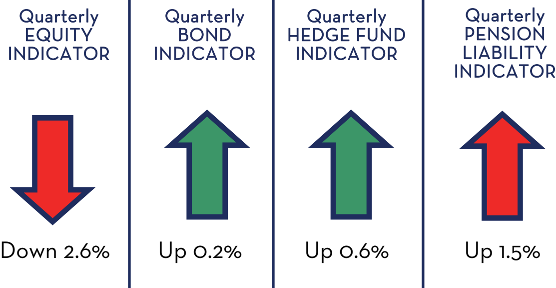
NEPC MARKET THOUGHTS

THIRD QUARTER 2014 VOLUME 35



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IT'S NOT YOU, IT'S ME: THE UNCOUPLING OF CENTRAL BANK POLICIES

Volatility in the foreign exchange market rose steeply in the third quarter as the US dollar surged and the Federal Reserve wound down its bond purchases. The US dollar rose 6% against a basket of major currencies over the third quarter, its biggest quarterly gain since the same period in 2008, when the collapse of Lehman Brothers fueled the global financial crisis and investors took refuge in US currency. Movements in foreign currency (see Exhibit 1) seeped into all asset classes and ended the streak of record low levels of volatility that markets have witnessed for most of this year.

Non-investment grade bonds led the decline in US fixed income with credit spreads returning to 2013 levels. Risk aversion also crept into domestic equities as small-cap stocks significantly underperformed large-cap. Commodity markets were crushed, posting losses of nearly 12% for the third quarter as oil touched $90 a barrel. Geopolitical concerns—ranging from the Ebola virus outbreak in West Africa, the political unrest in Russia and the Middle East, to the uncertainty around the Scottish independence referendum—also contributed to investor skittishness. Unhedged indices were pushed into negative territory across all major global asset classes as the dollar strengthened broadly against developed market and emerging market currencies. US equities initially resisted the volatility but sold off subsequently after the quarter ended.

Over the last three years, gains in assets globally have been supported by coordinated and accommodative central bank policies. The return of volatility and the strong rally in the US dollar underscore the increasing shift in central bank stimulus as the Fed, along with the Bank of England, uncouples its monetary policy from that of Europe and Japan. This breakup represents a profound change in the global macro landscape as policy divergence sets the stage for different expectations for economic growth and interest rates, and therefore, different investment environments. Financial markets must now place a greater emphasis on country fundamentals and asset valuations, and focus less on broad macro themes.

Exhibit 1: USD Trade Weighted Major Currency Index

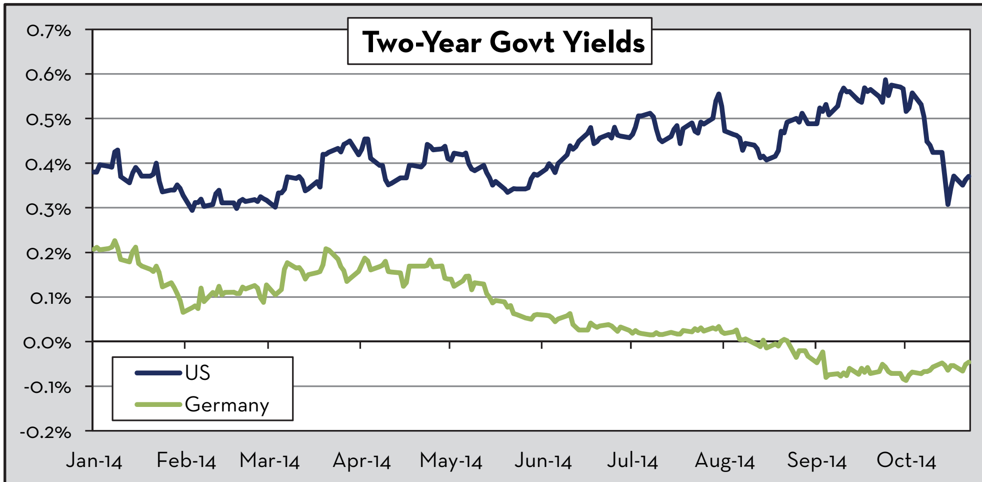
Source: Bloomberg

The divergence of monetary policies globally has been a much discussed theme in 2014, especially gaining traction following announcements from the Fed and the European Central Bank. This month will mark the end of quantitative easing, when the Fed winds down the bond-buying program it began in 2009 to combat the finan-

cial crisis. Across the pond, the ECB announced in September its asset purchase program to increase the central bank's balance sheet by approximately €1 trillion to a level last seen in 2012. The ECB announcement and action occur in the context of challenging economic conditions as expectations for growth and inflation remain subdued. These muted expectations have pushed yields on short-term German bonds to below zero (see Exhibit 2).

A stronger dollar and rising volatility also pinch emerging markets, as risk aversion increases among investors and they become more inclined to park their cash in relatively safe, developed markets such as the United States. Emerging market local currency bonds fell in the third quarter as most emerging currencies suffered. The theme of uncoupling flows through to major emerging countries, each facing unique socioeconomic, political and growth challenges. Expectations are improving for emerging countries undertaking economic and political reforms and languishing for those unwilling to address their economic challenges.

Exhibit 2: Two-Year US vs. Germany Since January 1



Source: Bloomberg

With an eye on current valuations, few global asset classes can be categorized as inexpensive. Price-to-earnings ratios of equities in developed markets are still hovering above long-term averages. Global credit spreads remain below long-term averages despite widening in the third quarter. With less direct support from the Fed, new catalysts will likely be needed to drive global asset prices higher. Yet, support for growth assets can be found. An increase in merger and acquisition activity and share buybacks can provide support for further equity expansion, while debt securities continue to benefit from historically low default rates, positive credit conditions and strong demand from yield-hungry investors.

With expectations of tightening monetary policy in the US and accommodative policies in Europe and Japan, it is reasonable to expect the volatility among global asset classes to shift higher. Currencies, among the first asset classes to show the effects of diverging central bank policies, shifted considerably in the third quarter as policy expectations diverged. In relation to developed markets, we believe currencies as an asset class represent a source of volatility with minimal return expectations. We continue to recommend that investors implement a strategic hedging program to mitigate a portion of developed market currency risk, which is largely an uncompensated risk.

We strongly believe investors should rebalance to policy targets, be it to capture gains of this multi-year bull run or, for those close to targets already, to buy on the dip given recent volatility. In a world likely to be characterized by low-return expectations, we encourage investors to maintain a long-term commitment to emerging markets as the secular outlook for strong growth remains. Investors, where appropriate, should continue to build positions in private markets with illiquid debt and real estate opportunities in Europe. At the same time, we urge investors to utilize dynamic strategies and active management to navigate potential macroeconomic and currency risks.

Global Equities

US equity markets appeared fairly calm on the surface with the S&P 500 Index up 1.1% for the three months ending September 30. There were hints of turbulence earlier in the third quarter when the S&P 500 fell by over 2% in August. Riskier small-cap equities significantly underperformed large-cap equities amid growing concerns around economic growth in Europe and China. To this end, the Russell 2000 index fell 7.4%. The energy sector was the worst performer as oil prices dropped amid rising global supplies. In terms of style, growth bested value in both large and small stocks.

Beyond the US, equities in developed and emerging markets underperformed due to, in part, currency weakness as the MSCI EAFE and the MSCI EM lost 5.8% and 3.5%, respectively. The losses came on the back of intensifying tensions in the Middle East and the Ebola virus outbreak in West Africa. Also, weak economic data in Europe pushed the ECB to continue easing its monetary policy. Europe was the worst performing developed market region, returning -7.0% in the third quarter. Meanwhile, subdued economic data in Japan resulted in a weaker yen, which bolstered exports and limited losses to 2.3%

for the quarter.

Equity Index Returns as of 9/30/2014				
Global Equity	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
MSCI World	-2.6%	10.0%	17.9%	10.1%
US Equity	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
S&P 500	1.1%	19.7%	23.0%	15.7%
Dow Jones Industrial Average	1.3%	12.6%	18.7%	15.1%
NASDAQ Composite	1.9%	19.1%	28.7%	22.3%
Russell 1000 Growth	1.5%	19.2%	22.5%	16.5%
Russell 1000 Value	-0.2%	18.9%	23.9%	15.3%
Russell 2000	-7.4%	3.9%	21.3%	14.3%
Russell 2000 Growth	-6.1%	3.8%	21.9%	15.5%
Russell 2000 Value	-8.6%	4.1%	20.6%	13.0%
International Equity	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
MSCI EAFE	-5.9%	4.3%	13.7%	6.6%
MSCI Emerging Markets	-3.5%	4.3%	7.2%	4.4%
MSCI Europe	-7.0%	5.8%	18.1%	7.9%
MSCI UK	-6.1%	6.1%	16.6%	11.2%
MSCI Japan	-2.3%	0.6%	10.0%	6.0%
MSCI Far East	-2.3%	1.4%	11.0%	6.7%

In local currency terms, emerging markets were up 0.6%, but currency depreciation led to a loss of 3.5% in dollar terms. Emerging countries in Europe were the largest detractors with Greece (-20%), Hungary (-12.8%) and Russia (-15.4%) suffering significant downdrafts in the third quarter. Gains in India (2.3%), Indonesia (3.4%) and China (1.4%) helped Asia grab the title of best performing region within the emerging economies.

Global Fixed Income

Risk aversion permeated fixed income markets in the third quarter amid growing concerns around geopolitical events and global economic growth. As a result, demand for long-dated US Treasuries increased, while the fear of interest rate hikes triggered a selloff in shorter-dated maturities. To this end, the Treasury yield curve flattened with the spread between two- and 10-year rates falling 16 basis points to 1.92%. The yield on the 10-year Treasury dropped four basis points during the quarter, finishing at 2.49%. Treasury Inflation-Protected Securities, or TIPS, significantly underperformed nominal Treasuries amid lower inflation expectations due to a stronger US dollar, lower energy prices, and underwhelming growth prospects in Europe. The Barclays US TIPS Index posted a loss of 2.0% for the three months ended September 30.

After a long stretch of credit spread narrowing, spreads on investment grade credit widened 12 basis points to 112 basis points during the third quarter. Heavy new issuance and event risk weighed on the investment grade corporate sector, where performance was ultimately flat. The Long Duration Credit Index gained 0.2%. Agency mortgage-backed securities returned 0.2% in the third quarter, underperforming like-duration Treasuries.

Buffeted by outflows, the high yield market lost 1.9% in the third quarter. Spreads on high yield bonds increased to 463 basis points, nearly 100 basis points wider than the lows seen in June. Unlike previous periods where lower-quality debt outperformed, BB-rated bonds were the best performers in the third quarter. BB-rated bonds returned -1.3% during the quarter, as B-rated and CCC-rated bonds returned -1.9% and -2.7%, respectively. Leveraged loans also turned in a lackluster performance in the third quarter; while loans experienced outflows over the period, the sector was supported by demand from the collateralized loan obligation market (CLOs). The CS Leveraged Loan Index lost 0.3%, its first negative quarterly return since 2011.

Fixed Income Index Returns as of 9/30/2014				
Global Fixed Income	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
Citi WGBI	-3.8%	-0.1%	-0.5%	1.6%
JPM EMBI Plus	-2.1%	7.8%	7.4%	8.7%
Domestic Fixed Income	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
BC Aggregate Bond	0.2%	4.0%	2.4%	4.1%
BC US Agg. Treasury	0.3%	2.3%	1.0%	3.5%
BC US Credit	0.0%	6.6%	5.1%	6.9%
BC Mortgage Backed	0.2%	3.8%	2.1%	3.7%
BC Interm. Gov't/Credit	0.0%	2.2%	2.0%	3.4%
BC 1-10 Yr TIPS	-2.0%	0.6%	0.9%	3.4%
BC High Yield	-1.9%	7.2%	11.1%	10.6%
S&P LSTA Lev. Loan	-0.5%	3.8%	7.1%	7.4%
3 Month T-Bills	0.0%	0.1%	0.1%	0.1%
10-Year Bond Yields	**Sep-14**	**Jun-14**	**Sep-13**	**Sep-12**
US	2.5%	2.5%	2.6%	1.6%
Germany	0.9%	1.2%	1.8%	1.4%
UK	2.4%	2.7%	2.7%	1.7%
Japan	0.5%	0.6%	0.7%	0.8%

Emerging market debt also slowed in the third quarter following a strong first half of the year. Headwinds to the asset class included geopolitical risk, growth concerns, and the prospect of the Fed raising interest rates. Local currency debt (as measured by the JP Morgan GBI-EM GD Unhedged Index) fared worse than external currency debt (as measured by the JP Morgan EMBI+ Index), with the two indices losing 5.7% and 2.1%, respectively.

Currency Markets

Volatility in the foreign exchange market rose steeply in the third quarter as the US dollar surged, rising 6% against a basket of major currencies. The strong global demand for US dollars comes amid improved economic prospects in the US, a flight to equality due to elevated geopolitical risks, and the likely end of quantitative easing. Higher yielding currencies—Brazil, Mexico, Australia and Canada—suffered from strong liquidations.

Commodity Markets

Commodities received a beating in the third quarter with the Bloomberg Commodity Index losing 11.8%. Corn and wheat prices were the biggest losers, returning -25.8% and -22.0%, respectively. These losses were fueled by decreased global demand and large increases in supply as growing conditions improve. Depressed corn and wheat prices resulted in losses of 18.0% for the agriculture sector, making it the worst sub-sector in the benchmark. Tighter cattle supply amid steady demand for beef triggered a 5.4% increase in cattle prices, enabling the livestock sector to outperform other commodities with a -2.2% return. The precious metals and energy sectors sold off by nearly 12% during the quarter after a negative supply outlook for crude oil from OPEC.

Pension Liability

Liabilities are estimated to have increased over the third quarter by 1.5%, with pension rates ending at 4.32% as of September 30, modestly down from 4.33% on June 30. This brings the total increase in liabilities over the first three quarters of 2014 to an estimated 15.9%.

Changes in funded status in the quarter were likely driven more by asset returns than liability changes. As a result, with modest market returns, many plans likely saw funded status remain relatively flat. In addition, corporate funding liabilities calculated under MAP-21 modified segment rates may be little changed due to the use of 25-year smoothed rates. With the recent passing of the Highway and Transportation Funding Act of 2014, modified discount rates under MAP-21 for funding calculations have been extended until 2021, preserving lower liability calculations and higher funded status for three-to-five more years for many corporate pension plans.

Clients with Liability Driven Investment, or LDI, strategies in place may have seen a slight improvement in funded status this quarter as long-duration fixed income and other interest rate-hedging assets gained over the quarter, offsetting some of the increase in liabilities. However, given the current low rate environment, clients considering implementing an initial LDI strategy should discuss any future implementation strategies with their NEPC investment consultant.

Hedge Fund Industry Performance Overview as of 9/30/2014				
Composite	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
DJCS Hedge Fund Composite	0.6%	7.7%	7.2%	6.4%
Relative Value	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
DJCS Convertible Arbitrage	-0.9%	2.7%	5.5%	6.5%
DJCS Fixed Income Arbitrage	0.9%	5.7%	6.7%	8.2%
DJCS Equity Market Neutral	-1.0%	3.5%	3.6%	2.1%
DJCS Multi-Strategy	2.0%	9.4%	9.5%	8.3%
Event Driven	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
DJCS Event Driven	-1.8%	8.8%	10.1%	7.3%
DJCS Event Driven - Distressed	-1.4%	10.3%	11.1%	8.7%
DJCS Event Driven - Risk Arbitrage	-2.7%	1.5%	3.1%	2.7%
DJCS Event Driven - Multi-Strategy	-2.0%	8.2%	9.7%	6.7%
Equity Hedge	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
DJCS Long-Short Equity	0.1%	9.7%	10.3%	6.4%
DJCS Emerging Markets	0.9%	5.2%	6.6%	5.6%
DJCS Dedicated Short Bias	3.4%	-6.9%	-19.0%	-14.6%
Tactical	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
DJCS Global Macro	1.7%	5.5%	4.0%	6.7%
DJCS Managed Futures	5.7%	11.9%	-1.2%	1.1%
Traditional Markets	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
BC Aggregate Bond	0.2%	4.0%	2.4%	4.1%
S&P 500	1.1%	19.7%	23.0%	15.7%

Hedge Funds

Hedge funds performed modestly in the third quarter, with the Credit Suisse Hedge Fund Composite returning 0.6% compared to 1.1% for the S&P 500 and 0.2% for the Barclays Aggregate Bond Index. The quarter saw a reversal in hedge fund sub-strategy performance from the first half of 2014 as managed futures and select global macro managers did well, while event-driven and select long-short equity strategies underperformed.

The Credit Suisse Managed Futures Index was up 5.7%, driven by strong gains of 5.0% in August largely due to falling yields on developed market sovereign bonds. The Credit Suisse Global Macro Index rose 1.7% in the third quarter with certain managers benefitting from the stronger US dollar. The Credit Suisse Event-Driven Index lost 1.8% as some special situation equity strategies were hurt in the market selloff in September, while the Credit Suisse Event-Driven Risk Arbi-

trage Index was down 2.7%. These losses were triggered by the US government's new rules on tax inversion deals and the federal-court decision that dealt a blow to stockholders of mortgage giants Fannie Mae and Freddie Mac.

The Credit Suisse Fixed Income Arbitrage Index was up 0.9%, while the BofA Merrill Lynch US High Yield Master II Index was down 1.9%. Managers benefitted from widening credit spreads and idiosyncratic opportunities in corporate securities and structured products. The Credit Suisse Long-Short Equity Index was flat for the quarter. Technology and healthcare specialists outperformed the broader long-short equity universe, while energy and materials funds underperformed. Energy-related names sold off sharply as commodity prices fell amid concerns around global growth and demand. We still believe there is merit in a diversified hedge fund approach that has exposure to equity, credit, global macro and event-driven strategies.

Private Markets

Distributions dominated the third quarter for US private equity investors. Distributions totaled nearly $160 billion for the first nine months of 2014, according to PitchBook, and are on pace to exceed 2013. Holders of mature buyout and growth equity funds were the primary beneficiaries, in addition to newer secondary-fund investors. US venture capital also reported modest distributions for the third quarter, but Asia stole the spotlight with Alibaba, a Chinese e-commerce company, which completed a $25 billion initial public offering and set a record for the largest IPO. While the Alibaba IPO took center stage, the majority of exits of venture-backed investments continue to come from trade sales or other merger and acquisition activity.

Even as distributions from mature investments have increased, the pace of cash getting invested by funds is on the decline. Private equity deal flow in the US fell for the third consecutive quarter with average enterprise valuations near 10x EBITDA, higher than in 2006-2008. While debt is readily available to support transactions, many general partners are exercising discipline by refusing to pay high prices for new investments. Add-ons have been the most frequent type of deals made in 2014, underscoring the emphasis on buying down acquisition multiples through synergistic post-merger acquisition activities.

Investors continue to commit large amounts to private equity funds. This year is on track to be the fifth consecutive year of increased commitments with new private equity obligations totaling $264.9 billion for the first nine months of 2014. At this current pace, we expect new fund raising to cross $350 billion this year. With US equity markets at record levels for most of 2014 and US debt readily available with few covenants, the relative value of European and Asian private equity may be looking more attractive. Approximately 40% of commitments in 2014 have been to non-US private equity firms. That said, risks remain, for instance, the "Occupy Central" movement in Hong Kong is laying bare the challenges of political reforms in China.

In Europe, the fourth quarter results of the ECB's asset quality review should provide clarity around the anticipated timing of asset sales needed to meet tighter reserve requirements. Turnaround specialists can provide attractive options in light of the recessionary impact on businesses. Limited partners looking to maintain or increase exposure to private equity are still allocating to new commitments, feeding competition for access to top-tier managers. With increasing interest in private equity across all strategies and regions, investors should 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. We favor managers with demonstrated price discipline, strong value orientation and sound operational capabilities to enhance portfolio company performance.

Moving to real estate, NEPC remains neutral on US core real estate, US REITs and debt strategies, and we are positive on non-core real estate strategies such as value-add and opportunistic real estate. For US core real estate (and US real estate broadly), strong fundamentals continue to dominate along with attractive income spreads relative to interest rates. Our main concerns for US core real estate are plentiful capital driving up pricing, the market's expectation for higher interest rates, and some new construction in certain locations. Regarding US REITs, they have traded down relative to net asset values and are now trading at 4.5% below NAV (the long-term average is 2.4% above NAV). Funds from operations, or FFO, multiples have also come down slightly with REITs now trading at 15.1x FFO multiples. This is down from the 16.0x (or greater) FFO multiples recently seen, but still well above their average of 12.5x since 2000. For debt strategies, yields have generally remained low and competition from more traditional lending sources (such as banks) has increased, putting pressure on private debt/mezzanine strategies. For non-core real estate—value-add and opportunistic—we still view Europe as the best place for a marginal dollar of real estate investment; however, the opportunity, which is based on asset mispricing and not future expected growth, is limited. For non-core real estate in the US, we continue to favor niche-focused managers and those with a proven ability to invest conservatively and avoid overheated markets.

For real assets, we remain positive on energy; neutral on agriculture, metals and mining, and infrastructure; and negative on timber. In the near-term, we expect the energy sector to be challenged as global oil prices continue to drop. Saudi Arabia and OPEC—long-time swing producers that have historically reduced supply during periods such as these—have indicated a willingness to allow lower oil prices to persist for some time in efforts to cement market share and reduce marginal supply. Natural gas prices were relatively stable in the third quarter as rig counts remain low and increasing supply has largely been a result of new drilling for oil and natural gas liquids. Similarly, agricultural commodities saw large drops as both corn and soybeans harvests are expected to be in-line with record volumes in 2013. We remain believers in the long-term demand drivers for agriculture. Mining commodity prices are still low as concerns around growth in China and lackluster industrial demand dampen prices. This can be advantageous to private long-term investors since capital markets remain closed to many small producers. We continue to look for infrastructure opportunities on a selective basis and we retain a bearish outlook on timber, especially for domestic strategies.

Final Thoughts

As we enter the last quarter of the year, global policy divergence is likely to be a key theme for 2015, renewing focus on growth, inflation and underlying fundamentals of individual countries. We encourage investors to remain committed run to emerging markets because of their secular growth potential. We also recommend building positions in private markets as attractive illiquid debt and real estate opportunities can be found in Europe. We suggest employing dynamic strategies and active management to navigate potential macroeconomic and currency risks.

As the Fed and other major central banks go their separate ways, we expect increased volatility within currency markets and among all global asset classes. This may be exacerbated as we shift away from the record low levels of volatility witnessed in recent quarters. To this end, we strongly believe investors would be wise to rebalance to policy targets following the long streak of robust equity gains, and maintain portfolio risk balance to weather various economic environments.

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- Past performance is no guarantee of future results.
- The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.
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