HammondAssociates
INSTITUTIONAL FUND CONSULTANTS, INC.

RESEARCH REPORT

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In this report . . .

- ✓Active Extension Portfolio Structures
- ✓Shifting Winds: Is the Liquidity Environment Changing?
- ✓Have Carry Traders Gotten Carried Away?
- ✓Emerging Market Equities Trading at Parity with Developed Markets

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Executive Summary

- Global equity markets posted strong returns for the second quarter. Domestically, the S&P 500 rose 6.3% and the Russell 2000 gained 5.4%. In international markets, the MSCI EAFE index jumped 6.4% and emerging markets continued to soar, returning 15.0%.
- The yield on the 10-year rose from 4.65% at the start of the quarter to 5.03%. A change in expectations regarding future Fed actions was likely the primary driver of the change in rates. At the start of the quarter, the market was expecting at least one cut before the end of the year. Futures are now predicting the Fed will stand pat in 2008.
- Credit spreads have widened over the last few weeks, with the option-adjusted-spread on the Lehman High Yield Index moving from a historic low of 2.33% on June 1 to 2.99% as of July 13. The leveraged loan market has also shown signs of tightening. However, credit markets remain very loose by historical standards and emerging market countries continue to amass huge foreign currency reserves, flooding the world with liquidity. If this truly marks a significant shift in risk tolerance and spreads continue to widen, it could be an unpleasant second half of the year for global markets.
- The carry trade, in which investors borrow in low yielding currencies and lend in high yielding currencies, continues to grow in popularity. The rush of money into the trade has driven low yielding currencies such as the Japanese yen well below fair value and high yielding currencies, such as the Australian dollar, well above fair value. When risk aversion rises, the carry trade tends to perform poorly. The popularity of the trade is another indicator of the amount of risk being taken on by investors.
- With the housing sector continuing to struggle, consumers will have to rely on wage growth to support their spending habits. While the job market remains healthy, we expect consumption growth to be sluggish in future years as households increase their savings.
- Year-over-year profit growth for US corporations slowed to 6.4% during the first quarter. While equity markets continue to benefit from strong buyout activity, as profit margins revert closer to normal levels in the coming years, stocks will face stiff headwinds.
- After several years of outperformance, emerging markets are now trading at parity with developed markets. For emerging markets to continue to outperform, they will need to generate excess earnings growth. Emerging markets are supported by strong momentum, but remain a high beta play on the global economy. They are likely to suffer during a global downturn or if there is a reduction in risk tolerance levels.
- Hedge funds have generally profited through the sub-prime meltdown, but continue to be exposed to a broad re-pricing of risk. REITS were hammered during the quarter, falling 9.4%. REITS are now trading at a discount to their NAV; however, the commercial market appears frothy.

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Research Note: Active Extension Portfolio Structures

May 2007

Over the last year, we witnessed a growing number of traditional active managers (mostly quantitative) seeking to enhance portfolio returns by including short positions as well as long positions in their equity portfolios benchmarked to traditional indexes. This new product, known as active extension, short extension, or simply 130/30, is essentially a relative return portfolio structure that allows traditional, long-only managers the flexibility to extend their long positions beyond 100% of client capital by selling short an equal amount of stocks.

According to Pensions & Investments, US money managers have accumulated nearly $30 billion in active extension products. We believe the newfound interest stems primarily from a series of research articles that describe how active equity management can be improved through relaxation of the long-only constraint that allows a portion of the portfolio to be shorted. In this Research Note, we examine the active extension structure and discuss some of the issues surrounding it.

What Is It?

In 2004, Roger Clarke, Harindra de Silva, and Steve Sapra published an article in the Journal of Portfolio Management identifying the long–only constraint as the greatest source of portfolio inefficiency or information loss when compared to other portfolio constraints. Their research demonstrated that just a moderate amount of shorting could significantly improve a portfolio's information ratio (unit of excess return per unit of tracking error) by increasing the strategy's transfer coefficient (a measure of how effective a portfolio manager is in translating forecasted active returns into active weights versus its benchmark).

A 130/30 active extension portfolio, for example, combines a 100% long exposure with a 30% short exposure and an additional 30% of long exposure. Hence, the portfolio is 130% long and 30% short, with a 100% net long position that is fully exposed to the market's return (a beta of around 1.0). These products come in different long/short variations, typically ranging from 110/10 to 150/50; however, most mandates we are seeing are 120/20 and 130/30.

The mechanics of implementing this structure are fairly straightforward. The portfolio manager first funds an account with a prime broker and engages in a multi-step process to establish the portfolio's positions. For a 130/30 structure, using a hypothetical $100 of client capital, a portfolio manager would deposit $100 in an account with a prime broker. (For a fee, the prime broker clears trades, arranges borrowing of stock for shorting, and facilitates financing for leverage.) The prime broker then arranges for the manager to borrow directly from a stock lender the $30 worth of stock that the manager intends to sell short. In turn, the $30 in proceeds from the short sales plus the initial $100 of capital are used to purchase stocks the manager wants to hold long. The additional long positions amounting to $30 are then used to collateralize the borrowed stocks (stocks sold short), which are held in a stock loan account.

Rationale for Active Extension

The argument for relaxing the long-only constraint centers on the recognition that imposing long–only constraints on portfolio managers limits their ability to express their full insights on stocks–both positive and negative. The research in this area suggests that the information ratio is partly dependent upon how well portfolio weights reflect the information from a manager's research (in addition to the quality of the information and the number of active positions taken).

This is problematic for a long-only manager since most indexes, such as the S&P 500, are dominated by relatively few stocks, which means a vast majority of the stocks within the index have relatively low weightings and provide management with little opportunity to underweight them in a meaningful way. Long-only managers can only express their negative insights in stocks by not owning them, which means for most benchmarks there can only be a minimal bet against most stocks, no matter how unattractive they are.

In the table below, we show the size breakdown of three major market-cap weighted equity indexes. In the three indexes, few stocks have meaningful weightings. In fact, only 15 stocks in the S&P 500 index have a weight greater than 100 basis points. This means that only 15 stocks in the index can be underweighted by 100 basis points or more in a long-only portfolio (even less for the other benchmarks). Moreover, half the stocks in the S&P 500 index have an index weight below 10 basis points; half the stocks in the MSCI EAFE index have an index weight below 3 basis points; and half the stocks in the Russell 2000 index have an index weight below 1 basis point.

Exhibit 1: Index Breakdown by Position Size

	# of Stocks		
Index Weight	S&P 500	Russell 2000	MSCI EAFE
>100 bps	15	0	8
< 50 bps	455	1,957	1,129
< 20 bps	387	1,943	1,044
< 10 bps	253	1,693	919

A portfolio manager can only benefit marginally from a negative view about a stock if the stock can be underweighted by only a few basis points. In effect, the long-only constraint precludes the possibility of meaningfully underweighting all but the very largest stocks in a benchmark Index. Using a typical active risk (over/underweight) limit of 50 to 100 basis points, a manager can fully underweight only a small proportion of stocks in the S&P 500, the MSCI EAFE, and the Russell 2000 indexes.

On the other hand, the inability to meaningfully underweight most stocks in the benchmark also hampers the ability to overweight stocks. Since most underweight positions are miniscule, not holding these stocks frees only a small amount of capital for overweighting attractive stocks. As a result, managers are also unable to maximize the contribution from their positive insights. In the end, much of the information derived from the manager's research on both attractive and unattractive stocks is not fully exploited.

Moreover, as managers take larger active positions in stocks expected to outperform, unintentional risk arises from the asymmetry of not being able to express the same conviction for stocks expected to underperform. This problem becomes more pronounced as active risk is increased: the portfolio's information ratio begins to deteriorate as tracking error outpaces excess return.

Relaxing the Long-Only Constraint

Information loss can be reduced by allowing managers the opportunity to sell short. For example, General Electric accounts for 290 basis points of the total market cap of the S&P 500 index. An active manager, who has a positive insight on GE decides to overweight the stock relative to the benchmark by 100 basis points (hold a 390 basis point position). The manager would like to fund the overweight based on an equally negative insight on Gannett.

Unfortunately, a long-only portfolio is only able to take a 10 basis point underweight in Gannett (i.e. hold a zero-weight position in the stock). However, by relaxing the long-only constraint, a manager now has the flexibility to achieve a full 100 basis point underweight by not owning the Gannett (10 basis point underweight) and shorting an additional 90 basis points (total underweight of 100 basis points).

As a result, the flexibility to go short better captures the information available from a portfolio manager's research. It allows for a manager to more symmetrically express its views on stocks unconstrained by a particular stock's capitalization, and ultimately offers the potential for greater alpha capture. All other index-relative neutrality constraints, such as beta, style, country/sector/industry exposure, stock exposure, and capitalization range, are allowed to remain unchanged and identical to those applied by the manager in its long-only portfolio structure. The key difference is that the active weights are more symmetrical and less dependent on benchmark construction inefficiencies with an active extension portfolio.

Why 130/30?

Most discussions concerning active extension structures tend to focus on 130/30 long-short portfolios. However, there is nothing magical about a 130/30 long-short mix. In fact, the appropriate mix of long-to-short positions should vary with the investment strategy, a targeted level of active risk, and the benchmark index. We have seen some analysis from investment managers that demonstrates why a 130/30 structure is optimal in terms of maximizing a portfolio's expected information ratio, based on the above-mentioned factors. These outcomes were derived by effectively solving for the expected active return and level of shorting associated with various levels of active risk within a strategy. For a given level of active risk, as the level of shorting increased, active returns would rise to a point and then subsequently begin to fall off. For a number of traditional managers we have reviewed, the optimal mix (i.e. where the information ratio is optimized) ranges from 120/20 to 130/30, given a targeted tracking error.

Also, it is important to note that the portfolio structure is not continuously maintained at the stated long-short mix. The stated mix represents the maximum allowed in investing in long-short positions. Under certain market conditions, an investment manager may not be able to identify attractive (or unattractive) opportunities. Forcing a particular level of short sales (e.g., 30%) under those circumstances may accomplish little other than increase transactions costs. Therefore, it is expected that the mix will vary somewhat over time. Frequent portfolio rebalancing should keep the mix within established guidelines.

Concerns Over Using Financial Leverage and Short Sales

The main concerns we hear with respect to active extension are the risks associated with shorting. Some clients may be hesitant to allow, or even be prohibited from allowing, a traditional manager to short stocks based on the potentially unlimited liability of a short position. The potential loss on a short position is theoretically unlimited because the price of a stock can rise without bound.

Many portfolio managers mitigate this risk by holding widely diversified portfolios with risk allocation limits and by using stop-loss orders. In addition, losses on short sales should at least be partially offset by gains on long positions (and vice versa); therefore, this risk can be controlled. The market exposure above 100% in these strategies is typically non-directional.

Another concern relates to the impact leverage has on active returns during periods of manager underperformance. Although over time the advantages of a 130/30 portfolio are expected to add an additional layer of positive alpha to the underlying beta of the long-only portfolio, there will be periods, maybe extended periods, when the underlying strategy underperforms the benchmark. Even with the most skillful managers, there will be periods of underperformance. This is an important point, since the financial leverage used in the active extension structure works to amplify the active returns of the underlying strategy on the upside as well as on the downside. While the active extension structure does not leverage the systematic risk and return of the asset class, it does leverage the active risk and return of the portfolio.

Although the net exposure to the market remains constant (the same as for the underlying long-only structure) the active extension structure does have higher gross exposure. In particular, with a 130/30 structure, the portfolio has exposed 160% of its assets to the market, with 130% long plus 30% short. As a result, the leverage magnifies the portfolio's active return. This is critical since periods of manager underperformance, when magnified, may be more difficult for clients with low risk tolerances to accept. For this reason, we like this strategy when it is applied to enhanced index strategies rather than more active traditional strategies.

Implementation Issues

There are two main issues in implementing this structure. The first issue is cost. The costs of implementing the structure will more than likely be higher than an equivalent long-only structure. Management fees as a percentage of capital are likely to be higher the more that investment positions are leveraged. However, we have seen certain managers in this space offering a discounted flat fee plus a performance-based fee (i.e. 0.30% plus 20% of excess return) option.

There are also additional costs associated with the use of the prime broker. In exchange for its lending services, the prime broker charges annual fees of roughly 40-50 basis points on the market value of the shares shorted. Fees may be higher for harder-to-borrow shares. The typical program pays financing fees keyed to the Fed Funds Rate. The levered long amount pays interest at the Fed Funds Rate plus additional basis points, while the proceeds of the short sales receive interest at Fed Funds less a negotiated discount. For a 130/30 portfolio with 30% of capital shorted, the prime brokerage fee would be about 12-15 basis points. In addition, since we would expect turnover to be higher than in an equivalent long-only portfolio, there could be additional transaction costs.

The second issue in implementing this structure rests with identifying active managers experienced in managing short positions. Most long-only investment firms have little to no experience in shorting stocks. Managing short positions requires a different manager skill set from managing long-only portfolios, including working with prime brokers. Those managers accustomed to evaluating only purchase candidates may find it difficult to identify solid short candidates and managing the risks of shorted positions. We believe it is critical that the manager has an established record and expertise managing short positions.

Unrelated Business Taxable Income

There is an issue related to potential tax liability from shorting. The use of financial leverage inherent in the active extension structure may have tax implications for tax-exempt institutions. The use of leverage presents the possibility of UBTI (Unrelated Business Taxable Income). (UBTI is income earned by a tax-exempt entity that does not result from its exempt activities. UBTI is taxable to an otherwise tax exempt entity, and thus, often viewed unfavorably by exempt investors.) The otherwise tax-exempt investor that profits from positions established with borrowed funds is subject to taxes on UBTI.

However, active extension strategies are typically structured to avoid UBTI. This is accomplished by establishing stock loan accounts with the prime broker. A typical active extension structure uses the proceeds of the portfolio's short positions as collateral to finance the additional long positions. This structure allows the portfolio to buy aggregate long positions equal to greater than 100% of the client capital without borrowing to finance those additional long positions, thus avoiding UBTI. Nonetheless, we would advise clients to consult their legal and tax counsel before investing in these structures.

Comparison to Other Long / Short Strategies

Most of the active extension products thus far have been launched by traditional investment firms as opposed to hedge fund firms more often associated with shorting and hedged strategies. While they both use leverage and shorting, the objectives of long-only managers using an active extension structure are different from those of a typical hedge fund. Hedge funds are managed as absolute return strategies while active extension products are managed as relative return strategies. An active extension strategy typically maintains a beta close to that of the benchmark. In contrast, hedge funds typically have a beta meaningfully different than that of the market.

An alternative way an investor could construct a 130/30 portfolio, as an example, would be to combine a 30/30 market-neutral long-short portfolio with a long-only (100/0) portfolio instead of a single 130/30 portfolio. With this combined structure, the long-short mix would be identical to a 130/30 active extension strategy. However, the problem with this structure is that combining two separate portfolios is suboptimal. The optimal stock weights are not obtained from an integrated optimization that considers all long and short positions simultaneously as is the case with the 130/30 structure. Portfolio optimizations, which consider the interaction of all the stocks in the portfolio (long and short combined), have to be analyzed in context of the overall portfolio and not two separate portfolios.

Quantitative vs. Fundamentals

Most of the active extension strategies launched over the last few years have been by quantitative managers. A few fundamental managers we have spoken to are considering active extension strategies. For quantitative managers, active extension provides a natural progression of their investment process by simply expanding the set of active opportunities. Quantitative managers are typically already estimating a predicted alpha for every stock in the universe based on some type of stock ranking model, whereas most fundamental managers lack the resources or inclination to adequately assess the entire universe. Fundamental managers oftentimes spend time only on stocks they will potentially recommend for purchase.

Quantitative managers may also have a systems advantage over fundamental managers, as there are implementation issues with many active extension structures. In particular, most quantitative managers have invested heavily in sophisticated trading and risk management systems, and find transitioning to 130/30 to be less of a challenge than a similarly-sized fundamental investment shop.

In addition, quantitative approaches may also have a marketing advantage in that they can better demonstrate that a disciplined, rules-based long-only process they have been running in real time could have generated attractive active returns in the 130/30 format. They can more objectively back-test how their short ideas would have been incorporated. Fundamental managers are working to conduct this analysis but face challenges in reviewing large sets of potential investments on a historical basis given the generally more subjective and judgmental nature of their investment processes.

What is notable recently is the increase in assets among quantitative managers, augmenting or replacing traditional fundamental managers. Quantitative managers have witnessed a substantial increase in assets in recent years. Based on an informal survey of our manager database, we estimate that managers using a primarily quantitative process have grown assets under management over six-fold since 1999. If active extension strategies gain more traction, even more assets will be managed with a quantitative bent. Our concern relates to the potential impact these inflows may have on performance should they continue. In particular, most quantitative strategies use similar processes, incorporating four broadly classified factor exposures into their investment models: value, growth, quality, and price. If too many investors start to use the same set of factors in order to make their decisions, then the effectiveness of those factors may be severely eroded. While we do not believe this point has been reached yet, there is a point where assets could start to negatively impact performance. This is an area that needs to be closely monitored.

Conclusion

We find the academic theory-based arguments for relaxing the long-only constraint quite compelling and believe it should be seriously considered by clients. If removing the long-only constraint allows skillful active managers the opportunity to take fuller advantage of their stock insights, thereby resulting in higher risk-adjusted returns, then we strongly recommend its implementation. But not all active extension products are the same. We specifically like this strategy when applied in the context of a quantitatively-driven, risk-controlled, enhanced index strategy using advanced portfolio optimization systems. However, with relatively few managers having sufficient track records in managing portfolios within this structure and with the potentially higher costs of implementing it, we recommend taking a go-slow approach to evaluating these products.

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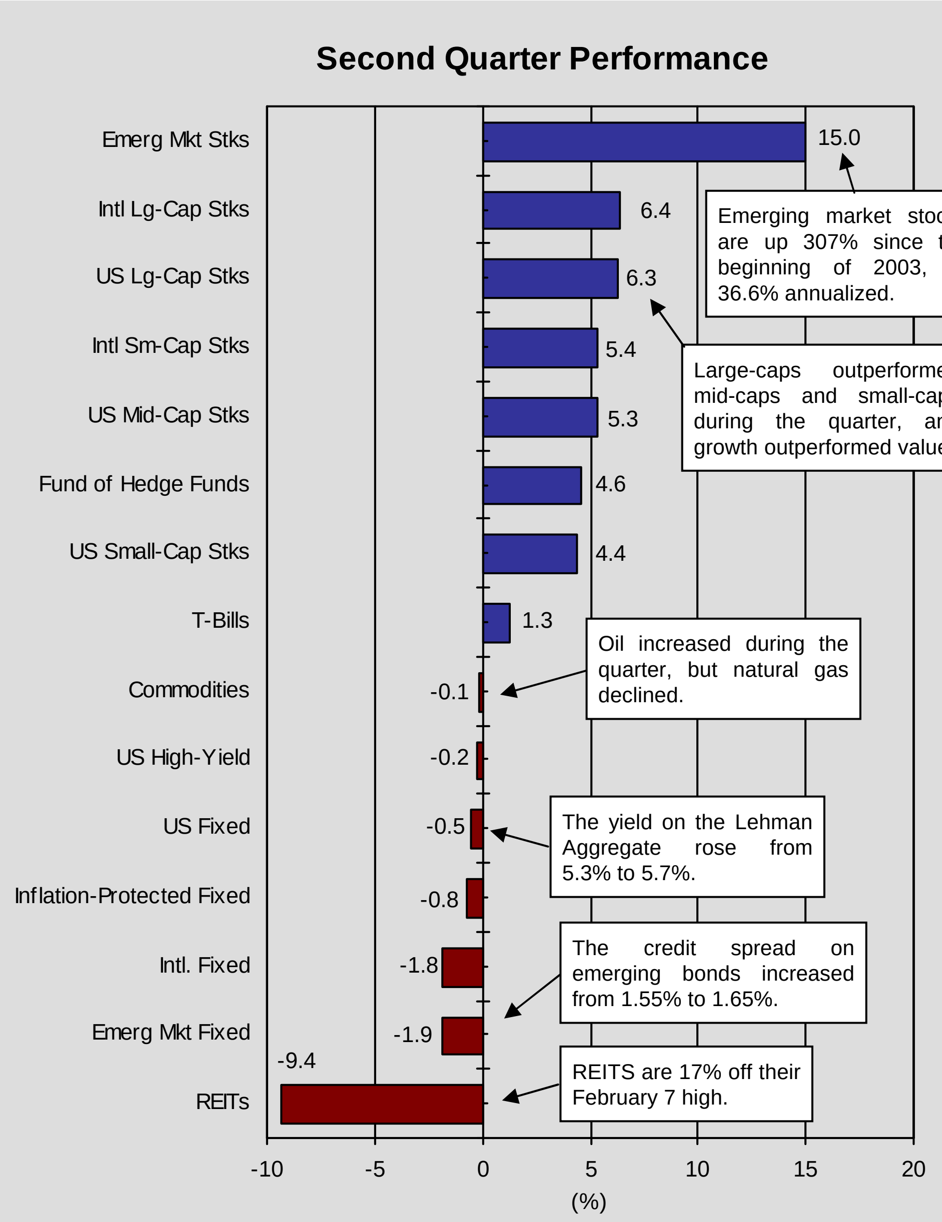
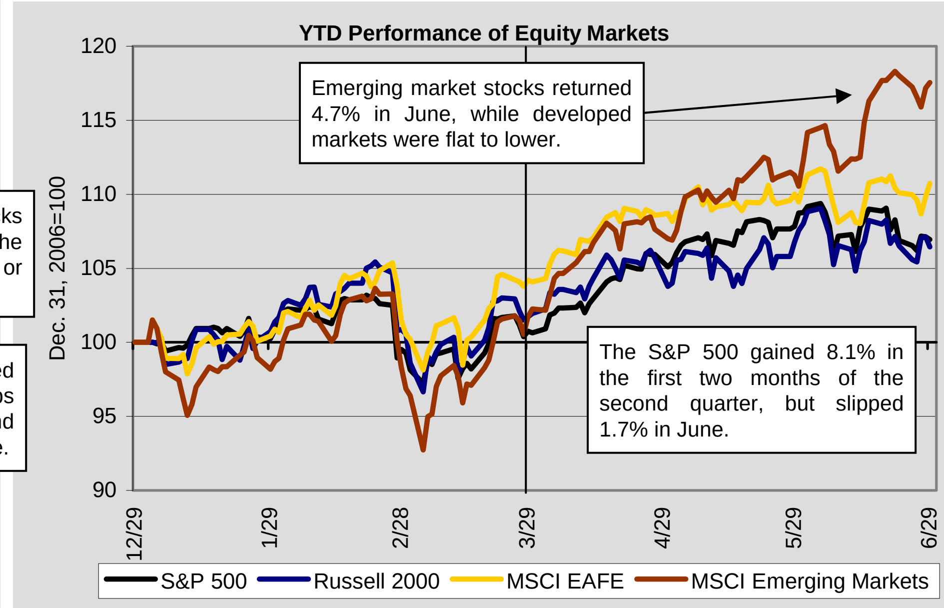
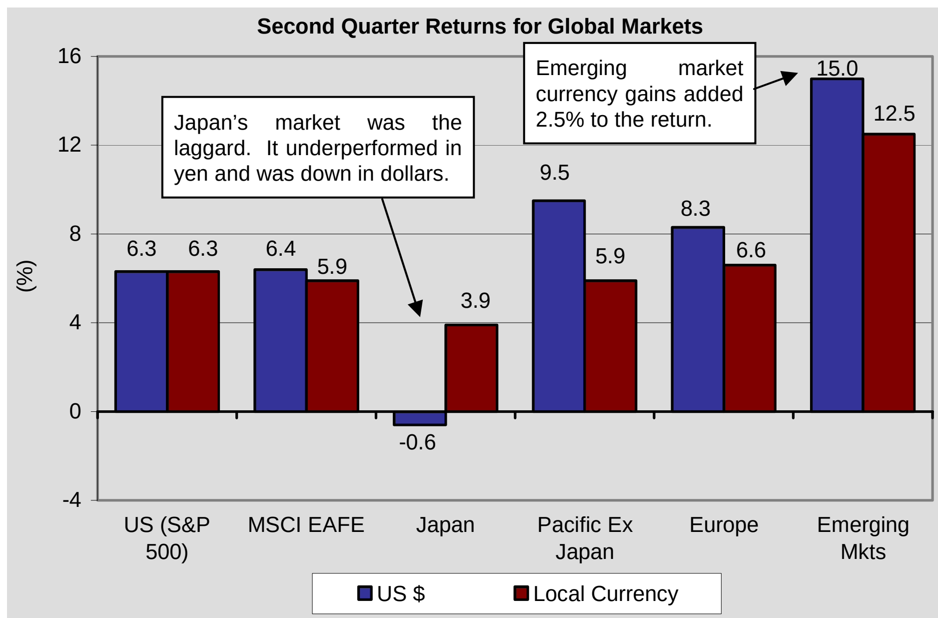
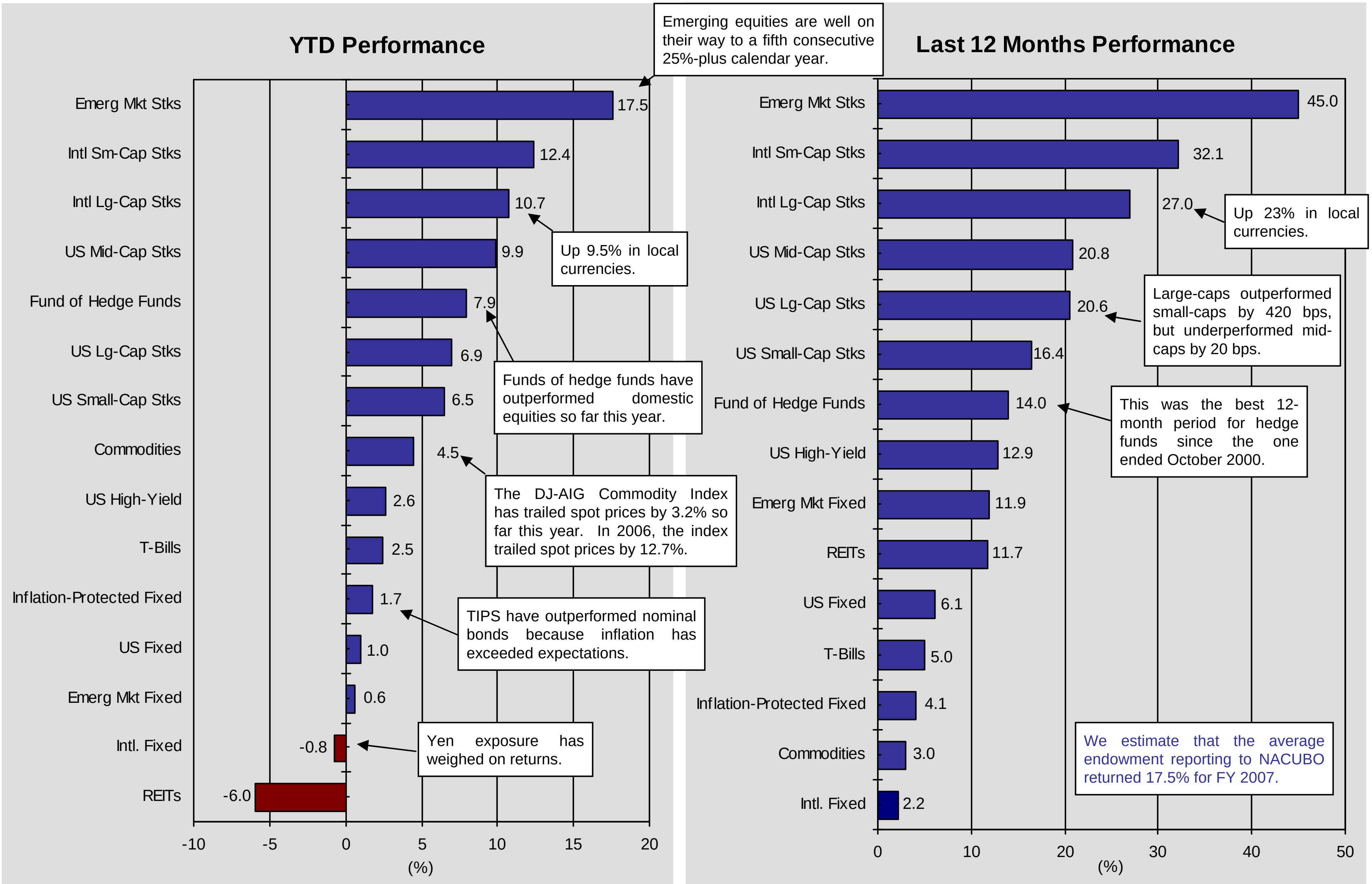
Global Equity Markets Continued to Move Higher





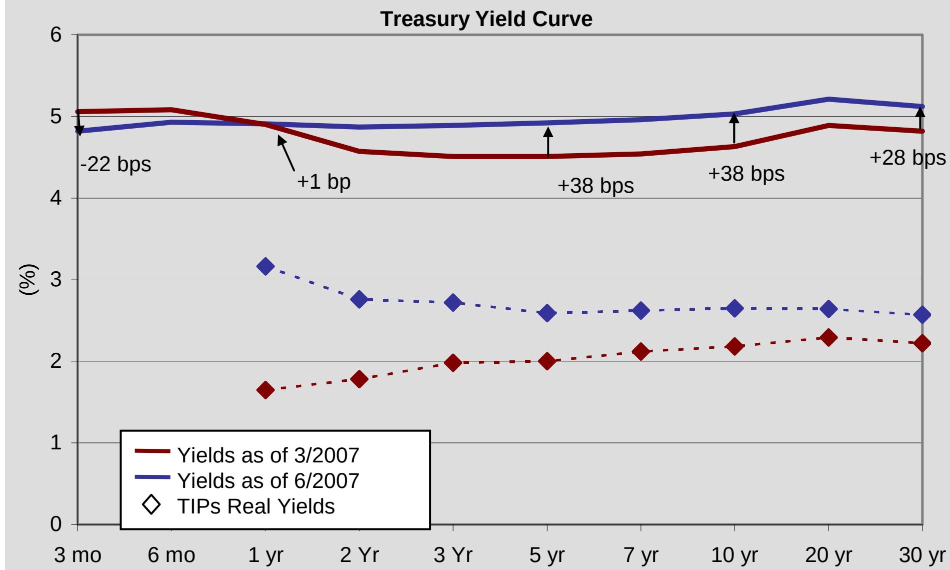


Global Equity Markets Continued to Move Higher (cont.)

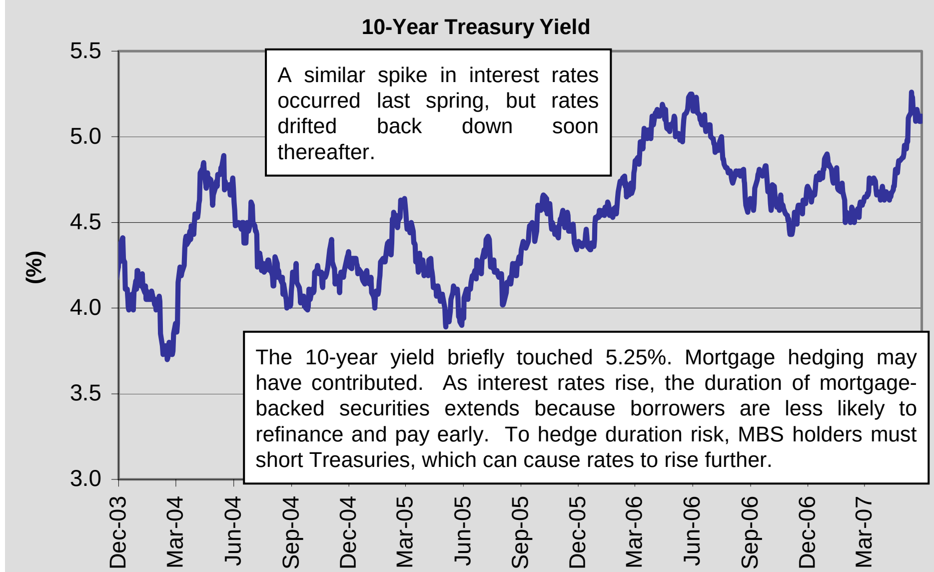


The 10-Year Treasury's Yield Topped 5%

- The yield on the 10-year Treasury bond breached 5% for the first time in nearly a year during the quarter. The yield on the 10-year rose from 4.65% at the beginning of the quarter to as high as 5.25% and finished the quarter at 5.03%. It does not appear that the increase was driven by long-term inflation expectations. In fact, the inflation breakeven rate priced into 10-year TIPs declined from 2.44% to 2.38% during the quarter. The real yield on 10-year TIPs surged from 2.21% to 2.65%.
- Fed expectations were likely a driver of the rise in interest rates. While first quarter economic growth was disappointing, growth apparently picked up in the second quarter, and higher energy prices kept inflation elevated. Going into the second quarter, Fed Funds futures were fully pricing one rate cut by year-end, with a high probability of a second. Futures now suggest that the Fed is likely to stand pat until 2008.
- There are some hints that foreign central banks contributed to the rise in yields. In the first two weeks of June, when much of the rate increase occurred, foreign central bank holdings of Treasuries and agencies custodied at the Federal Reserve fell for the first time since October 2006 (albeit by only $4 billion).
  - China has allowed the yuan to appreciate at an accelerated rate. It rose at a 6% annualized rate against the dollar in the second quarter, versus 4% in the first quarter and 3.4% for all of 2006. More rapid yuan appreciation allows China to purchase fewer dollar-denominated assets. If China's inflows have been depressing bond yields, then a slower pace of inflows allows interest rates to move towards equilibrium.
  - Some analysts have speculated that Asian banks shifted purchases to the short-end of the yield curve. While the yield on 10-year and 30-year Treasuries spiked, the yield on 3-month T-Bills fell 22 bps, suggesting higher demand for T-Bills. T-Bills now yield 43 bps less than the Fed Funds rate (4.82% vs. 5.25%). Typically, this spread is 15 bps.
- The increase in rates during the quarter represents a return to more appropriate levels. Interest rates should probably be even higher because of our current account deficit, but that hasn't been the case because of foreign central banks willingness to finance the deficit. While China and other countries are starting sovereign wealth funds, which will divert some flow into equities and other riskier securities, a substantial portion of reserve increases will still find their way into US bonds.



Source: Federal Reserve

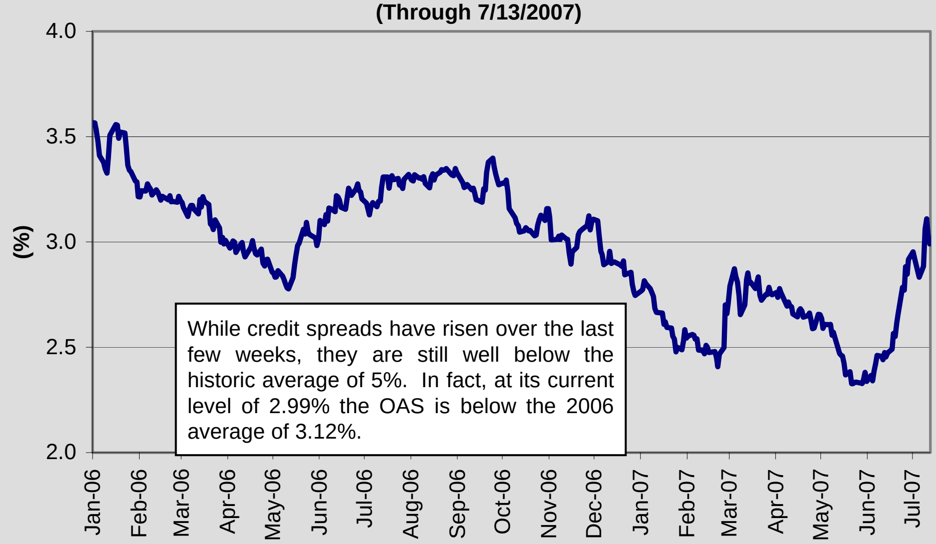


Source: Federal Reserve

Shifting Winds: Is the Liquidity Environment Changing?

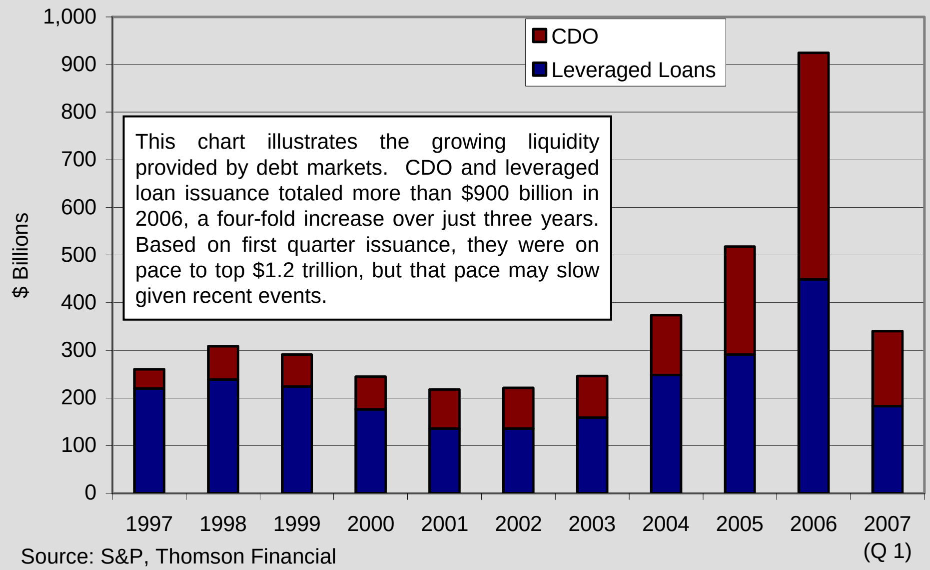
- Investors' willingness to accept risk for scant reward has been a significant contributor to excess global liquidity by encouraging debt growth. April and May saw a continuation of this trend as credit spreads on high-yield debt hit all-time lows and credit standards deteriorated further. However, there was an apparent shift in risk tolerance beginning in June and it has continued into July.
  - The option-adjusted-spread on the Lehman High Yield bond index jumped from a historic low of 2.33% on June 1 to 2.99% on July 13. Spreads on high yield credit-default-swaps have risen by more than 100 basis points over the last several weeks, as well.
  - The leveraged loan market, which provides financing for buyouts, has also shown signs of tightening. The cost to buy credit protection on leveraged loans has nearly doubled over the last month. According to Bloomberg, more than a dozen companies were forced to postpone or restructure debt offerings over the past few weeks.
- The fact that the sudden change in credit markets happened in the face of improving economic prospects hints at the dangers in the current marketplace. The sub-prime mortgage meltdown was certainly a contributor. Total sub-prime loss estimates are $100 billion on the high side, which should be bearable by our financial market. It seems credit investors have begun to fear that problems are not limited to sub-prime loans.
- While credit conditions have tightened, it's too soon to say that this marks a definitive turning point in global liquidity.
  - Credit spreads are still well below historic averages and low-grade borrowers and buyout firms can still easily obtain financing. Spreads probably must increase further to put a significant dent in the willingness to borrow.
  - While the Bank of England and the European Central Bank continue to tighten their monetary policies and the Fed shows no signs of easing, emerging market central banks continue to flood the world with liquidity by accumulating currency reserves. China alone is on pace to accumulate $540 billion in 2007. Japan also remains a provider of global liquidity as its low interest rates are fueling the carry trade.
- The willingness of credit investors to accept tight spreads has contributed to the outsized performance of equity markets by fueling the buyout boom. If this truly marks a significant shift in risk tolerance and spreads continue to widen, it could be an unpleasant second half of the year for global markets.

OAS on Lehman High Yield (Through 7/13/2007)



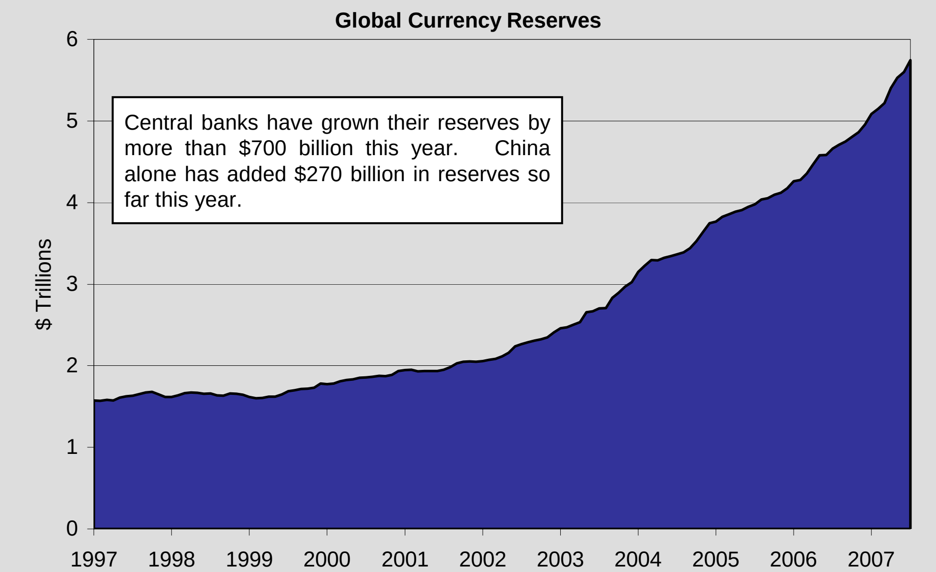
Source: Lehman Brothers

Global CDO and Leveraged Loan Issuance

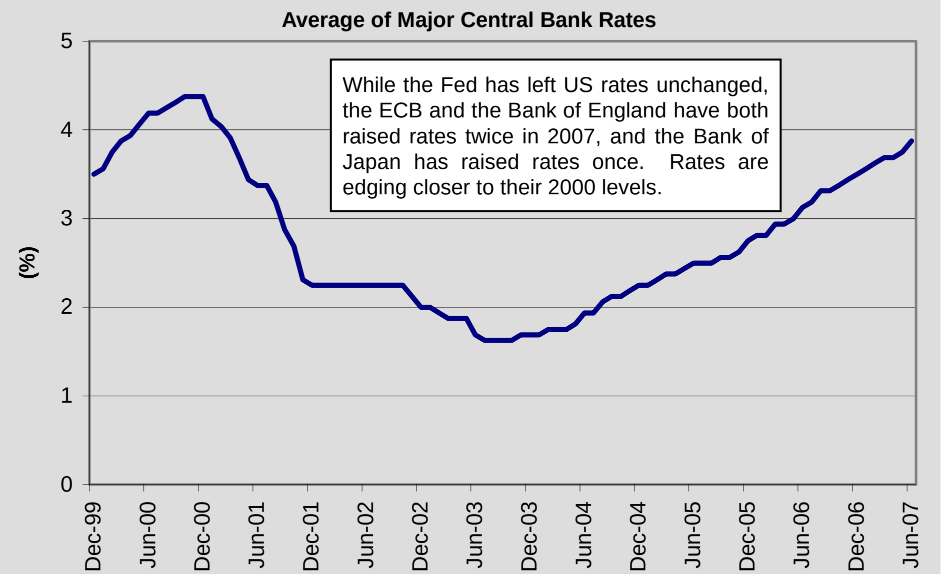


Source: S&P, Thomson Financial

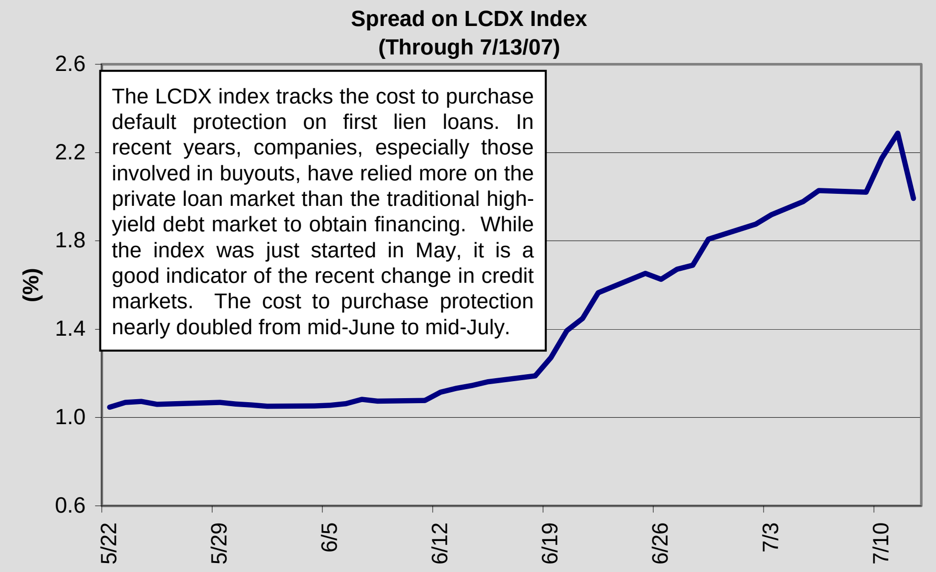
Shifting Winds: Is the Liquidity Environment Changing? (cont.)



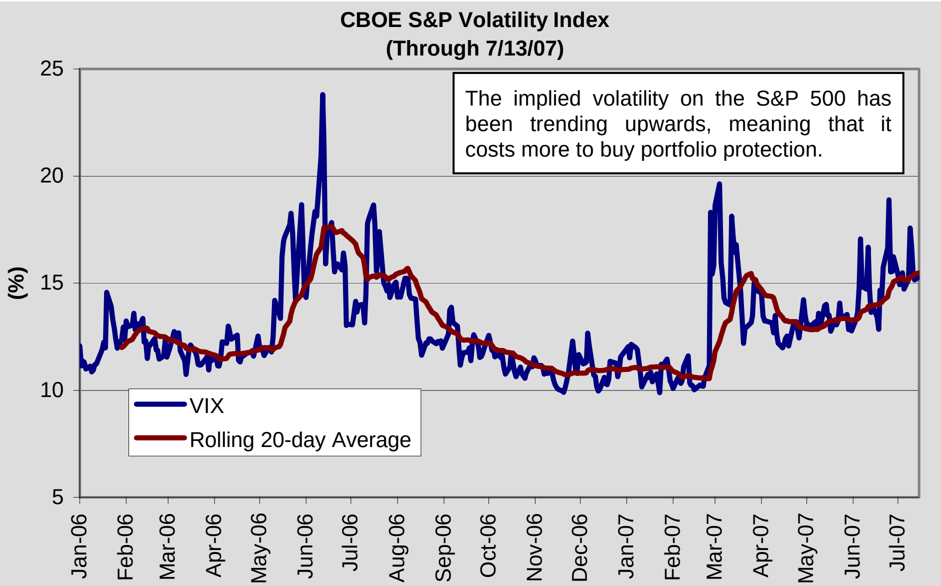
Source: IMF, Bloomberg



Source: Bloomberg



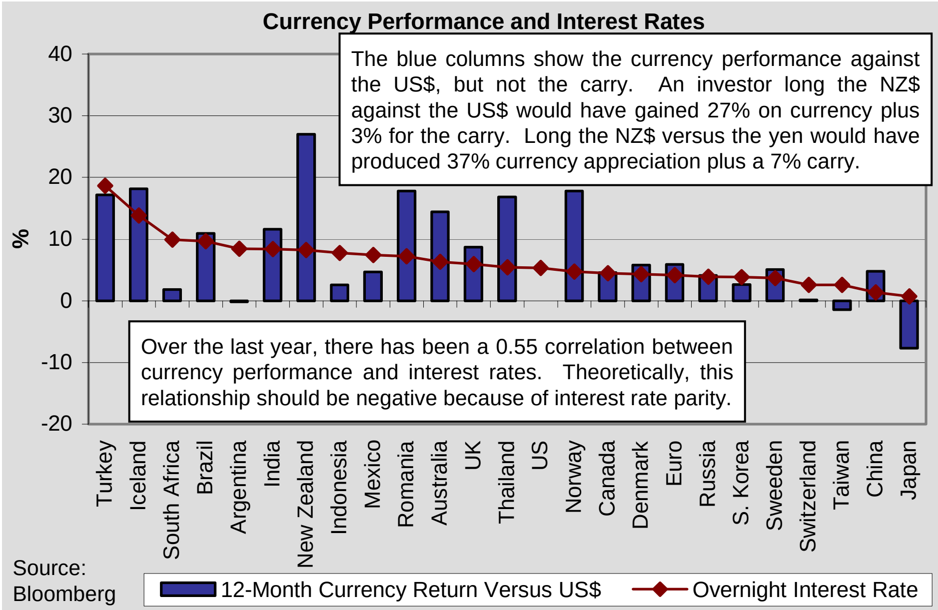
Source: Markit Group



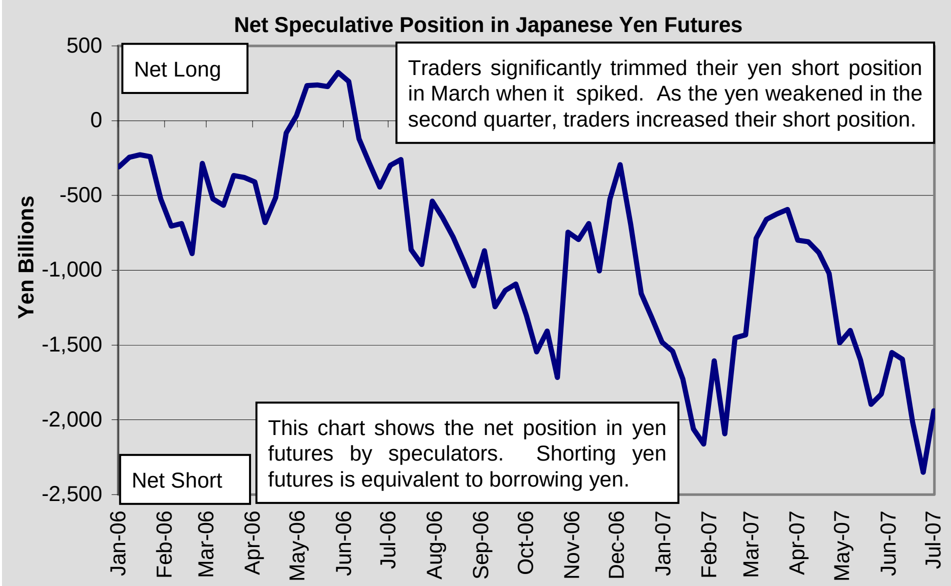
Source: Bloomberg

Have Carry Traders Gotten Carried Away?

- The currency carry trade refers to borrowing in low yielding currencies and lending in high yielding currencies to capture the interest rate differential. It can be implemented through futures or forwards. Shorting the low yielding currencies and going long the high yielding currencies provides the same exposure.
  - Historically, the carry trade has generated attractive excess returns. A strategy of going long the three highest yielding currencies among the G-10 and shorting the three lowest yielding (for a net exposure of zero) would have earned a return premium of 7.8% annualized since the beginning of 1990, with a standard deviation of 7.7%. The resulting Sharpe Ratio of 1.0 is more than twice the S&P 500's Sharpe Ratio over the same period.[1]
  - The reason for the strategy's long-term success is the forward rate bias anomaly. Interest rate parity holds that currencies with high relative yields should depreciate against low yielding currencies to offset their interest rate advantage. In practice, high yielding currencies generally do not depreciate as much as they should against low yielding currencies. This has created profit opportunities for those positioned in favor of high yielding currencies.
- The carry trade has been particularly attractive over the last year. The G-10 carry trade has returned 21% over the last year. Expanding the universe to include emerging markets currencies would have produced a 25% return. Not only have carry traders captured the yield differential, but high yielding currencies have also appreciated against the low yielders.
  - The yen, which is considered the primary funding currency for the carry trade, has been very weak. It lost 8% against the dollar over the last year.
  - Popular high carry currencies, including the Turkish lira, Brazilian real, New Zealand dollar, and Australian dollar have appreciated between 10% and 27% against the dollar, and from 20% to 37% against the yen.
- It now seems carry traders have taken it too far. The rush of money into the trade has pushed the popular high carry currencies far above fair value, while pulling the Japanese yen well below fair value. The Japanese yen is trading about 25% below fair value based on relative purchasing power parity, while the New Zealand dollar and Australian dollar are about 30% above fair value. Eventually, the fundamentals will take hold. Whenever risk aversion rises, the carry trade tends to perform poorly, as we saw in May/June in 2006 and during the pullback in global markets beginning on February 27. While we can't say whether the carry trade will unwind in the near-term, it could be ugly when it does.



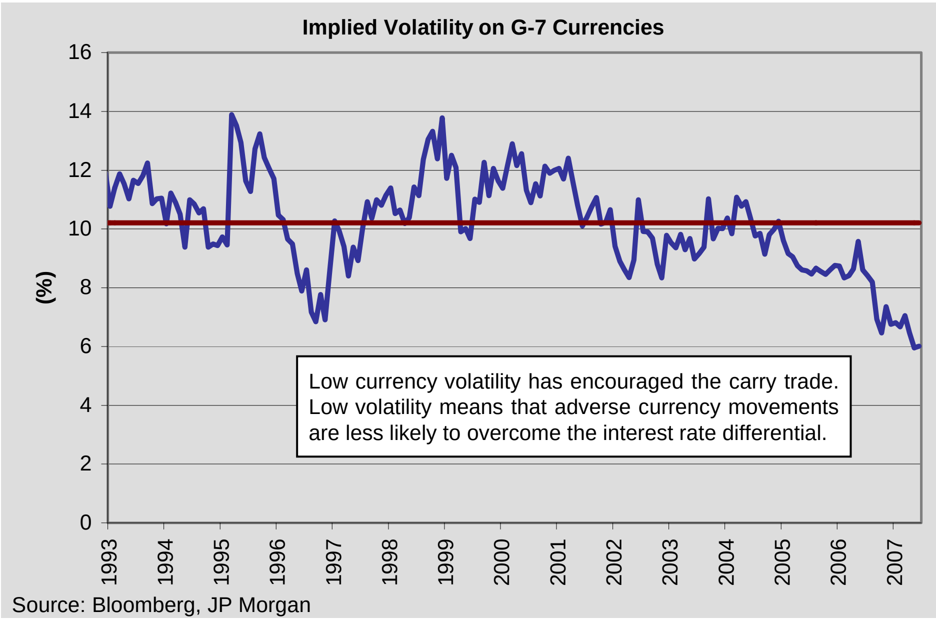
Source: Bloomberg

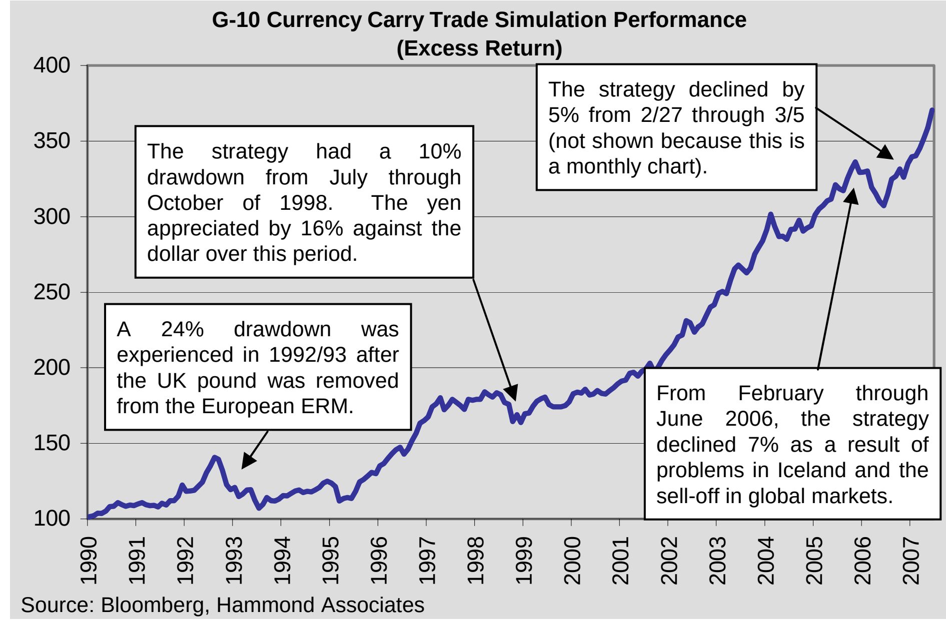


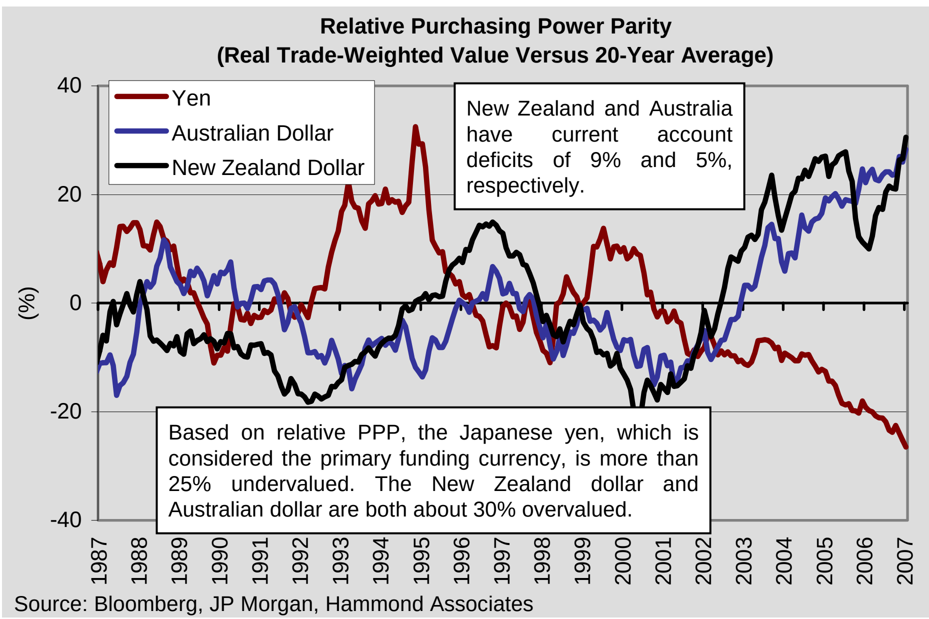
Source: Bloomberg, CFTC

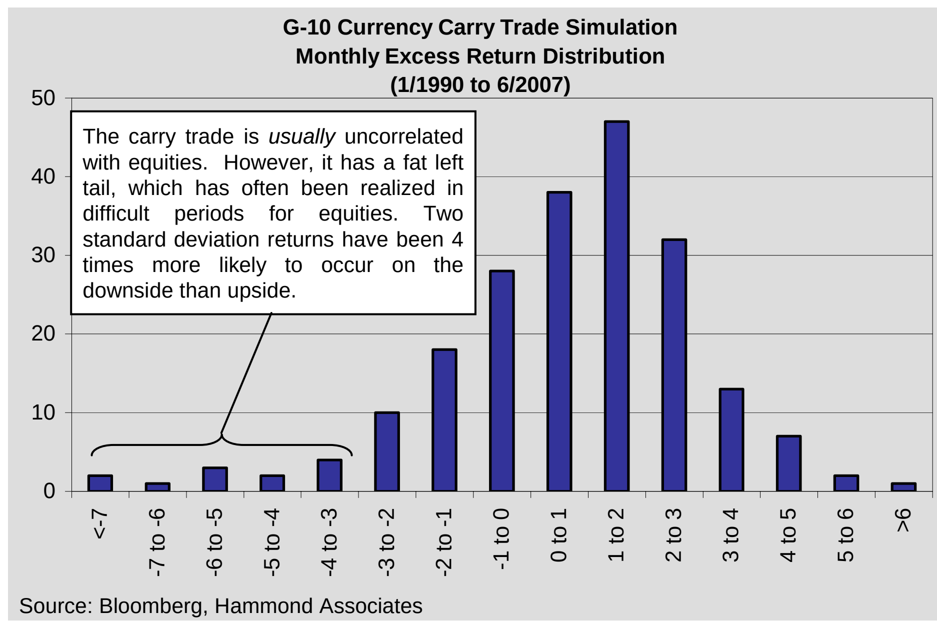
[1]The return for the carry strategy represents the excess return of the long currency basket over the short currency basket. As a result, the risk-free rate is not subtracted from the return when calculating the Sharpe Ratio.

Have Carry Traders Gotten Carried Away? (cont.)



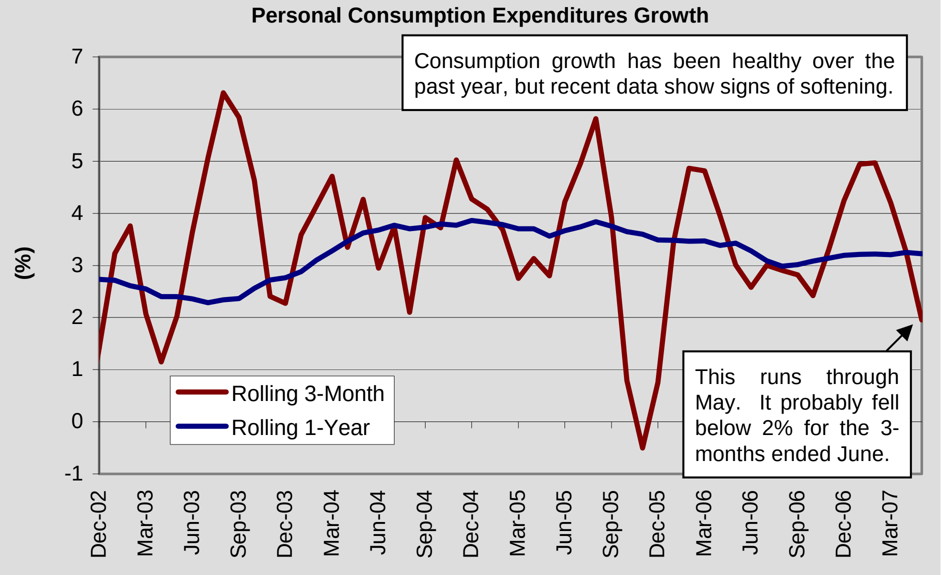




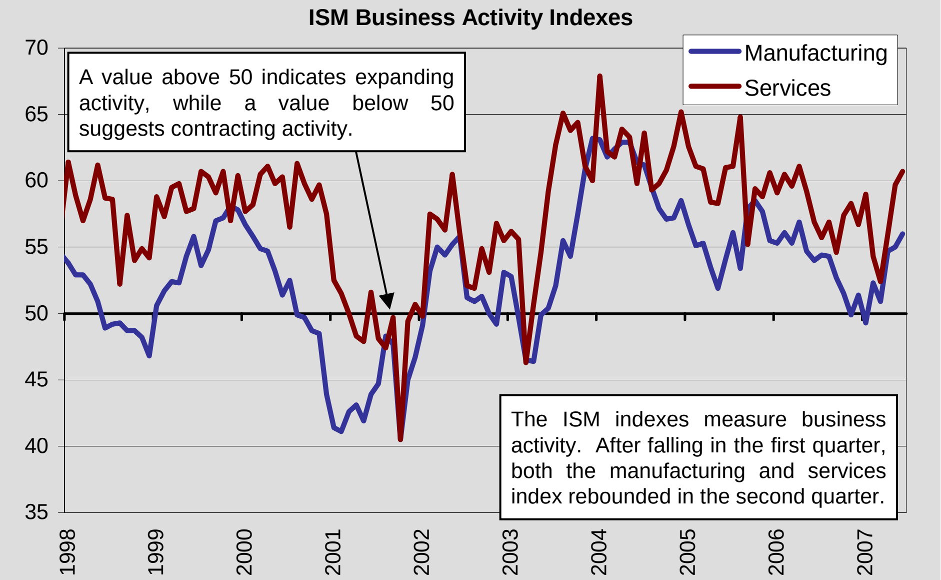


Consumer Spending Growth Slowed in the Second Quarter

- The economy grew at a sluggish annualized rate of 0.7% in the first quarter, which was the slowest pace in four years. The details of the report were not as poor as overall growth suggests. Personal consumption growth was very healthy at 4.2%, but weak residential investment (-16%), inventory liquidation, and a growing trade deficit weighed on overall growth. Economists polled by Bloomberg expect second quarter growth to come in near 3% on inventory rebuilding, strong business investment, and a narrower trade gap. Third and fourth quarter growth is expected to average 2.7%, moderately below the 3% long-term trend.
- Good news came from the business sector during the quarter, alleviating business investment concerns that arose earlier this year. While capital expenditures remain soft, the ISM Manufacturing and Services Indexes both spiked, causing optimism for business investment and employment growth.
- News from the housing sector is still ugly. Residential construction shows no signs of bottoming. Through the first quarter, residential investment had fallen by 15% from its peak in 1Q2006, and all indicators suggest it will fall further. As for prices, the Case-Shiller housing index is down 3% year-over-year. The recent spike in mortgage rates, now to 6.7% for a 30-year fixed, and the continuing fallout from the sub-prime woes (which has reduced the supply of buyers and could lead to an increasing number of forced sellers) places additional pressure on prices.
- Households may finally be succumbing to softness in the real estate market. Mortgage equity withdrawals are falling, and households are taking on less new debt. It appears that real consumption growth was only 1.5% to 2% in the second quarter. Except for the hurricane-dampened 4Q2005, it could be the lowest rate of growth in four years. Inflation from rising energy prices explains part of the slowdown, but spending in nominal terms is also running at a slower pace.
- Now that the wealth effect from real estate has turned from positive to negative, households will have to rely on wage growth to fund spending growth in the future. So long as the job market remains healthy, there is not much reason to expect a recession in the near-term. Nevertheless, sluggish spending growth will probably be the norm for several years as households increase savings.

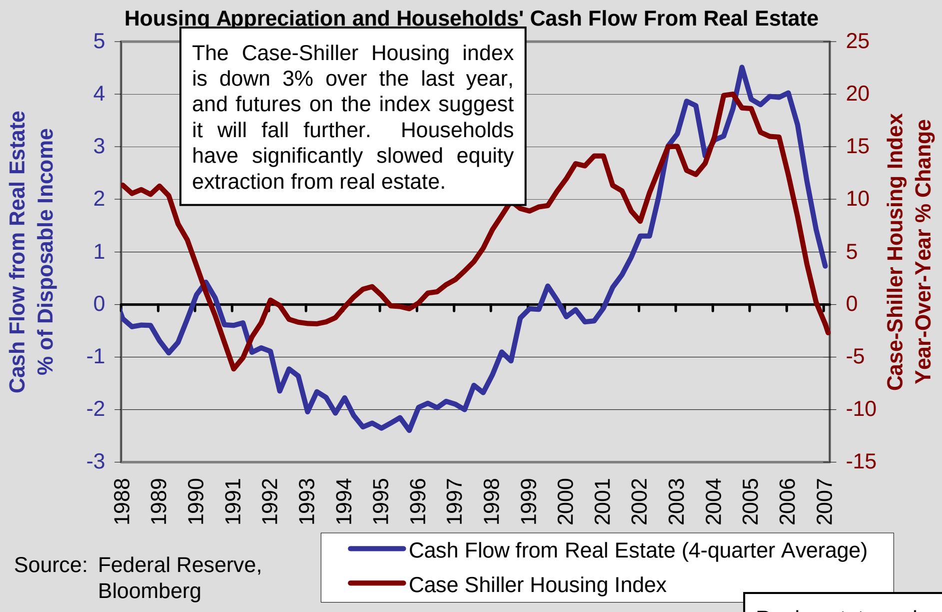


Source: Bureau of Economic Analysis



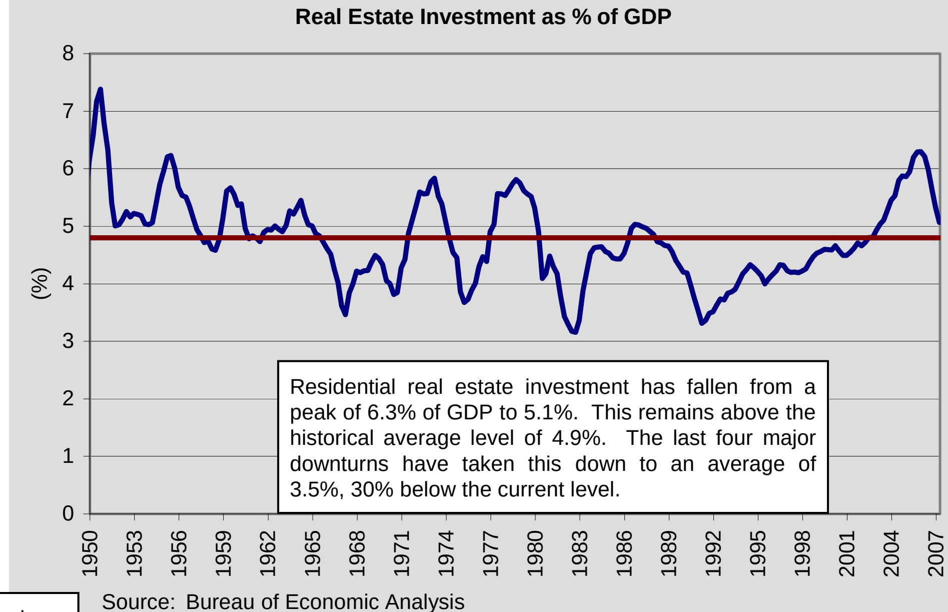
Source: Bloomberg

Consumer Spending Growth Slowed in the Second Quarter (cont.)



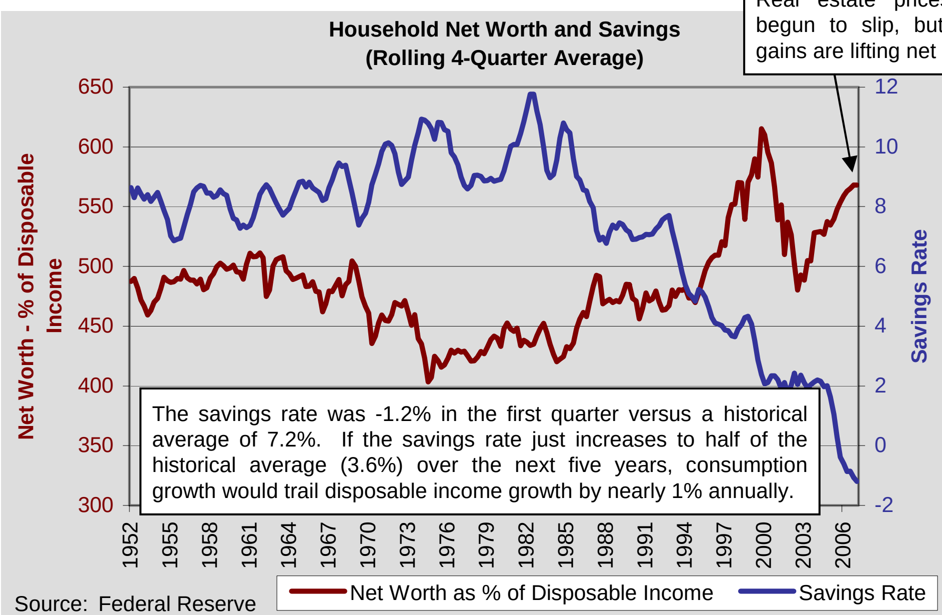
The Case-Shiller Housing index is down 3% over the last year, and futures on the index suggest it will fall further. Households have significantly slowed equity extraction from real estate.

Source: Federal Reserve, Bloomberg



Residential real estate investment has fallen from a peak of 6.3% of GDP to 5.1%. This remains above the historical average level of 4.9%. The last four major downturns have taken this down to an average of 3.5%, 30% below the current level.

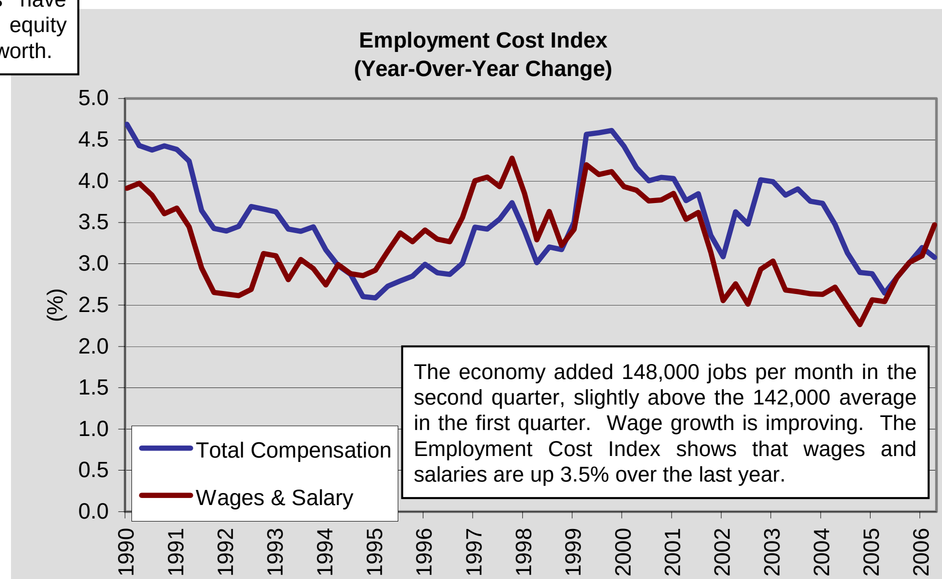
Source: Bureau of Economic Analysis



Real estate prices have begun to slip, but equity gains are lifting net worth.

The savings rate was -1.2% in the first quarter versus a historical average of 7.2%. If the savings rate just increases to half of the historical average (3.6%) over the next five years, consumption growth would trail disposable income growth by nearly 1% annually.

Source: Federal Reserve

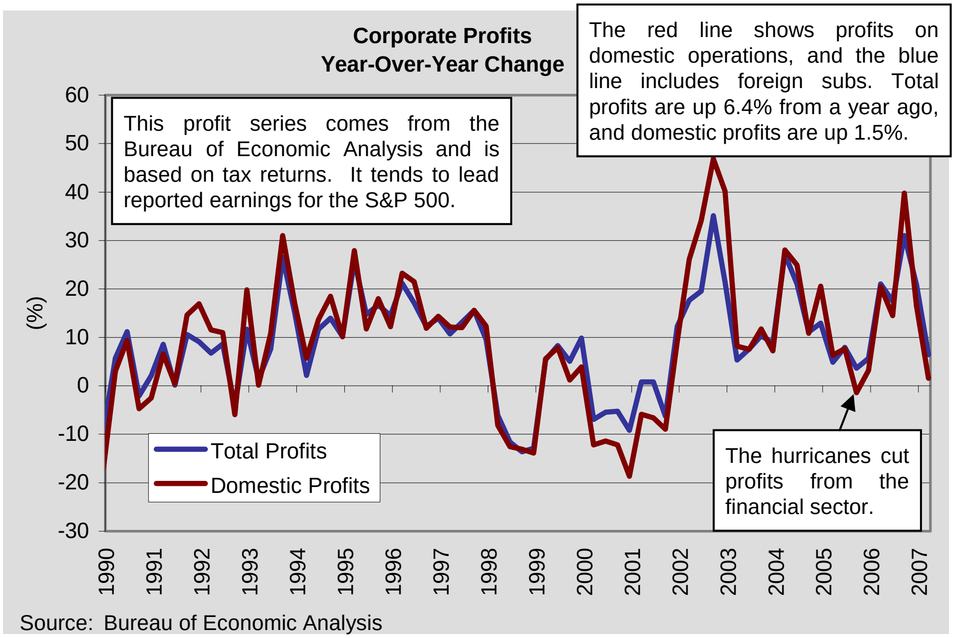


The economy added 148,000 jobs per month in the second quarter, slightly above the 142,000 average in the first quarter. Wage growth is improving. The Employment Cost Index shows that wages and salaries are up 3.5% over the last year.

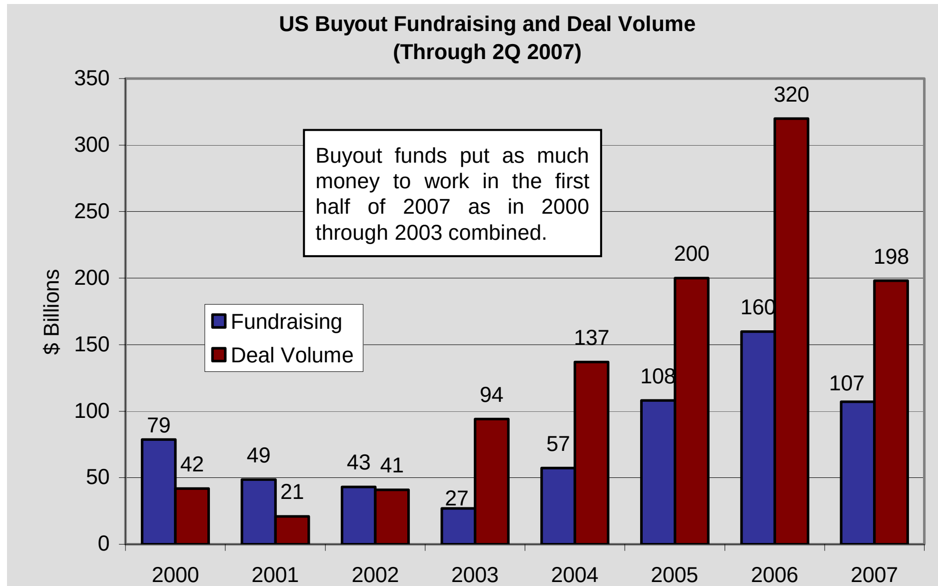
Source: Bloomberg

Domestic Equities: Earnings Growth Slowing, But Buyouts Booming

- With a 6.3% return in the second quarter, the domestic equity market continues to be kind to investors. The S&P 500 has earned a positive return in eight of the last nine quarters, and while volatility has picked-up over the last few months, it remains well below average.
- As we enter the second half of the year, slowing profit growth may put a damper on equity markets. As we covered in the Spring 2007 edition of this report, falling productivity growth combined with faster wage growth is finally putting pressure on profit margins. Corporate profits' share of GDP slipped from a high of 7% in the third quarter of 2006 to 6.6% in the first quarter. The Bureau of Economic Analysis reported that profits from domestic operations were flat in the first quarter and are up only 1.5% from a year ago. A bright note is that profits from foreign subsidiaries continue to show strong growth, jumping 27% from year-ago levels. While profit margins seem unlikely to collapse absent a serious recession, they may have begun a multi-year process of mean reversion.
- Slowing profits notwithstanding, equities still have a powerful tailwind from buyout activity. Buyout funds are on pace to raise more than $200 billion in 2007. On top of $160 billion in fundraising last year, they have massive sums to deploy given the typical 2x to 3x leverage. Buyout deal volume was nearly $200 billion in the first half of the year, and valuations continue to rise. So far in 2007, deals are being done at 9.5x EBITDA versus 7.1x in 2003 and 8.6x in 2006. The credit markets bear watching. As noted on page 10, debt buyers have become a little more discriminating, and credit spreads have risen. While the debt markets are far from restrictive, continued spread expansion would make current EBITDA multiples tough to maintain.
- Companies continue to buy back shares at a record pace, which is further supporting the market. Companies bought back $118 billion worth of shares in the first quarter, for a $472 billion annual pace. Combined with expected buyout activity for the year, about 5% to 6% of the US market capitalization could be taken out of public hands this year.
- So long as credit remains cheap and plentiful, the equity market will probably continue to motor along. If the rise in risk aversion that we've seen in the last few weeks continues, the second half of the year could be unpleasant. In any event, domestic equity markets will face stiff headwinds in the coming years as unsustainably high profit margins revert closer to normal levels.

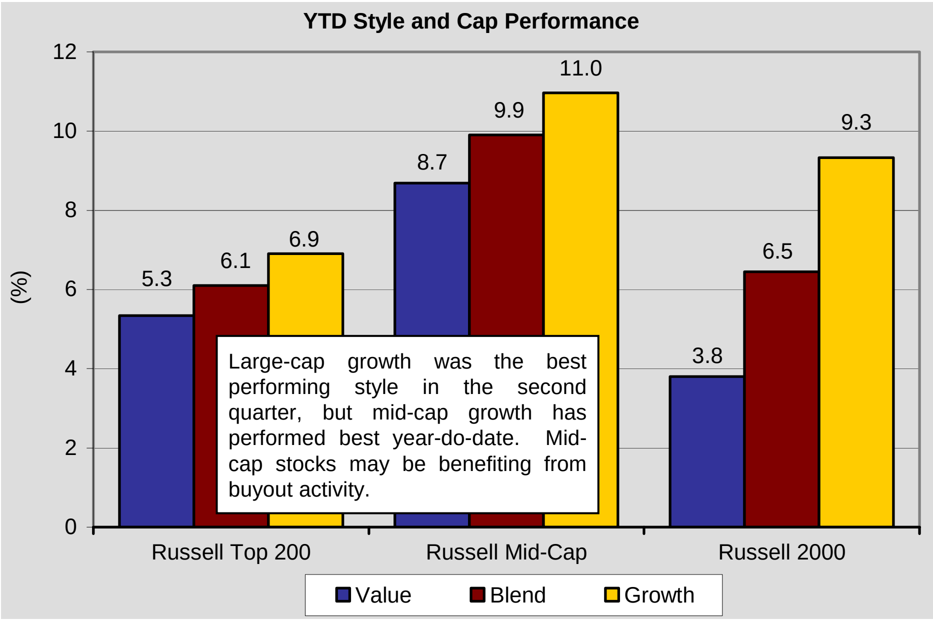


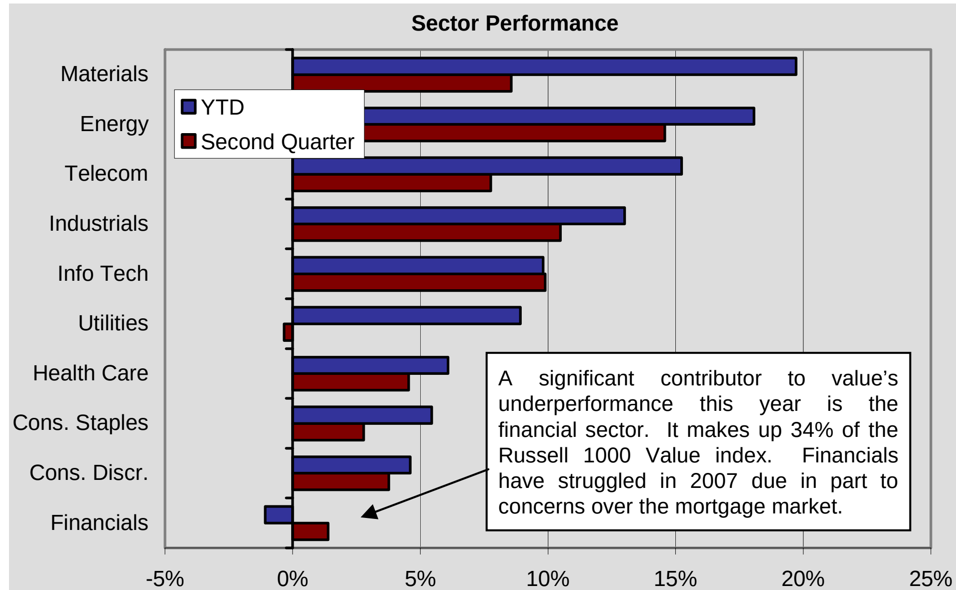
Source: Bureau of Economic Analysis



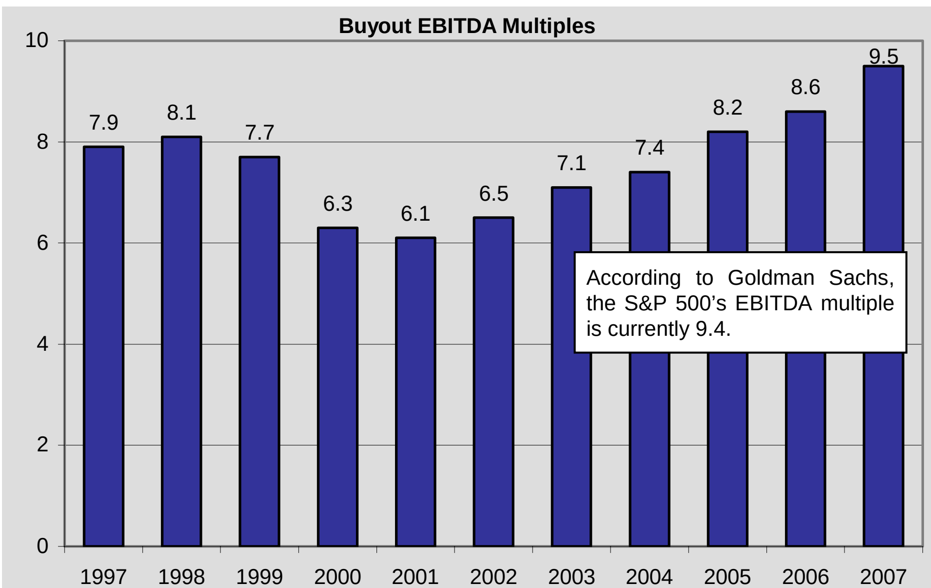
Source: *Private Equity Analyst, Buyouts*

Domestic Equities: Earnings Growth Slowing, But Buyouts Booming (cont.)

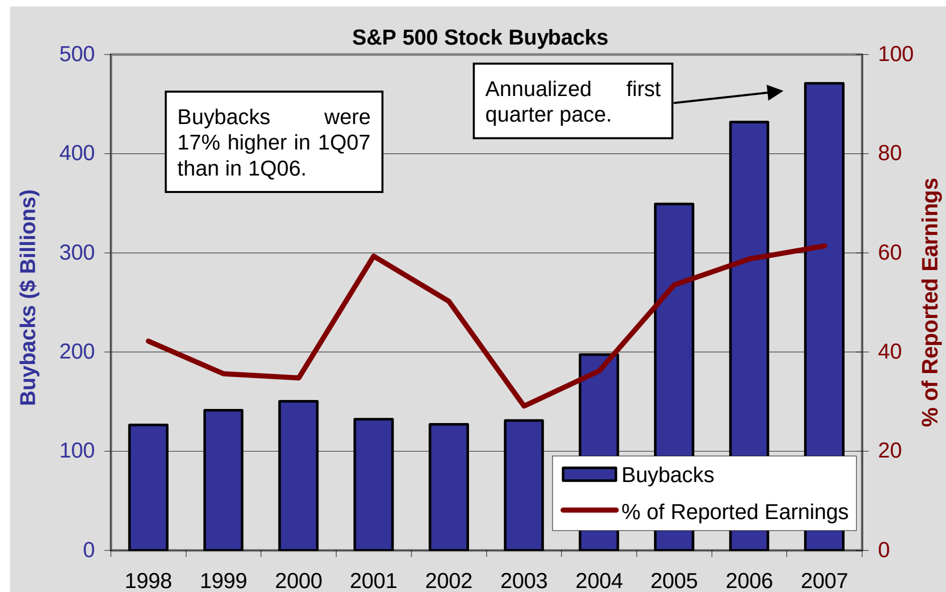




Source: MSCI



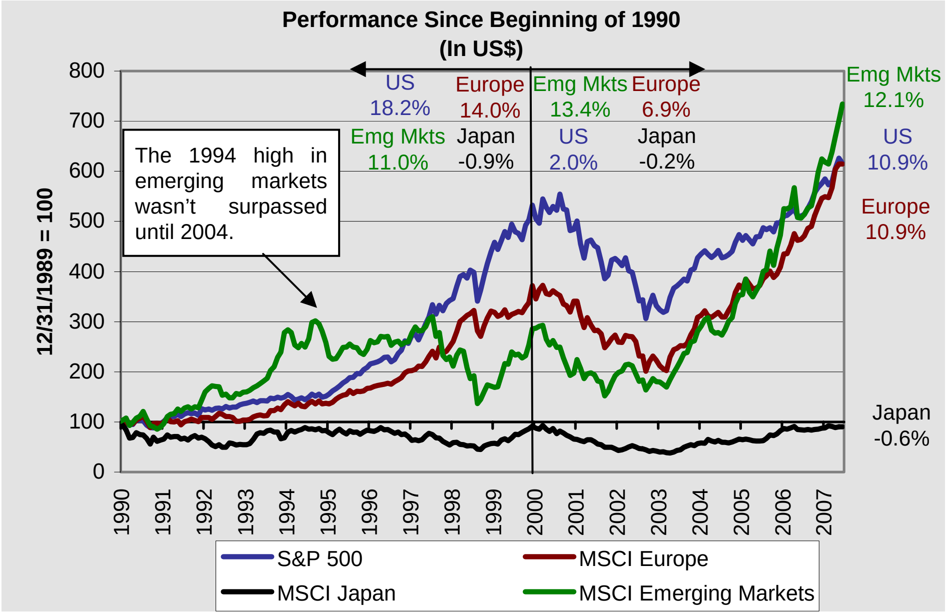
Source: Standard & Poor's LCD

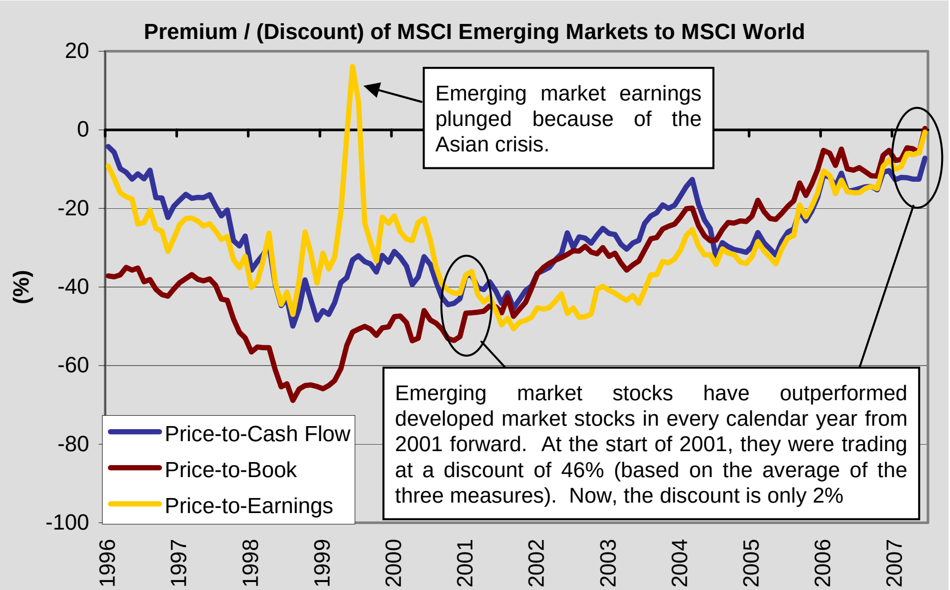


Source: Standard & Poor's

Emerging Market Equities Trading at Parity with Developed Markets

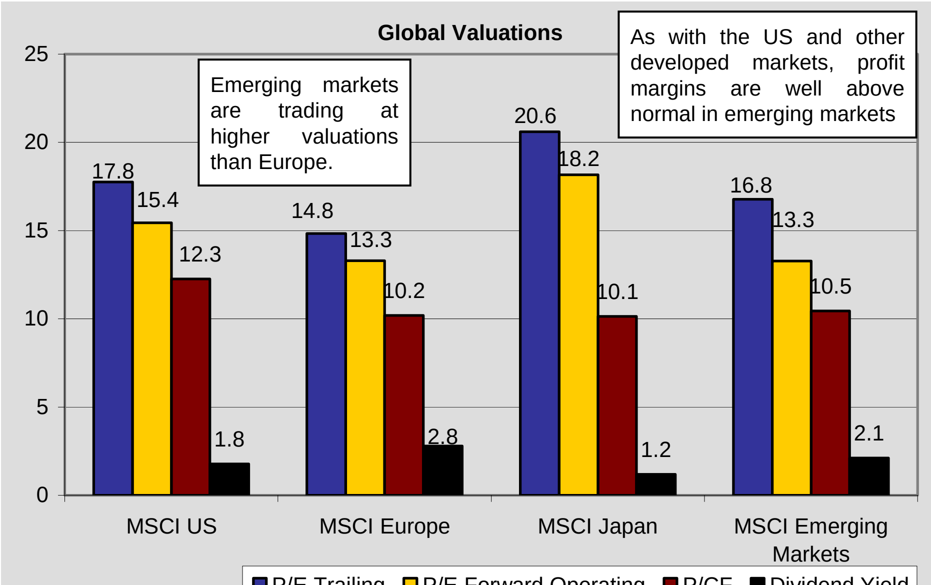
- Emerging market equities continue to outperform the developed world. As a result, the valuation discount of emerging markets has evaporated. The price-to-earnings ratio on the MSCI Emerging Markets index is virtually identical to that on the MSCI World. Some argue that even higher valuations are justified by their rapid economic growth, which should translate to earnings growth. That may be the case, but it's far from certain.
    - Since 1996, earnings for the MSCI Emerging Markets index have increased an annualized 8.3% (in US$), which was slightly below the 9.1% earnings growth rate for the MSCI World index. Over the last five years, both indexes have grown earnings at 26% annualized (off very depressed bases).
    - It is probably reasonable to assume that emerging market companies can grow their per share earnings faster than developed markets over the long-term, but it's likely to be much narrower than the economic growth differential (and what optimists may be expecting). Emerging market firms will face fierce competition to capture profit opportunities in their expanding economies, both from internal and external competitors. Multinationals in developed markets, for instance, will continue to be aggressive in capitalizing on opportunities, and it would not be surprising to see their share of profits in the emerging world rise.
    - Many of the largest emerging market firms are exporters, so their growth will be governed by global growth rather than more rapid local growth. Nearly a third of the MSCI Emerging Markets index is comprised of energy and basic material companies. Demand for their products is sure to rise, but it will be tied to global growth, and earnings, for better or worse, will be very sensitive to commodity prices.
- While valuations of emerging markets are concerning, these markets have momentum and money flows on their side. They are a high beta play on the global economy and markets. As long as global markets remain strong, they are likely to outperform their developed counterparts. However, they will bear the brunt of an economic downturn or a decline in risk tolerance. For example, the MSCI Emerging Markets index declined by 24% during the May/June downturn last year and fell by 10% from February 27 through March 5 of this year.
- We still believe the long-term prospects for emerging market equities are favorable. However, investors should not extrapolate benign conditions in emerging economies too far into the future. The path to development won't be painless. When we recommended a significant overweight early in this decade, relative valuations made the tilt compelling and provided downside protection. The potential for extra earnings growth was icing on the cake. At current valuations, there is little margin for error and excess earnings growth is required for emerging markets to outperform developed countries.



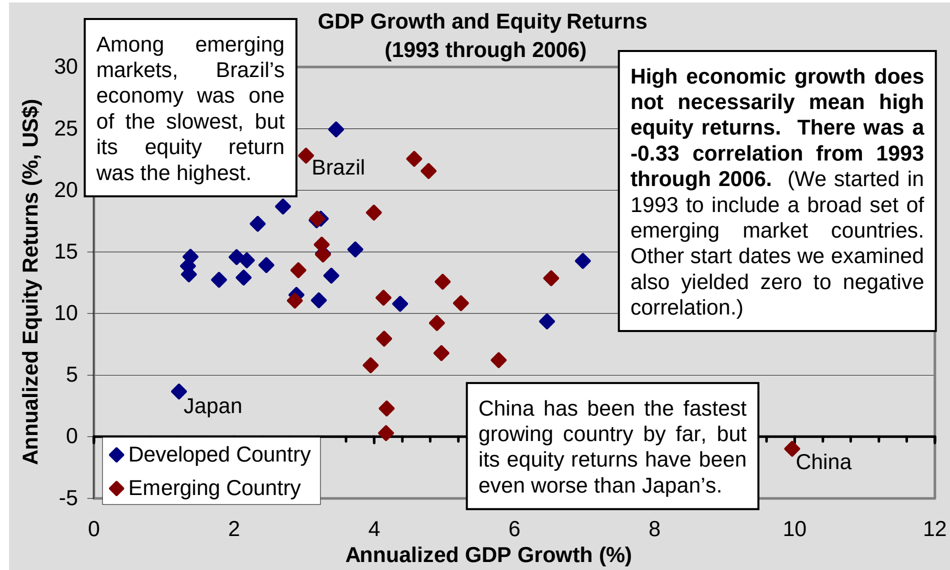


Source: MSCI

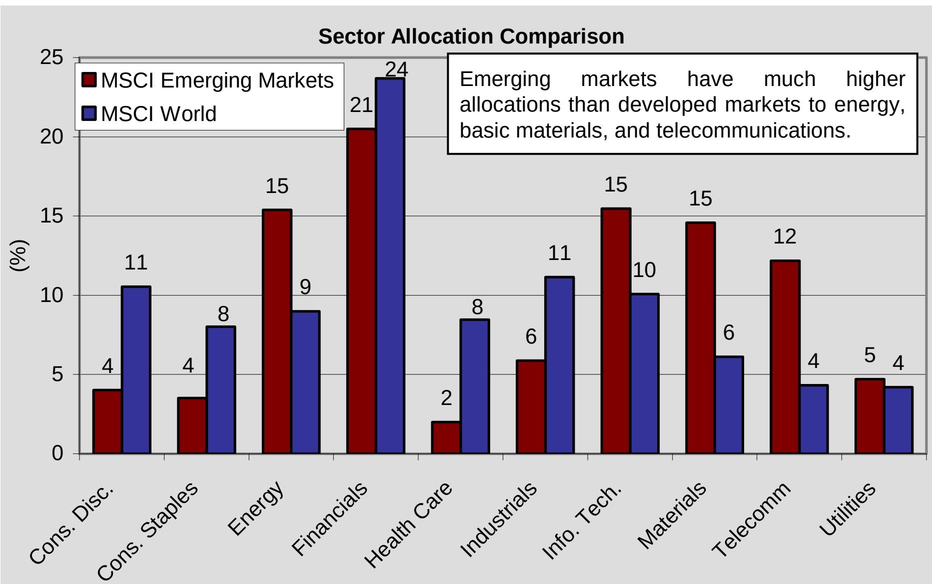
Emerging Market Equities Trading at Parity with Developed Markets (cont.)



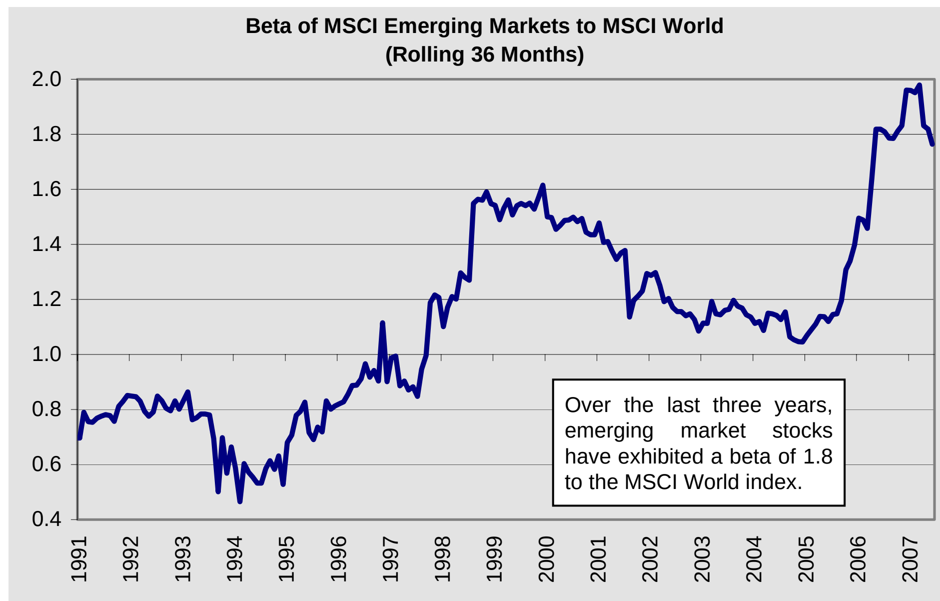
Source: Bloomberg



Source: Bloomberg, IMF, MSCI, Hammond Associates

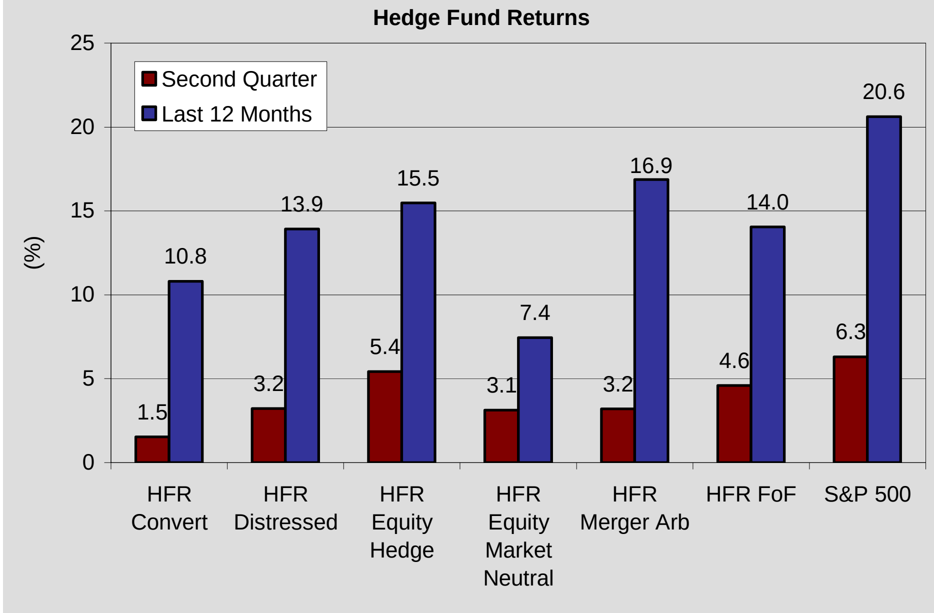


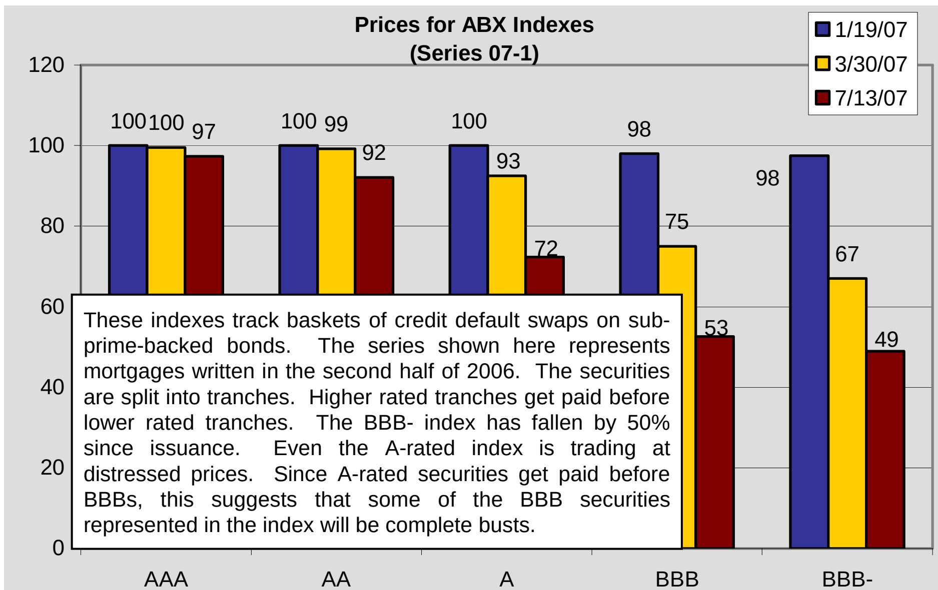
Source: BGI



Hedge Funds Profited During the Sub-Prime Meltdown

- Hedge funds turned in another strong quarter with the average fund of hedge funds, as represented by the HFRI Fund of Funds Index, posting a return of 4.6% in the second quarter. Performance was largely driven by directional exposure to equities; however, virtually all strategies performed well. Additionally, migration into international and emerging equity markets continued to help boost returns. Further, hedge funds managed to post a positive return in the month of June despite negative results in both the credit and equity markets.
- With the media focused on a handful of hedge funds that have or are going out of business in the wake of the sub-prime meltdown, the industry as a whole continues to produce solid results. Once again, it is the hedge funds that utilize substantial amounts of leverage that have found themselves in trouble.
- It is worth noting that a fair number of hedge funds have been positioned to capitalize from a sub-prime meltdown for some time. Such a fact undoubtedly helped to contribute to the positive performance that hedge funds managed to post in both February/March and June of this year, the two periods (so far) where the sub-prime meltdown has stung the markets.
- However, one must wonder if there are more problems yet to be revealed. It may be that the sub-prime winners are marking-to-market and the losers are marking-to-model, delaying the hit.
    - Winners probably got exposure through swap positions on the ABX indexes, which contain baskets of credit default swaps on residential mortgage-backed securities. The ABX indexes contain liquid contracts, so it is possible to mark-to-market.
    - Many of the holders of subprime CDOs may be marking-to-model. The CDO market is non-transparent and very illiquid. While the ABX indexes suggest many sub-prime mortgage-backed securities should be marked at distressed prices, the rating agencies have been very slow to downgrade the securities. As the rating agencies downgrade these securities, holders will be forced to re-mark them.
    - It's unclear how much hedge funds hold in sub-prime CDOs. It may be that banks, insurance companies, and institutional investors will bear most of the pain.
- This story hasn't been fully written. There will be more hedge fund failures to come and the prospect of global risk premiums being re-priced looms large, particularly in the credit markets.

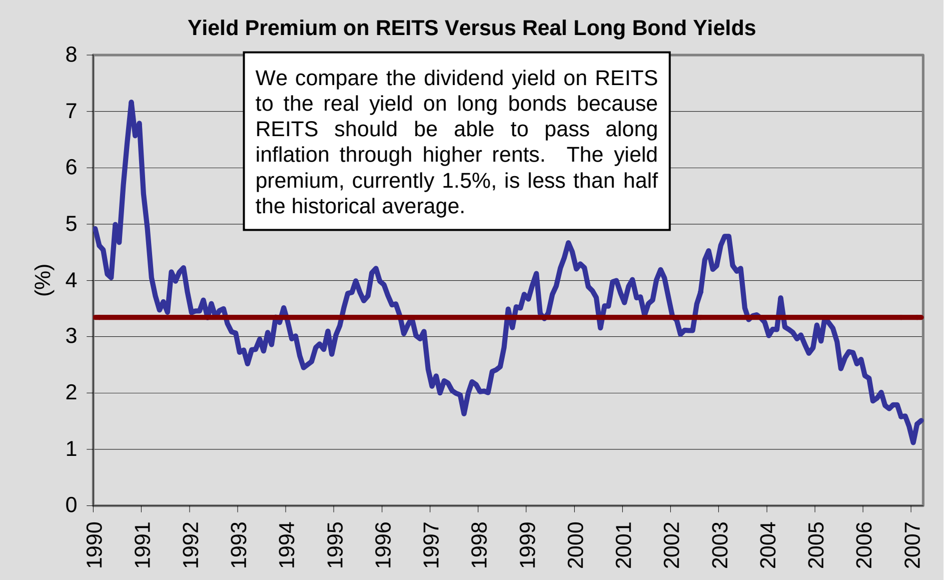




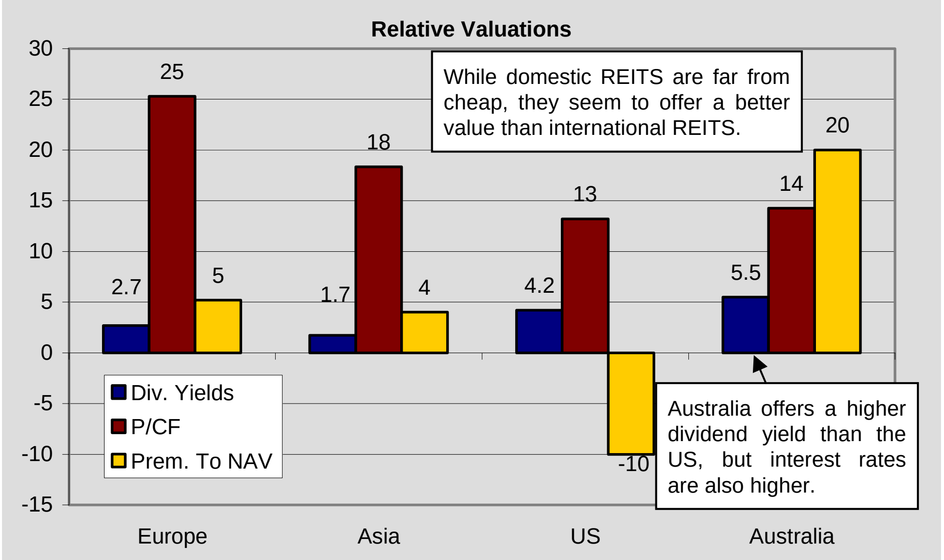
Source: Markit Group

REITS Took a Beating in the Second Quarter

- Driven by Blackstone's purchase of Equity Office Properties, REITS soared during the early part of the year and were up by as much as 13% in early February. However, shortly after the deal was closed, REITS began to tumble. REITS were crushed in June, dropping 9.4%. They are now down 6.0% YTD and are almost 17% off their February peak. Still, REITS have posted a respectable 11% return over the last 12 months.
  - It is hard to say what is behind the precipitous drop. One explanation is higher interest rates. As a yield play, REITS are sensitive to changes in interest rates. During the second quarter, the yield on the 10-year Treasury Note rose from 4.65% to 5.03%. It could also be that REITS buckled beneath the weight of their own valuations. The yield on REITS improved moderately during the quarter, moving from 3.7% to 4.2%. However, as shown on the chart to the right, REITS still appear expensive relative to the real yield on long-term bonds. REITS are not cheap, but the downturn has shaken some of the excesses out of the market.
  - REITS now appear reasonably valued relative to their underlying properties, although that brings only limited comfort considering the prices and capitalization rates at which commercial properties are trading hands. According to Green Street Advisors, at their peak, REITS were trading at about a 10% premium to their net asset value. At the end of June, REITS were trading at a discount of about 10%.
- International public real estate has attracted significant investor attention recently. The Dow-Jones Wilshire ex-US Real Estate Index has returned 34.1% over the last 12 months and 28.2%, annualized, over the last three years, outperforming US REITS.
  - The long-term trends of the international real estate market appear to be favorable. The fundamentals underpinning the commercial real estate market (falling vacancy rates, limited supply in attractive markets, strong economic growth, relatively low interest rates) are attractive and could drive prices and rents higher in many countries.
  - However, we are concerned about valuations. It appears that prices of publicly-traded real estate already reflect most, if not all, future growth potential. International real estate companies are trading at a premium to the value of their underlying properties. In addition, income yields are generally very low. International real estate appears very expensive on both an absolute basis and relative to domestic REITS. As in the US, we would prefer implementing a strategy through private value-added strategies.



Source: NAREIT, Federal Reserve



Source: Green Street Advisors, Morgan Stanley, S&P/Citigroup, UBS, Hammond Associates

The S&P 500 Set a New High

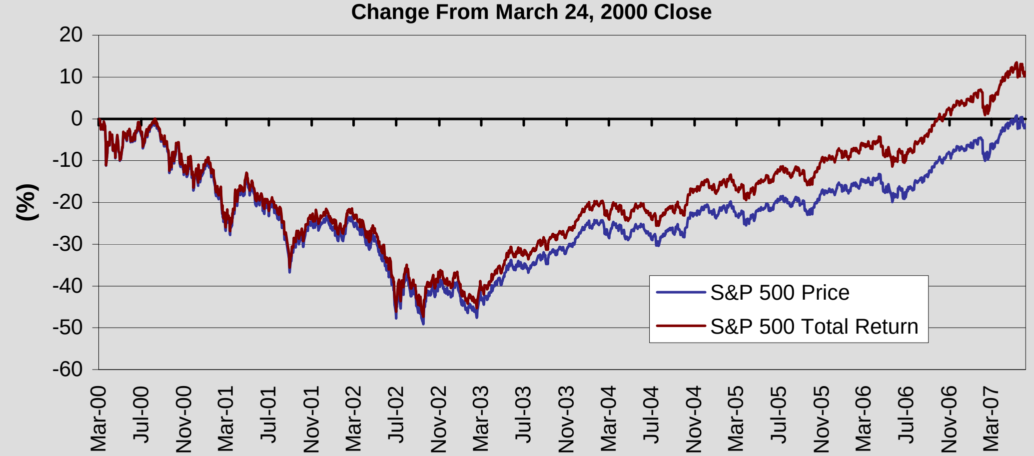
- After more than a seven year wait, the S&P 500 surpassed the March 24, 2000 high of 1527 on May 30, finally recovering the losses from the bear market that stretched to October 2002. The index went on to set a record high on June 4 at 1539, before slipping back to 1503 by quarter-end.
- On a total return basis, the S&P 500 set a new record eight months ago on October 23, 2006 and finished the quarter 11% above the March 24, 2000 level. However, adjusted for inflation, the index remained about 8% below the March 2000 record even with dividends included.
- The new record closed the book on a brutal bear market. The peak-to-trough decline of 49% was the worst since the Great Depression, barely edging out the 1973/74 bear market. The 87 months it took to surpass the March 2000 peak was 2.7 times longer than the average of other post-WWII bear markets (32 months). (On a total return basis, the 2000/02 bear market would look even worse versus other bear markets because the dividend yield was lower than in previous bear markets.)
- Despite the long time it took to recoup the previous peak, the S&P 500 still appears very richly valued because the market was probably more expensive in March 2000 than ever before.
  - The bear market was not harsh enough to remove all the froth. Based on Robert Shiller's P/E ratio on trailing 10-year real earnings (which adjusts for the cyclicality in profit margins), the S&P 500 reached a P/E ratio of 43 in 2000. This was far higher than the P/E ratio of 33 at the index's peak in 1929. The average P/E at the peak of prior bull markets was just 19.
  - At the October 2002 trough, the S&P 500 reached a P/E ratio of 22, which was above the average level for prior peaks. Even after nearly a 50% decline, the S&P was more expensive at the trough of the recent bear market than it was at the peak of most of the prior bull markets. At prior troughs, the P/E ratio averaged 12. The worst bear markets cut P/Es to single digits.
  - The current P/E using Shiller's methodology is 27, which is above the level at the start of all bear markets except for the one beginning in 1929. Optimists point to the S&P 500's P/E ratio on 12-month reported earnings of 18, but this is due to record profit margins and history has shown that profit margins are highly cyclical and mean reverting.

S&P 500 Bear Markets Since 1926
(Excludes Dividends)

Peak	Trough	Recovery	Peak to Trough Decline	# of Months: Peak to Trough	# of Months: Trough to Peak	# of Months: Peak to Peak	Shiller's Normalized P/E: At Peak	Shiller's Normalized P/E: At Trough	Shiller's Normalized P/E: At Recovery
09/07/29	06/01/32	09/22/54	-86.2	33	272	305	33	6	14
07/18/33	03/14/35	10/22/35	-34.0	20	7	28	14	10	15
03/10/37	03/31/38	02/02/46	-54.5	13	96	108	22	12	16
11/09/38	04/28/42	02/13/45	-45.8	42	34	76	16	9	12
06/15/48	06/13/49	01/07/50	-20.6	12	7	19	12	9	11
08/02/56	10/23/57	09/24/58	-21.6	15	11	26	19	14	16
12/13/61	06/27/62	06/17/63	-28.0	7	12	18	22	17	20
02/10/66	10/10/66	05/04/67	-22.2	8	7	15	24	19	22
12/02/68	05/27/70	03/03/72	-36.1	18	22	40	22	14	18
01/12/73	10/04/74	07/17/80	-48.2	21	70	91	19	9	9
12/01/80	08/12/82	11/03/82	-27.1	21	3	23	9	7	8
08/26/87	12/04/87	07/25/89	-33.5	3	20	23	18	13	17
03/24/00	**10/09/02**	**05/30/07**	**-49.1**	**31**	**56**	**87**	**43**	**22**	**27**
Average Since 1926 (ex. 2000/02)			**-38.1**	**18**	**47**	**64**	**19**	**12**	**15**
Average Since WWII (ex. 2000/02)			**-29.7**	**13**	**19**	**32**	**18**	**13**	**15**

Sources: Global Financial Data, Robert Shiller, Bloomberg, Hammond Associates

Change From March 24, 2000 Close



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- ***Firm***
  - Founded in 1985
  - National Practice
  - 31 Employee / Shareholders
  - Proprietary Research
  - $51 Billion in Assets Under Advisement
- ***Clientele***
  - Higher Education Institutions
  - Foundations
  - Public Retirement Plans
  - Corporate Retirement Plans
  - Healthcare Institutions
  - Private Wealth Clients
- ***Staff***
  - 96 Staff Members
  - 68 Investment Professionals
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