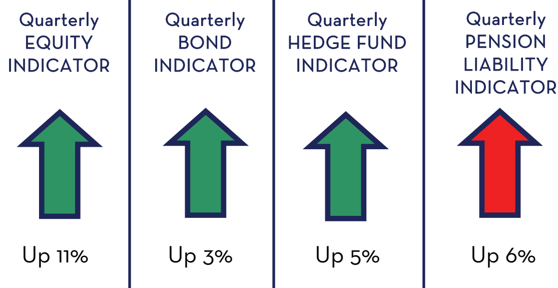
NEPC
MARKET THOUGHTS

THIRD QUARTER 2010 **VOLUME 19**



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.

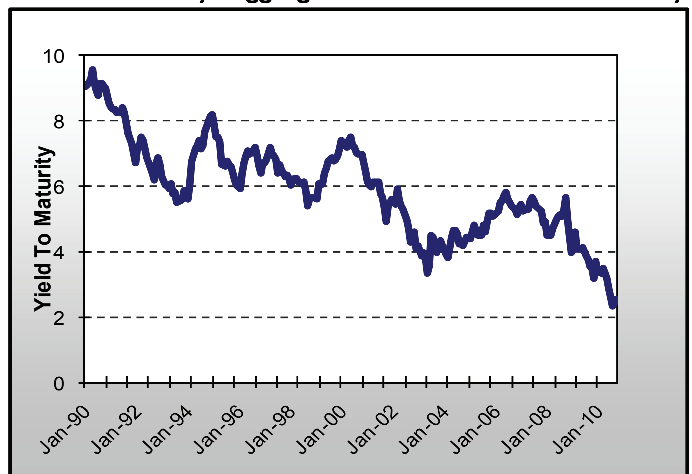
The Inexorable Math of Return Forecasting

Autumn at NEPC is the season for kicking off our annual capital markets forecasting process. Our Asset Allocation Committee is responsible for peering into the future to evaluate prospects for return, risk, and correlation for all major asset categories. To accomplish this task, the group meets with outside experts, considers major economic and geo-political trends, analyzes key data series, and assesses forward looking return indicators. The process culminates in mid-December with five to seven year forecasts for everything from US large cap stocks to emerging markets debt to inflation-hedging assets and hedge funds.

At the outset of 2010, we reduced return expectations for most asset classes to reflect the tremendous rally of 2009. Now, as we scan the basic foundations for prospective returns to start the new year, the outlook appears even more challenging. At their most basic level, asset class returns are driven by income and changes in valuation. Neither current market yields nor asset prices, however, appear particularly enticing for broad components of the global capital markets. To illustrate, we will walk through two examples – rough forecasts for US core bonds and US stocks. These do not reflect the full thinking of the NEPC Asset Allocation Committee (they've barely begun their work!), but rather can serve as an initial hint about the direction of expectations in the coming year.

US Bonds. At the start of this year, our five to seven year annualized return forecast for US core bonds was 3.75%, down from 5.50% at the beginning of 2009. These forecasts were developed using current and forward Treasury yield curves, spreads of securitized and corporate securities over Treasuries, and projections of likely spread levels over time. So where are these basic building blocks now? As of September 30th, intermediate maturity Treasury bonds were yielding around 1.7%. Many investors choose to take on high quality credit exposure through strategies benchmarked to the Barclays Capital Aggregate Bond Index to earn a yield above Treasuries. This benchmark, which includes corporate and mortgage-backed bonds as well as Treasuries, boasted a slightly higher, but hardly exciting, yield-to-maturity of 2.55%. Exhibit 1 illustrates the historical progression of this yield over time, highlighting the very low current levels. So before we consider how rates and spreads might evolve over the coming five to seven years, we see a decline of more than 1% from last year as a starting point for expected returns for US core bonds. Even more challenging, any rise in interest rates over this time period (a scenario, based on forward Treasury curves, that appears likely to occur) could dampen returns further.

Exhibit 1—Barclays Aggregate Bond Index Yield to Maturity

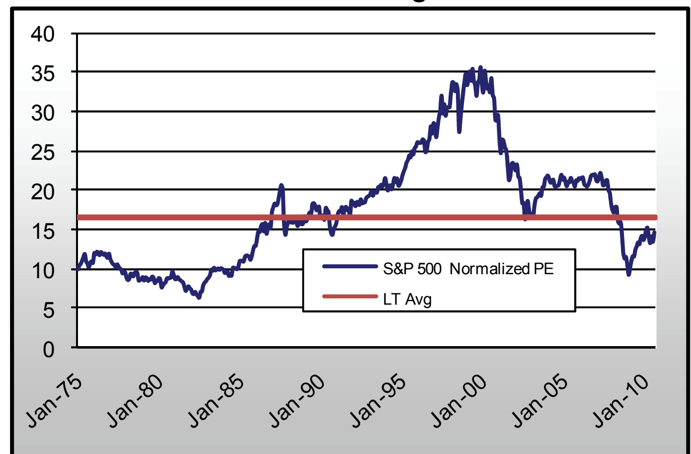


Source: Barclays Live

US Stocks. We began the year with a return forecast of 7.75% for US large company stocks, down significantly from 9.25% in early

2009. To build our stock market forecast we develop projections of 1) dividend yield, 2) inflation, 3) real economic growth, and 4) change in valuation. Current levels of these indicators, however, look as gloomy as the building blocks for bonds. The dividend yield on the S&P 500 is currently around 2.0%. To assess inflation, one can look at the difference in yield between comparable maturity Treasury bonds and Treasury Inflation Protected Securities (TIPS). As of September 30th, this "break-even" inflation spread in the intermediate portion of the yield curve is between 1.3-1.8%. To develop expectations for real economic growth (a proxy for corporate earnings growth) we refer to consensus forecasts as well as pricing of Treasuries and propose that 2% growth seems reasonable as a mid-point expectation over the coming five to seven years.

Exhibit 2—S&P 500 Price-to-Earnings Ratio



Source: Bloomberg

The last component of the equity return model is change in valuation. After nine months of robust corporate earnings growth and September's rise in equity prices, the stock market appears fairly valued at approximately fifteen times forward earnings. Exhibit 2 shows that this is consistent with long-term averages for stock market valuation. Absent a driver of significantly increased earnings growth (which we do not see in the modest economic growth environment) it is hard to forecast a significant expansion in the stock market valuation multiples. When all these building blocks are put together, before the application of the art and science of the forecasting process, it appears reasonable to expect a return forecast for the US stock market in 2011 of 7.00% or even lower.

US core bonds and large cap stocks, in addition to being the largest components of many investment programs, provide a starting point for the forecasts of global stocks and bonds as well as less liquid investment categories such as hedge funds, private equity, and real estate. As a result, forecasts of lower returns in US core bonds and large cap stocks exert a strong gravitational pull downwards on most other investment categories. It is quite probable that expected returns for diversified investment programs over a five to seven year horizon will be down 1% or more compared with last year. Going into 2011, investors with typical 60% equity/40% fixed income allocations may struggle to project annualized returns above 7% over the next five to seven years.

As the days shorten and the nights get colder, we will be grappling with the inexorable math of reduced capital markets return expectations, while also seeking to identify additional opportunities and risks. Importantly, we continue to challenge our own views and recognize that it is generally easier to see the looming negatives (especially in the current environment) and much harder to envision the possible positives. In fact, the continued accommodative policy of the Fed could lead to further near-term equity price increases. We also acknowledge that risks associated with extreme economic outcomes, a "double dip" recession, high inflation or perhaps one followed by the other (an environment we have dubbed "delev-flation") remain elevated. We are reminded, however, that in the dark days of the second half of 1990 (deep recession, banking crisis, looming war in the Persian Gulf, spiking energy prices, dominant Japan, and impending combined European competitive juggernaut), who could have seen the coming decade of phenomenal technology-led productivity growth and strong market returns? We are not naturally pessimistic, and will challenge ourselves to bring you the best ideas for how to structure your investment programs to mitigate risks while seeking to maximize the potential to achieve your long-term return objectives.

Global Equity Markets

The third quarter marked another volatile period for equity markets in which investor sentiment continued to drive returns. In July, stocks rebounded from the second quarter selloff, retrenched in August amidst fears about a double-dip recession, then rallied late in the summer at the prospect of further monetary easing by the Fed to produce the best September showing by the S&P 500 since 1939. While all sectors posted positive returns for the quarter, telecommunication services and cyclical sectors led the way, while financials and healthcare trailed due to

Equity Index Returns (09/30/10)

Global Equity	Quarter	YTD	1 Year	3 Yrs	5 Yrs
MSCI World	13.8%	2.6%	6.8%	-8.3%	1.3%
US Equity					
S&P 500	11.3%	3.9%	10.2%	-7.2%	0.6%
Dow Jones Industrial Average	11.1%	5.6%	14.1%	-5.3%	3.1%
NASDAQ Composite	12.5%	5.1%	12.6%	-3.4%	2.8%
Russell 1000 Growth	13.0%	4.4%	12.7%	-4.4%	2.1%
Russell 1000 Value	10.1%	4.5%	8.9%	-9.4%	-0.5%
Russell 2000	11.3%	9.1%	13.4%	-4.3%	1.6%
Russell 2000 Growth	12.8%	10.2%	14.8%	-3.8%	2.4%
Russell 2000 Value	9.7%	7.9%	11.8%	-5.0%	0.7%
International Equity					
MSCI EAFE	16.5%	1.1%	3.3%	-9.5%	2.0%
MSCI Emerging Markets Free	18.0%	10.8%	20.2%	-1.5%	13.4%
MSCI Europe	19.4%	0.0%	3.2%	-9.8%	2.9%
MSCI UK	19.8%	2.6%	9.8%	-9.5%	1.5%
MSCI Japan	5.9%	3.1%	0.3%	-9.9%	2.2%

uncertainty about the recovery of the real estate market and healthcare reform, respectively. Large cap stocks outpaced small caps - though both were up double digits - while growth beat value in all segments. Overall the pickup in the third quarter pushed most equity indexes into positive territory for the calendar year to date.

Global stock markets participated in the broad based rally, receiving an additional tailwind from US dollar weakness. Relative to local currency returns, the EAFE index gained an additional 9.4% due to foreign currency gains against the US dollar. Within developed markets, Europe outperformed Asia as a weak Japanese market dragged the region down. Emerging markets led the way, posting an eye-popping 18% return for the third quarter.

Global Fixed Income

Despite conflicting signals regarding the overall direction of the US economy, most fixed income sectors posted positive returns for the quarter, led by high yield bonds and emerging markets debt. Falling interest rates boosted returns across fixed income markets as the Fed, grappling with stubbornly high unemployment, low inflation, and weak domestic demand, communicated the potential for additional monetary stimulus in the form of a second round of quantitative easing. Interest rates fell across the US Treasury yield curve to near record lows, with the yield on the 10-year Treasury note falling 44 basis points to 2.53%.

During the quarter, most sectors outperformed Treasuries, with US credit amongst the strongest performing segments of the bond market. The Barclays US Investment Grade Credit Index returned 4.7% while the Barclays US High Yield Index posted a return of 6.7% during the quarter.

Fixed Income Index Returns (09/30/10)					
Global Fixed Income	**Quarter**	**YTD**	**1 Year**	**3 Yrs**	**5 Yrs**
Citi World Gov. Bond	8.2%	7.1%	5.0%	8.2%	7.1%
JPM EMBI Global Div.	8.9%	14.5%	16.0%	10.2%	11.0%
Domestic Fixed Income					
BC Aggregate	2.5%	7.9%	8.2%	7.4%	6.2%
BC Government	4.5%	14.4%	11.7%	10.1%	7.6%
BC US Credit	4.6%	10.5%	11.7%	8.3%	6.5%
BC Mortgage Backed	0.1%	5.1%	5.7%	7.5%	6.4%
BC Govt/Credit	3.2%	9.0%	8.7%	7.5%	6.1%
BC TIPS	1.9%	5.2%	7.4%	6.4%	5.4%
BC High Yield	6.7%	11.5%	18.4%	8.8%	8.4%
CSFB Leveraged Loan	0.4%	6.8%	10.8%	4.7%	4.8%
91 Day Treasury Bills	0.0%	0.1%	0.1%	1.1%	2.6%
10-Year Bond Yields	**Sep-10**	**Jun-10**	**Mar-10**	**Dec-09**	**Sep-09**
US	2.5%	2.9%	3.3%	3.8%	3.8%
Germany	2.3%	2.6%	3.1%	3.4%	3.2%
UK	2.9%	3.4%	3.6%	3.9%	4.0%

As with global equity markets, currencies had a major impact on global fixed income markets during the quarter. The Citi World Government Bond Index returned 8.2% in the third quarter, with 6.1% of that performance attributable to foreign currency gains against the weakening US dollar. Emerging market debt issued in local currencies benefitted in similar fashion, as the JP Morgan GBI-EM Global Diversified Index returned 12.4% in the quarter and is now up 16.1% year-to-date.

Due in part to the current low growth environment in advanced economies, we are constructive on opportunities in developing countries, particularly in local currency bond markets. While emerging local bond markets have performed exceedingly well year-to-date, yields remain attractive with the potential for additional currency appreciation versus the dollar.

Currency Markets

The US dollar decreased in value versus most major currencies during the third quarter. Markets reacted negatively to hints of additional quantitative easing by the Federal Reserve. The British pound (+5.1%) and the euro (+10.3%) rose against the US dollar, as concerns around the European debt crisis ebbed slightly and uncertainty over an American economic recovery persisted. Despite policy measures intended to slow recent gains, the Japanese yen (+5.6%) also improved against the USD. Commodity-sensitive “dollar-bloc” currencies like the Canadian dollar (+3.5%) rose as many commodity prices surged on the weakness of the USD.

Emerging currencies also gained value against the US dollar in the third quarter, though in more modest fashion than developed country currencies. The Brazilian real rose 7.2% and the Indian rupee appreciated 4.1%. The Chinese yuan continued a very modest revaluation, appreciating 1.6% in the third quarter amidst political wrangling and accusations of a disconnect between the US and China on the future of currency policy.

Commodity Markets

Commodities gained ground during the third quarter, increasing 11.6%, according the Dow Jones-UBS Commodity Index. Robust performance in agriculture (+27.5%) and industrial metals (+20.3%) led the way. Precious metals (+7.7%) were boosted by silver, which hit a 30-year peak. Gold prices neared all-time highs as political rhetoric raised concerns of forthcoming currency devaluations. Improving economic outlooks contributed to advances in base metals such as copper and aluminum. Agricultural prices rose as acreage shifted to more profitable crops and inventories remained at low levels. Expectations for future commodity prices center around anticipation of slower growth in developed markets and an expectation that healthier emerging market bal-

ance sheets and consumers will continue to drive global natural resource demand as these markets emphasize their domestic expansion. Easing US monetary policy and dollar weakness may further boost commodity prices.

Pension Liability Experience

After hitting an all-time low of 4.97% on August 31, the Citigroup Pension Liability Index increased slightly to 5.16% as of September 30, 2010. This rate is almost 100 basis points lower that the rate published six months ago as investors have pushed Treasury yields down while corporate spreads have remained relatively unchanged. The 30-year Treasury yield fell to 3.69% at the end of the third quarter, similar to rates seen in the first quarter of 2009 at the trough of the financial crisis, while 20-year corporate bond spreads over Treasuries increased only 6 basis points to 2.38%, based on the Barclays Capital Long Credit Index.

According to the declining discount rates of the Citigroup Index, the resulting increase in pension liabilities is estimated to be 6.4% in the third quarter and 19.1% year to date. With modest returns for most asset classes year-to-date, corporate pension plans may see a marked drop in funded status by the end of the year. In addition, the pension "relief" offered this year has not been useful for many plan sponsors, making it likely that the brunt of this deflationary environment will be felt by pension plans.

NEPC continues to recommend the benefits of LDI strategies for corporate clients to protect against declining interest rates, to reduce surplus volatility and to help maintain funded status. With interest rates at their lowest in decades, however, implementation has become more tactical and may need to occur over an extended period of time.

Hedge Funds

Hedge funds benefitted from the third quarter's market rally and modest volatility as the Credit Suisse Hedge Fund Composite returned 5.3% during the third quarter and no strategies lost money aside from Dedicated Short Bias (-10.0%). Emerging Markets (+8.6%) and Long/Short Equity (+6.6%) were the best performers during the period. Managers in these segments were buoyed by the rally in risky assets, while Managed Futures managers (+6.2%) also took advantage of upward trending asset prices.

In an environment in which we expect continued high volatility and dislocation in security prices, we prefer strategies with a nimble and unconstrained investment approach. Consistent with this rationale, we believe that Global Macro managers will continue to be a valuable component of a hedge fund allocation. These managers' highly flexible approach allowed them to take advantage of subsiding volatility in the third quarter, as Global Macro strategies were up 4.9%.

Lastly, we are finding attractive opportunities with managers that can extract alpha by investing both long and short in idiosyncratic credit situations as there is likely to be more corporate restructuring while we progress towards recovery. We believe that Long/Short Credit managers who have strong restructuring knowledge, experience looking across the capital structure, an ability to look at smaller credits, and good hedging discipline are poised to perform well over the medium to longer term.

Hedge Fund Index Returns (09/30/10)					
Composite	**Quarter**	**YTD**	**1 Year**	**3 Yrs**	**5 Yrs**
DJ CS Hedge Fund Composite	5.3%	6.0%	9.3%	1.4%	5.8%
Relative Value					
DJ CS Convertible Arbitrage	4.7%	7.5%	13.2%	2.8%	5.5%
DJ CS Fixed Income Arbitrage	4.1%	9.8%	14.7%	0.2%	2.4%
DJ CS Equity Market Neutral	3.8%	-1.0%	-2.1%	-14.2%	-5.2%
Event Driven					
DJ CS Event Driven	4.4%	6.3%	11.6%	2.2%	6.8%
DJ CS Event Driven - Distressed	2.5%	5.6%	11.3%	0.6%	5.6%
DJ CS Event Driven - Risk Arb.	4.3%	4.1%	5.8%	4.3%	6.0%
DJ CS Event Driven - Multi-Strat.	5.8%	6.8%	11.8%	3.2%	7.7%
Equity Hedge					
DJ CS Long-Short Equity	6.6%	3.1%	5.6%	0.4%	5.7%
DJ CS Emerging Markets	8.6%	7.7%	12.4%	0.7%	7.6%
DJ CS Dedicated Short Bias	-10.0%	-12.5%	-14.8%	-6.7%	-5.8%
Tactical					
DJ CS Multi-Strategy	4.5%	5.0%	8.5%	0.5%	5.2%
DJ CS Global Macro	4.9%	9.3%	11.8%	6.6%	9.6%
DJ CS Managed Futures	6.2%	6.4%	3.8%	6.8%	6.1%

Private Markets

Concerns around the wall of debt maturities for high yield and leveraged loans continue to be pushed further into the future as credit markets favor borrowers and defaults trend lower. Creditors have been flexible and have allowed borrowers to amend-to-extend their existing credit facilities, pushing maturities out to 2015 and later. Year-to-date through September 30, 2010, only thirty-two companies have defaulted on a total of $12.9 billion of debt, compared to all of 2009 when 106 companies defaulted on $146.8 billion of debt. Borrowers also participated in significant new issuance of high yield bonds and leveraged loans, using the proceeds primarily to refinance their existing debt.

In real estate, although the market has improved modestly, investors remain cautious and are slow to commit new assets. Many funds have put fundraising on hold or abandoned it entirely. Overall, real estate valuations remain well below 2006-2007 peak levels. Specifically, office rents are down 20-50%. Landlords believe the bottom has been reached, and are currently offering tenants lease extensions of one to three years with the expectation that lease renewals will occur when rents are rising. Given

the challenging overall economic environment, the amount of debt coming due, and the potential impact of financial reform, we continue to emphasize opportunities in distressed, mezzanine, and secondary strategies.

Final Thoughts

As we enter the last quarter of 2010, we are focused on addressing a market environment characterized by lower expected returns. We continue to believe that pockets of opportunity persist, particularly in developing country stock, bond and currency markets, and in providing liquidity through longer lock-up direct lending, mezzanine, and distressed debt and real estate strategies. We also believe that unconstrained alpha approaches can be an important component of helping investors meet return targets and are particularly attractive in the current macro-theme driven environment.

More importantly, with uncertainty continuing to drive markets, we believe that pursuing a risk-balanced approach to asset allocation with exposure to strategies that will provide some protection in extreme economic environments, such as inflation-hedging and risk parity programs remains important.

We look forward to helping our clients address the challenges of the current investing world while positioning their programs to meet their long-term objectives.