MARKET THOUGHTS

SECOND QUARTER 2014 VOLUME 34

Quarterly EQUITY INDICATOR	Quarterly BOND INDICATOR	Quarterly HEDGE FUND INDICATOR	Quarterly PENSION LIABILITY INDICATOR
Up 4.2%	Up 2.0%	Up 1.9%	Up 5.0%

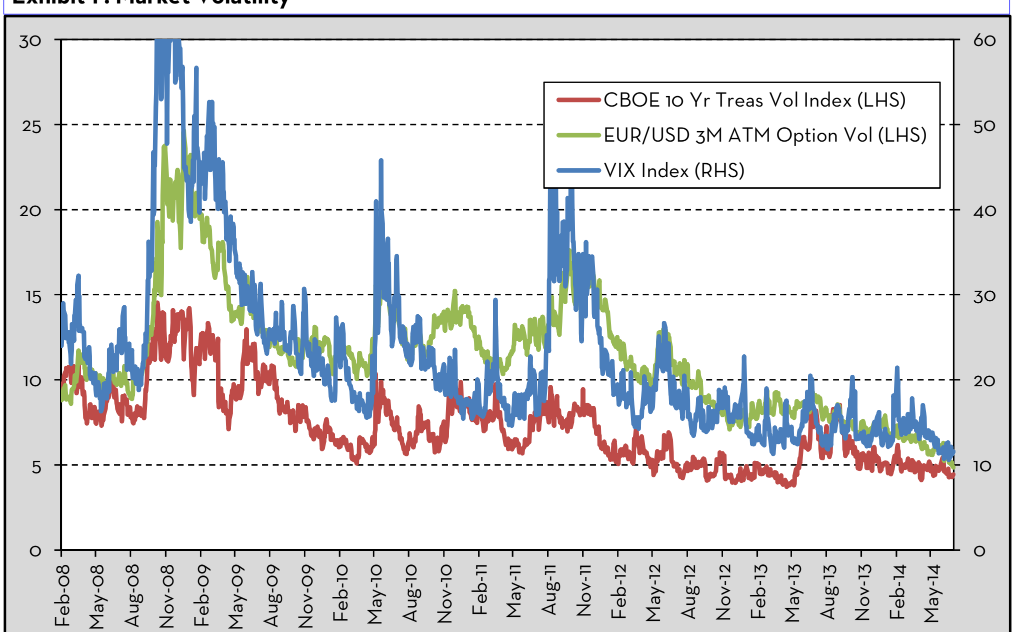
NEPC is an independent, full service investment consulting firm, providing asset allocation, traditional and alternative asset manager search, performance evaluation and investment policy services to institutional investment programs. We offer our market letters to provide insight into recent market conditions, and to assist your interpretation of investment results. We encourage your comments and feedback, as well as any inquiries you may have about our firm or our consulting services.

THE VOLATILITY CONUNDRUM

Growth assets continued their historic multi-year march upward in the second quarter amid demand from investors emboldened by the prevailing low volatility in capital markets. Still, the potential for volatility to spike looms as some central banks prepare to tighten monetary policy and geopolitical tensions intensify in the Middle East and Ukraine. To this end, we strongly believe investors would be wise to rebalance to policy targets. In addition, the current low volatility environment may be an appropriate time to assess overall risk exposure and possibly explore hedging or long volatility strategies. These risk mitigation tools may prove useful in managing downside risks from equity and fixed income markets should volatility arise.

Much like the first three months, all major global asset classes moved higher in the second quarter, even shrugging off a severe revision downward for first quarter GDP growth in the US. Markets also proved resilient to geopolitical tensions in the Middle East, and took in stride the continued tapering of the US Federal Reserve's bond purchases and the European Central Bank's attempts at monetary stimulus. Growth assets in the developed world churned higher as the S&P 500 Index posted its sixth consecutive quarterly rise, the longest streak since 1998. Emerging market assets continued their recovery with large inflows pouring into equity and debt markets during the quarter as investors dismissed balance of payment concerns. Fixed income investments also rallied with interest rate and credit assets benefiting from yield-hungry investors and markets digesting relatively dovish monetary policy statements.

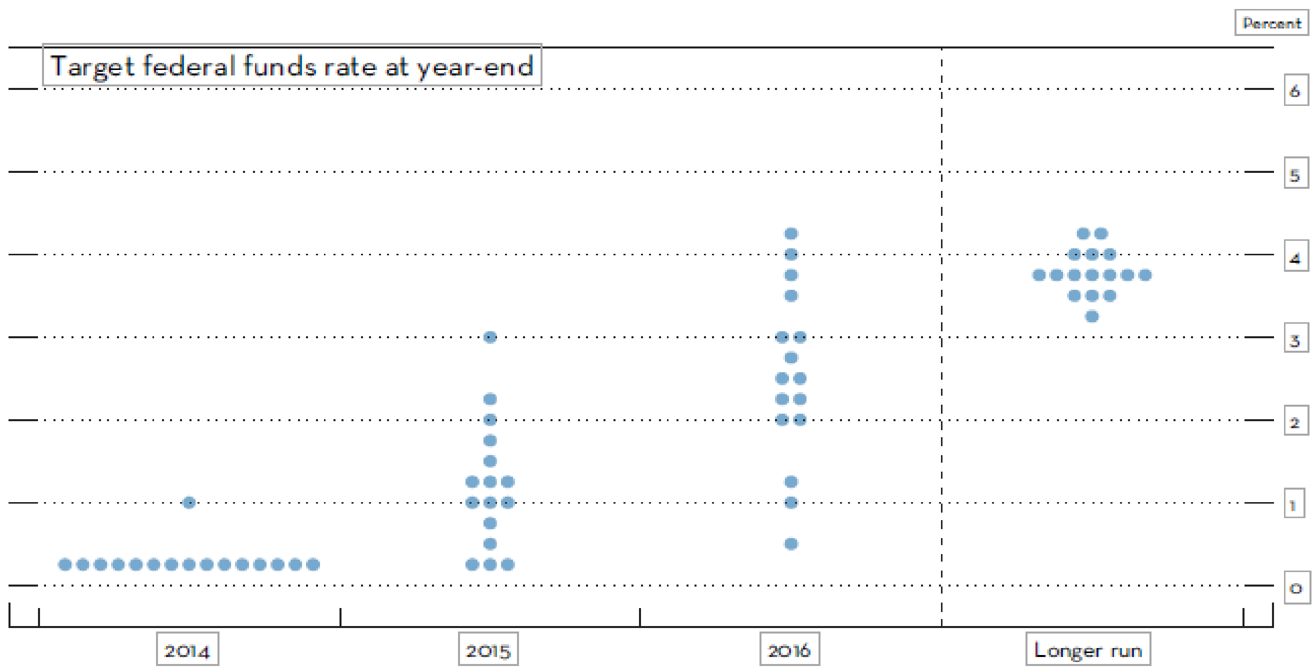
Exhibit 1 : Market Volatility



Source: Bloomberg as of 6/30/2014

As growth assets continue their ascent, a level of investor complacency has crept into markets with volatility across all assets reaching lows last seen in 2007. This low volatility has descended over markets as realized volatility has subsided to pre-crisis levels and markets price in very low probabilities of tail-risk events (Exhibit 1). Admittedly, volatility is not the sole definition of risk, but it does provide a barometer of investors' appetite for risk when contrasted with fundamental valuation levels across asset classes. For example, forward price-to-earnings ratios for global equity markets—with the exception of emerging markets—are trading

Exhibit 2 : Federal Open Market Committee Survey



Each shaded circle represents the value (rounded to the nearest percentage point) of an individual participant's judgment of the appropriate level of target federal funds rate at the end of the specified year or over the long run.

Source: Federal Reserve as of 6/18/2014

above long-term averages as global volatility levels approach historic lows. Similarly, global credit and sovereign debt appear to be valued above long-term averages. Yields on bonds issued by Spain and France are at levels last seen in the 18th century, and non-investment grade bond yields are below 5% with spreads trading at 2006-2007 levels.

To be sure, the potential remains for growth assets to grind higher in the current low volatility environment. Demand for growth assets is consistent and markets continue to offer support for higher asset prices even amid above average valuations. Historically low default rates and investors' insatiable appetite for yield provide a structural tailwind to push credit asset prices higher. Also, history tells us that low volatility can persist for extended periods and is not necessarily a direct cause of market stresses. Furthermore, capital market excesses have largely been deflated following the financial crises. Leverage levels are lower and, while valuations are stretched, there is little evidence of an equity market bubble. Significant increases in mergers and acquisitions and the potential to further lever balance sheets (with proceeds often used to fund share buybacks) could continue to bolster equity expansion in the developed world.

That said, low volatility can also fuel an environment of complacency as excesses build in capital markets while heightening the potential for macro tail risks to be overlooked. Ongoing macro tail risks include lingering questions around capital levels at European banks and the risk of deflation despite the ECB's recent move to push excess deposit rates to negative territory. In addition, continued instability in Iraq and Syria, combined with regional powers such as Saudi Arabia and Iran providing indirect and direct support to various factions, suggest the potential for major oil supply disruptions and price volatility. Also, divergence in monetary policy of global central banks has increased dramatically this year. This is especially relevant because the current low volatility can largely be attributed to accommodative central bank policies generating excess liquidity while encouraging investors to seek out growth assets. Divergence in monetary policies is most evident from the actions of the Bank of England and the Fed as they gradually scale back accommodative policy measures, while the central banks of Japan and the Eurozone expand their quantitative easing programs. The potential for volatility not only stems from this divergence itself, but also from projections of policy tightening by the Fed. While the Fed has a broad consensus regarding changes this year in the federal funds rate, a wider range of rate changes is slated for 2015 (Exhibit 2). The Fed Chair Janet Yellen has cautioned markets that policy tightening will be based on changes in economic growth and inflation, but there is clearly potential for increased volatility as markets begin to seek visibility into the Fed's monetary policy for next year.

To this end, we strongly believe investors should rebalance gains to policy targets, and continue to build positions in more attractively priced asset classes, for instance, emerging market equities and debt, and less liquid direct-lending strategies. They should assess the current low volatility environment and determine reasonable levels of portfolio liquidity and dry powder for future opportunities. In addition, investors may want to consider the appropriateness of strategies that benefit from increases in volatility even if volatility—implied and realized—stays low for a while. As we have consistently stated, regardless of how market conditions evolve, we believe investors will be well positioned to weather whatever comes next if they are armed with a diversified and risk-balanced portfolio.

Equity Index Returns as of 6/30/2014				
Global Equity	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
MSCI World	4.2%	21.6%	10.3%	16.2%
US Equity	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
S&P 500	5.2%	24.6%	16.6%	18.8%
Dow Jones Industrial Average	2.2%	12.9%	11.8%	19.8%
NASDAQ Composite	5.0%	29.5%	19.6%	28.0%
Russell 1000 Growth	5.1%	26.9%	16.3%	19.2%
Russell 1000 Value	5.1%	23.8%	16.9%	19.2%
Russell 2000	2.1%	23.6%	14.6%	20.2%
Russell 2000 Growth	1.7%	24.7%	14.5%	20.5%
Russell 2000 Value	2.1%	22.5%	14.7%	19.9%
International Equity	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
MSCI EAFE	4.1%	23.6%	8.1%	11.8%
MSCI Emerging Markets	6.6%	14.3%	-0.4%	9.2%
MSCI Europe	3.3%	29.3%	9.4%	16.9%
MSCI UK	6.1%	26.6%	11.7%	19.3%
MSCI Japan	6.7%	9.8%	8.2%	8.4%
MSCI Far East	6.8%	10.8%	8.0%	9.5%

Global Equities

US equities advanced in the second quarter amid improving economic data underscoring growth in the United States and Europe. Equity indices scaled new highs and price-to-earnings multiples are at the higher end of their historical ranges. Earnings growth guidance is holding up as corporate managers came out of the first quarter with a constructive view for the rest of the year.

Initially, momentum investors, anxious of the Fed accelerating its pace of tapering bond purchases, rotated from growth into the perceived safety of lower price-to-earnings and higher-yielding equities in the value sectors from March through May. This aided the energy and utilities sectors, which led performance in the second quarter. The appetite for the narrow segment of momentum stocks in biotech and technology returned mid-May as investors focused on high-growth and high-yielding stocks. For the quarter ended June 30, large cap stocks outperformed small cap stocks, with the S&P 500 Index returning 5.2% versus 2.1% for the Russell 2000 Index. So far this year, value has outpaced growth across the capitalization spectrum.

International equities gained 4.1% in the second quarter, according to the MSCI EAFE Index, underperforming domestic and emerging markets. Japan was one of the better performing regions of the market, returning roughly 6.6% during the quarter, amid positive remarks on structural reform from Prime Minister Abe. Emerging markets rallied to a 12-month high; returns during the quarter were bolstered by improving conditions in the Ukraine, positive election results in India, and better economic conditions in China. Turkey and India were the best performing markets, returning 15% and 13%, respectively. Technology, energy and utilities led the way in sector performance, each clocking gains of over 10%. The consumer segment of the market lagged, returning around 4% during the quarter.

Fixed Income Index Returns as of 6/30/2014				
Global Fixed Income	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
Citi WGBI	2.3%	6.9%	1.6%	3.6%
JPM EMBI Plus	5.8%	10.7%	7.7%	12.3%
Domestic Fixed Income	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
BC Aggregate Bond	2.0%	4.4%	3.7%	4.9%
BC US Agg. Treasury	1.4%	2.0%	3.1%	3.9%
BC US Credit	2.7%	7.4%	6.2%	8.9%
BC Mortgage Backed	2.4%	4.7%	2.9%	4.2%
BC Interm. Gov't/Credit	1.2%	2.9%	2.8%	4.1%
BC 1-10 Yr TIPS	2.9%	3.6%	2.2%	4.5%
BC High Yield	2.4%	11.7%	9.5%	14.0%
S&P LSTA Lev. Loan	1.4%	5.6%	5.7%	10.4%
3 Month T-Bills	0.0%	0.1%	0.1%	0.1%
10-Year Bond Yields	**Jun-14**	**Mar-14**	**Jun-13**	**Jun-12**
US	2.5%	2.7%	2.5%	1.6%
Germany	1.2%	1.6%	1.7%	1.6%
UK	2.7%	2.7%	2.4%	1.7%
Japan	0.6%	0.6%	0.9%	0.8%

Global Fixed Income

Fixed income markets continued to rally through June on the heels of a robust first quarter. Despite expectations for higher interest rates, Treasuries rallied in the second quarter, spurring strong performance across bond sectors. The 10-year Treasury yield fell almost 20 basis points during the quarter, finishing at 2.5%. The Treasury yield curve flattened as two-year yields rose slightly to 0.47% from 0.44%. Treasury Inflation-Protected Securities, or TIPS, outperformed nominal Treasuries due to increased inflation (expectations and actual), with the Barclays US TIPS Index posting gains of 3.8% over the period.

Spreads continued to grind tighter during the second quarter amid demand from yield-hungry investors, fueling robust gains in credit markets. Despite record new supply, investment grade credit posted strong performance, with spreads narrowing seven basis points to 96 basis points. The US Credit Index gained 2.7% and the Long Duration Credit Index returned 5.0% in the second quarter. Agency mortgage-backed securities gained 2.4% during the same period, driven by fewer new mortgage originations than expected.

High yield bonds returned 2.4%, aided by a decline in Treasury yields and a tightening of credit spreads. Spreads on high yield credit declined to 337 basis points, a post-crisis low, from 358 basis points at the end of the first quarter. Contrary to previous periods, where lower-quality debt outperformed, BB-, B-, and CCC- performed similarly in the quarter. Bank loan performance softened in the second quarter as retail flows turned negative after over 90 consecutive weeks of net inflows. However, demand for collateralized loan obligations, or CLOs, helped loans end the quarter in positive territory with gains of 1.4%, according to the S&P LSTA Loan Index.

The additional monetary accommodation implemented by the ECB in June fueled gains in Eurozone sovereign debt and helped to extend a rally in emerging markets debt. Emerging market debt has been the clear winner in the first half of the year following a challenging 2013. In addition to the accommodative action by the ECB, declining Treasury yields and economic stability in several emerging market countries provided a tailwind for the asset class. Coming off a strong February and March, local currency (JP Morgan GBI-EM GD Unhedged) and external currency (JP Morgan EMBI+) emerging markets debt had a stellar second quarter, returning 4.0% and 5.8%, respectively.

Currency Markets

Currency markets were generally range-bound in April. The US dollar was mostly lower against currencies with higher interest rates than the US, for instance, Brazil, UK, Canada and Australia, as global investors sought yield. Despite the crisis in the Ukraine, the US dollar did not benefit from a flight to quality and was also modestly down against European currencies.

In May, the US dollar strengthened against European currencies such as the euro and the British pound. Relative to the US dollar, the Euro reversed amid indications that the ECB may launch “pre-emptive action” against deflation, and that quantitative easing remained an option. Despite its strength against European currencies, the US dollar continued to exhibit weakness against higher interest rate currencies in countries such as Brazil, Mexico, Canada and Australia. The yen benefited from a flight to quality and was stronger against European currencies and the US dollar.

In June, the US dollar was mostly weak as markets anticipated the Fed would raise rates slowly. It continued to move down against higher-yield currencies. On the other hand, European currencies benefited modestly as did the Japanese yen. The New Zealand dollar rose due to the rate hike by the country’s central bank. In emerging markets, the Brazilian real and the South Korean won gained against the US dollar.

Commodity Markets

Commodities posted modest gains in the second quarter with the Dow Jones UBS essentially flat while the GSCI returned 2.7%. Commodity prices experienced high variability among sub-sectors. Poor weather conditions in the growing regions, combined with severe cold weather, sparked supply related rallies earlier in the quarter in corn and natural gas before reversing course and trading downward during the second half of the quarter. Further tensions in the Middle East pushed energy prices higher while record low livestock inventories in the US caused cattle prices to spike. In addition to energy and livestock, base metals recorded gains while agriculture posted losses.

Pension Liability

Pension rates fell 21 basis points to 4.33% on June 30 from 4.54% at the end of March, according to the Citigroup Pension Liability Index. This resulted in an estimated increase in liabilities of 5.0% for the second quarter, bringing the estimated increase in liabilities for the year to 14.24%.

Therefore, it is likely that some pension plans saw their funded status fall this quarter. However, corporate funding liabilities calculated under MAP-21 modified segment rates are unlikely to see much change due to the 25-year smoothed rates. In addition, with the recent passing of separate House and Senate bills, higher discount rates under MAP-21 have the potential to be extended until 2017, preserving lower liability calculations and higher funded status for many corporate pension plans.

Furthermore, clients with Liability Driven Investment, or LDI, strategies in place may have seen a more modest decrease or an increase in funded status, as long-duration fixed income and other interest rate hedging assets likely outperformed under declining interest rates. Clients who are considering implementing an initial LDI strategy should work closely with their NEPC investment consultant to discuss strategies and formulate a timeline for implementation.

Hedge Fund Industry Performance Overview as of 6/30/2014				
Composite	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
DJCS Hedge Fund Composite	1.9%	8.8%	5.2%	7.8%
Relative Value	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
DJCS Convertible Arbitrage	-0.1%	4.5%	4.5%	9.3%
DJCS Fixed Income Arbitrage	1.3%	5.9%	6.4%	9.8%
DJCS Equity Market Neutral	-0.3%	5.8%	2.8%	3.2%
DJCS Multi-Strategy	0.9%	10.2%	7.5%	9.5%
Event Driven	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
DJCS Event Driven	2.8%	14.1%	6.6%	9.3%
DJCS Event Driven - Distressed	3.3%	14.3%	8.6%	10.6%
DJCS Event Driven - Risk Arbitrage	2.4%	6.1%	2.9%	4.0%
DJCS Event Driven - Multi-Strategy	2.5%	14.0%	5.6%	8.7%
Equity Hedge	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
DJCS Long-Short Equity	1.5%	13.4%	6.5%	8.0%
DJCS Emerging Markets	1.9%	5.3%	3.0%	7.4%
DJCS Dedicated Short Bias	-2.3%	-19.8%	-15.2%	-17.7%
Tactical	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
DJCS Global Macro	1.6%	3.9%	5.0%	7.5%
DJCS Managed Futures	5.1%	1.7%	-1.9%	0.6%
Traditional Markets	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
BC Aggregate Bond	2.0%	4.4%	3.7%	4.9%
S&P 500	5.2%	24.6%	16.6%	18.8%

Hedge Funds

Hedge funds gained 1.9% in the second quarter, according to the Credit Suisse Hedge Fund Composite, compared to 5.2% for the S&P 500 and 2.0% for the Barclays Aggregate Bond Index. Overall, hedge funds still lag as managers maintain their defensive positioning given the continued expectation of increased market risk. Most sub-strategies were positive for the quarter, with the exception of short-biased equity and some relative value strategies. The Credit Suisse Dedicated Short Bias Index finished the quarter down 2.3%, while the Credit Suisse Convertible Arbitrage Index and the Credit Suisse Equity Market Neutral lost 0.1% and 0.3%, respectively.

In a change from recent quarters, global macro managers performed well during the second quarter. The Credit Suisse Global Macro Index was up 1.6% and the Credit Suisse Managed Futures Index gained 5.1% as many systematic managers were able to capture upward trends in the equity and bond markets. Event-driven and distressed managers maintain their relative outperformance year-to-date after posting a strong second quarter. Appreciation in distressed debt and post re-org equity positions continue to drive returns in these strategies, in addition to an uptick in mergers and acquisition activity.

The Credit Suisse Long-Short Equity Index was up 1.5% for the quarter; the index is expected to underperform the S&P 500 during rising markets given the hedged nature of the managers within the composite. Within sectors, technology and healthcare specialists continue to struggle, finishing flat in the second quarter, although still on positive ground so far this year.

Credit managers continue to perform in line with the Barclays Aggregate Bond Index and the Merrill Lynch High Yield Index as volatility remains low and credit assets rally behind accommodative monetary policy.

Private Markets

New private equity commitments totaled $173.1 billion in the first half of the year, putting 2014 on track to be the fifth straight year of increasing commitments. While the overall trend was up, commitments to North American private equity funds fell 3% in the first half of the year. With US equities scaling record highs and debt readily available with few covenants, for some investors the relative value of European and Asian private equity may be outweighing the risks of investing overseas. Venture capital commitments in the first six months of the year were $27.2 billion, nearly matching the total raised in all of 2013. However, allocations to venture capital, at 16% of total private equity raised, are just below the 10-year historic relative average. With a wave of large secondary fund managers returning to market this year, capital allocations to secondaries in the first half of 2014 were $14.5 billion, surpassing the $13.2 billion added to secondary funds in all of 2013. While financial institutions continue to methodically sell down their mature private equity portfolios, we are closely watching the secondary market for negative implications of a potential oversupply of capital. Lastly, mezzanine funds continue to face strong headwinds of a robust high yield market and an expanding supply of private debt and uni-tranche lenders competing away investment opportunities. New mezzanine funds represented only 3% of all new private equity commitments in the first half of 2014.

Looking ahead to the rest of the year, we anticipate the strong distribution environment—barring a significant correction in US public equities—will continue for mature US private equity investments. For new investments, we remain guarded on the large buyout sector in the US as an active high yield market, elevated transaction prices and the return of "covenant-lite" term sheets leave little room for operational missteps, and provide scant protection in the event of a prolonged recession. We favor managers with demonstrated price discipline, strong value orientation and those with operational capabilities to enhance portfolio company performance. Turnaround specialists can provide attractive options in light of the impact that the recession has had on many businesses. In Asia, many of the largest economies are going through important economic reforms. The Asian private equity environment—although not without risk—is becoming more appealing, given its lower valuations and higher growth prospects relative to the US. With investor interest in private equity expanding across all strategies and regions, investors need to be prepared to make quick decisions as many top tier fund managers are able to meet their capital fund raise targets within a few months of marketing.

Moving to real estate, NEPC's views have not changed materially since the first quarter. We remain neutral on core real estate in the US, positive on non-core real estate strategies, and neutral on debt strategies (both in the US and Europe). For US core real estate, strong fundamentals continue to be the story along with attractive income spreads relative to interest rates. That said, the main concerns for US core real estate (and US real estate, broadly) continue to be plentiful capital that is driving up pricing, and the market's expectation for higher future interest rates and their impact on capitalization rates and capital values. Putting these two competing forces together—strong fundamentals versus the potential increase in cap rates—we think base case US core real estate returns will be similar to historical average returns. However, we think dispersion of potential return outcomes is much broader than normal (both for the upside and downside). We are also neutral on REITs based on the same views above. REITs are trading at 2.5% above their net asset values, which is near their long-term average, and still close to all time high funds from operations, or FFO, multiples (16.0x FFO). For non-core real estate, select attractive opportunities remain for niche-focused US firms, managers with a proven ability to make disciplined investment decisions, and Europe-focused firms.

For real assets, we remain positive on energy, negative on timber, and neutral on agriculture, metals and mining, and infrastructure. The North American energy landscape continues to evolve as the "shale revolution" matures and we believe there are value opportunities in the new market dynamic. We believe in long-term demand drivers for agriculture, especially for row crops such as corn and soy. Infrastructure is an opportunity that can be utilized without a widely apparent "buy" signal. We think core/core plus and some brownfield investments should be in highly defensive assets with conservative debt levels, so as to enjoy the benefits provided to true infrastructure assets and prevent timing risk from riskier opportunistic investments. Metals and mining offer the prospect to invest in assets that will continue to feed urbanization trends, especially in Asia. We maintain our bearish outlook on North American timber due to a supply overhang largely at the mercy of a housing recovery. Still, there have been pockets of opportunity in this market, for instance, the Pacific Northwest, which has benefitted from sustained demand in the Asian markets. However, these deals have been largely fully priced. Foreign timber opportunities have the potential to generate higher total returns. That said, the asset class risk-return profile shifts when assets are purchased outside of North America (and Australia/New Zealand).

Final Thoughts

The second quarter ended with nearly all asset classes moving higher. Growth assets in the developed markets showed few signs of weakness as the S&P 500 Index posted its sixth consecutive quarterly gain. Emerging market assets continued their recovery as large investor flows moved into equities and debt. Markets shrugged off a severe revision downward for first quarter GDP growth in the US and geopolitical tensions in the Middle East. As growth assets continue a multi-year march upward, volatility across all assets has fallen to lows last seen in 2007. Low volatility can fuel an environment of complacency, heightening the potential for macro tail-risks to be overlooked. To this end, we strongly believe investors would be wise to rebalance to policy targets and maintain portfolio risk balance to withstand multiple economic scenarios.