MARKET THOUGHTS

FIRST QUARTER 2012 **VOLUME 25**

Quarterly EQUITY INDICATOR	Quarterly BOND INDICATOR	Quarterly HEDGE FUND INDICATOR	Quarterly PENSION LIABILITY INDICATOR
Up 12.6%	Up 0.3%	Up 4.0%	Down 3.5%

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.

Risk On, Risk Off, Risk On, Risk Off, Risk On...

What a start to 2012. The best first quarter for US stocks since 1998. Global stock markets all up double digits. A roaring "risk on" stretch during the "risk on/risk off" roller coaster of the last four years. So, naturally, clients are asking us: Is it still okay to like risky assets? To which we answer, **yes**—with a dollop of caution, of course, which at NEPC we call risk budgeting.

When we sit down to write NEPC's *Market Thoughts* each quarter, we strive to develop a unique theme, something fresh and different from the previous quarter's piece. We try to identify a particular new topic to explore in some depth, to challenge our clients and ourselves, to be a little provocative, or, at the very least, to inform. What we generally try to avoid is merely talking about markets from quarter to quarter. Nevertheless, this quarter's letter is, once again, about markets—the third in a row.

In October of last year, we told clients that the pricing of risk had changed and that risky assets were likely to be more attractive in our upcoming year-end capital markets assumption development process. Then, in our 2012 Annual Asset Allocation Letter and Fourth Quarter 2011 *Market Thoughts*, both published in January, we recommended that clients consider adding risk to their portfolios because of the relatively attractive valuations of risky assets and the very low level of Treasury yields.

At NEPC, we do our forecasting over a five- to seven-year horizon. We do not expect our recommendations to be rewarded nearly as quickly as they appear to have been so far this year. How good was the first quarter for risky assets? The S&P 500 was up 12.6%. Emerging markets stocks advanced 14.1% and EAFE gained 10.9% year-to-date. Since October of last year, most equity markets have risen 20% or more. And in the credit markets, spreads have tightened even as Treasury yields have risen, leading to returns of 5.3% for high yield bonds in the first quarter and 8.3% for emerging markets debt issued in local currency.

So, our clients' question is fair: have markets already realized the opportunity we identified at the start of the year to take advantage of attractive risky assets? To answer this, we re-examine the valuations of these assets compared to what can be earned in Treasuries (the most commonly recognized risk-free asset).

On the valuation front, first we look at equity markets. Exhibit 1 compares key valuation indicators for US and non-US stock market benchmarks at the end of 2011 and as of March 31, 2012. While equity market valuations have clearly crept up, with the exception of US small caps, they still are well below long-term averages—showing that there is room for further appreciation as long as earnings and sentiment remain strong.

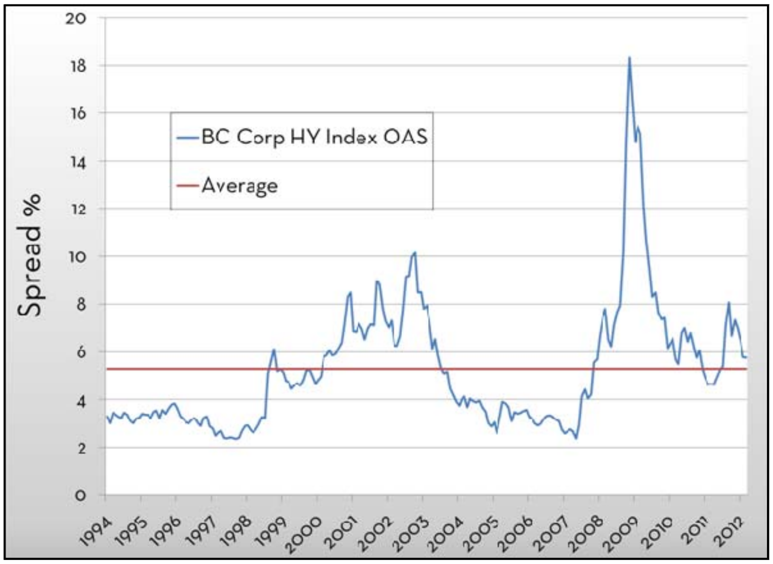
Exhibit 1 - Equity Valuation Measures 12/31/2011 and 3/31/2012

Equity Valuation	Price/Forward Earnings Ratio			Price/Book Value Ratio		
	12/31/2011	3/31/2012	10 Year Avg.	12/31/2011	3/31/2012	10 Year Avg.
S&P 500	12.97	14.37	16.00	2.05	2.29	2.54
Russell 2000	15.98	17.37	16.96	1.73	1.93	2.00
MSCI EAFE	10.76	12.44	14.20	1.27	1.38	1.81
MSCI EM	10.14	11.15	12.09	1.56	1.67	1.85

Source: Bloomberg

On the credit side, Exhibit 2 shows the historical series of high yield bond spreads over Treasuries, with the flat line representing the long-term average. The data indicate that, as with equities, high yield bonds remain

Exhibit 2 - High-Yield Bond Spreads



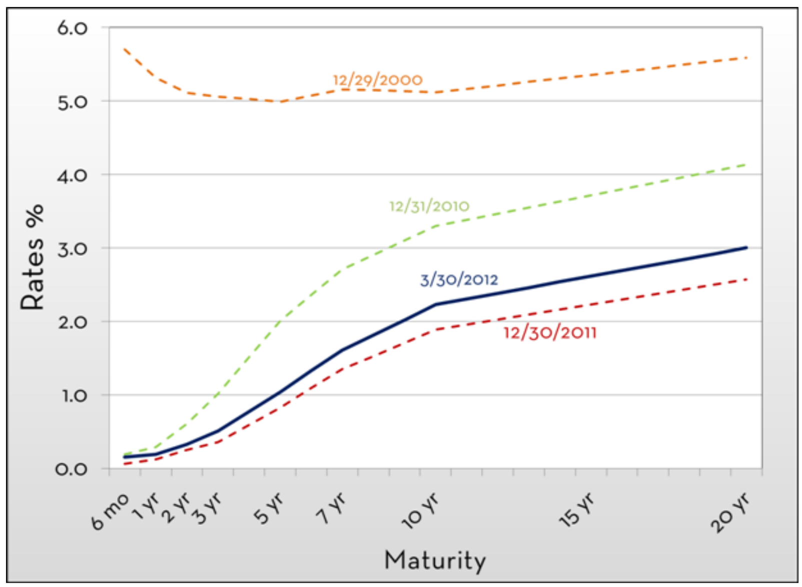
Source: Barclays Capital

cheap relative to historical valuation levels. While each segment of the credit market has unique attributes that need to be considered, high yield as an illustrative proxy indicates that, with a reasonably supportive economic environment, credit issues remain attractive.

There is one more criterion to consider in evaluating the current risk premium: the risk-free rate. Certainly Treasury yields have risen, most significantly in March, with the 10-year Treasury note yield increasing more than 30 basis points year-to-date and the 30-year bond yield rising 45 basis points over this period. Nevertheless, comparing the Treasury yield curve at quarter end to those at the start of 2012 and 2011 (Exhibit 3), it is clear that yields remain low. Putting current Treasury rates in broader perspective, we include the yield curve at the end of 2000—more than eleven years ago—to illustrate how close to rock-bottom the risk-free comparison remains.

And now for that note of caution: this is no time to become complacent. Numerous risks still stalk the global investment landscape. Further bouts of volatility are likely this year, potentially driven by additional chapters of the European debt crisis, the US presidential election, a hard landing in China, or instability in the Middle East. We remind clients, therefore, to build their risky exposures in the context of a risk-budgeting approach to asset allocation. Owning liquid high quality assets (whether directly in sovereign nominal bonds or in risk parity strategies) can hedge against fear-driven "flights to quality". Inflation-hedging assets such as global inflation-linked bonds and commodities, while not attractively priced in the current market, can help mitigate resource driven price shocks. Finally, it is important to match asset allocation policy with the forecasting horizon (in our case five to seven years, not three months) and build exposure to attractive asset categories gradually, dollar cost averaging into volatile segments such as emerging market stocks. As with the past several years, as 2012 unfolds we believe it is likely that the "risk on" environment of the first quarter will lead to at least one "risk off" market downturn at which point it will be important to have liquidity available to buy attractively priced assets.

Exhibit 3 - US Treasury Yield Curves



Source: US Department of the Treasury

Global Equities

The rally that began in the fourth quarter of 2011 continued into the first three months of this year. Equity markets delivered strong gains as macro fears continued to subside and attention turned to improving fundamentals. While first quarter earnings growth forecasts were modest, they continued to broaden across market sectors, even as valuations remain well below long-term averages. In both dollar and local currency terms, US markets outperformed international markets and emerging markets outperformed developed international markets.

US equity markets delivered the strongest first quarter gains in more than 10 years. Large, mid, and small cap stock posted double digit returns for the quarter, with mid caps leading the way followed by large caps and then small caps. Economically sensitive sectors performed best and offered discounted valuations while defensive sectors lagged the market. From a style perspective, growth outperformed value aided by heavier weightings in the Technology and Consumer Discretionary sectors. Entering the second quarter, investor confidence is growing stronger and macro fears continue to subside amid stabilizing economic data.

Positive events at the European Central Bank, the successful refinancing of a portion of Greece's debt, and the further development of the European Financial Stability Facility drove European markets higher for the quarter. The central banking measures helped support international financial stocks to return 20% during the quarter, a sector leader in non-US markets. On an absolute basis, international returns were strong but lagged US and emerging markets in both dollar and local currency terms. From a country standpoint, continued fears about the stability of the Spanish economy and, in particular, financial stocks within Spain caused that country to lag its European peers.

Emerging markets returned 14.1% during the quarter, outperforming developed markets as well as the US market in dollar terms, but lagging the US markets as measured in local currency. All sectors were positive for the quarter, with information technology posting the strongest gains. Turkey posted the strongest returns from a country perspective. All of the BRIC countries except China performed well, beating the broader benchmark. China's weaker performance was driven by concerns about lower future growth, as the Chinese government announced that the GDP target over the next five years will be 7.5%, a drop from the previous target of 8%.

Equity Index Returns (3/31/12)				
Global Equity	Quarter	1 Year	3 Yrs	5 Yrs
MSCI World	11.6%	0.6%	20.2%	-0.7%
US Equity				
S&P 500	12.6%	8.5%	23.4%	2.0%
Dow Jones Industrial Average	12.8%	8.4%	14.9%	2.4%
NASDAQ Composite	19.0%	12.3%	27.7%	6.0%
Russell 1000 Growth	14.7%	11.0%	25.3%	5.1%
Russell 1000 Value	11.1%	4.8%	22.8%	-0.8%
Russell 2000	12.4%	-0.2%	26.9%	2.1%
Russell 2000 Growth	13.3%	0.7%	28.4%	4.2%
Russell 2000 Value	11.6%	-1.1%	25.4%	0.0%
International Equity				
MSCI EAFE	10.9%	-5.8%	17.1%	-3.5%
MSCI Emerging Markets Free	14.1%	-8.8%	25.1%	4.7%
MSCI Europe	10.7%	-7.5%	17.6%	-4.0%
MSCI UK	7.6%	1.1%	22.3%	-2.3%
MSCI Japan	11.3%	0.3%	11.9%	-5.2%
MSCI Far East	12.0%	-0.4%	13.9%	-3.9%

Source: Bloomberg

Global Fixed Income

Corporate credit and emerging markets led fixed-income returns during the first quarter, with the riskiest sectors—among them US high yield bonds—performing the best. US Treasuries and other high-quality developed market sovereign bond markets posted the weakest results in the quarter as investors favored riskier assets and shunned the relative safety of government bonds. Fears over the solvency of the European banking sector ebbed with the apparent early success of the European Central Bank's Long-Term Recovery Operation (LTRO) liquidity window for European banks, which was launched in December. For the past several quarters, sentiment over the stability of Europe has driven returns in fixed income markets, and this pattern is likely to continue until the situation is resolved to the satisfaction of the markets.

Within investment-grade sectors, corporate bonds returned 2.0% and mortgage-backed issues returned a more muted 0.9%. The BC Aggregate Index was up 0.30% for the quarter. Financials, which underperformed for most of last year, rallied in the first quarter, returning 5.1%, while industrials posted a modest return of 0.7%. Treasury yields shifted higher during the quarter, with rates moving most at the longer end of the curve. At quarter end, the 10-year Treasury yielded 2.21% and the two-year Treasury offered a 0.33% yield, increasing by 34 and 8 basis points, respectively. Some steepness returned to the yield curve during the period, reflecting the market's belief that the Fed will continue to hold short-term rates at their current low levels. The yield on the BC Aggregate Index hit an all time low during the quarter, but rates had moved up slightly to 2.22% by the end of March.

Fixed Income Index Returns (3/31/12)				
Global Fixed Income	Quarter	1 Year	3 Yrs	5 Yrs
Citi World Gov. Bond	-0.5%	5.1%	6.2%	6.8%
JPM EMBI Plus	4.0%	12.8%	16.0%	8.5%
Domestic Fixed Income				
BC Aggregate	0.3%	7.7%	6.8%	6.3%
BC Government	-1.1%	7.9%	4.0%	6.0%
BC US Credit	2.0%	9.6%	12.3%	6.9%
BC Mortgage Backed	0.6%	6.2%	5.3%	6.3%
BC Govt/Credit	0.1%	8.5%	7.1%	6.3%
BC TIPS	0.9%	12.2%	8.7%	7.6%
BC High Yield	5.3%	6.5%	23.9%	8.1%
S&P LSTA Lev. Loan	3.8%	2.9%	17.2%	4.5%
91 Day Treasury Bills	0.0%	0.1%	0.1%	1.2%
10-Year Bond Yields	Mar-12	Dec-11	Sep-11	Jun-11
US	2.2%	1.9%	1.9%	3.2%
Germany	1.8%	1.8%	1.9%	3.0%
UK	2.2%	2.0%	2.4%	3.4%
Japan	1.0%	1.0%	0.9%	1.1%

Source: Bloomberg

Emerging markets debt delivered strong returns in the first quarter, particularly in local currency markets. The JP Morgan GBI-EM GD Index, which tracks the performance of local currency emerging markets sovereign bonds, returned 8.3%. Rallies in currency markets such as the Mexican peso and Brazilian real drove these strong results. Hard-currency emerging market bonds also had a solid quarter, returning 5.8%.

Currency Markets

The US dollar appreciated between 2% and 4% in the first quarter versus major developed market currencies including the euro, British pound, and Swiss franc. Driving the dollar strength were rising Treasury yields and strengthening economic growth. The euro, which had been the worst performing G10 currency in 2011, regained some strength beginning in mid-January, benefiting from aggressive central bank liquidity provision and the successful restructuring of Greek debt. One of the largest movements in the G10 currencies occurred between the US dollar and Japanese yen. In January 2012, the yen fell in line with the other major currencies. From the beginning of February through the middle of March, however, it rallied against the USD and appreciated 6.7% for the quarter.

The broad basket of emerging market currencies appreciated versus the dollar led by the Brazilian real and the Mexican peso; however, the Indian rupee and Russian ruble lagged during the quarter.

Commodity Markets

Like many other asset classes, real assets started the year with strong returns in both January and February. Many of those gains did not last through the month of March. For the quarter, REITs and natural resource equities were the best places to be invested in the real asset universe. Within natural resource equities, agriculture stocks performed best while gold stocks and industrial metal equities sold off. Commodity prices started off the year strongly, riding positive news from Europe and returning 5% through February. Fears surrounding Chinese growth, however, led to a selloff in March and a 0.9% return for the quarter, as measured by the Dow Jones UBS Commodity Index. Leaders within commodity markets during the quarter were oil and gold, both of which posted strongly positive returns.

Pension Liability

Following a year of declining interest rates, the first quarter opened 2012 on the positive side for liabilities. Estimated discount rates climbed 27 basis points since the end of last year according to the Citigroup Pension Liability Index, which published a rate of 4.67% at quarter end compared to 4.40% at year end 2011.

After falling for the majority of last year, 30-year Treasury yields rose 46 basis points during the first quarter, ending March at 3.35%. Corporate spreads over long Treasuries increased as well, ending the quarter at 245 basis points based on the Barclays Capital Long Credit Index. This rise in both Treasury rates and corporate spreads led to a 3.51% decrease in liabilities since the beginning of the year, which is good news for pension plan sponsors many of whom watched their funded status dwindle throughout 2011. Clients who have implemented LDI strategies, which are designed to protect against declining interest rates and to maintain funded status, may have given back some of their gains earned in 2011 during this quarter of rate increases. This is to be expected, however, with a hedging strategy.

Given the continued decline in interest rates, implementation of LDI strategies has become more tactical in recent years. Clients who have not yet implemented an initial LDI strategy may expect to dollar cost average into their LDI strategy over a period of months or years. Clients who already have an interest rate hedge in their portfolio may want to revisit their target hedge ratio, or develop a program to continue to extend duration when future increases in yields occur. In either case, your NEPC consultant can review LDI implementation strategies with you.

Hedge Funds

The first quarter was favorable for hedge fund strategies, with the DJCS Hedge Fund Composite gaining 4.0%. Long/short equity was the best performing category, up 7.2%, while short-biased equity strategies fell 13.1% amid the market rally. Hedge funds generally lagged the 12.6% return of the S&P 500 and, while market tailwinds helped strategies with embedded betas, many managers realized strong performance from idiosyncratic situations. An example of this was in the event driven strategy (+5.3%), as several merger deals came to a profitable conclusion. We have viewed this strategy favorably for some time, but it has nevertheless underperformed expectations. Going forward, we believe that event driven managers are positioned well given the dynamics of the corporate sector: high cash balances, a generally challenged environment for organic revenue growth, and private equity capital availability.

At NEPC, we are committed to the idea that hedge funds represent an integral part of many investment programs. The exit of bank proprietary trading desks continues to provide an opportunity for relative value trading strategies in rates, corporates, structured credit, and other areas. The reduction in bank capital provision has lead to opportunities in "exotic beta" strategies such as corporate and asset-based lending strategies. On the public equity side, a decrease in

Hedge Fund Industry Performance Overview (3/31/12)

Composite	Quarter	1 Year	3 Years	5 Years
DJCS Hedge Fund Composite	4.0%	-0.8%	9.8%	3.3%
Relative Value				
DJCS Convertible Arbitrage	4.9%	1.5%	17.2%	3.9%
DJCS Fixed Income Arbitrage	2.9%	5.3%	14.4%	2.2%
DJCS Equity Market Neutral	1.4%	2.4%	4.2%	-7.1%
DJCS Multi-Strategy	4.7%	2.3%	11.9%	3.3%
Event Driven				
DJCS Event Driven	5.3%	-7.1%	9.1%	2.9%
DJCS Event Driven - Distressed	5.9%	-1.2%	11.0%	2.3%
DJCS Event Driven - Risk Arbitrage	2.1%	0.6%	5.0%	4.0%
DJCS Event Driven - Multi-Strategy	5.0%	-10.5%	8.1%	3.3%
Equity Hedge				
DJCS Long-Short Equity	7.2%	-2.9%	8.9%	2.7%
DJCS Emerging Markets	6.0%	-2.7%	12.7%	3.0%
DJCS Dedicated Short Bias	-13.1%	-4.1%	-19.7%	-8.9%
Tactical				
DJCS Global Macro	1.6%	7.4%	10.1%	8.3%
DJCS Managed Futures	-0.7%	-3.8%	0.9%	5.6%
Traditional Markets				
S&P 500 TR	12.6%	8.5%	23.4%	2.0%
Barclays Aggregate Bond Index	0.3%	7.7%	6.8%	6.3%

Source: Bloomberg

intra-stock correlations bodes well for long/short and market neutral equity—strategies that benefit from a market that rewards fundamentals. We continue to "expect the unexpected" from macro and public policy perspectives and, despite glimmers of hope in the markets, we anticipate a low to moderate growth environment punctuated by flights to quality. Against this backdrop, we think that the trading oriented, dynamic, and hedged approach offered by these vehicles will improve portfolio returns over a market cycle.

Private Markets

Global private equity fundraising for the first quarter surpassed that of the same period in 2011 by 28%, with more than 110 funds raising roughly $30 billion. Buyout funds accounted for the bulk of the capital closings, bringing in $18.5 billion. BC Partners (Europe) and Thoma Bravo alone represented $10.2 billion in LP commitments. Ten mezzanine funds closed on $1.5 billion, nine funds of funds raised $800 million, and other private equity strategies raised $2.7 billion. Despite improving credit markets, buyout deal making fell off sharply to $29.8 billion, a 32% decrease from the prior year's first quarter. Perhaps having learned some lessons during the last buyout boom, these firms are hesitant to make deals in a frothy price environment. However , with many analysts predicting a capital gains tax hike, we could see a spike in deal making as owners of companies look to cash out.

More US venture capital funds held final closings in the opening three months of 2011 than in any first quarter since 2008, with 47 funds closing on $7 billion. Of this amount, two funds, Andreessen Horowitz and Tiger Global Management, accounted for 43% of venture capital raised. On the exit front, 19 venture-backed companies went public in the US during this year's first quarter, raising $1.5 billion. By dollars raised and IPO volume, these figures are the highest since the first quarter of 2007 and represent a 10% increase from 2011. In all, 86 merger and acquisition deals of venture-backed companies were reported, 24 of which had an aggregate deal value of $2.7 billion.

Core real estate sustained the improving trend shown in 2011 while non-core distressed properties maintained their slow recovery. On average, occupancies and rental rates continued to climb and new development remains extremely limited. Spreads between core real estate income yields and the five-year US Treasury, however, remain close to all time highs. Transaction volumes have slowed somewhat but still remain near pre-bubble levels. Significant capital flows, both equity and debt, continue into the core market. Most open-end core funds currently have multiple-quarter entrance queues and many US public REITs/REOCs have recapitalized with significant "dry-powder" available. Non-core real estate valuations, however, continue to lag. In this segment property valuations are still well below peak pricing and significant capital structure distress remains. Raising equity for new non-core funds remains difficult, with volumes still well below peak levels. We believe that the distress in the non-core market will persist through 2012, presenting an opportunity for investors who are able to take on illiquidity. In this area, we view two broad strategies to be attractive: recapitalization (loan-to-loan) and control (loan-to-own).

Final Thoughts

The year has opened with a robust (and gratifying) rally in risky assets. This market action reflects, and reinforces, a more positive tone to the global economic environment. In the US, the recovery is gaining traction with the employment situation improving, industrial production strengthening, the real estate market finding an apparent bottom, and consumers beginning to increase spending. In Europe, aggressive liquidity provision to the financial sector through the LTRO, along with the implementation of Greek debt restructuring, has provided breathing space to address the structural issues behind the continent-wide debt crisis—even as the economy slips into what is now expected to be a modest recession. Chinese growth is slowing but remains robust, as is growth more broadly across emerging markets.

The beneficial markets, along with the constructive global setting, provide a welcome respite for investment fund sponsors. In this environment, we recommend taking advantage of reasonably priced risky asset categories. In emerging markets, stocks remain attractive, particularly small company and consumer-oriented issues, along with local currency debt. Credit-oriented strategies also represent compelling opportunities on a risk-adjusted basis, ranging from traditional long-only high yield bonds and bank loans to more complex hedge-fund-oriented strategies meant to take advantage of mispriced complex asset-backed securities or dislocated debt markets in Europe. Finally, for those investors who can lock up capital, private debt and growth-oriented private equity strategies are well positioned to capture an attractive illiquidity premium.

Yet challenges still remain. Global economic growth is jeopardized by high debt levels and the need for many governments to tighten their belts, even as easy money policies threaten future inflationary episodes. And external shocks loom, among them turmoil in the Middle East. So, even as we suggest that clients modestly re-risk portfolios, we remind them to do so within a broad risk-budgeting framework. It is unlikely that we have seen the last of volatility in 2012. It will be important for investors to position components of their programs to do well in market downturns, whether driven by deflationary or inflationary shocks, and to provide liquidity to buy attractive assets on the dips.

As we ride the wave of positive markets into 2012, we look forward to helping our clients manage their investment programs in the midst of this broad set of challenges and opportunities.