

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.

NOW EVEN THE STOCK MARKET IS BORROWING FROM THE FUTURE

What's a consultant to do when stocks surge 10.6% in the first quarter, on the heels of a rigorous and robust forecasting exercise that projects only a modest expected return for the S&P 500? For starters, savor the gains in clients' asset values and financial positions. Then, work with clients to rebalance their investments.

These outsized gains of the first three months of 2013 underscore the challenges of forecasting, and the impact of exogenous forces such as monetary stimulus on markets.

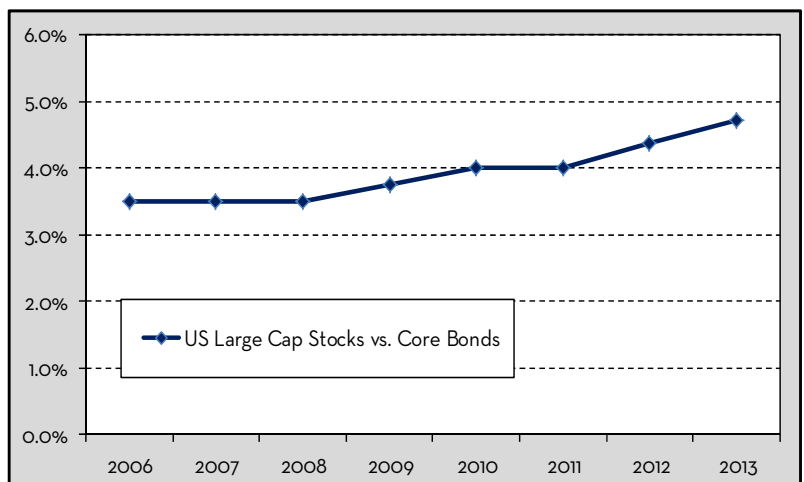
To recap, we made the following observations about the US stock market at the start of the year:

1. Expected returns are low: we are forecasting a 6.75% annual return—our lowest ever—for US large company stocks over the next 5-7 years
2. The expected return of stocks in contrast to bonds is elevated. In other words, the equity risk premium is at the high end of the historical range
3. Monetary stimulus could provide a tailwind for US stocks for a while

Our approach to forecasting return by using forward-looking building blocks is particularly useful for raising the question of what one has to believe to expect significantly different results from our base case. In order for the stock market to maintain its torrid pace, or just stay at this level, one would have to expect greater economic growth, higher inflation, bigger dividend payouts, and/or rising price/earnings ratios. Although any of these outcomes are possible, they are yet to be reflected in the overall economic environment.

The remarkable gains of US stocks in the first quarter, absent significant change in the fundamental drivers, appear to borrow from future expected returns. As the estimable Howard Marks of Oaktree Capital Management put it in his most recent letter to clients, "Appreciation, at a rate in excess of cash flow growth, accelerates into the present some appreciation that otherwise might have happened in the future." To this end, equity investors may be taking a page from the US government's playbook of borrowing liberally from future generations to meet current obligations.

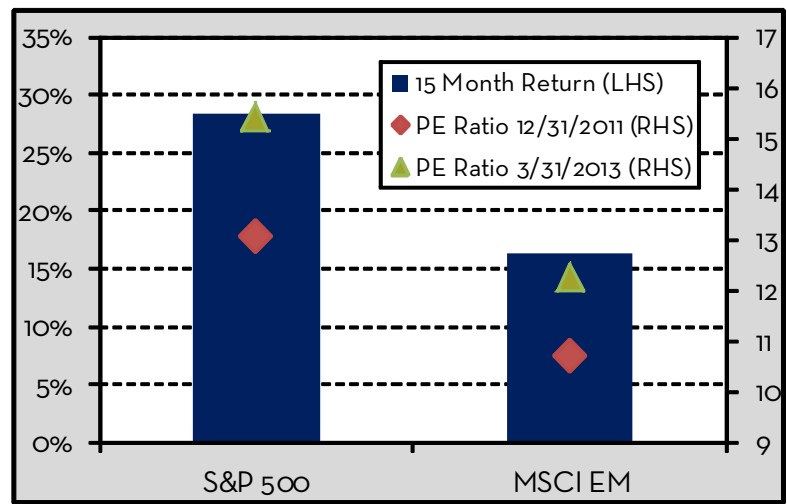
Exhibit 1: NEPC Forecast Return Premiums



Source: NEPC 5-7 year Forecast Returns

So how do we make sense of such bullish sentiment, absent key underlying drivers? This brings us back to our observation regarding stocks at the outset of 2013. Due to the very low yields of nominal bonds such as Treasuries, often referred to as the “risk free” rate, the difference in expected return between bonds and stocks is at a very high level. In fact, despite the low absolute expected return on US stocks, this measure of equity risk premium was as high as we had ever forecast, and was toward the upper end of the historical range (*Exhibit 1*). With the Federal Reserve keeping Treasury rates artificially low, investors gravitate toward risky assets, bidding up their value and triggering a wealth effect to spur economic growth. Monetary stimulation appears to be the strongest justification for the robust returns of risky assets in 2012, and the continuing bullish performance of US stocks so far this year. This dynamic can certainly continue as long as the Fed keeps pumping tens of billions of dollars of liquidity into markets every month.

Exhibit 2: Return and Price to Earnings (PE) Ratio Comparison



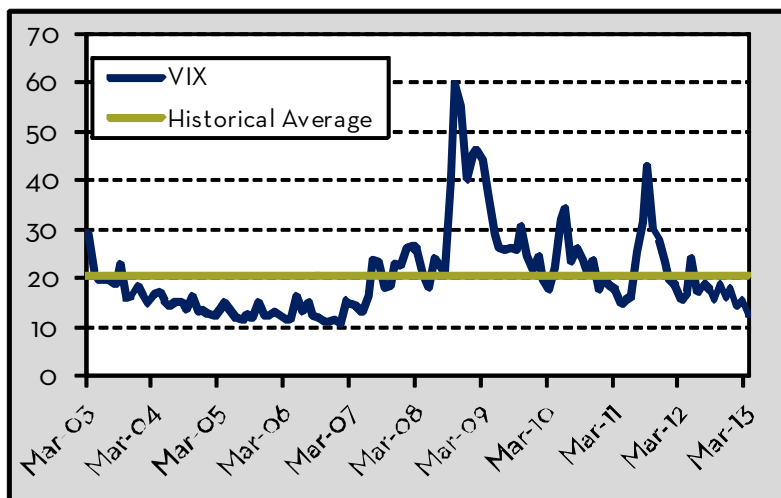
Source: Bloomberg

This does not mean investors should steer clear of stocks. Equity markets can run for long periods before correcting overstretched valuations. Also, most long-term investors require exposure to risky assets to meet their investment objectives. That said, we believe this is a good time to reinforce the concept of rebalancing portfolios. Taking profits after an allocation moves above pre-determined policy ranges is generally a winning strategy, especially if those gains can be redeployed into attractively valued assets. Enter: emerging markets.

We began the year with a recommendation to build exposure to emerging markets stocks and bonds. These investments seem reasonably priced and positioned to benefit from powerful secular trends supporting their economic growth. Supportive trends include increasing globalization of markets and lower-cost manufacturing, demand for natural resources, and a growing middle-class of new consumers. To be sure, this broad category stalled in the first quarter, posting losses and trailing US large company stocks by over 12%. Non-US stocks also trailed US stocks in the first quarter, albeit by a lesser margin. This proves investing, particularly return forecasting, is a humbling business. Still, we view these short-term results as an opportunity to divert profits from US stocks to global strategies, including emerging market equities. (*Exhibit 2* shows the difference in performance and valuation of US and EM stocks.)

Another factor in support of stocks is the extremely muted risk landscape. The day-to-day price volatility of major markets is well below the historical average (*Exhibit 3*). The VIX, a measure of implied stock market volatility, rested at a nearly-supine 12.70 at the end of the quarter, despite well-articulated potential drivers of future market shocks,

Exhibit 3: Implied Stock Market Volatility



Source: Bloomberg

such as another chapter of the Eurozone debt crisis, a conflagration in the Middle East or the Korean peninsula, a sudden economic slowdown in China, or an interrupted recovery in the US fueled by fiscal tightening.

Yet, we argue this is no time for complacency. When the market stops borrowing from the future, and downside volatility resurfaces, it will behoove investors to have some dry powder on hand to buy attractive assets at a discount. To this end, rebalancing can not only enforce the useful discipline of selling high and buying low, but also ready investors to take advantage of opportunities when they arise to buy appealingly priced assets.

Global Equities

The US economy continues to recover with improvements in residential real estate and consumer sentiment, and an increase in employment opportunities. The stock market posted hefty gains in each month of the first quarter. Valuations rose as investors flocked to equity, snapping up attractively priced lower growth stocks while avoiding those with higher valuations. To this end, defensive sectors such as consumer staples and healthcare led the pack. The S&P 500 rose 10.6% while the Russell 2000 gained 12.4%. Value outperformed growth across the market cap spectrum except in small cap. That said, we believe the improvements in underlying economic fundamentals are at odds with the extent of these gains in US stocks.

International markets lagged behind with modest returns of 5.1% in the first quarter, according to the MSCI EAFE Index. During the quarter a strong US dollar provided a headwind to international markets. The Yen and Euro fell fueled by anticipated policy changes in Japan and continued financial concerns in Europe, respectively. Similar to the US, defensive sectors, consumer staples and healthcare, were the strongest performers.

Broadly speaking, emerging markets retreated during the quarter, recording losses of 1.6%, according to the MSCI Emerging Market Index. The commodity sectors, a major component of the benchmark, trailed behind with energy trading off nearly 5% and materials off almost 10% amid weakening global demand and slowing growth in China. That said, consumption-related investments and small cap stocks recorded gains in emerging markets. Emerging market small cap stocks returned 4.3% during the quarter and significantly outperformed the large cap index. Domestically-driven sectors, such as consumer staples and healthcare, returned around 1% in the first quarter. From a regional standpoint, Philippine and Thai markets led the ASEAN region higher.

Overall, we view the performances of international and emerging market equities as an opportunity to divert profits from US stocks to global strategies.

Global Fixed Income

Investors' quest for yield again drove performance for fixed income in the first quarter. Depressed yields in investment-grade bonds pushed investors into riskier segments of the market. Government stimuli withstood the selling pressures at the short-end of the curve and kept rates suppressed, but a steepening of the curve left long-dated government issues at a loss. The yield on the 10-year Treasury stood at 1.87% in March, compared to 1.78% in December, and 1.65% in September 2012.

As a result of the yield increase, the Barclays Aggregate index returned -0.1%, its first quarterly loss since 2006. Investment-grade credit, at -0.2%, was also negative for the quarter. Financial issues (0.9%) outpaced industrial issues (-0.7%) as investors gravitated toward the debt of banks and financial institutions because of their relative immunity to leveraged buy-outs, a risk to fixed income investors in a low interest rate environment. As a result, spreads, that is, the additional yield over similar-dated treasuries required by investors to compensate for additional risks, on financial issues were tighter than those of industrial corporates, a first since 2007. Agency-mortgage backed securities (MBS) returned -0.05% in the quarter underscoring investors' concerns on the longevity of the Fed's mortgage purchase program.

The segment of the bond market below investment-grade contin-

Equity Index Returns as of 3/31/2013				
Global Equity	Quarter	1 Year	3 Yrs	5 Yrs
MSCI World	7.2%	9.3%	6.5%	0.0%
US Equity	Quarter	1 Year	3 Yrs	5 Yrs
S&P 500	10.6%	14.0%	12.7%	5.8%
Dow Jones Industrial Average	11.3%	10.3%	11.4%	3.8%
NASDAQ Composite	8.2%	5.7%	12.1%	8.7%
Russell 1000 Growth	9.5%	10.1%	13.1%	7.3%
Russell 1000 Value	12.3%	18.8%	12.7%	4.8%
Russell 2000	12.4%	16.3%	13.5%	8.2%
Russell 2000 Growth	13.2%	14.5%	14.7%	9.0%
Russell 2000 Value	11.6%	18.1%	12.1%	7.3%
International Equity	Quarter	1 Year	3 Yrs	5 Yrs
MSCI EAFE	5.1%	11.3%	5.0%	-0.9%
MSCI Emerging Markets	-1.6%	2.0%	3.3%	1.1%
MSCI Europe	2.7%	10.6%	5.0%	-2.0%
MSCI UK	2.5%	9.7%	8.6%	0.7%
MSCI Japan	11.6%	8.5%	3.5%	-0.5%
MSCI Far East	10.0%	9.8%	4.7%	0.4%

Source: Bloomberg

Fixed Income Index Returns as of 3/31/2013				
Global Fixed Income	Quarter	1 Year	3 Yrs	5 Yrs
Citi WGBI	-2.8%	-0.7%	3.9%	2.8%
JPM EMBI Plus	-3.3%	9.7%	11.5%	11.6%
Domestic Fixed Income	Quarter	1 Year	3 Yrs	5 Yrs
BC Aggregate	-0.1%	3.8%	5.5%	5.5%
BC US Agg. Treasury	-0.2%	3.1%	5.7%	4.9%
BC US Credit	-0.2%	7.0%	8.5%	8.7%
BC Mortgage Backed	0.0%	2.0%	4.3%	5.7%
BC Interm. Gov't/Credit	0.3%	3.5%	4.7%	4.6%
BC 1-10 Yr TIPS	0.3%	3.9%	6.2%	4.5%
BC High Yield	2.9%	13.1%	11.2%	11.6%
S&P LSTA Lev. Loan	2.1%	7.9%	6.5%	8.5%
3 Month T-Bills	0.0%	0.1%	0.1%	0.3%
10-Year Bond Yields	Mar-13	Dec-12	Mar-12	Mar-11
US	1.8%	1.8%	2.2%	3.5%
Germany	1.3%	1.3%	1.8%	3.4%
UK	1.8%	1.8%	2.2%	3.7%
Japan	0.6%	0.8%	1.0%	1.3%

Source: Bloomberg

ued to perform in the first quarter. The Barclays high yield index returned 2.9% with low quality issues outperforming high-quality paper. Gains in high-yield were driven by the continued demand for yield, low projected default rates, and positive fundamentals in the asset class. The S&P LSTA Leveraged Loan Index, a bellwether for US leveraged loans, was up 2.1%. Loan funds, offering interest rate protection through their floating rate structure, and seniority in the capital hierarchy, were popular with investors in the first quarter. In an about turn, emerging markets, last year's strongest performer in fixed income, posted negative returns for the quarter ended March 31. In this period, USD-denominated emerging sovereign debt posted losses of 2.3%, fueled by upward pressure on US rates and spread widening in the sector. Local currency debt, as measured by the JP Morgan GBI-EM GD (unhedged), returned -0.1% in the period.

Currency Markets

The risk-taking environment in January caused the US dollar (USD) to depreciate against most developed and emerging market currencies. However, the USD reversed course and strengthened against most of these currencies in the first quarter. This was mainly fueled by risk aversion in February and March, stemming from concerns including sequestration in the US, the Cypriot financial crisis, and political uncertainties in Spain and Italy.

The worst performing currencies in developed markets were the Japanese yen (JPY) and the British pound (GBP), which declined 7.9% and 6.5%, respectively, relative to the USD. The JPY continued to weaken on the back of recently elected Prime Minister Abe's stated goal to reverse deflation in the Japanese economy, and the expected easing measures by the Bank of Japan. Safe haven flows, however saw the yen reverse towards the end of March. The GBP depreciated with Moody's Investors Service's downgrade of the United Kingdom. The euro (EUR) also weakened, reaching a four-month low against the USD, as concerns deepened over the political and economic future of the Eurozone. On the other hand, commodity producing countries like Australia and New Zealand saw their currencies appreciate against the USD.

Most emerging market currencies also weakened against the USD. The notable exceptions: the Thai baht appreciated 4.5%, fueled by strong capital inflows into government bonds as investors sought higher returns. The Mexican peso also appreciated strongly on the back of a stronger economy.

Commodity Markets

Negative news headlines underscored the extremely mixed performance posted by commodity and commodity-related equity markets in the first quarter. Moderate growth in China and disappointing economic reports in Europe put downward pressure on many commodity subsectors. Late in the quarter, news out of Cyprus that large depositors would incur losses also proved to be a drag on the markets. The energy sector, the one bright spot within commodities, saw gasoline prices surging nearly 30%. The worst performing commodity subsector was metals, with copper, gold, and silver declining roughly 5% during the quarter. The energy sector maintained its lead within commodity-related equities, with the integrated oil stocks, oil services, and natural gas stocks posting gains between 7.2% and 13.7%. Gold experienced two consecutive negative quarters, a first since 2001. As a result, gold mining stocks continued to underperform, trailing overall commodity returns by around 20% during the quarter.

Pension Liability

Pension discount rates rose in the first quarter fueled by increases in Treasury rates and credit spreads. The Citigroup Pension Liability Index gained 27 basis points, rising to 4.32% from 4.05%, consistent with a 3.7% drop in liability values. The impact on shorter duration plan liabilities was around 2%. Liability Driven Investing (LDI) strategies likely experienced losses in the first quarter.

Many of our corporate pension clients have implemented LDI glide path strategies to hedge interest rate exposure and reduce funded status volatility. A glide path framework can be customized to trigger changes in asset allocation as interest rates and/or funded status levels increase. Given strong results of growth assets in the first quarter, we encourage you to discuss your volatility reduction goals with your NEPC consultant.

Hedge Funds

Hedge funds posted gains in the first quarter. The Dow Jones Credit Suisse (DJCS) Hedge Fund composite rose 3.6%, trailing the S&P 500 Index's 10.6% return. Managers with high net exposure to US stocks were the top performers, while global macro and fixed income arbitrage lagged at 2.2%.

The DJCS Long-Short Equity index gained 5.1% as lower net exposure managers missed out on the strong beta rally. Exposure to Japan was a positive contributor for managers with the MSCI Japan Index rising 11.6%. The MSCI Emerging Markets Index was down -1.6% during the quarter, and the DJCS Emerging Markets Index rose 4.5%, including both equity and credit managers. The DJCS Event Driven Index gained 4.8% as activist and special situation managers benefited from the market rally.

The DJCS Global Macro Index returned 2.2% during the quarter while the DJCS Managed Futures Index rose 3.7%. Some managed futures funds recorded a strong performance in January and March fueled by exposure to equities and certain foreign exchange markets. Discretionary global macro managers benefited from the short Japanese Yen trade and long exposure to US stocks. Select managers outperformed due to their ability to dynamically adjust risk even as broad hedge fund indices lagged the S&P 500 during the quarter.

Hedge Fund Industry Performance Overview as of 3/31/2013				
Composite	Quarter	1 Year	3 Yrs	5 Yrs
DJCS Hedge Fund Composite	3.6%	7.2%	5.4%	3.4%
Relative Value	Quarter	1 Year	3 Yrs	5 Yrs
DJCS Convertible Arbitrage	2.7%	5.6%	6.3%	6.3%
DJCS Fixed Income Arbitrage	2.2%	10.2%	8.9%	5.4%
DJCS Equity Market Neutral	0.7%	0.2%	2.0%	-8.5%
DJCS Multi-Strategy	4.7%	9.9%	3.6%	4.0%
Event Driven	Quarter	1 Year	3 Yrs	5 Yrs
DJCS Event Driven	4.8%	10.2%	4.3%	4.0%
DJCS Event Driven - Distressed	5.0%	10.8%	5.7%	4.1%
DJCS Event Driven - Risk Arbitrage	0.3%	1.0%	1.9%	2.5%
DJCS Event Driven - Multi-Strategy	4.7%	9.9%	3.6%	4.0%
Equity Hedge	Quarter	1 Year	3 Yrs	5 Yrs
DJCS Long-Short Equity	5.1%	6.1%	3.9%	2.9%
DJCS Emerging Markets	4.5%	8.7%	5.3%	2.5%
DJCS Dedicated Short Bias	-8.6%	-16.3%	-13.5%	-14.4%
Tactical	Quarter	1 Year	3 Yrs	5 Yrs
DJCS Global Macro	2.2%	5.2%	8.0%	5.1%
DJCS Managed Futures	3.7%	1.3%	2.0%	1.6%
Traditional Markets	Quarter	1 Year	3 Yrs	5 Yrs
Barclays Aggregate Bond	10.6%	14.0%	12.7%	5.8%
S&P 500	-0.1%	3.8%	5.5%	5.5%

Source: Bloomberg

Private Markets

The private equity industry exhibited a seasonal fundraising decline in the first quarter. Investments in new private equity funds totaled \$54 billion during this period, equal to 20% of the \$257 billion raised in 2012, and in line with amounts raised in the first quarter of last year. Bucking the trend of the seasonal slowdown, European fundraising posted \$17 billion of new commitments, representing 31% of amounts raised for European funds last year. Buyout and growth equity commitments were \$33 billion in the first quarter, comprising approximately 60% of all new commitments. These new commitments, combined with capital overhang from prior years, are helping to fuel high transaction valuation multiples, especially in the large end of the market where private equity competes with corporations for mergers and acquisitions. Commitments to new distressed funds were less than \$1 billion during the quarter as investors waited for prior commitments to be deployed before adding to their distressed positions.

Lending activity in Europe and the US was robust fueled by high volumes of refinancing and M&A activity in the quarter. With high yield and leveraged loan spreads narrowing, NEPC has identified senior lending as an attractive alternative for investors willing to trade illiquidity for higher yielding fixed income portfolios. With the dust yet to settle on the near-term economic outlook, we believe a blend of growth- and value-oriented strategies is vital to balance the macroeconomic risk in a private equity program. We find secondary, turnaround/special situation, and direct lending strategies particularly attractive as they benefit from corporate restructurings and tighter regulation of the global banking industry.

In private core real estate, quarterly results continue to trend downwards towards long-term average returns. NEPC has a neutral view for US core real estate. Positive signs for core real estate include improving fundamentals for occupancy and rental rates, limited new construction, and attractive relative spreads versus Treasuries. Concerns include lower absolute yields and significant capital inflows that have bid up asset prices. NEPC remains neutral on US Real Estate Investment Trusts (REITs). REITs are trading at historically high multiples of their funds from operations (FFO) and at premiums to underlying net asset values (NAV). NEPC continues to see opportunities in value-add and opportunistic real estate strategies, especially in Europe, where anemic lending activity is causing capital structure distress, particularly in non-core/secondary assets. Debt-related investment opportunities, also in Europe, appear to offer an attractive risk-return profile for investors.

Final Thoughts

The bullish start to the year for US equities provides a welcome boost for many investment programs, and a positive backdrop to the improving economic environment, at least in the US. The strong market results, however, appear to stem from an accommodative monetary policy, and the associated incentives to invest in higher yielding risky assets, rather than a proportionate improvement in underlying fundamentals. At the same time, the year-to-date tepid performance of Europe-

an and emerging market stocks increases the appeal of these categories relative to US equities. In response, we recommend rebalancing overall equity exposures to targets, and, within the total equity allocation, adding to non-US, global, and emerging markets strategies using gains from US stocks as a funding source.

The continuing monetary stimulation by the Fed and other major central banks raises concerns around inflation, even if they remain unfounded so far. As a result, we also recommend building strategic exposure to inflation-hedging strategies across the spectrum, from liquid real assets such as inflation-linked bonds and commodities, to illiquid strategies, including direct investments in real estate and real assets. Finally, investors with the ability to lock-up capital, have the potential to profit from replacing banks in areas where traditional lenders are no longer active. In the coming months we will bring to clients investment ideas for direct lending, and other credit-related strategies, in the US, Europe and Asia. We believe these offer desirable returns with favorable risk profiles.

At NEPC we remain committed to building risk-balanced programs that pursue innovative strategies to meet the long-term financial objectives of our clients.