Market Thoughts

THIRD QUARTER 2008 — Volume 17 · Issue 3

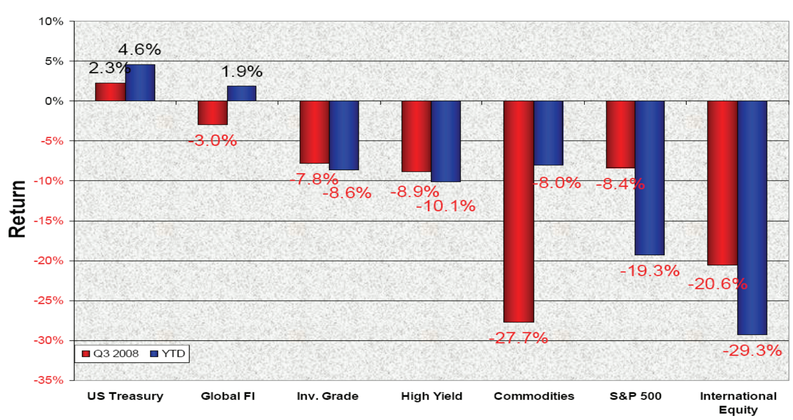
QUARTERLY EQUITY INDICATOR	QUARTERLY BOND INDICATOR	QUARTERLY HEDGE FUND INDICATOR	QUARTERLY DIRECTION OF LIABILITIES
Down 8.4%	Down 0.5%	Down 10.3%	Down 7.5%

NEPC is an independent, full service investment consulting firm, providing traditional and alternative asset manager search, asset allocation, 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.

Nowhere to Hide

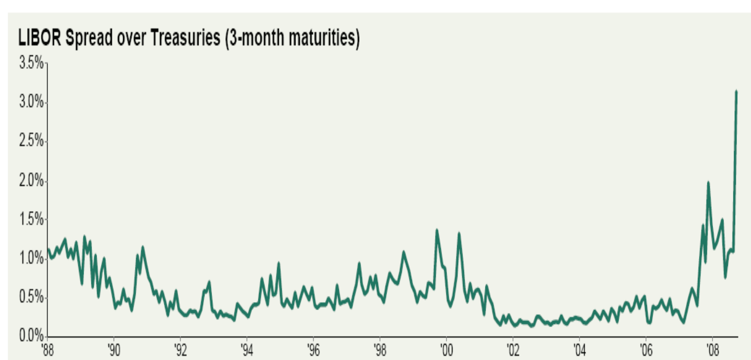
On October 3, 2008 NEPC had our first firm-wide client conference call to discuss our views on capital markets. Participation was very strong, which is not surprising as we experienced the accelerated unfolding of a global credit crisis that has surpassed anything seen since the problems unleashed by the market crash of 1929. Global equity markets finished the quarter down more than 20% from their peaks (and more than 40% at the time of writing). What began as a sub-prime induced housing bubble in the US has led to a radical restructuring of the global financial industry. Fannie Mae, Freddie Mac, Merrill Lynch, Lehman Brothers, AIG, Washington Mutual, Wachovia – all nationalized, merged, or bankrupt…and those are just the names in the United States…thus far.

Exhibit 1



US Treasuries (and the bonds of developed market governments) were the only positive performers in the period. Even money market funds came under pressure, as the Reserve Primary Fund "broke the buck" due to illiquidity in commercial paper and other components of the short-term debt market. As with any financial crisis, correlations among and within global capital markets converged. Market sectors normally providing portfolio diversification benefits failed to do so in the near term. Commodities corrected on concerns about slowing economic growth limiting demand for natural resources. Hedge funds provided limited downside protection amid continued deleveraging amid new shorting restrictions that went well beyond the stocks of pressured financials. For safety's sake, investors were willing to bid near zero yields in Treasury bills simply to find a temporary haven in the storm. There truly was no place to hide.

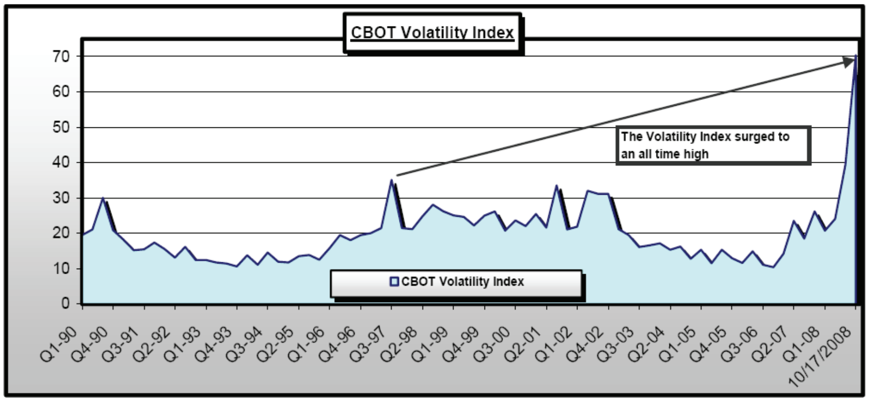
Exhibit 2



A key measure of the health of the credit markets is the London Inter-Bank Offer Rate (LIBOR), the short term interest rate that global banks charge one another to borrow. LIBOR traditionally trades tightly with US Treasuries, with the difference between the two known as the TED spread. Yet in this crisis, the spread between LIBOR and US T-Bills has blown out at the end of September [see Exhibit 2]. As a result, even as investors bid yields on T-Bills down to record lows, the cost of inter-bank lending remains stubbornly high. Despite some short-comings of LIBOR, these wide spreads are a clear indication of the lack of confidence and liquidity in the global banking system as well as the heightened counterparty risk perceived by many market participants.

Volatility, as measured by the VIX, has reached new highs as investor sentiment remains jittery amid extraordinary market events. Many concerns linger as the evolving news in these uncertain times continues to unfold. [See Exhibit 3].

Exhibit 3



source: Bloomberg

The global fiscal and monetary response to this crisis has been unprecedented in its scope and magnitude. Policy makers in the U.S. and abroad are trying every tool in the tool-box to address the situation: coordinated rate cuts, injecting markets with liquidity, enormous bail-out and rescue programs. In the U.S. the stop-and-go progress toward the $700 billion Troubled Assets Recovery Program (TARP) did little to re-assure markets.

The troubles of Wall Street are clearly being transmitted quickly to Main Street. The confidence and spending capacity of the US consumer—long a main driver of our economic growth—is being pressured on several fronts. Continued house price declines (off 18% from the peak and continuing to fall), the decline of investment account balances, tighter borrowing standards, and rising unemployment are translating into the near certainty of recession hitting by the fourth quarter, if we are not already in one. As corporations struggle to find financing for their operations, business spending will come under pressure, reinforcing the negative impact on earnings and economic growth. Somewhat offsetting these challenges to growth and spending has been the precipitous drop in commodities prices in the third quarter as oil fell from a peak of $147 per barrel in July to $100 at the end of September.

Going forward, we are forced to grapple with several powerful and competing market forces. Certainly, global economic growth is slowing. We face the prospect of deflation—this deepening financial crisis has already caused significant asset price deflation as well as future asset value declines. We also face the potential effect of inflation from the enormous government bail-out programs and central bank liquidity injections. Investors need to evaluate their portfolio's abilities to hedge against either deflationary or stagflationary environments.

We are embarking on a period of consolidation and rationalization that could take over a year to re-stabilize. Markets and economies are working through a process of financial sector consolidation, nationalization, and deleveraging that is leading to asset re-pricing across the global capital markets. The economic and market environment that emerges from this process will look very different from what we have been used to: a new presidential administration, a new paradigm of increased regulation, and potentially moderated return expectations for risky assets.

Global Equity Markets

Global equity markets sold off during the quarter as fear and panic led investors to shun risk and emphasize liquidity needs. Correlations approached one among and within global regions and market sectors. As a result, higher risk emerging market and small cap stocks were hit hardest by negative sentiment. Emerging markets experienced one of their worst quarters since 1998, returning -26.7%. While all markets were negative within emerging markets, the BRIC Countries were hit especially hard. Brazil, Russia, India, and China posted significant negative returns trading off -37.7%, -45.3%, -13.9%, and -25.2% respectively. Within international markets defensive sectors offered some protection, but still were negative for the quarter. The more cyclical En-

Equity Index Returns (9/30/08)	Quarter	YTD	1 Year	3 Yrs	5 Yrs
Global Equity					
MSCI World	-15.2%	-24.2%	-26.0%	0.8%	7.3%
US Equity					
S&P 500	-8.4%	-19.3%	-22.0%	0.2%	5.2%
Dow Jones Industrial Average	-3.7%	-16.6%	-19.8%	3.3%	5.6%
NASDAQ Composite	-8.8%	-21.1%	-22.5%	-0.9%	3.2%
Russell 1000 Growth	-12.3%	-20.3%	-20.9%	0.1%	3.7%
Russell 1000 Value	-6.1%	-18.9%	-23.6%	0.1%	7.1%
Russell 2000	-1.1%	-10.4%	-14.5%	1.8%	8.1%
Russell 2000 Growth	-7.0%	-15.3%	-17.1%	1.5%	6.6%
Russell 2000 Value	5.0%	-5.4%	-12.3%	2.0%	9.4%
International Equity					
MSCI EAFE	-20.6%	-29.3%	-30.5%	1.1%	9.7%
MSCI Emerging Markets Free	-27.0%	-35.5%	-33.2%	8.4%	18.7%
MSCI Europe	-20.8%	-24.1%	-30.6%	-30.9%	2.5%
MSCI UK	-21.0%	-21.6%	-29.9%	-31.5%	-0.2%
MSCI Japan	-17.7%	-15.6%	-22.2%	-26.9%	-4.0%
MSCI Far East	-18.3%	-16.9%	-24.3%	-28.0%	-3.0%

ergy, Materials, and Industrials sectors reversed course and saw strong negative results, trading down more than 25% for the quarter. Defensive sectors such as Consumer Staples and Healthcare offered investors some protection but experienced negative results, down approximately 9% during the quarter.

US Equity Markets

Technicals and sentiment drove U.S. stock market returns as markets focused on concerns about slowing economic growth and liquidity. The resultant wide-scale deleveraging led to a broad equity sell-off, especially in the most liquid and larger cap stocks. Mid-July marked a turning point in the markets, with a rotation of investor capital out of growth stocks into Financials and defensive stocks. In the domestic equity markets, large caps underperformed small caps for the quarter; the higher liquidity of large caps made them an attractive source of funds for investors seeking cash. Among the market sectors, Financials, Healthcare, and Consumer Staples led the way, while Energy, Materials, and Utilities retreated amid global macro growth concerns. Commodity prices declined, particularly oil, driving the Energy sector down the most for the quarter. From a valuation perspective, S&P 500 stocks are approaching attractive levels as already low earnings estimates are likely to be reduced further, with US stocks pricing 18.8 times trailing 12 months earnings and 12.3 times forward 12 months earnings. With the equity risk premium at a 45-year low, investors need to consider whether domestic equities have moved past fair value to become cheap.

Commodity Markets

Commodity returns declined during the quarter as falling equity markets and the continued global economic slowdown weighed on sentiment, raising fears of cooling demand for global natural resources. The near term rally in the US dollar also pressured commodities, as many trade and price in US Dollars. The Energy complex fell sharpest, losing 30% as oil fell from a record high in July to close the quarter near $100/barrel and natural gas prices lost nearly half their previous value. Industrial Metals dropped 23% as a strengthening dollar and bearish fundamental economic outlook weighed on demand. Agricultural commodities declined 27% on favorable weather conditions and upwardly revised yield estimates boosted inventories. Precious Metals dropped 9% due in part to the US dollar rally, but were helped by rising investor demand for safe hard assets amid record equity market volatility.

The tremendous technical pressure on commodities is eclipsing a tight supply/demand imbalance for many natural resources. Fundamentals remain supportive for future price increases as inventories slow during price declines. Rescue packages from global central banks may successfully stimulate economic growth, increasing future demand for commodities. Further, the recent rally in the US dollar due to strong demand for the safety of US Treasuries may begin to unwind as money supply is increased to fund rescue/stimulus packages. Conviction in the US Dollar may wane as investors examine their confidence in the Federal Reserve's new, and more risky, balance sheet. As a result, both dollar inflation and price inflation may abate in the near term yet rise again longer term.

Currency Markets

The US Dollar saw an explosive rally during the third quarter as the economic malaise in the US spread to Europe and elsewhere. The dollar was also helped by renewed foreign interest in buying US bonds, a drop in oil prices, and an improving trade balance. Many long-held secular bets against the currency became increasingly unprofitable and were unwound. The dollar strengthened 12% against the euro, posting its best quarter against the European currency since its inception in 1999. The dollar also gained 12% against the British pound, its strongest quarter against that currency in over a decade. Meanwhile, the dollar traded relatively flat against the yen but gained against the dollar bloc as commodities corrected, rising 17% against the Australian dollar and 4% against the Canadian dollar. In addition to traditional measures of relative currency value like short term interest rates (2.1% and likely to remain low), current account balance ($700 billion but slowly improving), and GDP growth (latest quarter at 2.1% and likely slowing) the relative value of the USD will also depend upon global confidence in our capital system amid continued turmoil in financial markets and the effectiveness of a recovery program that is of unprecedented magnitude.

Global Fixed Income Markets

Fixed income markets, normally a bastion of safety for many investors during poor equity markets, continued to see unprecedented volatility and disappointing results in credit markets during the third quarter. The LB Aggregate Index returned –0.5% in the quarter, and was slightly positive year-to-date. The duress wasn't limited to intermediate duration fixed income—even cash investments became a source of concern. Financial services institutions, primarily banks and insurance companies, were the principal cause of anxiety in credit markets—which in turn was the leading driver of negative returns in fixed income. Several events including the bankruptcy of Lehman Brothers, near bankruptcy of AIG, and bankruptcy of Washington Mutual caused credit spreads over Treasuries to widen dramatically during the quarter. To put the severity of the credit re-pricing into perspective, the A rated segment of the credit market, which is dominated by financial services companies, returned –10.1% during the quarter, while B rated credits returned –9.5%. Mortgages generally posted positive returns, due primarily to the Government-led support of Fannie Mae and Freddie Mac. High yield bonds, as measured by the LB High Yield Index, returned –8.9%, and in the past year returned –11.2%.

Fixed Income Index Returns (9/30/08)	Quarter	YTD	1 Year	3 Yrs	5 Yrs
Global Fixed Income					
Citigroup World Gov. Bond	-3.0%	1.9%	5.9%	5.6%	5.3%
Domestic Fixed Income					
LB Aggregate	-0.5%	0.6%	3.7%	4.2%	3.8%
LB Government	1.9%	4.0%	7.9%	5.6%	4.3%
LB U.S. Credit	-6.4%	-6.8%	-4.8%	0.9%	1.9%
LB Mortgage Backed	1.9%	3.8%	7.0%	5.5%	4.8%
LB Govt/Credit	-1.6%	-0.7%	2.4%	3.6%	3.3%
LB TIPS	-3.5%	1.2%	6.2%	4.3%	5.2%
LB High Yield	-8.9%	-10.1%	-11.2%	1.1%	4.4%
91 Day Treasury Bills	0.6%	1.8%	2.9%	4.2%	3.3%
10-Year Bond Yields	9/30/2008	6/30/2008	3/31/2008	12/31/2007	9/30/2007
U.S.	3.9%	4.0%	3.5%	4.0%	4.6%
Europe	4.4%	4.7%	3.9%	4.3%	4.3%
U.K.	4.5%	5.2%	4.4%	4.6%	5.0%
Japan	1.5%	1.6%	1.3%	1.5%	1.7%

Liability Experience

Liabilities dropped significantly during the extreme market dislocations in September, according to the Citigroup Pension Liability Index, after decreasing in July and increasing in August. As fear and a flight to quality prevailed in the market, Treasury and swap yields decreased, but not as much as credit spreads widened, reaching historic highs at the end of the third quarter. The cumulative effect was a jump of 68 basis points in the Citigroup Pension Liability Index, from 6.82% on June 30, 2008 to 7.50% on September 30, 2008.

In conjunction with the increase in discount rates, liability returns dropped, with Citigroup estimating a return of -6.58% for September and -9.14% year-to-date. This drop in liabilities may be one bright spot for the funded status of many pension plans, given the severe decrease in assets during the third quarter.

Plan sponsors who have implemented Liability Driven Investing (LDI) strategies saw a positive return in these strategies as short-term interest rates fell much more than longer-dated rates, steepening the yield curve at the same time pension liabilities were decreasing. With the near-term volatile and uncertain, we continue to recommend consideration of LDI strategies for pension plans to reduce surplus volatility and help maintain funded status.

Alternatives: Hedge Funds

Hedge funds reported the second worst drawdown in their history in the third quarter, with September accounting for the majority of the loss. The CS Tremont Hedge Fund Composite lost 10.3% during the quarter as all strategies reported negative returns. Convertible Arbitrage, Emerging Markets, and Long-Short Equity strategies reported the worst losses during the quarter.

September was an especially challenging month, with virtually the entire spectrum of hedge fund strategies losing money as equity volatility remained elevated, credit spreads and inter-bank lending rates remained wide, and market action seemed driven almost solely by global macro news. These factors led to continued difficulties for hedge fund managers who rely on dispersion of

Hedge Fund Index Returns (09/30/08)	Quarter	YTD	1 Year	3 Yrs	5 Yrs
Composite					
CS Tremont Hedge Fund Composite	-10.33%	-9.87%	-7.71%	5.49%	7.32%
Relative Value					
CS Tremont Convertible Arbitrage	-14.71%	-19.45%	-19.24%	-0.92%	-0.05%
CS Tremont Fixed Income Arbitrage	-7.79%	-11.57%	-10.59%	-0.03%	1.78%
CS Tremont Equity Market Neutral	-2.04%	1.67%	4.28%	8.16%	7.31%
Event Driven					
CS Tremont Event Driven	-8.28%	-9.31%	-7.95%	6.22%	9.09%
CS Tremont Event Driven - Distressed	-7.70%	-8.96%	-8.82%	5.60%	9.11%
CS Tremont Event Driven - Risk Arbitrage	-4.99%	-1.77%	-1.10%	5.19%	5.21%
CS Tremont Event Driven - Multi-Strategy	-8.73%	-9.66%	-7.55%	6.78%	9.28%
Equity Hedge					
CS Tremont Long-Short Equity	-12.86%	-13.28%	-11.21%	4.99%	8.04%
CS Tremont Emerging Markets	-15.06%	-18.07%	-14.06%	6.59%	10.93%
CS Tremont Dedicated Short Bias	-7.64%	3.40%	11.29%	0.58%	-0.76%
Tactical					
CS Tremont Multi-Strategy	-10.77%	-12.62%	-11.28%	4.02%	5.89%
CS Tremont Global Macro	-10.34%	-2.07%	1.93%	9.93%	9.66%
CS Tremont Managed Futures	-7.11%	6.70%	10.32%	6.75%	6.68%
Traditional Markets					
S&P 500	-8.37%	-19.29%	-21.98%	0.22%	5.17%
Lehman Aggregate Bond Index	-0.48%	0.64%	3.66%	4.15%	3.79%

returns to generate positive performance. Fundamental analysis, which is the essence of many hedge fund strategies, was not rewarded in the quarter, as trades were driven primarily by technical and liquidity factors. Hedge funds that rely on financing and strategies predicated on higher levels of leverage were subject to self-reinforced losses as both voluntary and non-voluntary deleveraging continued and was further compounded by potential redemptions on the horizon.

In September, the SEC stepped in and temporarily halted short-selling on a group of financial companies. The rule change caused a rally in financial stocks, which was exacerbated as investors ran to cover their short positions, resulting in losses for many managers who were short the sector. This also hurt confidence as a key tool in hedge funds' toolbox was threatened.

Another common hedge fund position that suddenly reversed course in the third quarter was a long position in commodities and commodity-related securities, especially energy related, as fear of a global recession mounted. This reversal hurt global macro managers as well as long/short equity managers.

This has been an extremely difficult period for hedge funds. Short-term challenges to this sector remain including rising financing costs, uncertainty about shorting rules, and the potential for increased redemptions. It is possible that many hedge funds, particularly smaller funds and funds with significant high net worth investment, will close their doors in the next 3-6 months. At the same time, many funds have taken this opportunity to become more conservatively positioned and to prepare to take advantage of significant opportunities that are emerging from the current market environment.

Alternatives: Private Markets

The current public market and economic environment is affecting real estate and private equity valuations. The combination of a slowing economy, rising layoffs, and lack of liquidity is presenting challenges to both real estate and private equity managers. Redemption queues are being formed as Investors seek liquidity from open-end real estate funds. Real estate managers are reluctant to sell properties at discounted valuations to redeem investors. The credit markets are constrained, further limiting the ability of managers to raise cash from debt markets. As companies implement cost containment measures and further layoffs occur, real estate managers are faced with increasing vacancy rates. Giving rent concessions to maintain occupancy is putting further pressure on commercial real estate valuations and cash flow. The lack of liquidity and profit erosion are causing buyout managers to put more equity into their investments and reserve more capital for follow-on/acquisition investments. The synchronicity of increasing equity investments, higher reserves and a slowing economy will require managers to raise new capital from investors who in turn are facing their own liquidity issues — capital calls with the expectation of negligible distributions. "It's Déjà Vu all over again" as venture capital managers are again cautioning their portfolio companies to reduce the cash burn rate given the expectation that an exit in the near term is unlikely. The venture capitalists recognize that the closed IPO market and very slow mergers and acquisition activity will add years to the exit timetable.

There are, however, investment opportunities for liquidity-providing funds and vehicles that provide shorter-term "j-curve mitigating' cash flows in this environment. The distressed, secondaries, and mezzanine areas of the private equity market, and real estate mezzanine and opportunistic funds are positioned to do well. Many investors in illiquid assets will raise cash by selling their holdings to a secondary manager. Mezzanine managers will provide leverage, at a price, to companies with more equity and less debt. Going forward we expect that existing private and closed-end real estate funds will need to set aside larger reserves to fund acquisitions and will be coming back to the market for follow-on funds sooner than history would suggest. Importantly, our research has recently shown that superior long-term returns in private market investing are best enabled by the disciplined approach of diversification by strategy and vintage year—that a consistent pace of annual commitments with top half managers creates a more effective program than market timing and/or trying to pick only top-quartile managers.

Final Thoughts

So what have we learned through this extremely volatile market environment? <u>First, diversification is still critical to long term portfolio success.</u> This remains true, even though there was nowhere to hide in the short-term. Specifically, the importance of diversification to reduce equity concentration risk in investor portfolios has become manifest. Pursuing an investment strategy within a "risk budgeting" framework, seeking to balance the sources of risk in portfolios among stocks, bonds, real assets, and alternatives has provided investors with lower volatility and lower downside risk in this volatile environment.

Second, managing assets with liabilities in mind is critical. When debt funding sources dried up, institutions with mis-matched portfolios could not continue to fund operations. Those who had matched their liabilities with long-dated Treasuries or swaps are riding out this storm much better than peers who did not. While this may apply most directly to pension plans and insurance pools, it remains broadly important for all clients to ensure an appropriate match between funding sources, investment strategy, and liquidity needs.

Third, at times of crisis, liquidity becomes paramount, yet it can quickly become scarce. The ultimate undoing of the failed financial institutions was a liquidity crunch. Our analysis of how to manage the risk of a "tail-event" such as we are experiencing, indicates that broad diversification and time-matching of assets generally hedges against such events. The danger for investors in such a time is if they have calls on their capital they cannot meet, which may lead to selling liquid assets (locking in losses) and retaining less liquid assets until their portfolio becomes out of balance, and potentially impaired. For these few investors, we suggest a liquidity review using scenario analysis to evaluate the likelihood of a liquidity crunch, and developing appropriate strategies.

Fourth, derivatives and leverage are not bad by nature. Although the use of derivatives and leverage have contributed to some of the failures of financial institutions and will amplify the losses of some institutional investors, when used in the larger context of the lessons described above, they continue to be important elements in the sophisticated investor "toolbox". In fact, many institutional investors who use levered "risk parity" and liability-matched strategies implemented primarily with derivatives have experienced better downside protection than more traditional strategies so far this year.

Fifth, active management can still add value over the long term. The heightened volatility, risk avoidance, and powerful negative sentiment in the current marketplace represent a strong headwind to active managers. They rely on more rational pricing environments to identify and exploit fundamental valuation opportunities and to get rewarded for taking on risk; we would expect such 'normal' market environments to resume.

Sixth, hedge funds still work. Despite this period of negative returns for the majority of absolute return strategies, the case for absolute return investing remains intact. The role of providers of consistent, uncorrelated returns over a risk-free benchmark remains important in an institutional portfolio. Absolute return strategies have experienced broad draw-downs before (most recently at the time of the Long-Term Capital Management sell-off in 1998) and yet bounced back to provide positive returns in each instance. As providers of liquidity in a liquidity-starved environment, those hedge fund managers with a strong franchise and robust business models should be able to buy significantly undervalued assets in the coming months and provide strong investment results. While the next several months will continue to be choppy for hedge funds, we believe that the long-term case for seeking uncorrelated returns above a risk-free rate from institutional-caliber hedge funds pursuing unconstrained investment strategies remains intact.

Seventh, take nothing for granted. One lesson learned from the current market turmoil is the need for increased scrutiny of elements of the investment landscape that have either been taken for granted or treated in relatively off-hand fashion, including: money market funds, securities lending programs, counterparty risk, prime brokerage arrangements, collateral management, and even stable value funds in defined contribution programs.

Finally, to rebalance or not to rebalance? Given recent market movements, it is likely that most client portfolio allocations are outside their policy bands. We recommend that clients rebalance their portfolios toward target allocations at this time. Given that in most cases this will require reallocations from fixed income and other lower-risk asset classes into equity, we recommend that these reallocations be made prudently in light of heightened market volatility and liquidity constraints being faced in some areas of the markets such as fixed income. This recommendation is made based on the historical analysis of the long-tem benefits of rebalancing and after a review of markets leading to the conclusion that the potential rewards for taking risk are rising.

NEPC maintains its recommendation for continued diversification and reduction of equity as the primary source of volatility in client portfolios. Yet we cannot ignore the opportunities available in some liquid global markets, be they valuation-based opportunities in equities or historic spread dislocations in the credit markets. Investors with patient capital can take advantage of their long time horizon and act as liquidity providers during this crisis. Those investors may profit most from the opportunities provided by it— in the words of Warren Buffet "to be fearful when others are greedy and to be greedy only when others are fearful." The recent market movements have been painful for most investors, and the current turbulent environment is likely to persist. We will continue to offer our clients the perspective and guidance necessary to navigate the storm.