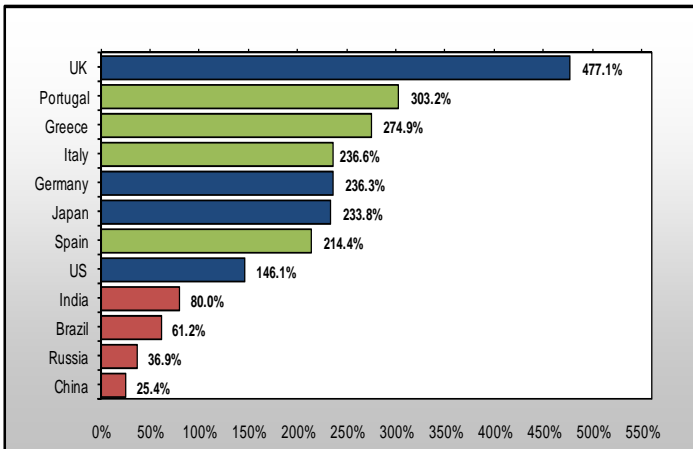


NEPC is an independent, full service investment consulting firm, providing asset allocation, traditional and alternative asset manager search, performance evaluation and investment policy services to institutional investment programs. We offer our market letters to provide insight into recent market 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.

## Pondering Risks...Sovereign, Tail, and VIX

Exhibit 1 - Total Debt to GDP

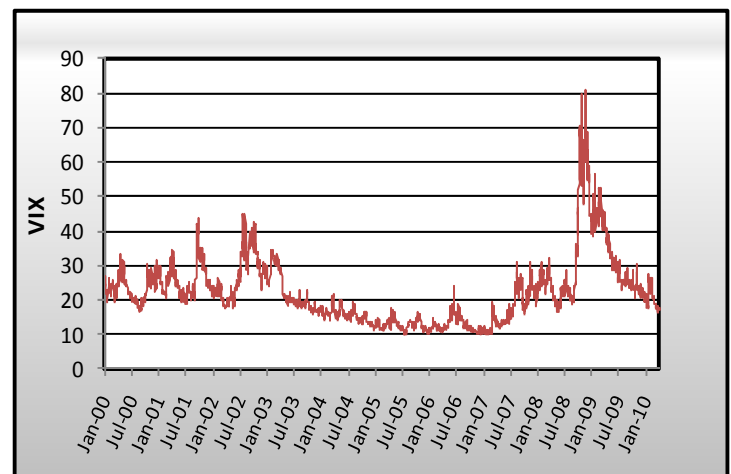


Source: CIA—The World Fact Book

Or should they? The most common measure of stock market risk, the S&P 500 Volatility Index (commonly known as the “VIX”), after spiking to unheard of levels in November 2008, has now settled to more quiescent values (see Exhibit 2). Recently the VIX was as low as 15.5, comparable to the long bull-market stretches of the 1990s and mid-2000s. In this apparently benign environment, the US stock market continues to rise, posting its fourth consecutive positive quarter. At the same time, credit spreads for corporate bonds have returned to pre-crisis levels, with high yield spreads plummeting from more than 18% over Treasuries in the midst of the crisis back to the longer-term average of 6%. Corporate debt issuance has ballooned, even as more than three quarters of high yield issuance in 2009 was to repay existing debt in an effort to amend, extend, and (perhaps) pretend. To our eyes, liquid credit markets appear to have, at a minimum, returned to fair value.

In the first quarter of 2010, Greece came close to defaulting on its government debt obligations. An on-again, off-again, IMF-orchestrated, Germany-led bailout was ultimately necessary to avoid a major sovereign default. In the same period, headlines trumpeted that obligations of the US government are being priced with higher risk than that of Warren Buffett’s Berkshire Hathaway Corporation. These ominous headlines highlight the perilously increasing debt levels of many developed countries from the “Club Med” of Portugal, Italy, Greece, and Spain, to the highly-levered UK, Japan, and even the US (see Exhibit 1). Developed country debt levels are a stark contrast to the more modest debt to GDP ratios of emerging countries. Perhaps we need a new category for countries - Developed, Emerging, and Submerging. As we hover on the brink of the first developed market sovereign default in our investing lifetimes, investors must ponder the many kinds of risk stalking the investment environment.

Exhibit 2 - S&P 500 Volatility Index



Source: Bloomberg

So what are we to make of this conundrum - where risks seem to abound, ranging from geopolitical events to potential national defaults, and yet the equity and credit markets seem happily whistling past the graveyard to continued advances? Is it possible that the VIX is simply providing a myopic view of risk? As a measure of volatility, perhaps this indicator is failing to express the risks of a "black swan" event, the kind of tail-risk that has yet to manifest itself.

We have been spending a lot of time with clients this year discussing the different definitions of risk. A key theme continues to be the importance of broad diversification in the face of lower capital markets return expectations, despite the temptation to reach further along the return spectrum by assuming more equity risk. We caution investors to avoid being fooled by the current low level of volatility as measured by the VIX. Within this context of current low volatility forecasts, we have been ruminating more on tail risk, including the slew of new products hitting the marketplace. Consideration of tail events and how a portfolio might respond is part of sound risk management but paying up front costs to hedge specific events can be challenging given the dynamic and unpredictable nature of investment markets. We find that for most plan sponsors, broad asset diversification and a long-term time horizon are sufficient to manage tail risk, even events as extreme as those experienced in 2008. Investors who may consider tail risk hedging strategies are those who could experience a liquidity crunch in an extreme market environment and be forced to become a distressed seller, or for whom asset declines represent a potentially punitive outcome, such as debt covenant violations or benefit restrictions. For those investors who may want to evaluate a tail risk hedging approach, we recommend pursuing targeted strategies that can be built to an investment program's specifications. We recommend avoiding products that package hedge fund strategies (and fees) with downside protection. We also counsel being wary of "off the shelf" products that would have worked well in the last crisis. While we do not have a crystal ball when it comes to tail events, we are fairly confident that the next black swan will look different than the last one.

### **Global Equity Markets**

After a retrenchment in January, the risk trade returned sharply in February for the US, and one month later for foreign stocks. The markets were still largely sentiment driven - investors initially grew cautious about the sovereign debt problems in Europe, but soon threw caution to the wind when encouraging economic data provided some support for a sustained recovery. Although March marked the 13th month since the bottom, the advances in the markets, led by low-quality, high-beta stocks, still typified that of an early recovery phase. Small cap stocks performed better than large caps, and value beat growth. Sector themes were consistent in the US and abroad as cyclicals (Consumer Discretionary, Financials, and Industrials) fared better than their defensive counterparts (Utilities and Telecommunications).

Globally, developed markets small cap stocks continued to outperform large cap. Investors fleeing to safety early in the quarter led to a strong dollar and underperformance of the international markets relative to the US. Similarly, the Yen rallied and thus, Japan also posted strong returns. Not surprisingly, Europe, the epicenter of many sovereign debt concerns, sold off. Emerging markets continued to rise, but not without added volatility, as emerging markets plummeted in January, only to snap back sharply to end the quarter in positive territory. However, China was a laggard during the quarter, falling 1.6%. China's pull-back was driven by fears of real estate bubbles, economic overheating, rising inflation, and a tighter monetary policy. Eastern Europe led the way for emerging countries. Within the region Hungary was the best performing market helped by attractive valuations and a tightening of economic policy.

<b>Equity Index Returns (03/31/10)</b>				
<b>Global Equity</b>	<b>Quarter</b>	<b>1 Year</b>	<b>3 Yrs</b>	<b>5 Yrs</b>
MSCI World	3.2%	52.4%	-5.4%	2.9%
<b>US Equity</b>				
S&P 500	5.4%	49.8%	-4.2%	1..9%
Dow Jones Industrial Average	4.8%	46.9%	-1.5%	3.3%
NASDAQ Composite	5.7%	56.9%	-0.3%	3.7%
Russell 1000 Growth	4.7%	49.8%	0.0%	3.4%
Russell 1000 Value	4.2%	19.7%	-0.8%	1.1%
Russell 2000	8.9%	62.8%	-4.0%	3.4%
Russell 2000 Growth	7.6%	60.3%	-2.4%	3.8%
Russell 2000 Value	10.0%	65.1%	-5.7%	2.8%
<b>International Equity</b>				
MSCI EAFE	0.9%	54.4%	-7.0%	3.8%
MSCI Emerging Markets Free	2.4%	81.1%	5.2%	15.7%
MSCI Europe	-5.8%	50.4%	-8.5%	3.5%
MSCI UK	-0.6%	59.5%	-8.2%	2.47%
MSCI Japan	8.2%	37.9%	-9.0%	1.3%
MSCI Far East	7.1%	42.2%	-7.6%	2.5%

### **Global Fixed Income**

Fixed income delivered mostly positive returns across domestic market segments in the first quarter. Returns in fixed income were mostly driven by further spread compression as the Barclays Aggregate Bond Index returned 1.8%, led by investment grade credit (+2.3%), and investment grade CMBS (+9.1%).

High yield bonds experienced a microcosm of 2009, returning 4.6%, but led by the lowest quality CCCs (5.3%). Spread levels, after reaching historic levels only one year ago, have returned to long-term averages. Within investment grade, financials were the best performing sector, signaling improving conditions at the large money center banks. Fundamentals in the housing market, such as improving housing starts and homebuilder sentiment, combined with strong sales in March have relaxed the extreme illiq-

uidity observed in non-agency sectors last year, although uncertainties remain in the housing market, particularly after the first time homebuyer's credit expires and government support begins to wane. Active fixed income managers are still likely overweight credit, however, and this may be an opportunity to take some profits and upgrade the quality of portfolios.

Despite volatility, intermediate Treasury yields were mostly unchanged, while the two year note fell twelve basis points, yielding 1.02%. The slight steepening in the short end of the curve may be explained by markets reacting to continued low inflation expectations and a continued commitment from the Fed to a very accommodative policy, counter to market expectations of significant tightening in the coming months. Forward yield curves indicate possible higher interest rates in early 2011, although the economic signals hinting at benign inflation and the Fed's carefully parsed language are causing markets to re-price yields and may contribute to some volatility in investment grade bonds in the next several quarters. Treasury yields may also face upward pressure as the new issuance continues to flood the market.

Fixed Income Index Returns (03/31/10)				
Global Fixed Income	Quarter	1 Year	3 Yrs	5 Yrs
Citi World Gov. Bond	-1.3%	6.3%	7.2%	4.8%
JPM EMBI Global Diversified	3.6%	27.3%	7.0%	9.4%
Domestic Fixed Income				
BC Aggregate	1.8%	7.7%	6.1%	5.4%
BC Government	1.1%	-0.1%	6.0%	5.2%
BC US Credit	2.3%	20.8%	6.0%	5.4%
BC Mortgage Backed	1.5%	5.2%	7.0%	6.1%
BC Govt/Credit	1.6%	7.5%	5.8%	5.2%
BC TIPS	0.6%	6.2%	6.0%	4.8%
BC High Yield	4.6%	56.2%	6.7%	7.8%
CSFB Leveraged Loan	4.4%	41.1%	2.4%	4.1%
91 Day Treasury Bills	0.0%	0.2%	2.0%	2.9%
10-Year Bond Yields	Mar-10	Dec-09	Sep-09	Jun-09
US	3.8%	3.8%	3.3%	3.5%
Europe	3.1%	3.4%	3.2%	3.4%
UK	3.9%	4.0%	3.6%	3.7%
Japan	1.4%	1.3%	1.3%	1.4%

In developed overseas markets such as the UK and Euro-zone, local bond returns were mostly positive, with the exception of weaker sovereigns such as Greece. Currency contributed to negative returns for US investors, with the CITI WGBI returning -1.3% in the quarter. Emerging markets, both external and local currency posted strong positive returns.

### Currency Markets

Concerns over the debt crisis in Greece, and similar fiscal woes facing other peripheral European economies plagued the Euro and benefited the US dollar, as the dollar strengthened 6% against the Euro in the first quarter, ending at \$1.35. The Sterling was dragged down along with the Euro, also falling 6% relative to the US dollar in the first quarter. The Japanese yen had similar experience against the EUR and GBP and traded relatively flat to the US dollar. The dollar bloc was mixed as Canada and Australia strengthened while the New Zealand dollar fell by 3% to the US dollar.

The quarter closed with drama unfolding in US-China relations as accusations of China as a currency manipulator began to emerge. Treasury Secretary Geithner took a more measured approach, choosing to delay the Treasury's report on exchange rates to Congress. The potential de-pegging of the Chinese yuan to the US dollar has many macroeconomic and political implications and will continue to be scrutinized by market participants over the coming months.

### Commodity Markets

Commodities fell 5% during the first quarter (according to the DJ-UBS Commodities Index), a reversal of fortune from the sharp gains posted in 2009. From the macro perspective, investors expressed concerns over slowing expectations for global economic growth and declining demand for natural resources. Commodity prices also fell as the US dollar gained ground, increasing the cost of commodities for non-dollar buyers. Yet, supply/demand dynamics still exerted considerable influence over prices of individual commodities, a sign that fundamental forces remain intact. Energy markets were resilient as oil rose 6% to \$83.76/barrel amid mixed signals on consumption and inventory. Other parts of the energy sector corrected sharply, as natural gas fell 36%. Agriculture was down significantly (-12%), led by sugar, down 36% over the quarter. Gold increased modestly, up 2% to close the quarter at \$1,113.30/ounce.

### Pension Liability Experience

The continued climb in long Treasury yields, as corporate spreads remained tight, led to modest declines in pension liabilities. The 30-year Treasury yield rose just 9 basis points in the quarter, but reached 4.72% at March 31, the highest rate since October 2007. Long corporate bond spreads over Treasuries tightened by another 12 basis points, based on the Barclays Capital Long Credit Index. The estimated liability decline for the quarter was 1.2%, with the Citigroup Pension Liability Index increasing from 5.96% as of December 31, 2009 to 6.14% as of March 31, 2010.

Pension funding relief issued by the IRS during 2009 helped corporate plan sponsors use substantial smoothing techniques in their funding valuations for 2009. These techniques will result in a high funded status for plans with a January 1, 2009 valuation date relative to mark-to-market measurements. However, discount rates as of December 31, 2009 were histori-

cally low, and without discretionary contributions or additional funding relief, many plan sponsors should see a decline in pension funding and increased contribution requirements for 2010 valuations.

NEPC continues to recommend consideration of LDI strategies for corporate clients to protect against declining interest rates, to reduce surplus volatility and to help maintain funded status. These benefits should be expected on a prospective basis, as the IRS has indicated that 2010 and future years' funded status will be based on PPA mark-to-market rules. Clients who are considering implementing an initial LDI strategy may want to dynamically average into an LDI allocation over a period of months or years. Your NEPC consultant can review LDI implementation strategies with you and discuss the appropriate hedge ratio in your portfolio.

### **Hedge Funds**

Hedge funds posted another solid 3.1% return for the first quarter of 2010, according to the CS Tremont Hedge Fund Composite. This continued trend of positive performance has helped return many funds and strategies to near their high water marks, while the S&P 500, despite a strong rally throughout the past year, remains close to 20% off its peak. Most strategies experienced strong absolute and relative returns in the quarter, however; Equity Market Neutral (-0.7%) and Dedicated Short Bias (-10.0%) continued to suffer in the face of the year-long equity bull run.

Throughout the quarter, generally improving sentiment regarding economic activity and subsiding volatility factored more heavily in producing positive returns in risky assets (equity and credit) and outweighed the fears regarding sovereign risk. Most equity-related managers and strategies maintained cautious positioning due to doubts regarding the sustainability of the rally and consequently reined in long exposure to the broader S&P 500. Credit strategies benefited significantly from further spread tightening in March as distressed, high yield, bank loans and investment grade all clocked solid months and did well for the quarter. A particularly strong trade was long high yield, short investment grade. Event-driven managers witnessed a surge in M&A activity throughout the quarter, particularly in the insurance, energy, and pharmaceutical sectors.

<b>Hedge Fund Index Returns (03/31/10)</b>				
<b>Composite</b>	<b>Quarter</b>	<b>1 Year</b>	<b>3 Yrs</b>	<b>5 Yrs</b>
CS Tremont Hedge Fund Composite	3.1%	21.2%	2.5%	6.2%
<b>Relative Value</b>				
CS Tremont Convertible Arbitrage	3.5%	41.6%	2.1%	4.7%
CS Tremont Fixed Income Arbitrage	3.6%	27.8%	-1.6%	1.0%
CS Tremont Equity Market Neutral	-0.7%	7.0%	-13.1%	-4.8%
<b>Event Driven</b>				
CS Tremont Event Driven	4.8%	26.4%	3.8%	7.7%
CS Tremont Event Driven - Distressed	5.0%	28.5%	1.6%	6.6%
CS Tremont Event Driven - Risk Arbitrage	1.4%	10.6%	5.2%	5.8%
CS Tremont Event Driven - Multi-Strategy	4.6%	25.0%	5.1%	8.4%
<b>Equity Hedge</b>				
CS Tremont Long-Short Equity	2.8%	22.4%	2.6%	7.0%
CS Tremont Emerging Markets	2.6%	33.5%	2.7%	9.0%
CS Tremont Dedicated Short Bias	-10.0%	-33.3%	-6.8%	-4.7%
<b>Tactical</b>				
CS Tremont Multi-Strategy	2.6%	23.4%	1.2%	5.5%
CS Tremont Global Macro	2.6%	11.5%	7.5%	9.1%
CS Tremont Managed Futures	2.1%	-1.8%	7.9%	6.3%

Normalization continues to be the theme in the hedge fund space in 2010 following the challenges of 2008 - 2009. Positive asset flows have continued and institutional investors continue to profess a desire to maintain or increase their allocations to the sector.

### **Private Markets**

Investors and Private Markets managers are asking the same question - where are we in the economic cycle? The answer depends on the private markets strategy, which side of the investment you are on, where the investment is in the capital structure and the economic drivers of the strategy.

For Private Equity, managers reacted to the fall off in top-line revenue by implementing plans that rationalized operations with a goal of having a positive bottom line and deleveraging portfolio company balance sheets. For Real Estate, unemployment, less consumer spending, and limited available debt have had a negative impact on operations and the price a for which a property can be sold in the market or the amount of debt for which a property can be refinanced. Performance of a real estate strategy in the current environment is highly influenced by the market conditions and less so by the manager's ability to impact the property operations.

For Investors, private market fund raising risk, in addition to strategy risk, must be evaluated in the context of whether the manager can raise sufficient capital to successfully execute the strategy. Investors are balancing the desire to continue to

invest in the private markets with their own liquidity issues and the denominator effect, which has caused their private markets allocations to rise. Although the public markets have improved, many investors remain over allocated to the private markets strategy. Investors who have capital to invest are cautious, taking longer to complete the due diligence process, but also being rewarded by, fund terms and conditions that are more negotiable and management fees that are being reduced.

### **Final Thoughts**

As we progress through 2010, the economic outlook appears to be one of moderate growth in the developed world with robust economic recovery in the emerging markets. In the US, Europe and Japan, important imbalances remain as debt levels are elevated, fiscal deficits abound, and unemployment remains stubbornly high. While capital markets continue to advance and risk measures maintain a downward trend, we recognize that significant imbalances seldom are resolved gradually.

We recommend that investors:

- 1.) Not reach for return - with muted expectations, a risk-balanced approach remains prudent;
- 2.) Pursue broad global diversification including adding further strategic exposure to currencies, bonds, and stocks of the more rapidly growing and fiscally sound emerging markets;
- 3.) Broaden exposure to investments that will perform well in extreme economic environments including inflation-sensitive assets as a hedge against potential inflation;
- 4.) Redeploy opportunistic liquid credit allocations (including bank loans and high yield) to take advantage of an elevated illiquidity premium associated with a protracted distressed cycle and the departure of many traditional providers of financing; and
- 5.) Consider the role of active strategies as, in a low return environment, alpha contributions can be significant.

We will address these and other key issues at our upcoming client conference May 12-13 in Boston. Featured speakers include Jeremy Grantham of GMO who will provide an overview of the key issues in markets, Howard Marks, CEO of Oaktree Capital, who will offer his unique insights into the distressed markets, and Robert Pozen, Chairman of MFS Financial who will provide an overview of the changing regulatory environment. We look forward to many clients joining us for what should be a stimulating and enjoyable gathering.