive, hedged strategies are bound to outperform strategies that rely on negative stock/bond correlations.
- **Private Assets** are similar to Real Assets insofar as their valuations are often based on tangible assets and cash flows which can limit the volatility and downside in large events.
- **Mega Value Corporations** are globally diversified operationally and can typically survive even in difficult capital markets given their ability to directly access capital with quasi-sovereign debt ratings. These firms won't shoot the lights out anytime soon but there is something to be said for having a credit rating higher than most governments.

As always, we are thankful for your continued trust and support.

The Partners of Makena Capital Management

Analysis by Michel Del Buono, Global Investment Strategist

Summary of Investment Strategy

In our Q4 2015 letter, we outlined a series of investment recommendations. Many of those themes remain unchanged.

i. *Caution over growth companies during the run-up to and immediate aftermath of the Fed's first hike*

Growth companies will likely exhibit heightened sensitivity to the effects of a rate hike. However, in a world of scarce growth, they may be able to attract and sustain higher valuation multiples than they have attracted historically, suggesting that risk is perhaps somewhat muted.

ii. *Similar to (i) above, buy into long-term growth via EM equities*

Growth *countries* will also likely exhibit heightened sensitivity to the effects of a rate hike. Indeed, many EM markets seem to have already priced-in the effect of lift-off. Moreover, in a world of scarce growth, they should be able to attract and sustain higher valuation multiples than they have historically. Said differently, some EM countries currently represent "growth at a reasonable price."

iii. *Longer duration vs. shorter duration in Fixed Income portfolios*

Uncertainty over the timing and pace of the coming Fed hiking cycle is likely to continue to generate substantial volatility in the short end of the curve and potentially less volatility in the longer end. Additionally, should market expectations price a lower growth rate and a lower inflation outlook following a rate hike, we could actually see a rally in the long end.

iv. *Continued overweight to U.S. dollar in currency portfolios*

Q1 dollar weakness was driven by delayed Fed expectations, causing the trading community to re-position for a second hike in 2H16. We try to ignore near-term volatility and focus on the substantial and growing rate differential between the USD and the rest of the G-10, especially the Euro.

v. *U.S. small and medium enterprises (including Private Equity) vs. large-caps*

With a strong dollar and therefore weaker commodity prices, the U.S. consumer will continue to favor more domestically-oriented companies.

vi. *Competitive EM over commodity EM (across asset classes)*

While weaker commodity prices hurt commodity exporting nations, it also benefits manufactured goods-producing nations through lower input costs. The stronger dollar and increased disposable income available to the U.S. consumer should also benefit manufactured goods-producing nations.

vii. *Long Europe exporters and periphery intra-Europe exporters*

Between lower commodity prices and lower wages, thanks to internal deflation across most of Europe, European exporters should see margins continuing to improve. The weaker Euro will also bolster exports to outside the Eurozone and from peripheral Europe to the core as a substitute for imports from outside the Eurozone.

viii. *Long U.S. services / non-traded goods companies vs. U.S. exporters*

The flip side of a strong dollar is that export-led U.S. companies will likely see earnings and earnings growth hampered from overseas operations. On the other hand, due to weak wage inflation dynamics, U.S. services will benefit from a slower unwind of high margins as it takes time for declining labor slack to drive wage pressures.

ix. *Long EM reformers vs. laggards (across asset classes)*

Some countries have embraced reforms since the last few crises, implementing flexible exchange rates, minimizing interventions in their domestic economies, and in general fostering an environment where private industry can thrive. These countries should be able to navigate volatility driven by exchange rates and the Fed's moves more successfully than the laggards who have not reformed.

IMPORTANT NOTES AND DISCLOSURES

Makena Capital Management, LLC ("Makena") prepared this document solely for the person to whom it has been given for informational and discussion purposes only. This document and the information contained herein are strictly confidential and may not be reproduced, distributed or communicated, in whole or in part, to any third party without the express approval of Makena. Makena reserves the right at any time to amend or change the contents of this presentation without notice to you.

Under no circumstances should the information presented be considered an offer to sell, or a solicitation to buy, any security referred to in this document. Such offer or solicitation may only be made pursuant to the current offering documents for the Makena Fund (the "Fund" or "Funds") which may only be provided to accredited investors and qualified purchasers as defined under the Securities Act of 1933 and the Investment Company Act of 1940. This document should be read in conjunction with, and is qualified in its entirety by, information contained in the Funds' offering documents.

Makena believes that the research used in this presentation is based on accurate sources (including but not limited to economic and market data from various government and private sources and reputable external databases), but we have not independently verified those sources, and we therefore do not guarantee their accuracy. The opinions, projections, and estimates contained herein reflect the views of Makena only and should not be construed as absolute statements and are subject to change without notice to you.

Certain statements in this presentation may constitute forward-looking statements that should not be relied upon as representations of the future performance of any Makena Fund. The past performance of any Makena Fund is not necessarily indicative of future results. The projected performance results presented in this document, if any, are hypothetical and for informational and illustrative purposes only and should not be construed as a guarantee of actual or future performance results of any Makena Fund. Actual performance results may vary significantly from projected performance results due to many factors, including, but not limited to, new issue eligibility, different liquidity terms, timing of investment and other factors.

Certain performance numbers in this presentation may be unaudited, preliminary and based on estimates. Final reported and audited performance numbers may vary considerably from these estimates. Estimated gross and net performance numbers could change materially as final performance figures and underlying investment costs and fees are determined and allocated. Unless otherwise noted, performance is shown net of underlying manager fees and net of the standard Makena fees per the applicable limited partnership agreement, including any incentive fees earned or estimated that a "day one" investor would pay. Asset class performance is shown net of underlying manager fees but gross of Makena fees. Please refer to the offering documents of the Makena funds for complete information regarding fees and expenses. Past performance is not indicative of future results.

Comparison of the performance of any Makena Fund to a benchmark or benchmarks is for illustrative purposes only and the performance of the Makena Funds may differ materially from the performance of the benchmarks due to diversification, asset allocation, volatility or other factors.

If MSCI data is presented be aware that MSCI has not approved, reviewed or produced this report, makes no express or implied warranties or representations and is not liable whatsoever for any data in the report. You may not redistribute the MSCI data or use it as a basis for other indices or investment products.