

Quarterly
EQUITY
INDICATOR



Up 5.2%

Quarterly
BOND
INDICATOR



Up 0.6%

Quarterly
HEDGE FUND
INDICATOR



Up 1.6%

Quarterly
PENSION
LIABILITY
INDICATOR



Down 0.7%

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.

Does Diversification Still Make Sense?

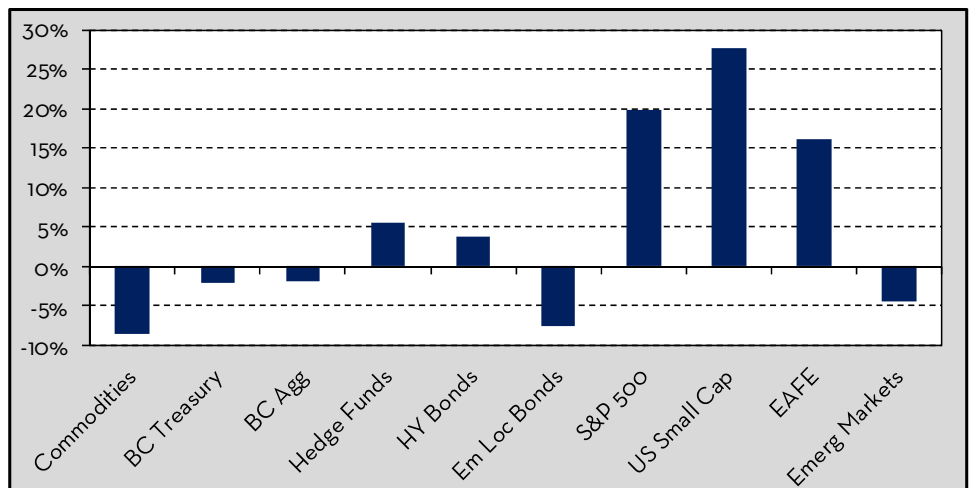
Introduction

Being diversified has felt really lousy so far in 2013. There. We said it. Owning anything but US stocks, and maybe some Japanese equities, has hurt...a lot. Through September, the Standard & Poor's 500 Index is up nearly 20% and shares of US small companies have gained even more (Exhibit 1). Everything else? A real drag. Treasuries are negative for the year; as are Treasury Inflation-Protected Securities (TIPS), investment-grade corporate debt, commodities, and emerging markets' stocks and bonds. On the (modestly) positive side, high-yield bonds and bank loans have posted gains and hedge funds, in general, have generated robust returns, but not to the same degree as the bountiful US stock market. So, diversification hasn't helped this year. In fact, in many cases it has made investors feel downright silly for holding anything other than US equities.

To this end, we enter the last quarter of 2013 questioning the merits of diversification. There are investors who believe that interest rates are going through the roof and no one should own a bond again, that inflation is dead so holding commodities is a fool's errand, and that the emerging markets are about to founder on the rocks of currency crises. In their view, US equities are the superior choice and will enjoy a bull market for years. All of these are possible...or not. We don't know. And, for that matter, no one does. This brings us to one of the most important reasons to diversify: the future is unknown and it is vital to have exposure to assets that will do well in a variety of economic environments. Reflecting this essential uncertainty is a risk-balanced asset allocation, a humble starting point for investors. This also means that in any given period, investors will own some assets that do well and others that do not. That is the core of diversification. And that has not served us well this year.

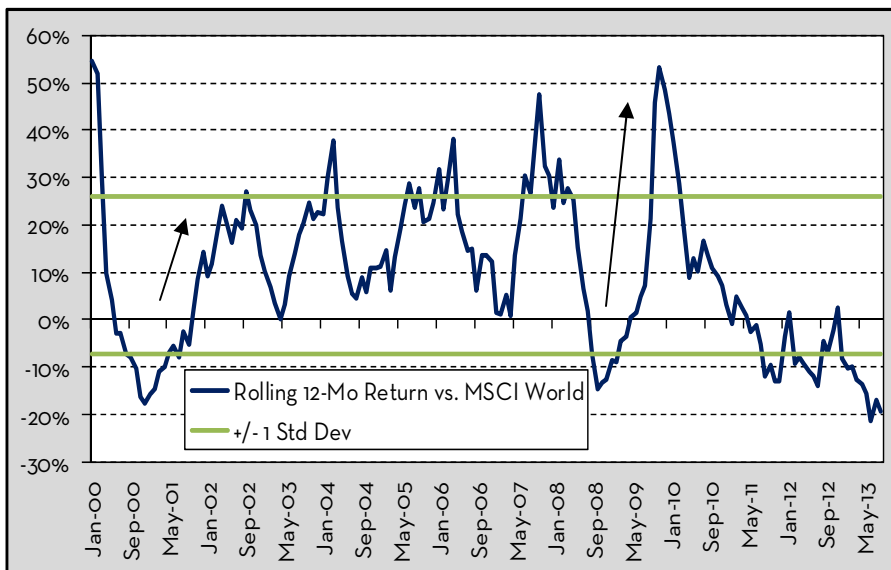
While we believe that risk-balanced asset allocation reflects a sound and modest starting point, we also want to share our views on markets. We do not believe US equities will continue to outperform all other investment categories. As we begin our annual process for setting asset class assumptions, we start with the observation that US stock market performance in 2013 is not matched by equal improvements in underlying fundamentals and, as a result, valuations have become more expensive. Conversely, emerging market equities look even cheaper. Some may

Exhibit 1: Year to Date Performance for Major Asset Classes



Source: Bloomberg as of 9/30/2013

Exhibit 2: MSCI Emerging Market Equity Excess Returns vs. MSCI World



Source: Bloomberg as of 9/30/2013

more than 25% early in the summer before that gap somewhat closed in September; and emerging markets' debt is the worst performing segment of the global bond market. These results reflect, in part, lower expected economic growth in these markets and, more recently, the risk of balance of payments crises in some countries. These are significant challenges. That said, emerging markets are still fueled by these powerful drivers of potential future performance:

- Economic growth expectations, although reduced, remain meaningfully higher than for developed countries;
- Better financial positions than developed markets (with a few potential important exceptions); and,
- Attractive valuations.

Exhibit 2 illustrates the relative performance of emerging market stocks compared to the MSCI World. In prior historic periods when emerging market equity returns diverged to this degree from the global market, the subsequent period saw an equally large rebound. To be sure, risks associated with currency crises and growth-shocks are real. However, these risks are specific to certain countries, for instance, Turkey, Indonesia, India, Brazil and South Africa, and are, to a certain extent, priced in. In this environment, we believe the best way to get exposure to emerging markets is through active managers who can assess trade-offs of risk and return across markets and allocate accordingly. We also continue to believe that shares of smaller companies and consumer-oriented firms allow investors access to a compelling driver of growth in these markets.

Finally, we expect market volatility to remain a mainstay, whether it is driven by political wrangling in Washington or conflict in the Middle East. We suggest investors remain disciplined, rebalancing US equities back to targets and allocating gains to emerging markets and other diversifying investments. As frustrating as this approach has been this year, we remain convinced that allocating broadly to risk-balanced exposures remains the best way to position for uncertain markets.

Global Equities

US stocks continued their march upward in the third quarter, the S&P 500 Index gained 5.2%, shrugging off uncertainty around the continuity of the Federal Reserve's accommodative monetary policy. The economy also expanded modestly during this time. Housing remained strong as unemployment inched lower and consumers regain confidence. Stock market gains were tempered at the end of the quarter as investors fretted over the political gridlock and a potential debt default by the US. Growth stocks outpaced value, underscoring increased risk tolerance; defensive and interest rate sensitive sectors, typically seen in value stock portfolios, lagged. Small-cap shares continued to lead in the third quarter and year to date, with the Russell 2000 Index returning 10.2% for the three months ended Sep. 30.

The quarter also was positive for international and emerging markets. Returns were boosted on the back of improving economic data in Europe, especially in some of the more troubled regions such as Greece, Italy and Spain. Japanese stocks gained but still lagged broader developed markets as its Prime Minister's political party failed to garner a majority in elec-

say for good reason (more on that below). Interest rates have risen across the board, pushing up expected bond returns. Commodities have sold off and their prices in the futures markets have improved. As a result, US equities appear less attractive than they were at the start of the year relative to the broad universe of assets. This is the hard part, the consultant's "eat your vegetables" recommendation: even when it feels the worst, disciplined long-term investing means trimming from the best performing investments and buying more of the assets that are not doing well. In the latter category, we believe emerging markets' stocks and bonds are a particular candidate for additional investment.

To be sure, this has been a thankless recommendation so far this year. Emerging markets' stocks trailed the S&P 500 by

tions. Signs of stabilizing growth in China pushed up emerging markets, which returned around 5.9% in the third quarter. An increase in risk-taking within these regions sparked a sharp rally in the more cyclical sectors, such as energy and materials; defensive sectors lagged, with, for instance, consumer staples losing 0.1%.

Global Fixed Income

Fixed income markets were beset by volatility in the third quarter as bonds continued to price in the Fed eventually tapering its monetary stimulus. This caused yields in long-term Treasuries and high-quality bonds to spike, with the 10-year Treasury yield closing near 2.6% in mid-September.

An unexpected announcement by the Fed to leave the bond-purchase program unaltered ratcheted up investors' risk appetite. US Treasury obligations, the assets most sensitive to Fed policy, sold off as yields reached 2.98% in September from 2.52% in June, subsequently ending the quarter at 2.64%. Longer-dated Treasuries fared the worst amid inflationary expectations fueled by continued monetary stimulus and signs of a slowly improving domestic economy. In response, US TIPS returned 0.9% in the quarter and the breakeven rate, that is, the spread between nominal and real yields that serves as a proxy for market expectations for inflation, widened 10 basis points to 2.3%.

The Barclays Aggregate Index, which tracks the US investment-grade fixed income market, lost 0.6% in the quarter, bringing year to date losses to -1.9%. Similar to Treasuries, mortgage-backed securities struggled in the first half of the quarter, but benefitted greatly from the Fed's inaction, posting gains of 1.0% for the three months ending Sep. 30. The weakness in Treasury markets in July and August negatively impacted prices of investment-grade credit, which subsequently recovered,

Fixed Income Index Returns as of 9/30/2013				
Global Fixed Income	Quarter	1 Year	3 Yrs	5 Yrs
Citi WGBI	2.9%	-4.6%	1.0%	4.3%
JPM EMBI Plus	0.5%	-5.9%	4.9%	11.5%
Domestic Fixed Income	Quarter	1 Year	3 Yrs	5 Yrs
B C Aggregate Bond	0.6%	-1.7%	2.9%	5.4%
BC US Agg. Treasury	0.1%	-2.1%	2.3%	4.4%
BC US Credit	0.7%	-1.9%	4.3%	10.1%
BC Mortgage Backed	1.0%	-1.2%	2.7%	5.1%
BC Intern. Gov't/Credit	0.6%	-0.5%	2.4%	5.0%
BC 1-10 Yr TIPS	0.9%	-3.9%	3.1%	4.1%
BC High Yield	2.3%	7.1%	9.2%	13.5%
S&P LSTA Lev. Loan	1.2%	5.0%	6.3%	9.7%
3 Month T-Bills	0.0%	0.1%	0.1%	0.2%
10-Year Bond Yields	Sep-13	Jun-13	Sep-12	Sep-11
US	2.6%	2.5%	1.6%	1.9%
Germany	1.8%	1.7%	1.4%	1.9%
UK	2.7%	2.4%	1.7%	2.4%
Japan	0.7%	0.9%	0.8%	1.0%

Source: Bloomberg

Equity Index Returns as of 9/30/2013				
Global Equity	Quarter	1 Year	3 Yrs	5 Yrs
MSCI World	7.7%	17.7%	10.3%	6.1%
US Equity	Quarter	1 Year	3 Yrs	5 Yrs
S&P 500	5.2%	19.3%	16.3%	10.0%
Dow Jones Industrial Average	1.5%	12.6%	13.4%	7.9%
NASDAQ Composite	10.8%	21.0%	19.7%	16.1%
Russell 1000 Growth	8.1%	19.3%	16.9%	12.1%
Russell 1000 Value	3.9%	22.3%	16.2%	8.9%
Russell 2000	10.2%	30.1%	18.3%	11.2%
Russell 2000 Growth	12.8%	33.1%	20.0%	13.2%
Russell 2000 Value	7.6%	27.0%	16.6%	9.1%
International Equity	Quarter	1 Year	3 Yrs	5 Yrs
MSCI EAFE	11.6%	23.8%	8.5%	6.4%
MSCI Emerging Markets	5.8%	1.0%	-0.3%	7.2%
MSCI Europe	13.6%	24.2%	9.5%	6.8%
MSCI UK	12.0%	17.0%	11.3%	9.0%
MSCI Japan	6.7%	31.5%	9.7%	5.7%
MSCI Far East	6.8%	27.2%	9.1%	6.9%

Source: Bloomberg

posting returns of 0.9% in the quarter. In a testament to market confidence, telecommunications giant Verizon Communications sold \$49 billion of bonds, the largest corporate debt offering ever, amidst overwhelming investor demand.

The star performers of 2013, high-yield bonds and leveraged loans, maintained their reign over the domestic fixed income market. High-yield bond yields fell to 6.2% in September from 6.6% in June, according to the Barclays High Yield Index, returning 2.3% in the third quarter. Leveraged loans, which have benefitted from strong demand from retail and institutional investors, gained 1.2% during the same period. The thirst for yield persisted as lower quality and less liquid portions of the speculative-grade market outperformed higher quality issues.

Emerging markets' debt improved from the second quarter. That said, results were mixed. Concerns of a secular slow-down across emerging markets, specifically in Brazil, Indonesia, India, South Africa and Turkey, and the specter of a Fed tightening drove spreads higher over the period. However, emerging market bonds denominated in external currency gained 0.9% in the third quarter, bringing year to date performance to -7.4%. Local currency emerging markets debt lost 0.4% in the period, with currency depreciation offsetting a

modest decline in local yield curves. Year to date performance in this asset class is -7.6%.

Currency Markets

The US Dollar (USD) weakened against most major and some emerging market currencies fueled by expectations that the US will continue its accommodative monetary policy. In July, the USD strengthened against most major currencies, boosted by speculation that the Fed was easing off asset purchases. But the Fed unexpectedly stood pat, triggering a drop in the USD. This weakness continued in September, especially against higher yielding currencies, such as the Brazilian Real, Mexican Peso, British Pounds, and the Australian, New Zealand and Canadian Dollars. It was further exacerbated by the political gridlock around the US debt ceiling.

Commodity Markets

Commodities experienced a bumpy ride in the third quarter as a strong start gave way to a weak finish. Overall, commodities posted quarterly returns of 2.1%, according to the DJ-UBS Commodity Index. Grains were the worst performing segment, off around 5.1%, on the back of record harvest levels in corn. Precious metals led the pack, gaining about 9%, amid an uptick in demand as growth stabilized in China.

Pension Liability

Pension discount rates inched higher during the third quarter to 4.9% from 4.8% as of June 30, according to the Citigroup Pension Liability Index. The Treasury curve steepened slightly, with 30 year rates rising 17 basis points. The net result was a positive estimated decline in clients' pension liabilities of 0.6% for the quarter, contributing to a liability decline of 11.2% so far this year.

Clients with or without liability driven investing (LDI) strategies in place should have seen a rise in economic funded status this quarter if the plan was not 100% hedged; those with an LDI strategy in place may have also reported losses from long-duration assets. Meanwhile, the funding relief for corporate plans from MAP-21, which allows for higher discount rates to be used under PPA, masks these changes in economic discount rates that will be more visible in accounting reporting.

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. NEPC believes that LDI may still be a useful hedging tool to put in place, especially after rates and plan funded status start rising.

Hedge Funds

Hedge funds were up 1.6% in the third quarter, according to the Dow Jones Credit Suisse (DJCS) Hedge Fund Composite, compared to gains of 5.2% for the S&P 500. Broadly, most strategies were in the black; however, managed futures lost 3.9% for the quarter.

The DJCS Long/Short Equity Index returned 3.5%. Sector-focused indices, for instance, the HFRI: Energy-Basic Materials and Technology-Healthcare, outperformed the overall market at 6.1% and 8.8%, respectively. Stock selection continued to improve, allowing managers to outperform relative to their net exposures. Exposure to small cap, global and emerging markets benefitted managers as these areas outperformed the S&P 500.

Hedge Fund Industry Performance Overview as of 9/30/2013				
Composite	Quarter	1 Year	3 Yrs	5 Yrs
DJCS Hedge Fund Composite	1.6%	7.4%	5.0%	5.5%
Relative Value	Quarter	1 Year	3 Yrs	5 Yrs
DJCS Convertible Arbitrage	0.9%	6.7%	5.6%	9.7%
DJCS Fixed Income Arbitrage	1.1%	4.6%	6.9%	6.6%
DJCS Equity Market Neutral	1.2%	4.8%	3.1%	-7.9%
DJCS Multi-Strategy	2.7%	9.5%	7.9%	7.5%
Event Driven	Quarter	1 Year	3 Yrs	5 Yrs
DJCS Event Driven	2.9%	13.7%	5.5%	6.4%
DJCS Event Driven - Distressed	2.2%	13.9%	7.2%	6.6%
DJCS Event Driven - Risk Arbitrage	1.8%	5.6%	2.1%	4.1%
DJCS Event Driven - Multi-Strategy	3.3%	13.7%	4.6%	6.3%
Equity Hedge	Quarter	1 Year	3 Yrs	5 Yrs
DJCS Long-Short Equity	3.5%	13.1%	5.6%	6.1%
DJCS Emerging Markets	0.9%	8.2%	3.5%	5.7%
DJCS Dedicated Short Bias	-10.9%	-24.6%	-17.0%	-16.1%
Tactical	Quarter	1 Year	3 Yrs	5 Yrs
DJCS Global Macro	0.2%	2.8%	5.5%	6.9%
DJCS Managed Futures	-3.9%	-10.2%	-3.2%	0.0%
Traditional Markets	Quarter	1 Year	3 Yrs	5 Yrs
BC Aggregate Bond	0.6%	-1.7%	2.9%	5.4%
S&P 500	5.2%	19.3%	16.3%	10.0%

Source: Bloomberg

Fixed income managers posted gains, led by multi-strategy and fixed income arbitrage at 2.7% and 1.1%, respectively, as the Fed held off on tapering its accommodative monetary policy. Global macro managers struggled during the quarter, turning in a flat performance of 0.2%, as risk reversals in global bonds and equities hurt results. The DJCS Event-Driven Index rose 2.9% aided by the market rally.

Private Markets

Private equity fundraising in the first nine months of 2013 totaled \$228 billion, 85% of the amount raised in all of 2012, pointing to an expected increase for 2013. Investor interest underscored economic optimism with 58% of commitments going to buyout and growth equity funds. Buyout deal activity increased in the third quarter; however, corporate acquisitions of buyout-backed businesses slowed, possibly because of near-term market uncertainties around political negotiations on the debt ceiling. Venture capital fundraising represents only 9% of this year's total, down from its 10-year average of 17% of all new funds raised. The volume of venture-backed mergers and acquisitions and initial public offerings gradually picked up in the middle of the year. While M&A of late has been the chosen method of exit for the majority of venture-backed investments, the recent rise in Facebook's stock price above its IPO valuation and Twitter's expected IPO may fuel venture-backed IPO activity as we move toward 2014.

Across the pond, Europe raised \$57.2 billion of private equity through the first nine months of 2013, eclipsing 2012's total of \$54.0 billion. Nearly a quarter of this \$57.2 billion is going into CVC Capital's latest buyout fund. In a display of some of the same reticence as public markets, Asian private equity slowed to 9% of all funds raised in 2013. In the US, we remain guarded on the large buyout sector 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 little protection in the event of a prolonged recession. While this makes for an attractive selling opportunity for existing fund managers, we believe that investors making new commitments are better served by value-oriented buyouts, particularly in the lower- or middle-market, where returns are less dependent on leverage and more reliant on operational improvements and the execution of growth strategies. Opportunistically, private direct lending is an attractive fixed income alternative for investors; it is competing with mezzanine funds by providing uni-tranche financing to lower- and middle-market businesses at attractive yields with lower fee structures for investors. Secondary funds continue to find appealing opportunities as US and European banks whittle down their private equity portfolios to comply with Basel III and other regulation.

In real estate, NEPC is neutral on core real estate in the US and remains positive on non-core real estate, that is, value-add and opportunistic strategies. For US core real estate, fundamentals continue to improve with increasing rents and decreasing vacancy rates; new supply, that is, construction, is still muted, and income spreads relative to Treasuries, though narrowing, remain attractive. That said, plentiful capital, both equity and debt, for acquisitions has driven down absolute yields to near historical lows for high demand assets. For new investments today, we expect returns similar to long-term averages. For non-core real estate, select attractive opportunities remain in the US for skilled firms with a proven ability to identify undervalued assets, buy right, and create value. In Europe, non-core properties are still undervalued and significant distress remains, creating what we believe are more attractive opportunities than in the US. We still believe real estate debt strategies are appealing, particularly in Europe's distressed lending environment, although currency risk is a potential consideration.

In real assets, NEPC believes that energy, specifically in North America, represents an attractive opportunity in the upstream and midstream parts of the energy value chain. MLPs operating in the energy midstream space continue to generate growing cash flows and carry a healthy outlook over the next three-to-five years for strong companies. Agriculture and metals/mining opportunities seem appealing based on long-term demographic trends despite a less certain short-term outlook. Timber is still an underweight as total return targets are low with a relatively small market opportunity and managers seeking deals outside the US.

Final Thoughts

Advancing stock markets in the US and other developed countries have boosted most investment programs so far this year. Still, the recent US government shutdown and the last-minute deal on the debt ceiling to avert a potentially catastrophic default are stark reminders of the ongoing clash between fiscal austerity and monetary stimulus. In addition, slowing growth and changing capital flows are challenging emerging economies. Bond investors face the potential headwind of rising interest rates when the Fed tapers its accommodative monetary policy. Other risks, including unrest in the Middle East and uneasiness around debt levels in Europe, also remain.

In this environment, we remind investors of the importance of building diversified portfolios for the long-term, allocating globally and across asset categories, including bond markets and inflation-hedging assets. While we find emerging markets attractive, we recommend gradually rebalancing with the goal of market-weighting them in the total portfolio. We also recommend making allocations to this segment through active strategies in recognition of their likely volatility. For bonds, we suggest opportunistic investments across markets and durations to manage the risk of rising rates. Risk parity strategies remain a strong foundation for achieving efficient exposures to a broad set of asset categories. And this likely presents a good juncture for corporate defined benefit programs with improvements in funded status to reduce risk by increasing exposure to liability-hedging assets.

We acknowledge that exposure to asset classes other than US stocks has led to frustrating results. We do not believe this spells the end of diversification. Valuations on US stocks appear stretched while prospective returns from other asset categories have improved. At the same time, opportunities exist in less liquid categories such as direct lending, where long-term investors can seek to earn an attractive risk-adjusted return by replacing lending by traditional banks as these financial institutions pare back amid regulation. At NEPC, we continue to believe that building a risk-balanced portfolio, while maintaining the flexibility to allocate to more attractive components of global markets, is still the best approach to achieve long-term investment objectives.

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