MARKET THOUGHTS

THIRD QUARTER 2015 — **VOLUME 39**

Quarterly EQUITY INDICATOR	Quarterly BOND INDICATOR	Quarterly HEDGE FUND INDICATOR	Quarterly PENSION LIABILITY INDICATOR
Down 8.9%	Up 1.2%	Down 2.5%	Up 3.2%

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.

A ROAD MAP FOR INVESTORS AS VOLATILITY RULES

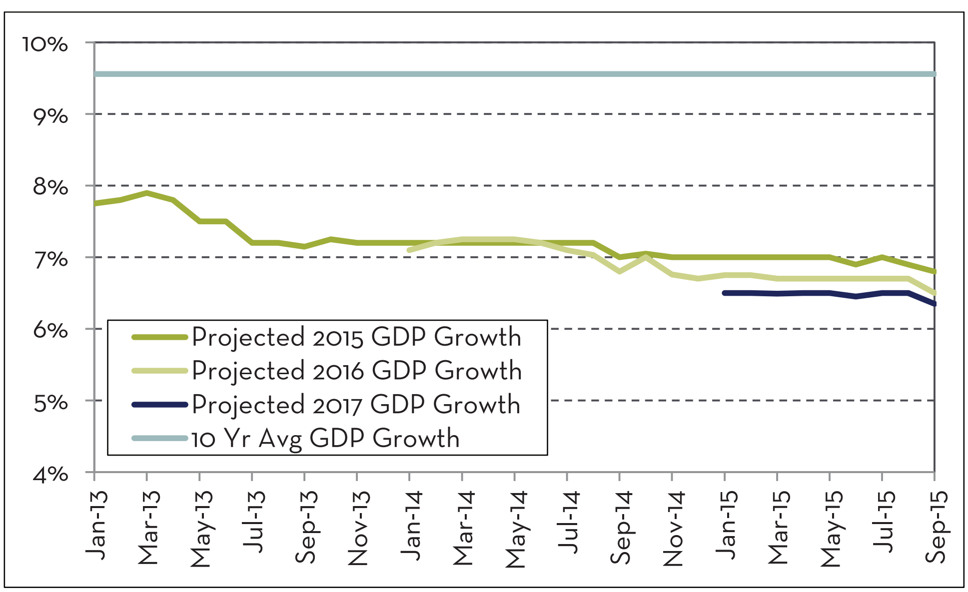
Introduction

Markets got pummeled in the third quarter as concerns of an economic slowdown in China rattled investors and unleashed a wave of volatility. The worst casualties were economies sensitive to commodities with emerging market securities suffering the steepest declines. Emerging market equities plunged 18%, while currencies depreciated nearly 10%. Risk aversion infected developed markets too, pushing credit spreads higher, while US equities bore the brunt of their first major correction since 2011, falling more than 10% from their highs in 2015.

Often times, the best investment environments are the ones in which we feel the most uncomfortable. To this end, as volatility spikes globally, we encourage investors to remain watchful with an eye towards long-term policy targets and opportunities to increase exposure to equities and credit during market downturns.

The global turmoil in the third quarter largely emanated from China as the Shanghai Stock Exchange declined more than 40% from its peak in June, crushing speculative positions in mainland equity markets. In step with the crash in equities, growth in China appears to be slowing from a longstanding policy target of around 7% as its economy gradually transitions to one more focused on domestic consumption (Exhibit 1). While China employed a wide range of policies to address the stock market crash, its response was somewhat disjointed. This lack of coordination came to a head in August when the People's Bank of China devalued the Chinese yuan relative to the dollar by 3%, while signaling the greater role of financial markets in setting the daily exchange rate. The central bank's announcement fueled volatility in all corners of financial markets, triggering concern and uncertainty among investors regarding the economic stewardship of the world's second largest economy.

Exhibit 1 - Slowing Projected Growth in China

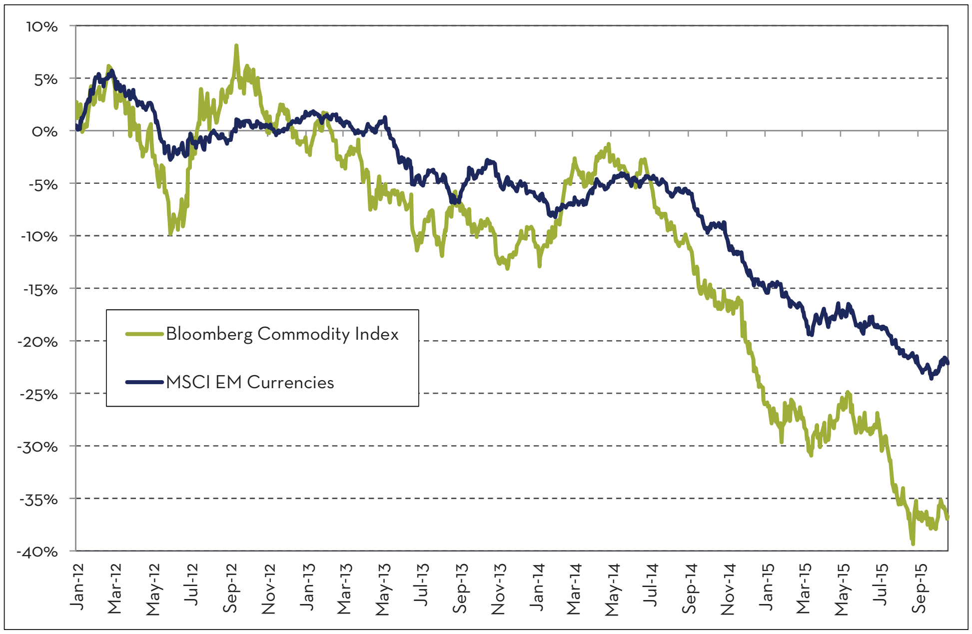


Source: Bloomberg

Also adding to investors' skittishness is the uncertainty around the potential timing of the Federal Reserve tightening monetary policy. Investors are vigilantly awaiting the next move from the Fed after it left rates unchanged following its September meeting, citing global economic risks, low inflation and the strength of the US dollar as reasons to keep interest rates near zero. In fact, a rate increase now appears unlikely in 2015.

While this most recent turmoil represents another round of disappointing returns for emerging markets, it reflects the rebalancing and adjustments necessary to create sustainable growth and economic progress for these countries as they grapple with their own set of challenges. Brazil, South Africa and Russia are currently dealing with the fallout from declining commodity prices. Taiwan, Korea and Thailand are facing the impact of their links to China. Still others, like Turkey, are dealing with issues related to balance of payments (Exhibit 2). Some, such as India, appear to be addressing necessary reforms but have been dragged down by broader economic concerns globally.

Exhibit 2 - Commodity Weakness Coincides with EM FX Decline



Source: MSCI, Bloomberg

For long-term investors, the prospects of reasonable equity valuations, depressed currencies and attractive fundamentals represent a solid investment foundation. Historically, emerging markets have turned quickly and, to this end, NEPC recommends investors maintain at least a market weight in emerging market equity exposure. Closer home, equity valuations in the US have been pushed lower and forward price-to-earnings ratios are hovering around long-term averages; risk premiums on non-investment grade debt now exceed their long-term average. NEPC believes the risk-return profile of high-yield fixed-income securities is attractive relative to US stocks.

Beyond the US, NEPC favors international developed market equities relative to domestic stocks. We recommend a larger overweight for investors implementing a partial strategic currency hedge. We still believe non-US developed equities offer a more favorable return outlook with superior valuations, improved corporate earnings visibility in Japan and Europe, and significant monetary accommodation from the Bank of Japan and the European Central Bank.

Outside of an extreme economic slowdown in China or a severe policy misstep from the Fed, both of which we view as unlikely, the recent market upheaval represents an opportune time for long-term investors to increase equity and credit exposures back to policy targets. With risk assets trading lower globally, investors can exploit the volatility with disciplined rebalancing to increase risk exposures as global equity and credit trade at more attractive levels.

Equity Index Returns as of 9/30/2015				
Global Equity	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
MSCI World	-8.9%	-6.9%	6.4%	6.1%
US Equity	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
S&P 500	-6.4%	-0.6%	12.4%	13.3%
Dow Jones Industrial Average	-7.6%	-4.4%	6.6%	8.6%
NASDAQ Composite	-7.4%	2.8%	14.0%	14.3%
Russell 1000 Growth	-5.3%	3.2%	13.6%	14.5%
Russell 1000 Value	-8.4%	-4.4%	11.6%	12.3%
Russell 2000	-11.9%	1.2%	11.0%	11.7%
Russell 2000 Growth	-13.1%	4.0%	12.8%	13.3%
Russell 2000 Value	-10.7%	-1.6%	9.2%	10.2%
International Equity	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
MSCI EAFE	-10.2%	-8.7%	5.6%	4.0%
MSCI Emerging Markets	-17.9%	-19.3%	-5.3%	-3.6%
MSCI Europe	-8.7%	-9.3%	6.0%	4.3%
MSCI UK	-10.0%	-12.1%	3.0%	4.5%
MSCI Japan	-11.8%	-2.2%	9.0%	4.9%
MSCI Far East	-12.7%	-3.5%	7.6%	4.5%

Global Equities

International equities contracted sharply during the quarter with developed markets down around 10% and emerging markets losing nearly 18%. Fear of a pending rate hike by the Fed and negative headlines from China and Greece helped fuel the selloff. Greece and Brazil were among the hardest hit emerging economies, trading down 35% and 33%, respectively. Emerging market small-cap stocks continued to outpace their larger-cap peers. Within developed markets, European equities were down 8%, while Japanese stocks lost 10%.

At home, equities suffered their worst quarterly loss in four years. The S&P 500 Index declined 6.4% in the third quarter, erasing its gains for the year; the Russell 2000 Index lost 11.9%. Within large-cap stocks, growth bested value, while value stocks lost less in the small-cap space. Overall, energy and healthcare were among the worst performing sectors.

Fixed Income Index Returns as of 9/30/2015				
Global Fixed Income	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
Citi WGBI	1.7%	-3.8%	-2.9%	-0.2%
JPM EMBI Plus	-0.9%	-0.9%	0.2%	4.2%
Domestic Fixed Income	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
BC Aggregate Bond	1.2%	2.9%	1.7%	3.1%
BC US Agg. Treasury	1.8%	3.8%	1.3%	2.5%
BC US Credit	0.5%	1.5%	2.0%	4.1%
BC Mortgage Backed	1.3%	3.4%	2.0%	3.0%
BC Interm. Gov't/Credit	0.9%	2.7%	1.4%	2.4%
BC 1-10 Yr TIPS	-0.9%	-0.8%	-1.4%	1.8%
BC High Yield	-4.9%	-3.4%	3.5%	6.1%
S&P LSTA Lev. Loan	-1.4%	0.9%	3.3%	4.5%
3 Month T-Bills	0.0%	0.0%	0.1%	0.1%
10-Year Bond Yields	**Sep-15**	**Jun-15**	**Sep-14**	**Sep-13**
US	2.0%	2.4%	2.5%	2.6%
Germany	0.6%	0.8%	0.9%	1.8%
UK	1.8%	2.0%	2.4%	2.7%
Japan	0.4%	0.5%	0.5%	0.7%

Global Fixed Income

Within the US, Treasuries and other high-grade assets rallied as lower-quality securities sold off amid the market volatility. To this end, the Barclays US Aggregate Bond Index gained 1.2% in the third quarter. Risk premiums widened with US investment-grade corporate spreads increasing 24 basis points to 169 basis points. High-yield bond spreads spiked 160 basis points to 630 basis points with the Barclays US Corporate High Yield Index losing 4.8%. The Treasury curve flattened over the quarter; the yield on the 30-year Treasury fell 24 basis points to 2.90%, while yield on the one-year Treasury increased by six basis points to 0.34%.

Outside the US, developed market bonds rallied as investors shunned risk; the Citigroup WGBI Index rose 1.7% in the third quarter. Meanwhile, emerging market debt faced headwinds. Weakening currencies continue to be the principal drag on emerging market debt. Consequently, debt denominated in local currency declined the most, losing 10.5%, while hard-currency sovereign debt fell 1.7%, according to the JP Morgan EMBI Index. In general, the debt of exporters of oil and commodities underperformed during the quarter. Brazilian debt was also sharply lower, rocked by a ratings downgrade by Standard & Poor's Ratings Services, and continued economic weakness.

Currency Markets

The US dollar stayed strong despite the Fed's decision in September to keep interest rates unchanged at near-zero levels. The predominant themes driving foreign exchange in the third quarter were slow growth and low interest rates in the developed world, combined with decelerating growth in China and declining commodity prices. Core currency markets exhibited volatility, but were relatively unchanged from the prior quarter; the euro depreciated 0.5% and the yen appreciated around 2.3% in the three months ending September 30.

Developed market commodity currencies, including the Canadian dollar and the Australian dollar, continued to depreciate versus the US dollar as investor sentiment waned amid expectations of subdued global growth. Emerging market countries dependent on commodity exports also saw substantial declines, with the currencies of Brazil, Mexico and Malaysia falling 26%, 8% and 16%, respectively.

Commodity Markets

Commodities declined 14.5% in the third quarter, according to the Bloomberg Commodity Index, beginning with a steep 10.6% fall in July which marked one of the biggest selloffs in four years. Forecasts of slowing economic growth in China—the largest consumer of energy, metals and grains—weighed heavily on the market. Energy prices fell despite declining oil production in the US. OPEC's effort to pump at record levels and the return of Iranian oil added to the glut of supply in an already saturated market, keeping prices depressed. Bloomberg's copper sub index fell 10.7% in the third quarter, the commodity's largest decline since 2011; copper has fallen 17.6% so far this year. A strong US dollar held down prices of gold and silver. Within agriculture, global corn inventories remain elevated at 27-year highs and reports from the US Department of Agriculture indicate a good planting year, keeping prices low.

Pension Liability

The Citigroup Liability Index fell 12 basis points to 4.32% as of September 30 from 4.44% as of June 30. Underlying this decline—on the back of a steady rise in the first half of the year—was a 27 basis points drop in 30-year Treasury yields in the third quarter, offset by credit spreads widening by 26 basis points, according to the Barclays Capital Long Credit Index.

The decline in interest rates had a negative impact on the liabilities of pension plans, which are estimated to have increased 3.2% for the quarter, but remain down 3.8% so far this year. Clients who have implemented liability driven investment (LDI) strategies most likely have seen gains during the quarter from their long-duration assets, but may still experience a decline in funded status if not fully hedged.

Liability driven investing may be a useful hedging tool for you depending on your hedging goals, but timing implementation should be carefully considered with your NEPC consultant.

Hedge Funds

Hedge fund strategies were not immune to the challenging market environment in the third quarter. While the Credit Suisse Hedge Fund Index was down 2.6%, hedge fund strategies exhibited an ability to protect capital and moderate some of the broader market volatility by outperforming the major market indices on a relative basis. So far this year, the Credit Suisse Hedge Fund Index is down 0.6%. Performance was mixed among the hedge funds sub-strategies with short-biased and market-neutral strategies generating gains and more directional strategies capturing some of the market selloff.

Event-driven strategies posted the weakest performance in the quarter, down 6.0%, according to the Credit Suisse Event Driven Index, as they were subject to significant mark-to-market price action, particularly in special situations equity positions. Exposures to stressed/ distressed energy companies were impacted substantially as oil prices trended downward through the quarter. Credit strategies performed similarly, with longer-biased managers experiencing more of the selloff than those with tighter net exposures. Short-credit exposure was a positive contributor and was able to mitigate the broader market losses. The Credit Suisse Fixed Income Arbitrage Index was down 0.2% on the quarter but remains slightly positive for the year at 0.6%.

Hedge Fund Industry Performance Overview as of 9/30/2015

Composite	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
DJCS Hedge Fund Composite	-2.5%	0.1%	5.0%	4.5%
Relative Value	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
DJCS Convertible Arbitrage	-1.5%	-1.7%	2.5%	3.5%
DJCS Fixed Income Arbitrage	-0.2%	0.6%	3.6%	5.4%
DJCS Equity Market Neutral	2.1%	2.1%	3.5%	3.0%
DJCS Multi-Strategy	0.1%	4.5%	7.8%	7.5%
Event Driven	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
DJCS Event Driven	-6.0%	-6.1%	5.1%	3.7%
DJCS Event Driven - Distressed	-3.5%	-5.8%	5.8%	5.1%
DJCS Event Driven - Risk Arbitrage	-2.7%	-2.1%	1.6%	1.1%
DJCS Event Driven - Multi-Strategy	-6.9%	-6.2%	4.8%	3.0%
Equity Hedge	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
DJCS Long-Short Equity	-1.5%	4.2%	9.0%	6.1%
DJCS Emerging Markets	-5.6%	-2.2%	3.7%	2.7%
DJCS Dedicated Short Bias	17.4%	4.3%	-9.9%	-11.1%
Tactical	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
DJCS Global Macro	-2.9%	0.0%	2.7%	4.4%
DJCS Managed Futures	4.4%	11.4%	3.8%	2.5%
Traditional Markets	**Quarter**	**1 Year**	**3 Yrs**	**5 Yrs**
BC Aggregate Bond	1.2%	2.9%	1.7%	3.1%
S&P 500	-6.4%	-0.6%	12.4%	13.3%

Tactical trading strategies were split during the third quarter, with systematic macro strategies outperforming discretionary macro strategies. The Credit Suisse Managed Futures Index was up 4.4%, while the Credit Suisse Global Macro Index was down 2.9%.

Market-neutral and short-biased equity strategies generated absolute returns of 2.1% and 17.4%, respectively. The Credit Suisse Long-Short Equity Index was down 1.5% for the quarter; year-to-date, long-short equity strategies remain positive at 1.9%. Energy-focused hedged equity strategies continue to struggle, down 12.4% so far this year.

Private Markets

It is too early to tell how volatility in global economies and public equity markets is affecting new commitments to private equity funds, though there are indications that the pace of commitments may be slowing. Through the first nine months of 2015, $259 billion of new private equity fund commitments were made. This represents 72% of the $350 billion in commitments that were made globally in 2014. Geographically, North American and European funds garnered the lion's share—92%—of the total capital raised. Buyout and growth equity funds remain the anchor in most investors' portfolios, gathering over 50% of capital.

On the new deal side, buyout activity remained moderately high in the third quarter aided by high levels of competition. Average deal values declined by 15%, reflecting similar public equity market declines in the quarter. Buyout managers may be able to increase their deployment activity at more reasonable transaction valuations should lower equity valuations persist. Meanwhile, buyout exit activity declined from the prior quarter but is still relatively high compared to recent years.

Looking ahead to the last quarter of 2015, we are advising clients to balance their commitments between those likely to benefit from long-term economic recovery with those that can capitalize on near-term volatility in public equity and debt markets. We favor managers with demonstrated price discipline, strong value orientation and those with operational capabilities to enhance portfolio company performance.

Moving to real estate, NEPC remains neutral on US private core real estate and real estate investment trusts (REITs). Core real estate properties in the US in certain markets are now trading above pre-recession peak values. That said, pricing is still attractive relative to interest rates and market fundamentals remain appealing. We still have a neutral view on the real estate debt market as competition among traditional lenders is keeping yields low. We remain positive on value-add and opportunistic real estate. We still view Europe as the best candidate for a real estate investment. For non-core real estate in the US, we continue to favor niche-focused and historically conservative managers with a proven ability to understand local markets and avoid overheated markets.

In real assets, we are positive on energy and neutral on agriculture, infrastructure, metals and mining, and timber. NEPC continues to evaluate the spectrum of liquid and illiquid energy-related investment opportunities given the dislocation in oil prices. Our highest conviction remains in the private equity and credit areas of the energy opportunity set as we believe these strategies are best equipped to invest and manage assets through this uncertain period. We believe that more stress is developing in the energy sector, creating a ripe environment for deploying capital in this market. The one liquid area of the market that we are constructive on is in the midstream (MLP) space but we also believe that security selection and an investment manager's fundamental understanding of each midstream company's underlying cash flows is critical.

Final Thoughts

We are unwavering in our belief that a diversified risk balance portfolio best serves the ability of investors to withstand a multitude of economic environments over the long term. For many NEPC clients, this has translated to lower equity exposure relative to peers and greater use of alternative and multi-asset strategies. With this diversified starting point, we view the recent market correction as a more attractive entry point to increase exposure to non-US developed equities and rebalance US credit and global equity exposures back to policy targets.

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