

**HAMMOND ASSOCIATES**

INSTITUTIONAL FUND CONSULTANTS, INC.

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# RESEARCH REPORT

## Second Quarter 2005

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*In this report . . .*

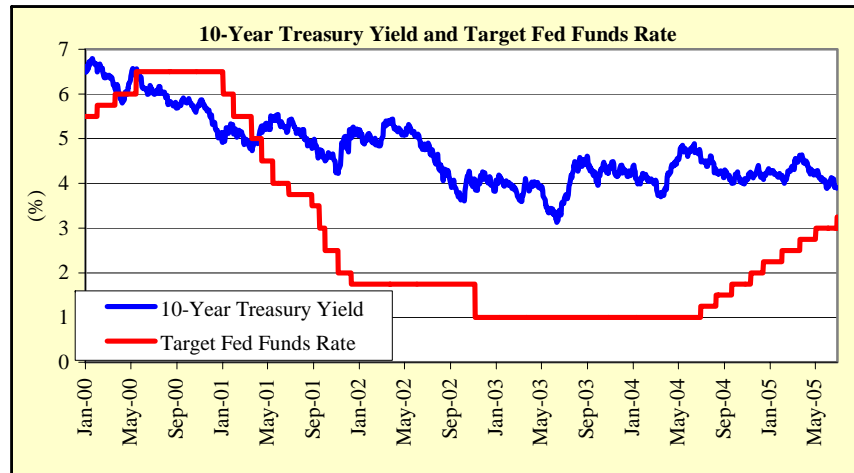
- ✓ The Interest Rate Conundrum
- ✓ The Housing Bubble and Consumer Spending
- ✓ Are High Oil Prices Here to Stay?
- ✓ Will the Dollar's Resurgence Last?

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## Hammond Associates The Interest Rate Conundrum July 2005



Long-term interest rates resumed their downward trend in the second quarter. After the yield on the 10-year Treasury bond increased from 4.2% to 4.5% in the first quarter, it fell back to 3.9% in the second quarter. This occurred despite the Fed raising the overnight lending rate twice, from 2.75% to 3.25%. Since the Fed began tightening one year ago, the yield on the 10-year bond has fallen by 68 bps. This change is in stark contrast to history. In prior Fed tightening cycles since 1958, 10-year bond yields increased an average of 125 bps from the first rate hike over the following twelve months.<sup>1</sup> This is the first tightening cycle during which the 10-year bond yield has fallen. Fed Funds futures indicate that we are still in store for two or three more quarter-point rate increases in 2005, which would virtually flatten the Treasury yield curve.

<sup>1</sup>The current cycle also differed from previous cycles in that the 10-year bond yield increased significantly **before** the first rate hike. The yield increased 76 bps in the three months preceding the rate hike. The 10-year bond yield remains above the Spring 2003 trough. (See Hammond Associates' Second Quarter 2004 Research Report.)

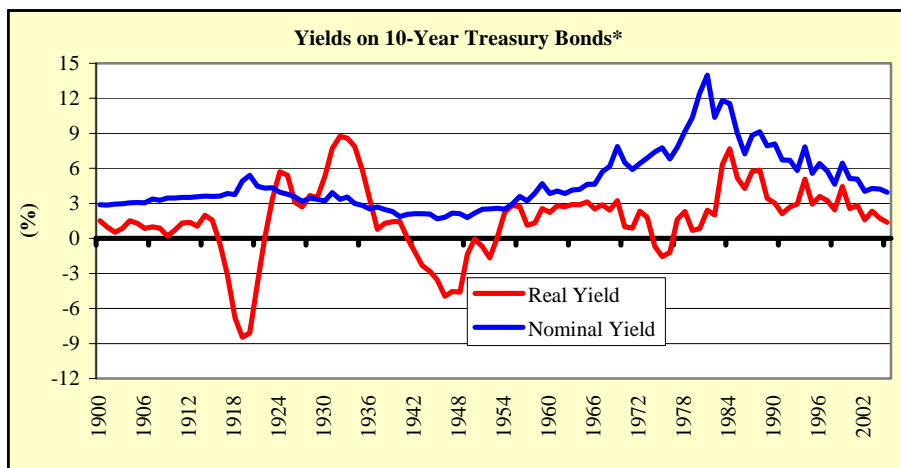
Based on the pricing of TIPS, much of the second quarter decline in yields was attributable to lower inflation expectations. The breakeven inflation rate on the 10-year bond, which represents the difference in the Treasury yield and the real yield on TIPS, declined from 2.7% (4.50% 10-year yield less 1.79% TIPS yield) to 2.3% (3.94% 10-year yield less 1.66% TIPS yield). However, since the beginning of 2000, falling real (after inflation) interest rates have been the driver of contraction in nominal yields. The real yield on 10-year TIPS has declined from 4.2% at the beginning of 2000 to just 1.7%. Expectations for future inflation, as measured by the breakeven inflation rate on TIPS, have increased since the beginning of 2000.

Declining real interest rates have had a spillover effect on other assets. The liquidity created by low rates has pushed asset prices higher and expected returns lower. There is a clear link between falling interest rates and ballooning residential real estate prices. Corporate bonds (both investment-grade and junk) and emerging market debt have benefited not only from lower Treasury rates, but also from a contraction in the credit spread to Treasuries as investors reach for yield. Real estate investment trusts, with their fat (albeit shrinking) dividend yields, have surged 126% since the Fed made the first cut in the overnight lending rate in January 2001. Despite the bear market, equities are still trading at high valuations. Low real interest rates are supporting the high valuations. Of course, assets that were fueled by interest rates as they fell could be dragged down in the event of a reversal.

### Today's Interest Rates Relative to Historical Levels

A common perception is that Treasury bond yields are significantly below normal. This is undoubtedly influenced by the experience of the 1980s and 1990s. The median yield on 10-year Treasuries over these two decades was 7.8% nominal and 3.3% real. However, when compared to the rest of the 20th century, these two decades were abnormal. From 1900 to 1979, the median nominal yield on Treasuries was 3.5%, and the real yield was only 1.3%. For the full century, the median nominal yield was 3.8%, and the real yield was 1.9%. A current real yield of 1.7% on 10-year TIPS is not too far from the median level of the 20th century.

Are the 1980s and 1990s or the long-term experience more indicative of the future? The reason for higher than normal rates in the 1980s and 1990s was the Fed's efforts to reduce inflation. Inflation exceeded 12% in 1980, which prompted the Fed to lift overnight lending rates to double digits. It required higher than normal real interest rates to reduce inflation to the low levels reached by the late 1990s. Inflation is now fairly well contained, so there is no need for the Fed to keep real interest rates as high. The high real yields bondholders enjoyed during the last two decades of the 20<sup>th</sup> century will likely prove to be an aberration.



\*We estimated real yields on the 10-year Treasury by applying trailing inflation to the yield. Prior to 1950, we used trailing 5-year inflation. Trailing 3-year inflation was applied from 1950 to present.

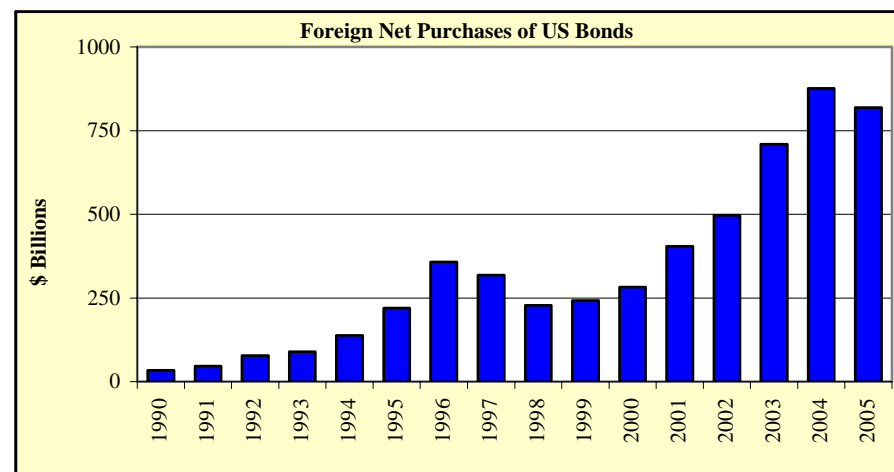
What is an appropriate level for interest rates? In a normal environment, a 1.7% real yield on the 10-year bond may not be unreasonable. However, the current environment seems anything but normal because of the current account deficit. The current account deficit, which now exceeds 6% of GDP, is symptomatic of our over consumption. We are spending \$750 billion per year more than we are producing. That money must be borrowed from foreign investors. The natural state in this environment would be higher than normal real interest rates, which should be necessary to attract the foreign capital to offset the deficit. A consequence would be the reduction of consumption growth and an increase in savings. This would eventually help to correct the deficit.

### Why Aren't Interest Rates Higher?

While bond yields don't appear that low when compared to history, the current account deficit argues for higher than normal yields. Why aren't yields higher? There are three common reasons cited for low interest rates—bond purchases by foreign central banks, weakening economy, and a lower inflation risk premium.

Willingness on the part of Asian central banks to invest in US bonds seems a likely contributor to low real interest rates. Asian countries, particularly China, are flush with cash from their massive trade surplus with us, and have been willing to recycle their receipts into US bonds. This keeps their currencies from appreciating against the dollar, which would dampen export growth. Asian central banks appear to have made the choice of accepting a low interest rate and the potential for losses from currency depreciation to improve employment growth.

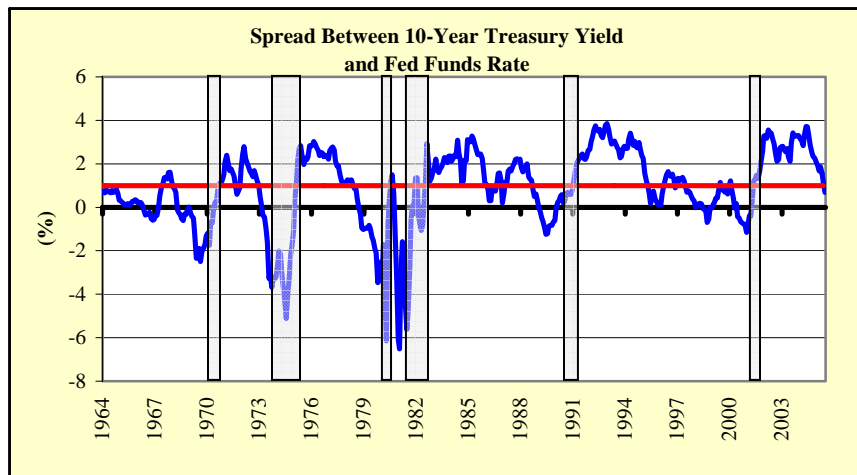
The amount of foreign assets going to domestic bonds is staggering. We must attract sufficient foreign capital to offset the current account deficit (\$750 billion and growing) plus net purchases of foreign securities by US investors. All told, the US now requires about \$1 trillion of foreign capital per year. Since the equity market bubble burst, foreign investors have been avoiding equities and purchasing bonds. In the first quarter of 2005, foreign investors purchased an annualized \$816 billion of US bonds, the bulk of which was Treasury and agency securities. As a result of massive overseas buying, foreign investors hold 50% of outstanding Treasury debt and more than a quarter of corporate and agency debt. Bill Gross of PIMCO figures the yields are as much as 100 basis points below equilibrium levels because of purchases by foreign investors.



If the supply of foreign capital is the primary cause of low interest rates, can we rely on it to continue? Over the short-term, there is little reason to expect a change. This system can be viewed as favorable over the short-term for both the US and Asia. The US can continue to over consume, becoming more indebted to foreign creditors, without paying the higher interest rates profit-motivated creditors would demand to compensate for risk (which in this case is a secular decline in the value of the dollar). However, it cannot be sustained forever. The longer it lasts, the greater our debt service burden will be (even at discounted interest rates). Eventually, it will become too much to bear. Furthermore, Asians will eventually desire to increase consumption and standards of living, rather than save. It's impossible to say whether this will occur within a couple of years or a couple of decades.

Another possible explanation for low interest rates is that the bond market has caught a whiff of economic trouble down the road. US consumers have relied on the housing market (fueled by the Fed's easy money policy) and tax cuts to support spending in the face of stagnant wage growth. The stimulatory effects of the tax cuts are long past, and the housing market appears increasingly at risk of a slowdown or worse. The removal of these effects, combined with the household debt overhang and imbalances in the global economy, may make the bond market expect the economy is heading for rougher sledding. In this case, the current tightening cycle would come to an end, and another easing cycle could ensue.

Historically, the yield curve has been one of the more accurate predictors of recessions. In normal environments, the yield curve slopes upward, meaning that longer maturity obligations provide a higher yield. **In six of seven instances when the yield curve has inverted since 1969 (short-term rates exceeded long-term rates), recessions have followed, and no recessions have occurred without the yield curve first inverting.** Of course, the yield curve *is not* currently inverted. The 10-year Treasury yield exceeds the Fed Funds rate by 69 bps, compared to the mean differential over the past 50 years of 100 bps. Current expectations are for the Fed to lift the Fed Funds rate to 3.75% or 4% by year-end, which could mean an inverted curve. However, current credit spreads on low-quality corporate bonds are inconsistent with the argument that the bond market expects a weaker economy. High yield bonds are trading at a spread to Treasuries of less than four percentage points, which is about 30% below the historical average. If bond investors expected the economy to weaken significantly, high yield spreads should be trading at much higher levels.



Lower risk of inflation is another potential explanation for the fall in nominal yields. Low inflation risk should lower the maturity premium for nominal bonds because part of the maturity premium represents an inflation risk premium (which is separate from *expected* inflation). If the perceived risk of inflation is lower because of Fed credibility or other factors, the compensation investors require for the possibility that inflation exceeds expectations should fall. In the 19th century when secular inflation was not considered a risk, short-term rates were typically higher than long-term rates. Investors preferred long-term bonds due to their fairly stable yield over the highly variable yields of short-term securities. The purchasing power of future interest payments and principal was secure because the country was on the gold standard. The 19th century, in fact, was deflationary. Prices fell by 0.4% annualized over the 100 year period.<sup>2</sup> The abandonment of the gold standard brought inflation risk and an upward sloping yield curve.

If the risk of inflation is lower, the yield curve could be permanently flatter. The inflation breakeven rate on TIPS suggests that the bond market has little concern about inflation. The breakeven inflation rate should include expected inflation plus an inflation risk premium. This rate on 10-year TIPS stands at only 2.3%. Extending to 30 years, this rate is only 2.5%.

There have been many other potential contributors to the low level of rates raised. The shift of defined benefit pension plans to match the duration of liabilities seems the most likely contributor. For years, most pension plans have operated at an asset/liability mismatch. The duration of their liabilities (in the form of obligations to future retirees) has been much longer than the duration of their bond assets. This was especially damaging to funding levels in the early part of this decade because their liabilities increased since they were being discounted at lower interest rates, and their assets didn't keep pace due to the bear market for equities. This has led many pension plans to be more mindful of their asset/liability mismatch, which, in turn, has led to higher fixed income exposure with a longer duration. This shift towards longer duration is another factor that may explain the flatness of the yield curve.

### Implications for Other Assets

Real interest rates should directly influence prices for risky assets. In theory, investors make investment decisions based on the expected return and risk of an opportunity versus what can be received on a risk-free basis over an equivalent horizon. Risky assets' expected returns should include a premium over the real

<sup>2</sup>There were periods of sharp inflation within the period, such as during the Civil War. However, periods of inflation were followed by periods of deflation.

riskless interest rate based on the level of risk. All else equal, it follows that when real interest rates fall, the required return for other asset classes should also fall. Lower required returns mean that assets trade at higher prices.

We've witnessed the effects of falling real interest rates in investment markets and residential real estate. Low interest rates have increased the purchasing power of home buyers, helping them to bid up prices to seemingly unsustainable levels. Low real interest rates have also reduced valuation pressures on equities, allowing them to trade at higher P/E ratios. It is also apparent that investors are accepting more risk in trying to eke out additional return. (Unfortunately, return *needs* have not fallen along with return expectations.) Credit spreads on corporate investment-grade and high yield debt remain well below historical averages.

If current real interest rates represent a new paradigm (or perhaps more accurately, a return to an old paradigm), there are significant implications for security markets. Equity markets that previously appeared overvalued don't look so unreasonable. In our asset allocation model, we assume equities should provide a 2.5% risk premium to long-term TIPS. We currently assume a 2.5% equilibrium real interest rate on long-term TIPS; therefore, stocks have a required earnings yield of 5% and should trade at a normalized P/E ratio of 20 (1/5%). With a current normalized P/E ratio of 24, the equity market is overvalued by about 20% under these assumptions. On the other hand, if long-term TIPS remain at the current 1.7% yield for the foreseeable future, stocks only need to provide a real return of 4.2% to provide the same 2.5% risk premium, which translates into a fair value normalized P/E of just less than 24. Under this assumption, the S&P 500 is trading at fair value.

Fair valuation on stocks as a result of lower real interest rates is probably small comfort for investors. **A real return of less than 2% on bonds and 4% for stocks makes it challenging to earn a typical 5% real return to offset spending for endowments and foundations.** Under this scenario, institutions eventually will need to learn to live on less or be willing to accept more risk to achieve their return needs. Defined benefit plan sponsors, who must value their liabilities and set their contributions based on these low rates, are in an even more precarious position. They will also be under pressure to lower their seemingly unrealistic actuarial assumed returns (often 8.5% nominal, or 6% real). Funding pension plans must increasingly occur through contributions from cash flow, rather than earnings on investments.

The alternative scenario also has unappealing implications for asset markets. If real interest rates rise, which arguably needs to occur to reduce our current account deficit, asset prices will fall. Falling residential real estate prices could send the economy into a recession. Moreover, P/E ratios on equities would come under renewed pressure. From a long-term perspective, higher real interest rates would be positive for investors, but it would mean short-term pain. The surge in interest rates and stagnation in equity prices in the last half of the 1970s set up a 20-year bull market for stocks and bonds.

## Conclusion

Current real interest rates are near long-term historical norms. From that perspective, one can argue that the decline in interest rates experienced over the last five years (actually, the last 24 years), represents a return to the norm. Nevertheless, higher real rates are necessary to reduce the current account deficit to sustainable levels. Higher rates would help to reduce consumption growth and increase savings. However, the willingness of Asian central banks to lend trade receipts back to us could keep real interest rates low for an extended period. Eventually, higher than normal real interest rates are likely, but it's hard to say when "eventually" will come.

If real interest rates stay at current levels for the foreseeable future, it will present challenges to investors. Low real interest rates should mean low expected returns for other asset classes as well. A low cost of capital world is unfavorable for investors. Endowments and foundations will have trouble meeting their typical 5% spending rate while preserving purchasing power. Defined benefit pension plan sponsors will be forced to fund more of their pension benefits through cash flow from operations. Baby-boomers will need more savings to replace pre-retirement income. Despite the short-term pain it would cause, long-term investors, even those invested substantially in bonds, should welcome an increase in real interest rates.

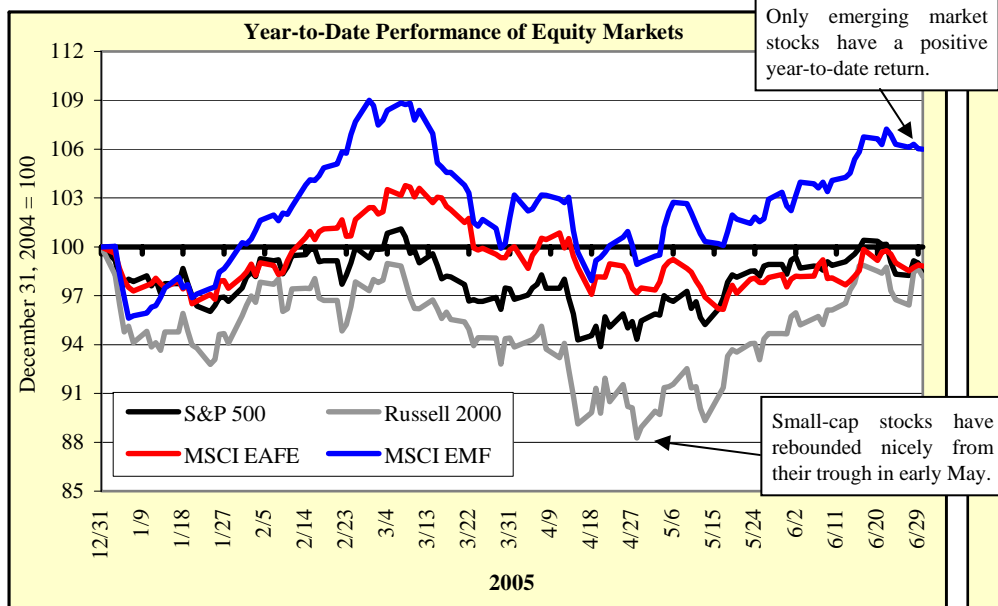
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# Second Quarter Executive Summary

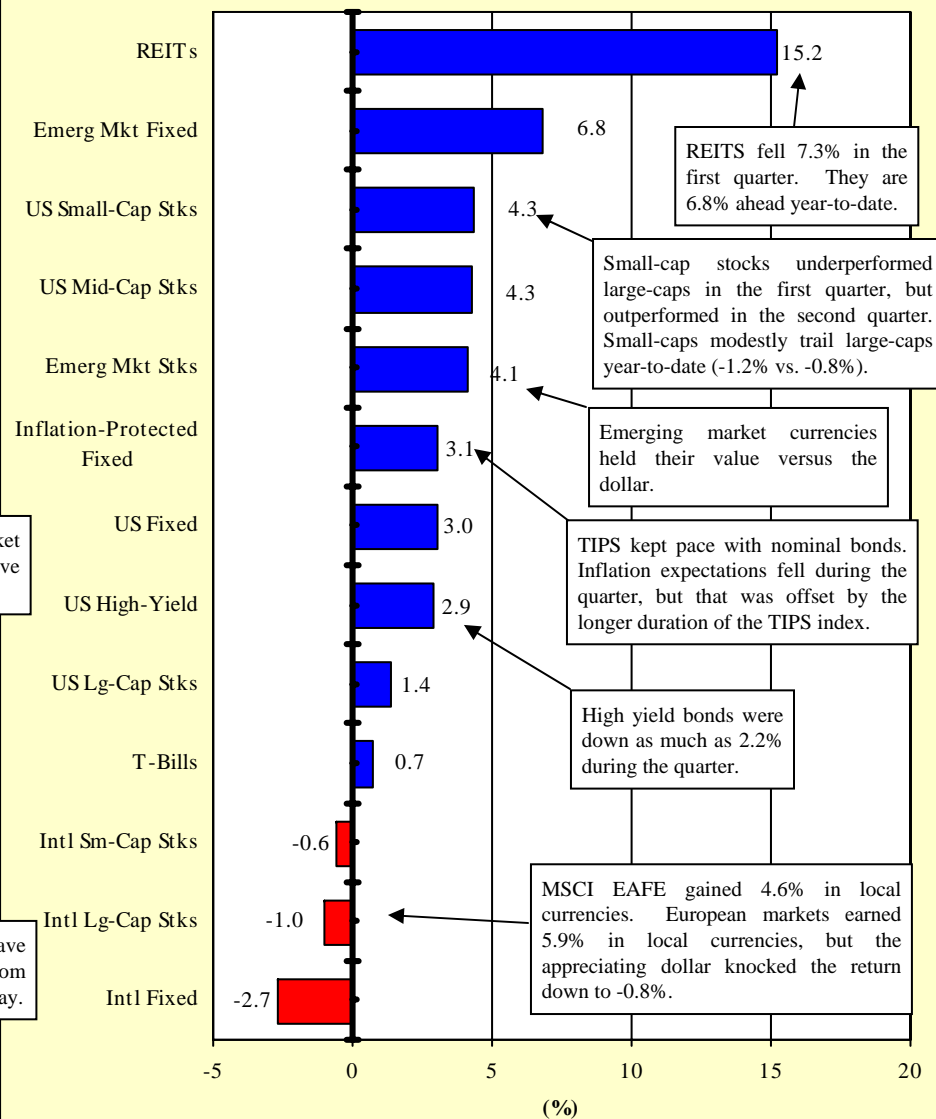
- The S&P 500 enjoyed a modest gain of 1.4% during the second quarter, but remains 0.8% in the hole so far in 2005. Many developed international markets experienced strong gains in local currency terms, but the surging dollar resulted in losses for US investors. The MSCI EAFE index gained 4.6% in local currencies, but declined 1% in dollars. Emerging market equities gained 4.1%.
- The FOMC lifted the Fed Funds rate twice during the quarter to 3.25%. Fed Funds futures predict a 3.75% to 4% overnight lending rate by year-end. However, the yield on the 10-year bond declined from 4.50% to 3.94%. This has resulted in a fairly flat yield curve.
- The economy grew at a 3.8% annualized rate in the first quarter. Economists expect second quarter GDP data to show 3.5% growth. Forecasters polled by *The Economist* expect growth of 3.5% for 2005, which is at the long-term average. Our continued concern is that the economy is being primarily fueled by strong consumer spending, which appears increasingly vulnerable.
- In the fourth year of the economic recovery, wage and salary growth continues to lag far behind the typical post-recession period. Nevertheless, the wealth effect from residential real estate appreciation has kept spending strong. Nationally, housing prices have surged 50% since the beginning of 2000 and are now at record high levels versus rents and income. Housing prices do not need to fall to have an adverse effect on the economy. If prices level off, households would be less likely to tap home equity, and the savings rate would move towards more normal levels.
- The price per barrel of oil finished the quarter at \$57, up only \$1 from March 31. Despite high prices, demand is increasing. Worldwide demand is expected to increase 2.2% in 2005. The good news is that high prices are attracting new investment. Over the short to intermediate term, there will be a race between increased demand and new supply. If new supply does, in fact, exceed demand over the next few years as some expect, oil prices could decline. Even so, we believe exposure to energy in a portfolio makes sense as a hedge.
- Investors' hunger for yield in a low interest rate environment helped to push credit spreads on risky fixed income securities to near historic lows in February. In March, however, spreads began moving upwards. The credit spread on high yield bonds increased by 35 bps during the quarter and is 119 bps above March's trough. Even with this, credit spreads on both investment-grade and high-yield corporate bonds remain well below historical norms. Treasuries still appear to offer the best value among domestic bond sectors.
- The dollar continued to rebound against major currencies during the second quarter. It surged 7.2% against the euro and 6.0% against the yen. Based on relative purchasing power parity, the dollar is fairly valued on a trade-weighted basis. Still, we expect the trade-weighted dollar to depreciate further because of the negative current account balance. Domestic consumption needs to grow at a slower pace than that of the rest of the world so that exports grow much faster than imports. To accomplish this, real interest rates need to rise, and the trade-weighted dollar must become significantly *undervalued* for an extended period (which would make imports more expensive). We continue to recommend significant exposure to foreign currency-denominated assets.
- Reported earnings on the S&P 500 continue to improve, but the pace of growth is slowing. The S&P 500's P/E on trailing reported earnings stands at 19. However, profits appear unsustainably high due to a cyclical peak in profit margins. The index is priced to provide a 4.2% real return in the future. Within the US market, there are no obvious bargains. As a result of their outperformance in recent years, small-cap stocks appear overvalued relative to large-caps. Value stocks appear richly priced relative to growth stocks.
- Hedge funds generated slightly positive returns during the second quarter, with the average fund of funds gaining 0.3%, according to HFR.

# REITS On Top in the Second Quarter

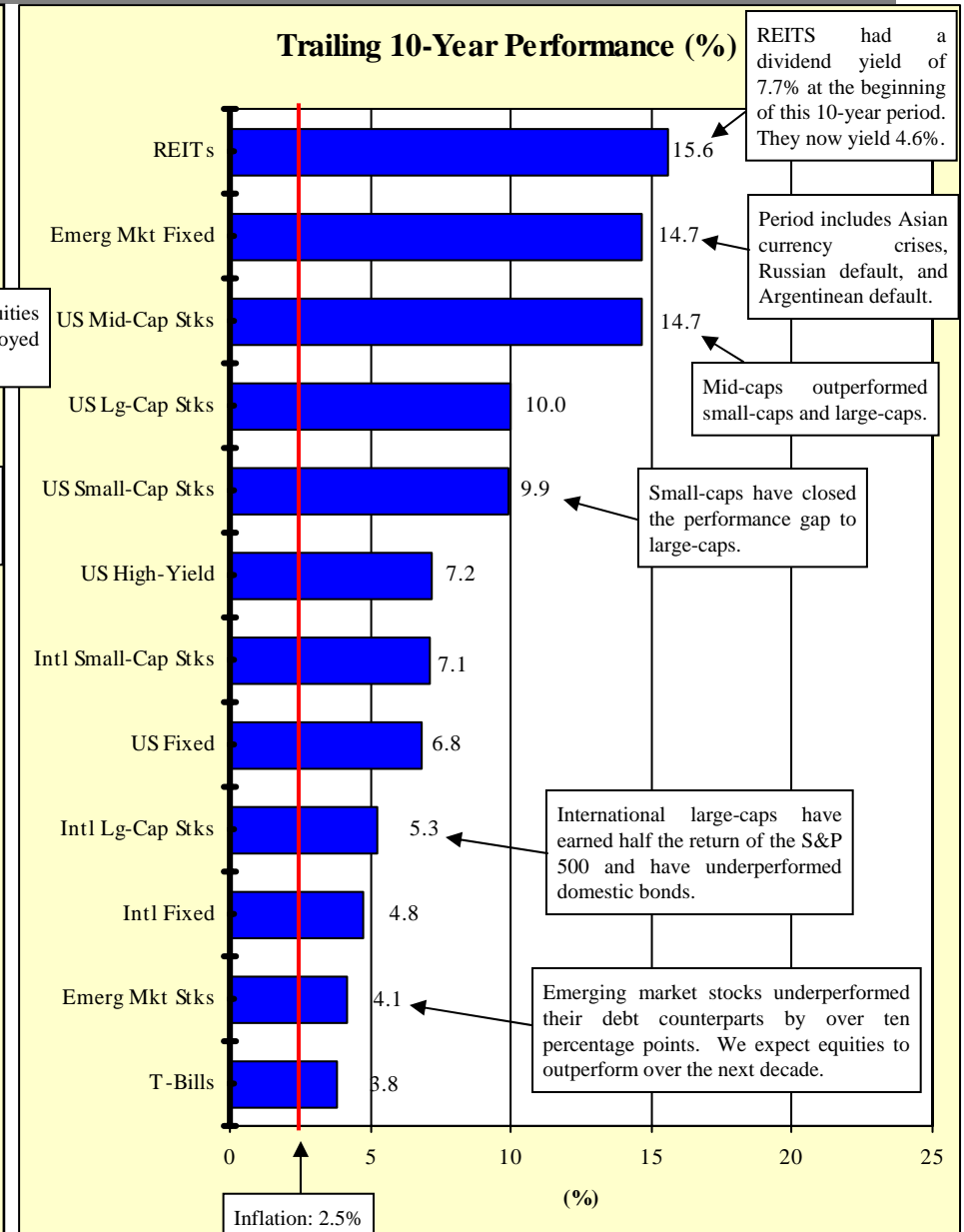
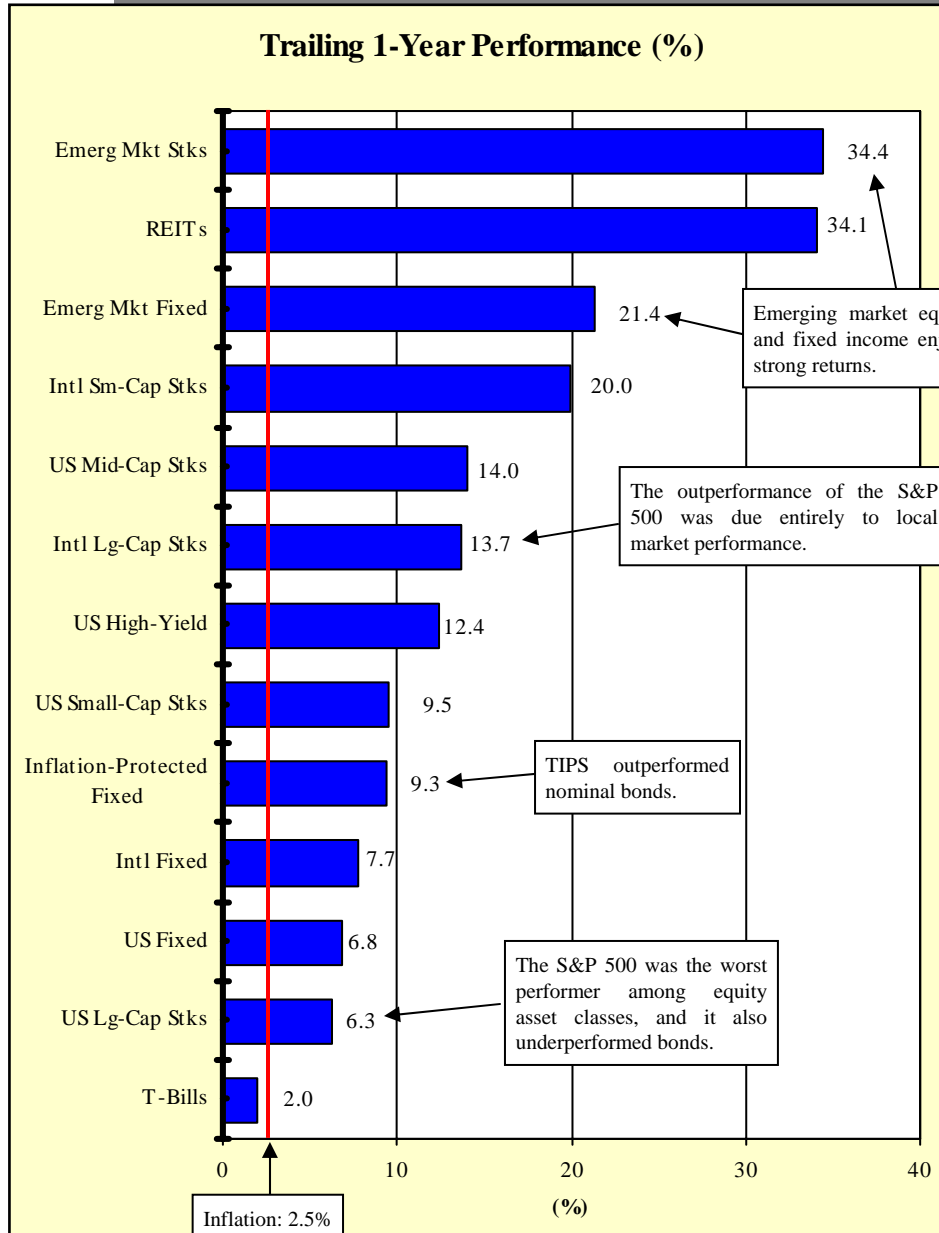
- The S&P 500 enjoyed a modest gain of 1.4% during the second quarter. Combined with the 2.2% loss in the first quarter, large-caps remain 0.8% in the hole so far in 2005.
- Many developed international markets experienced strong gains in local currency terms, but the surging dollar resulted in losses for US investors. The MSCI EAFE index gained 4.6% in local currencies, but declined 1% in dollars. The buck appreciated only slightly against emerging market currencies, and emerging market equities gained 4.1% in dollar terms.
- Investment-grade bonds performed well on falling intermediate- and long-term interest rates. The Lehman Aggregate index earned 3%. REITS, which have been trading more like long duration TIPS than stocks recently, surged 15.2%.



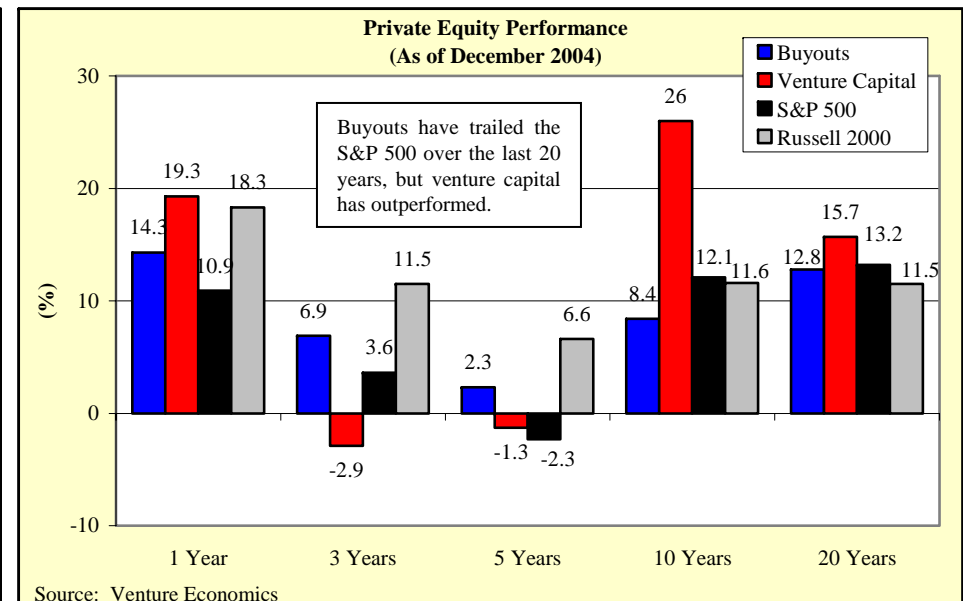
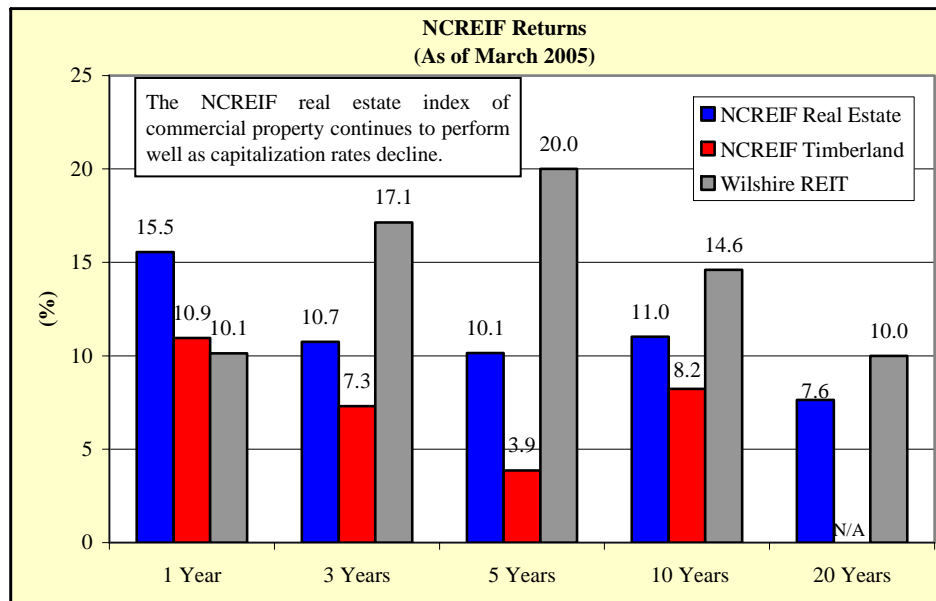
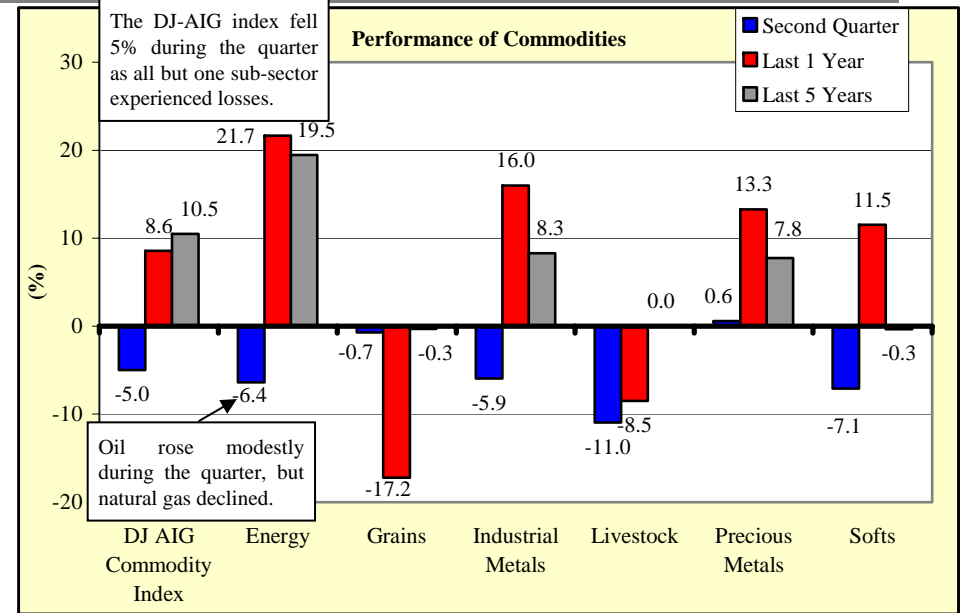
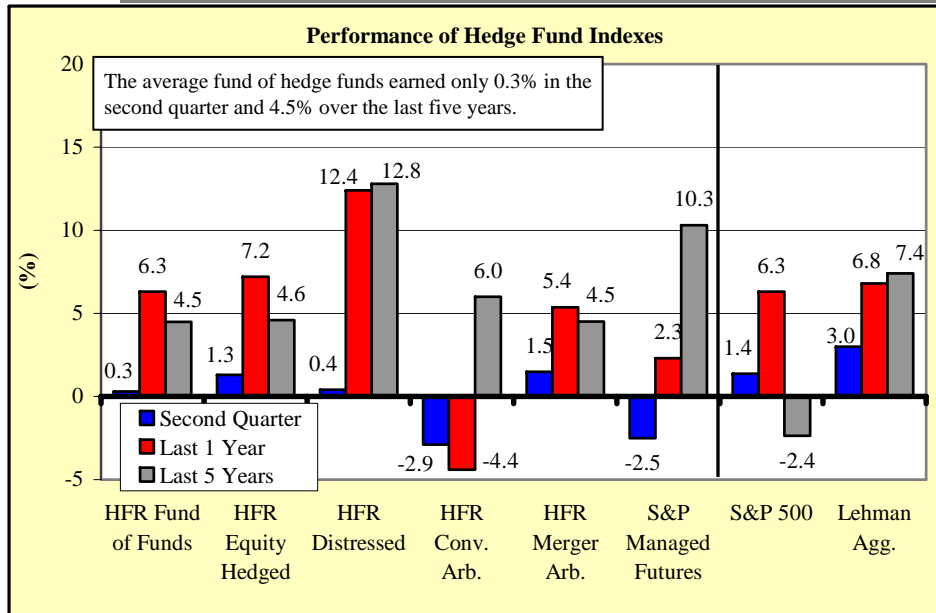
## Second Quarter 2005 Performance (%)



# REITS Also the Best Performer Over 10 Years

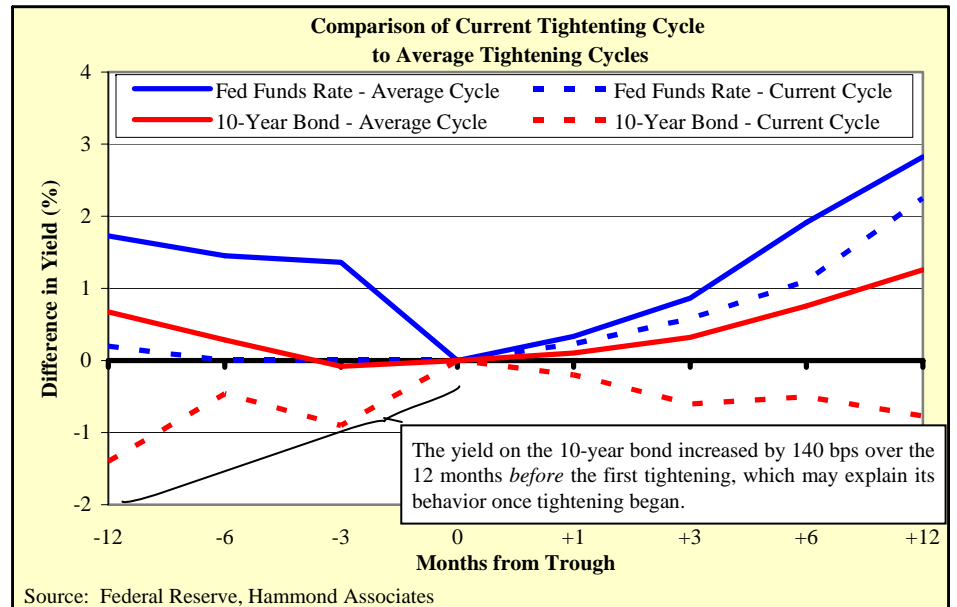
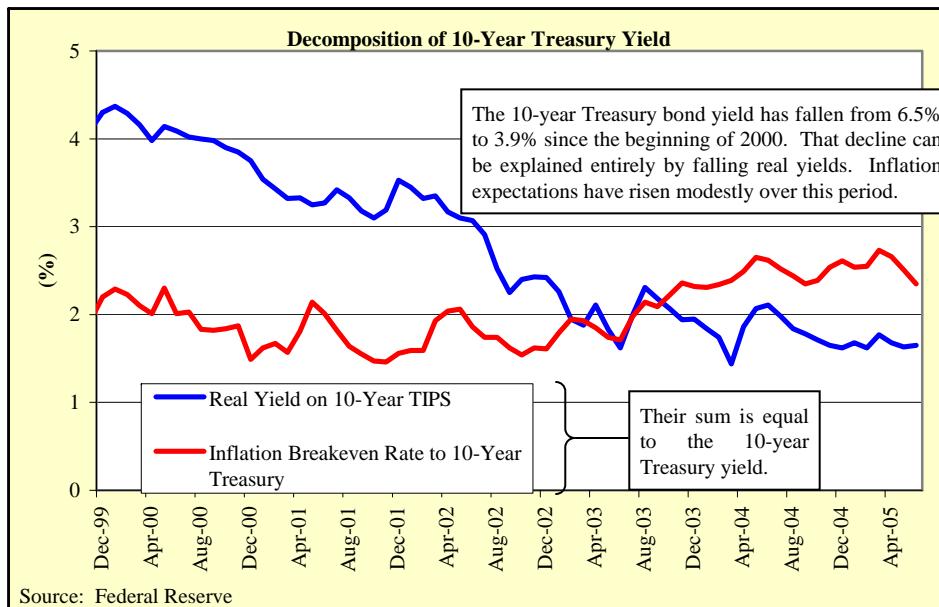
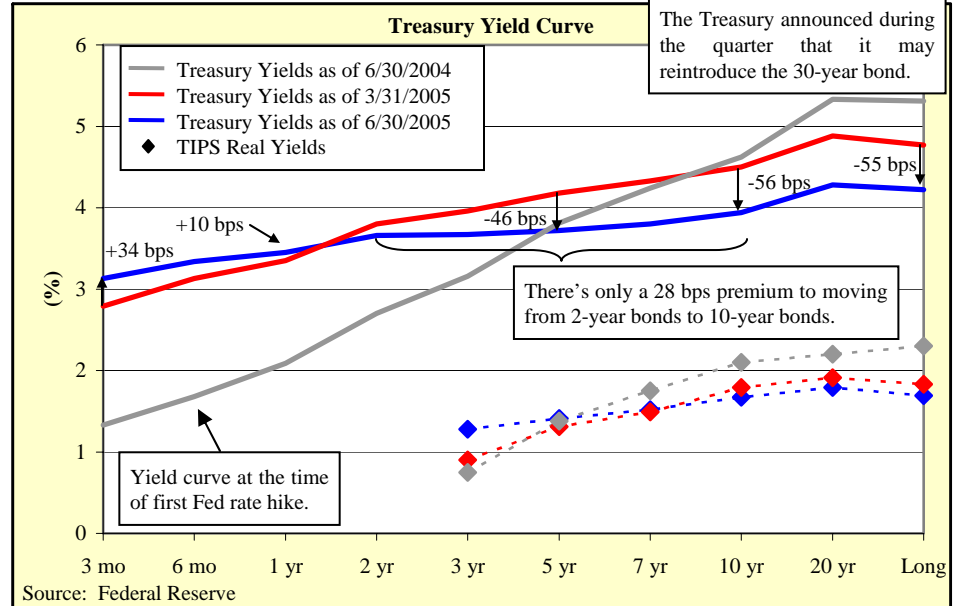


# Hedge Funds Lag Stocks and Bonds in Second Quarter



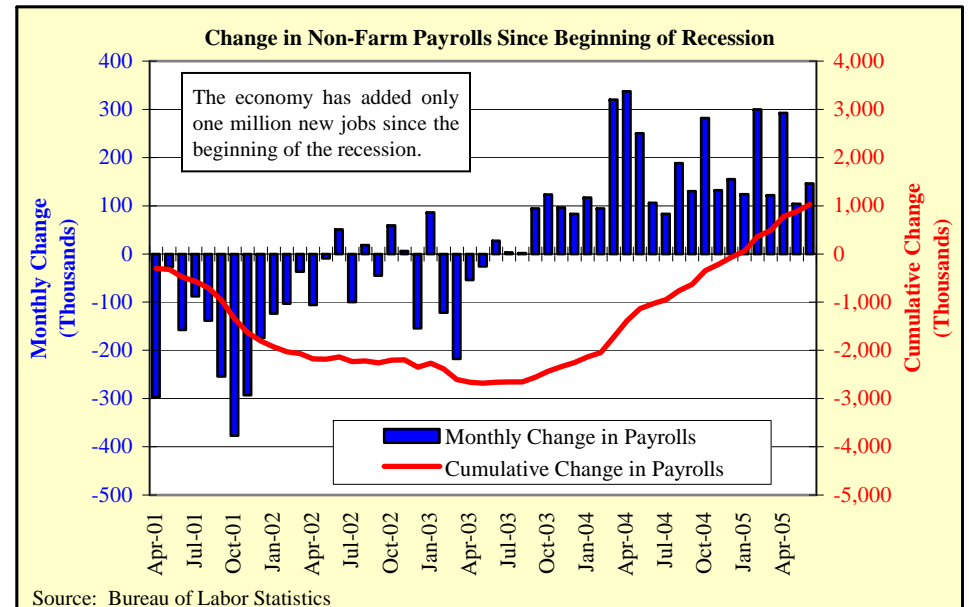
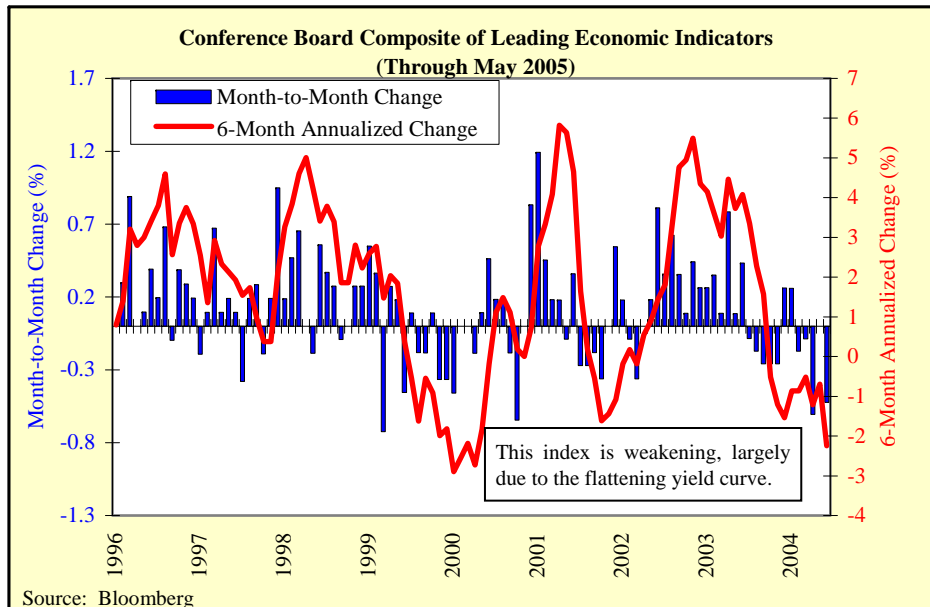
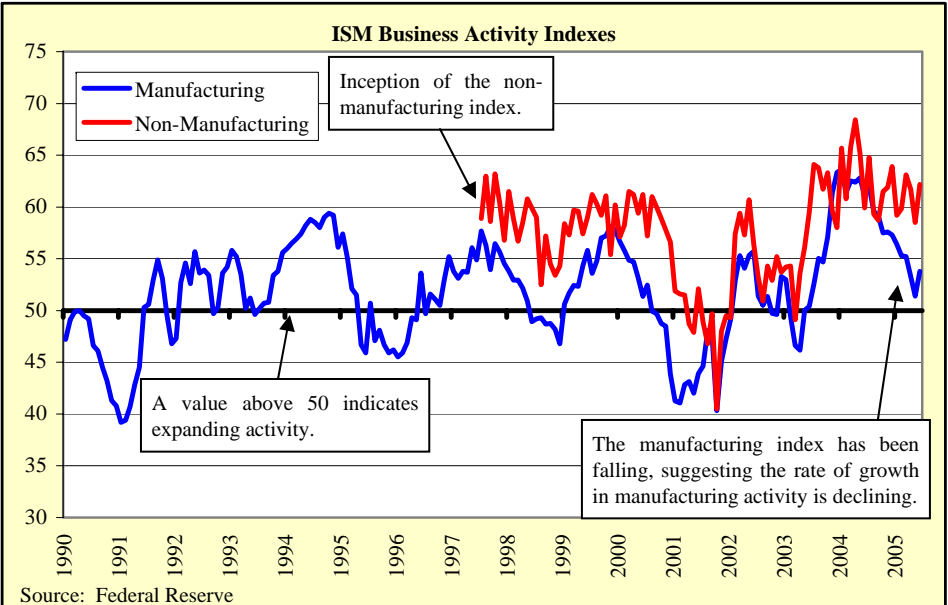
# Yield Curve: Heading Towards Inversion?

- The FOMC lifted the Fed Funds rate twice during the quarter to 3.25%. Fed Funds futures predict a 3.75% to 4% overnight lending rate by year-end. Surprisingly, intermediate- and long-term bond yields moved in the opposite direction. The yield on the 10-year bond declined from 4.50% to 3.94%. Since the Fed began tightening one year ago, the 10-year bond yield has fallen 68 bps. The real yield on 10-year TIPS declined from 1.8% to 1.7%. (See “The Interest Rate Conundrum” at the beginning of this report.)
- Higher short-term rates and lower long-term rates have resulted in a flattened yield curve. There is only a 69 bps spread between the 10-year bond and the Fed Funds rate versus a 362 bps difference before the Fed began tightening. If the 10-year holds at the current yield, the yield curve could invert by year-end, which has historically been a warning sign for the economy. The flattening yield curve is squeezing profits out of the “carry trade” (borrowing short and lending long).



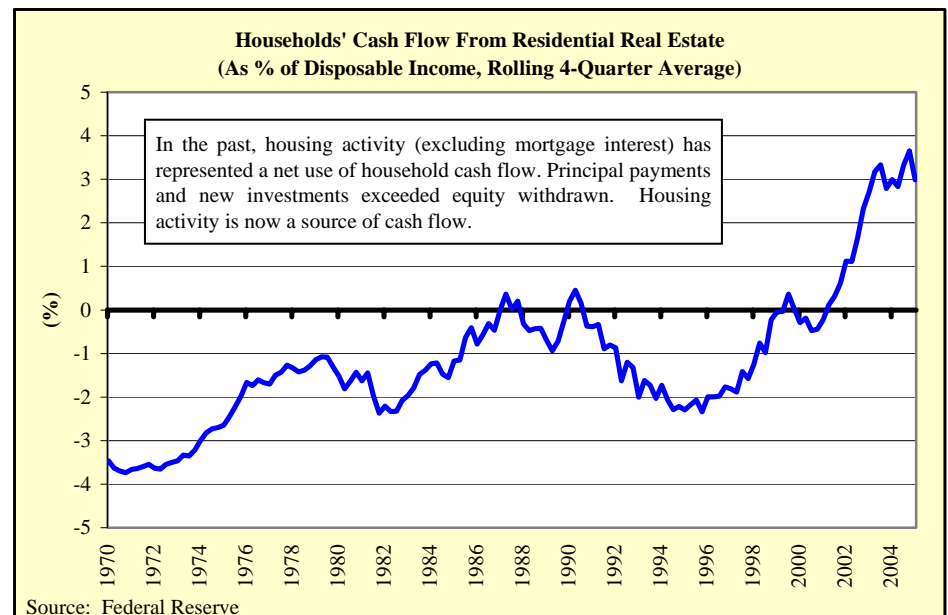
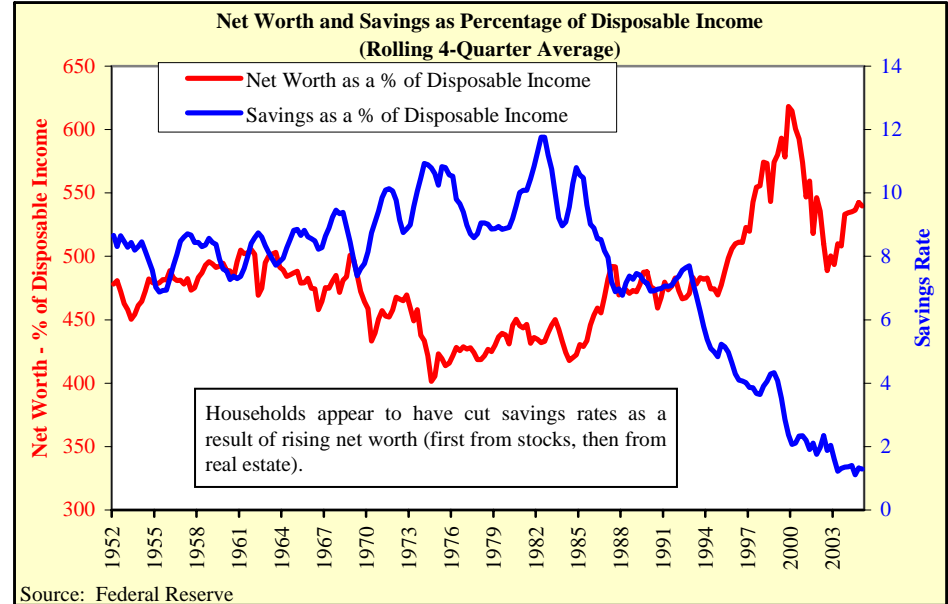
# Moderate Economic Growth Continues

- The economy grew at a 3.8% annualized rate in the first quarter. Growth of consumer spending and residential fixed investment accounted for the bulk of the growth. The pace of business investment slowed substantially for the quarter (from 14.5% to 4.1%).
- Economists expect second quarter GDP data to show 3.5% growth. Forecasters polled by *The Economist* expect growth of 3.5% in 2005, which is at the long-term average.
- Employment growth was decent during the second quarter. The economy added an average of 181,000 jobs per month, which is more than the 150,000 jobs economists believe are necessary to absorb new entrants. Nevertheless, job growth remains anemic when compared to past recoveries.
- Our continued concern is that the economy is being primarily fueled by strong consumer spending, which appears increasingly vulnerable.

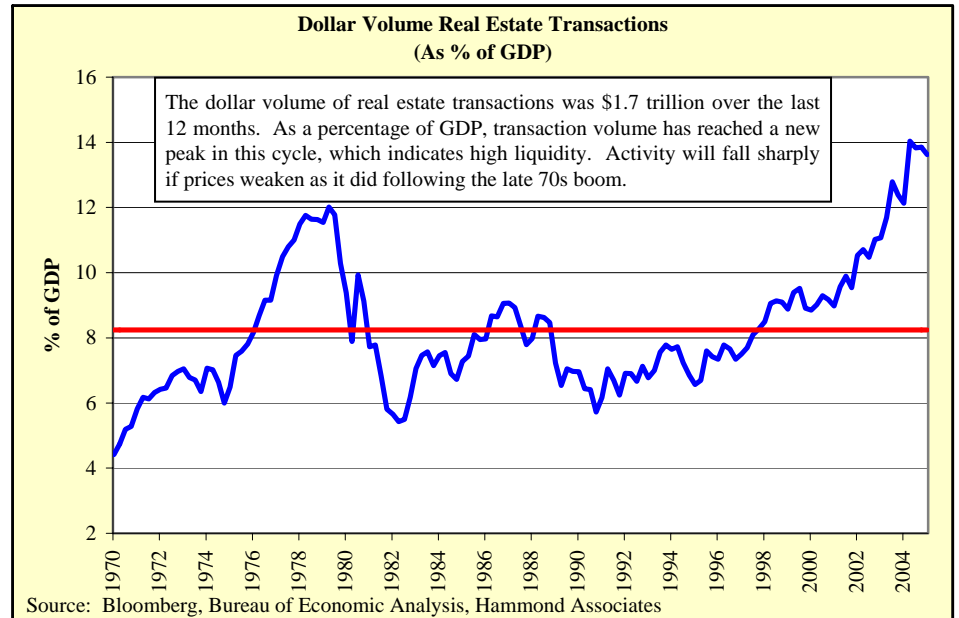
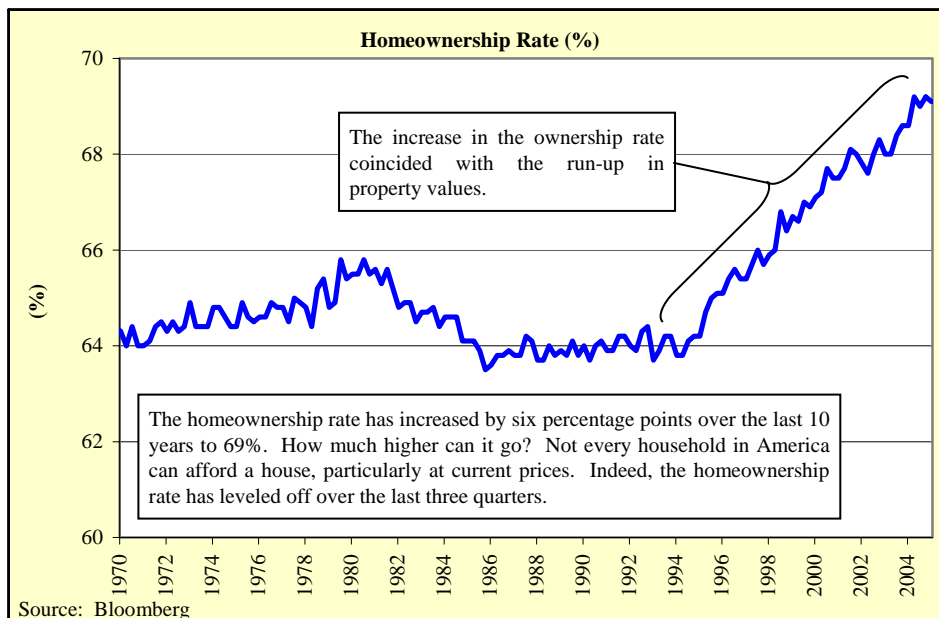
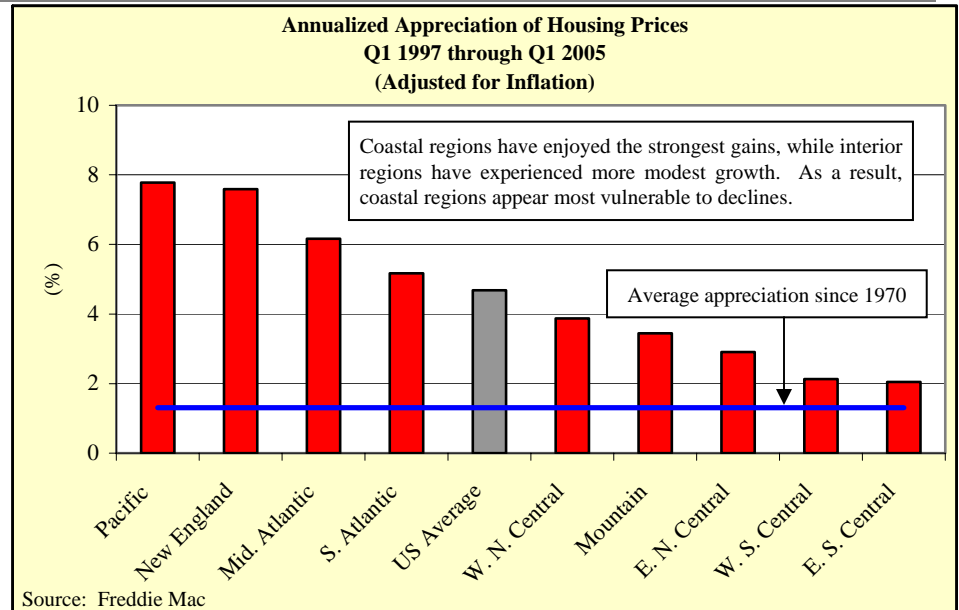
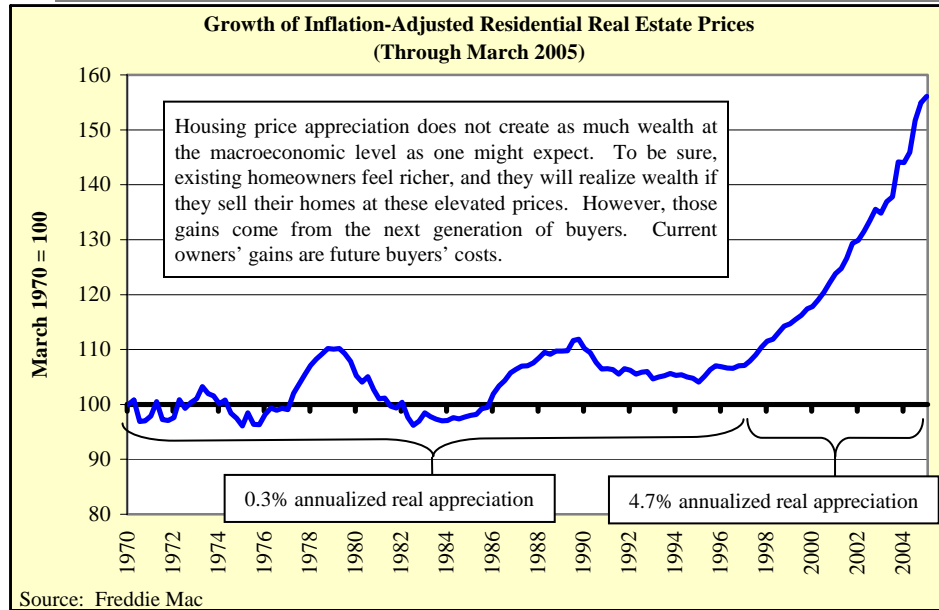


# The Housing Bubble and Consumer Spending

- In the fourth year of the economic recovery, wage and salary growth continues to lag far behind the typical post-recession period. Nevertheless, the wealth effect from residential real estate appreciation has kept spending strong. Households have tapped home equity through cash-out refinancings, home equity loans, and second mortgages.
- Further signs of housing's beneficial effect on the economy can be observed in employment. According to *The Economist*, more than 40% of private sector jobs created since 2001 have been in housing-related sectors (construction, real estate, and mortgage broking).
- Nationally, housing prices have surged 50% since the beginning of 2000 and are now at record high levels versus rents and income. Coastal markets have experienced far greater gains. There are signs that we may be approaching the top.
  - ✓ The percentage of new mortgages with adjustable rates (ARMs) remains high at 30%, which is surprising given the below average spread between ARMs and fixed rate mortgages. ARMs have the highest share in markets that have experienced the greatest gains, which suggests buyers are stretching to make payments. The use of unconventional mortgages, such as interest-only loans and negative amortization loans (a portion of the interest is added to the loan's principal), is also rising. These are also most prevalent in the hottest markets.
  - ✓ The National Association of Realtors reported that 23% of home purchases last year were for investment purposes and a further 13% represented second homes.
- Housing prices do not need to fall to have an adverse effect on the economy. If prices level off, households would be less likely to tap home equity, and the savings rates may move towards more normal levels.

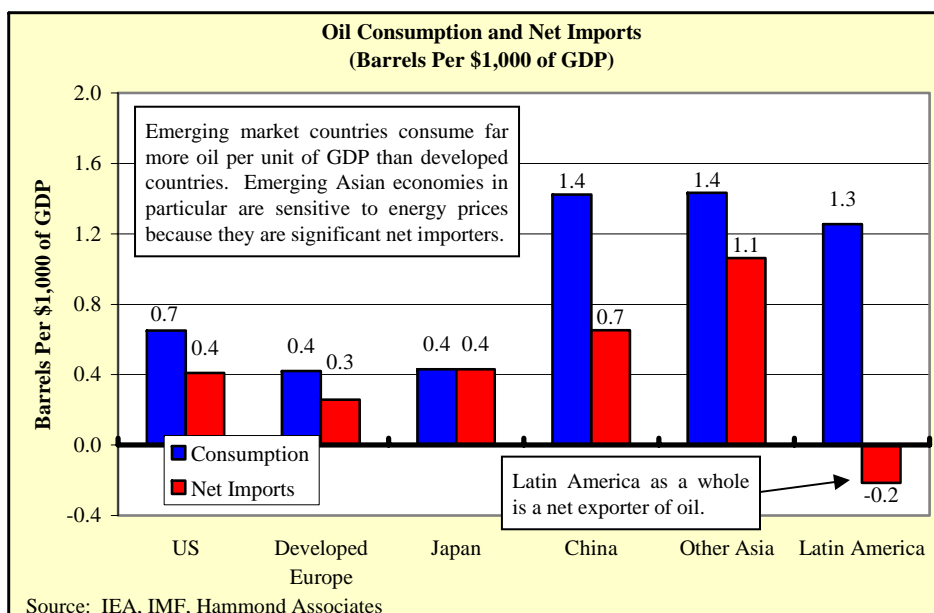
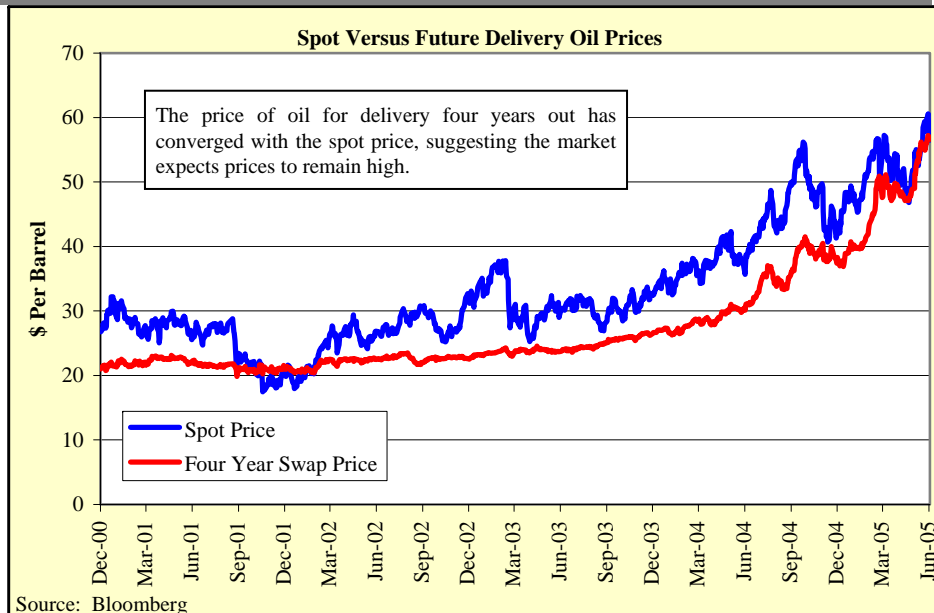


# The Housing Bubble and Consumer Spending (cont.)



# Are High Oil Prices Here to Stay?

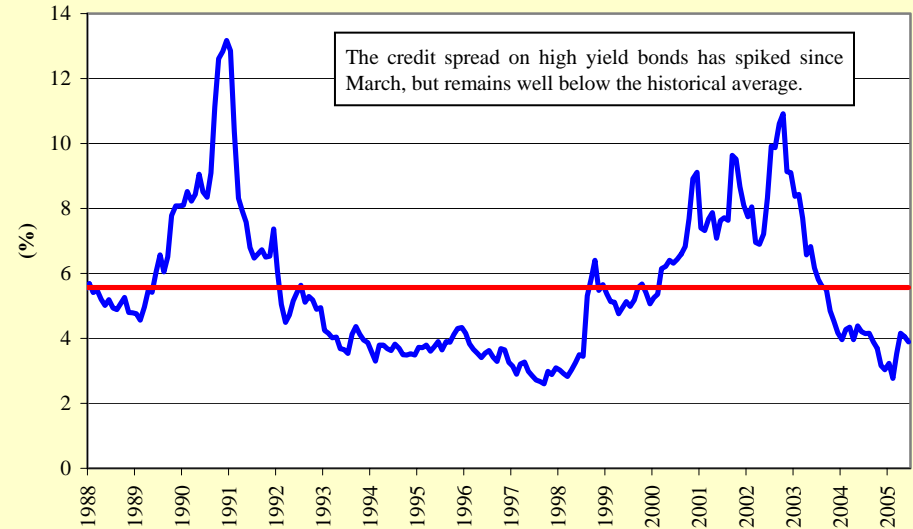
- The price per barrel of oil finished the quarter at \$57, up only \$1 from March 31. Volatility remained high. Oil traded as low as \$47 (May 20) and as high as \$61 (June 27). High volatility is likely to continue. OPEC has very little spare capacity with which to smooth prices. The Energy Information Administration figures that only Saudi Arabia has excess capacity, and that is only 0.9 to 1.4 million barrels per day. This represents about 1% of worldwide daily demand, which is well below historical levels.
- Despite high prices, demand is increasing. China's demand growth has moderated over the last few months (and actually contracted in April), but worldwide demand is expected to increase 2.2% in 2005.
- The good news is that high prices are attracting new investment. As new production comes on-line, upward price pressures may decrease. Cambridge Energy Research Associates estimates that capacity could exceed demand by 6 to 7.5 million barrels per day later in this decade. High prices are making "unconventional" oil projects profitable, such as Canadian oil sands and ultra-deepwater drilling. Over the short to intermediate term, there will be a race between rising demand and new supply.
- A long-term concern is that some analysts (albeit a minority) believe that we may be within a decade or two of peak worldwide oil production. The possibility of political upheaval in producing countries is perhaps the largest risk. With little margin between capacity and demand, a political event (particularly in Saudi Arabia) could send prices skyrocketing.
- If new supply does, in fact, exceed demand over the next few years, oil prices could decline. Even so, we believe exposure to energy in a portfolio makes sense as a hedge.



# A Tumultuous Quarter for Credit

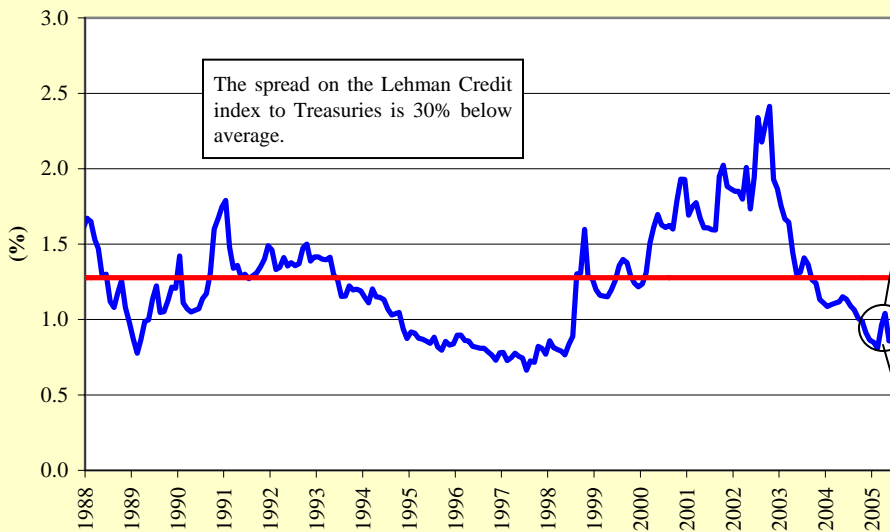
- Investor's hunger for yield in a low interest rate environment helped to push credit spreads on risky fixed income securities to near historic lows in February. In March, however, spreads began moving upwards and culminated with Ford's and GM's downgrades to junk status in May. Following the downgrades, credit spreads drifted back downward.
- The credit spread on high yield bonds increased by 35 bps during the quarter and are 119 bps above March's trough. The spread on the Lehman Credit (investment-grade) index declined modestly in the second quarter, but that was only because GM's debt was removed from the index. GM bonds were trading like junk bonds well before the downgrade.
- Credit spreads on both investment-grade and high-yield corporate bonds remain well below historical norms. Treasuries still appear to offer the best value among domestic bond sectors.

Credit Spread on High Yield Bonds



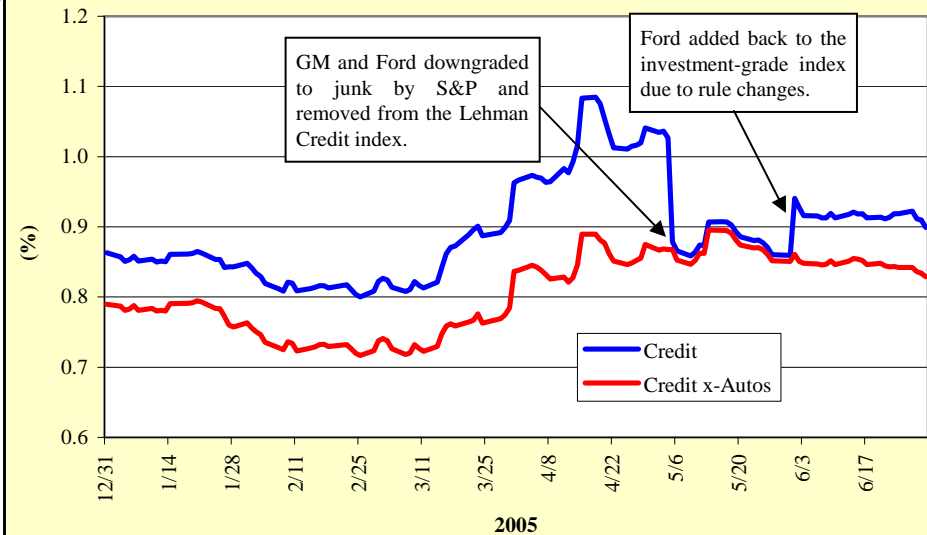
Source: Lehman

Credit Spread on Lehman Credit Index



Source: Lehman

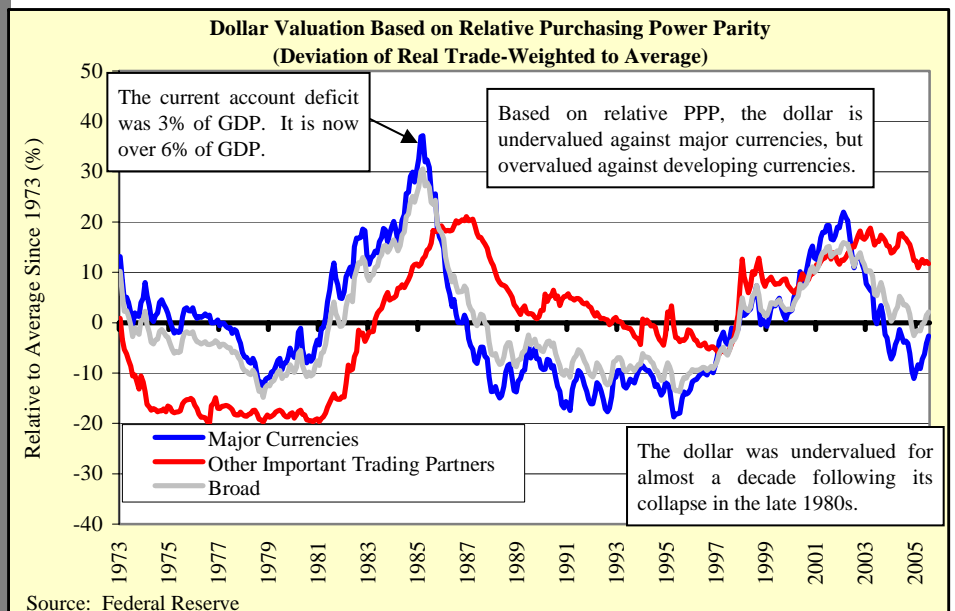
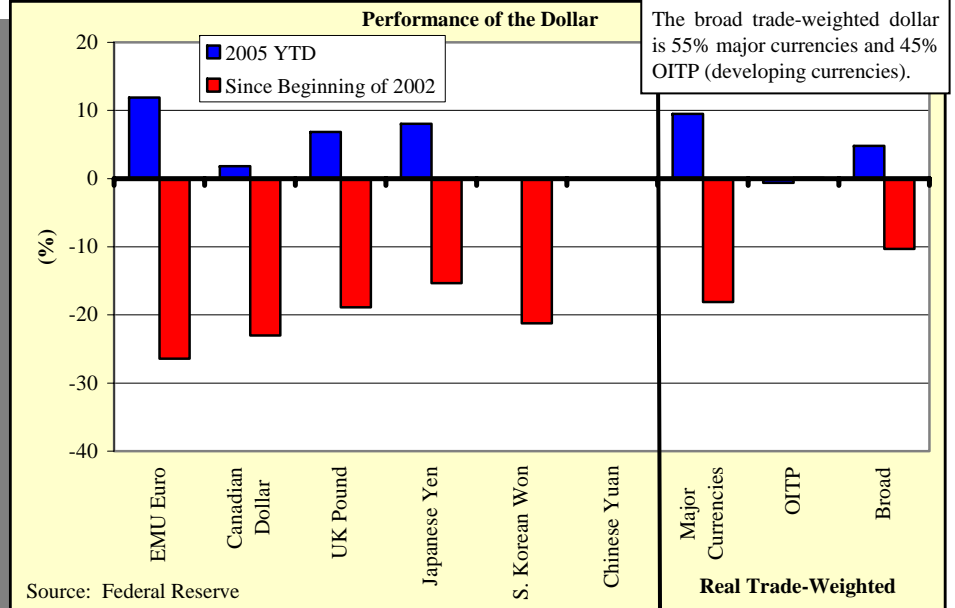
Credit Spread on Lehman Credit Index



Source: Lehman

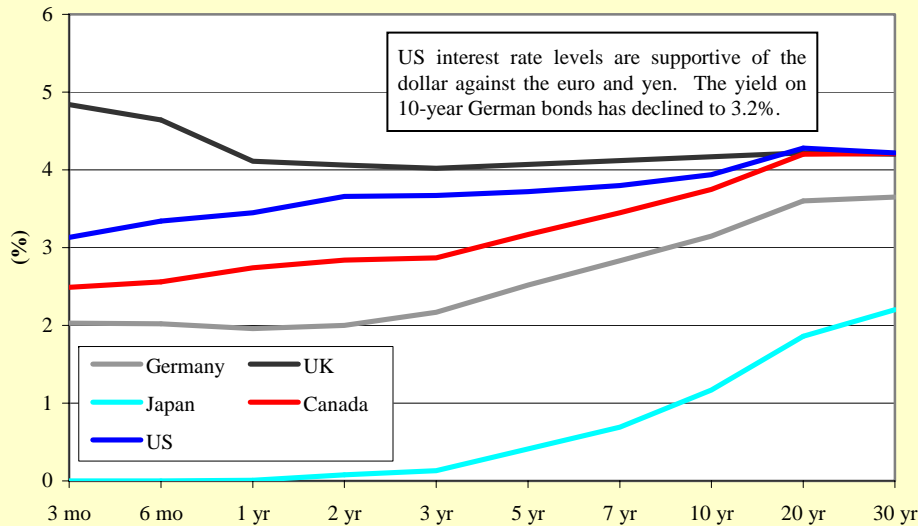
# Will the Dollar's Resurgence Last?

- The dollar continued to rebound against major currencies during the second quarter. It surged 7.2% against the euro, as French and Dutch voters rejected the EU constitution and Italy hinted at abandoning the euro. Year-to-date, the buck has gained 11.9% against the euro. The dollar gained 5.1% against the UK pound and 6.0% against the yen during the quarter. It didn't gain much ground against emerging market currencies.
- Based on relative purchasing power parity, the dollar is fairly valued on a trade-weighted basis. It is slightly undervalued against major currencies, but is still overvalued against emerging market currencies (most significantly, the Chinese yuan). Still, we expect the trade-weighted dollar to depreciate.
  - ✓ Due to over consumption and lack of savings, the current account deficit continues to deteriorate and could reach 7% of GDP this year. The US net investment position was at negative 22% of GDP as of 2004 year-end, meaning that foreign investors hold \$2.5 trillion more of our assets than we hold of theirs. The net investment position will likely worsen to negative 30% by the end of 2005.
  - ✓ Despite the negative international investment position, the US receives more income on assets invested abroad than it pays to foreign investors in US assets. This is because US investments abroad are tilted towards higher returning direct investments, while foreign investors hold a much higher allocation to bonds. The US will become a net payer before long due to the high rate at which we are amassing debt.
- The current account deficit must be reduced, or we will find the debt service burden too much to bear. Domestic consumption needs to grow at a slower pace than that of the rest of the world so that exports grow faster than imports. To accomplish this, real interest rates should rise, and the trade-weighted dollar must become significantly *undervalued* for an extended period (which would make imports more expensive). We continue to recommend significant exposure to foreign currency-denominated assets.



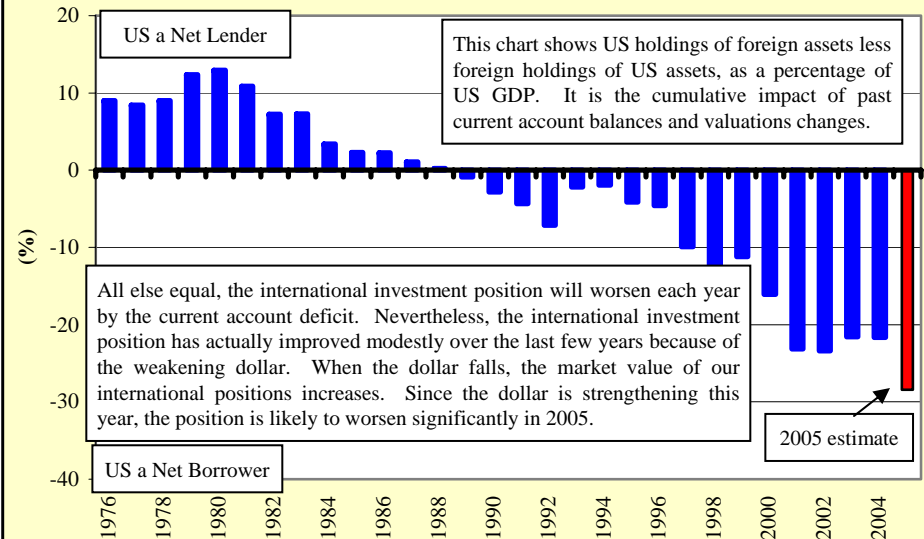
# Will the Dollar's Resurgence Last? (cont.)

**Global Interest Rates**



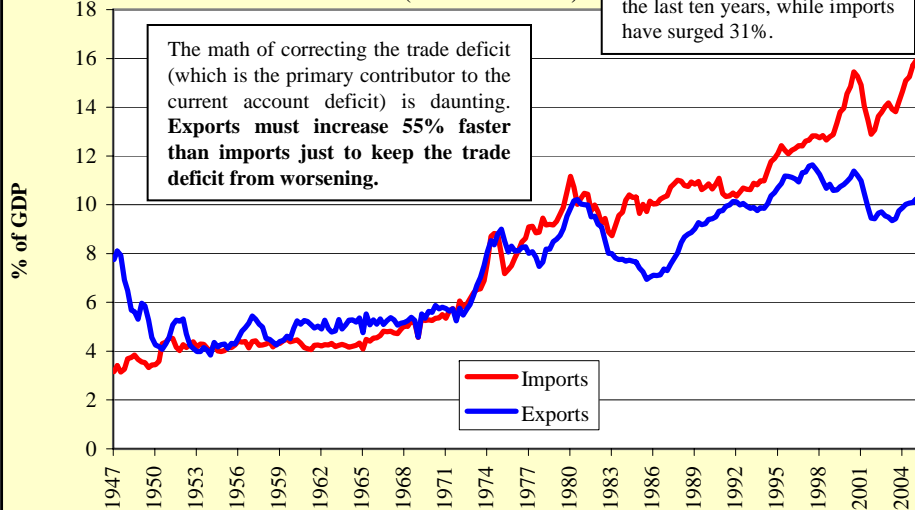
Source: Bloomberg

**International Investment Position as % of GDP**



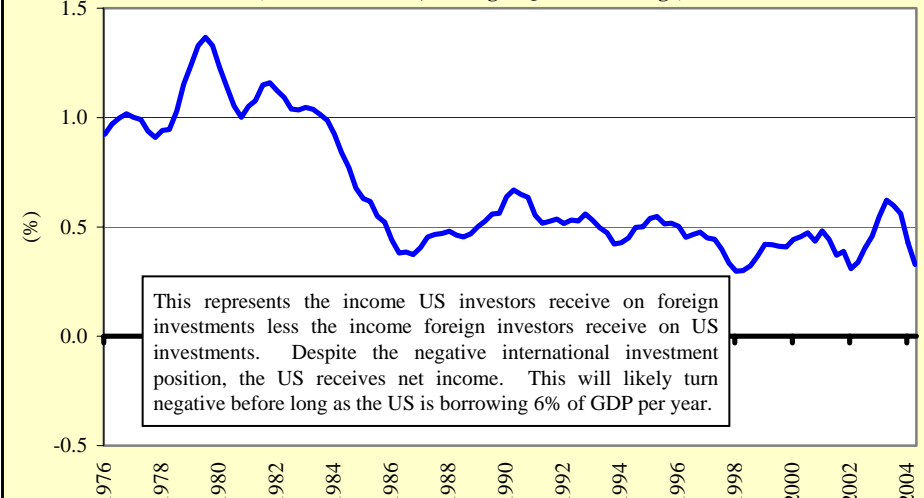
Source: Bureau of Economic Analysis

**Imports and Exports (As % of US GDP)**



Source: Bureau of Economic Analysis

**Net Income Receipts on Assets from Rest of World (As % of US GDP, Rolling 4-Quarter Average)**



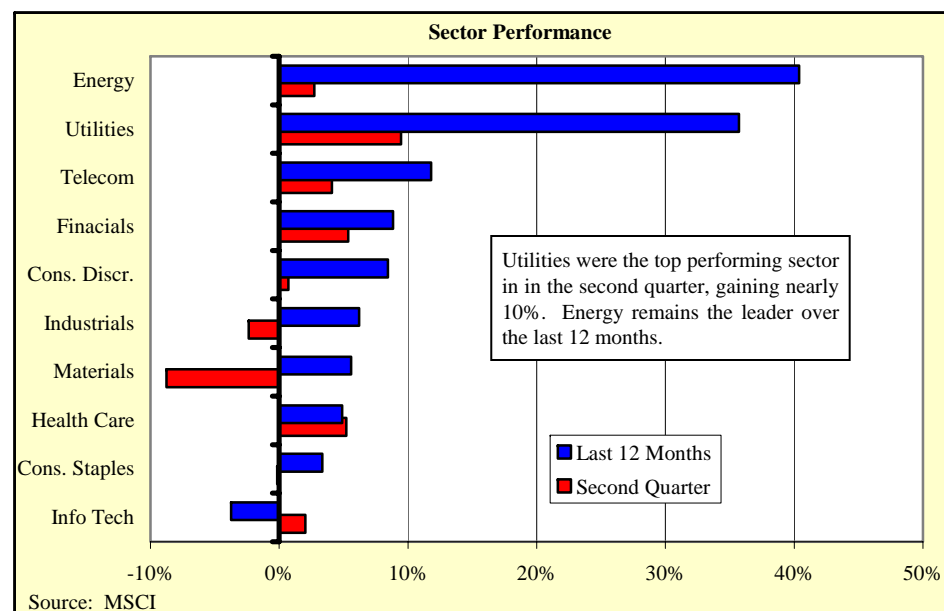
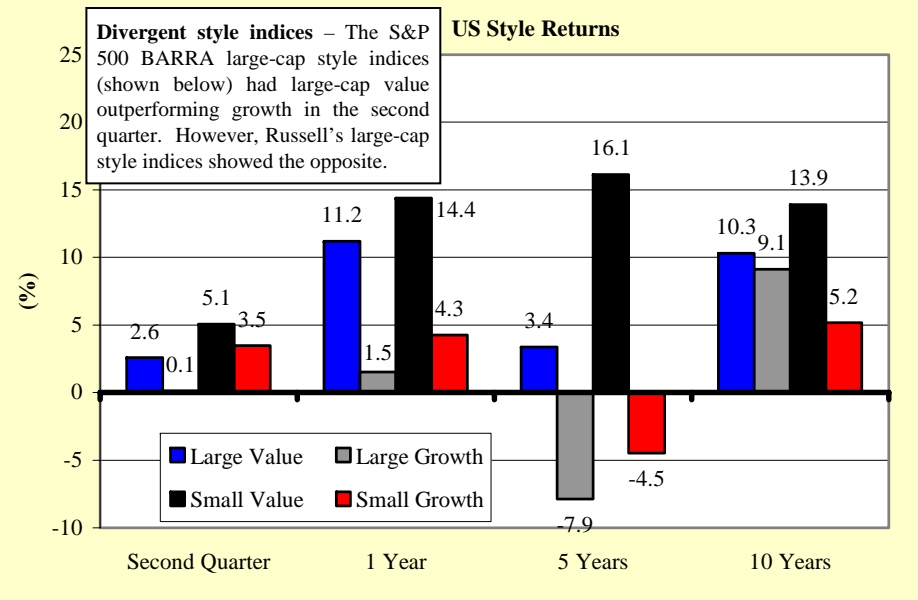
Source: Federal Reserve

# US Equities Posted Modest Gains During the Quarter

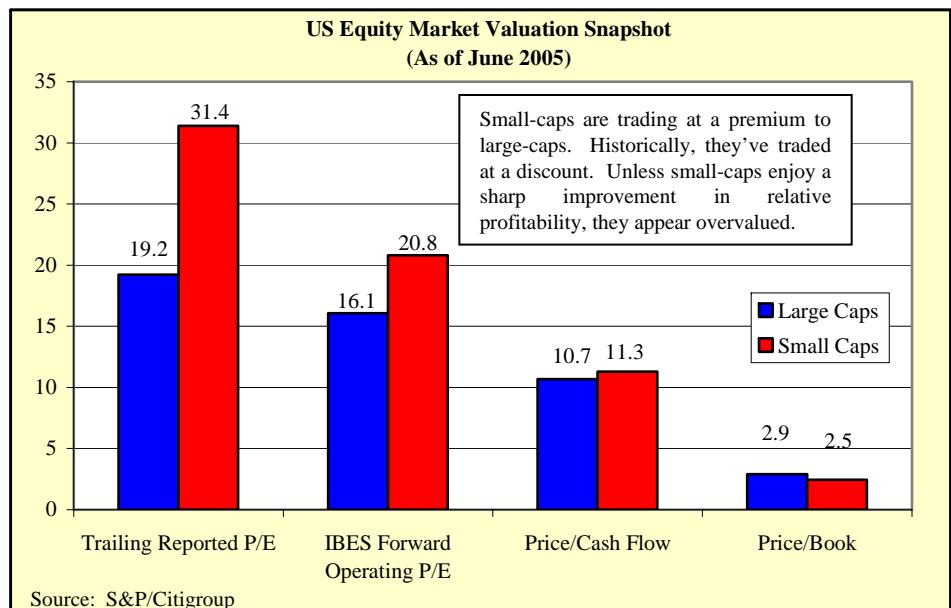
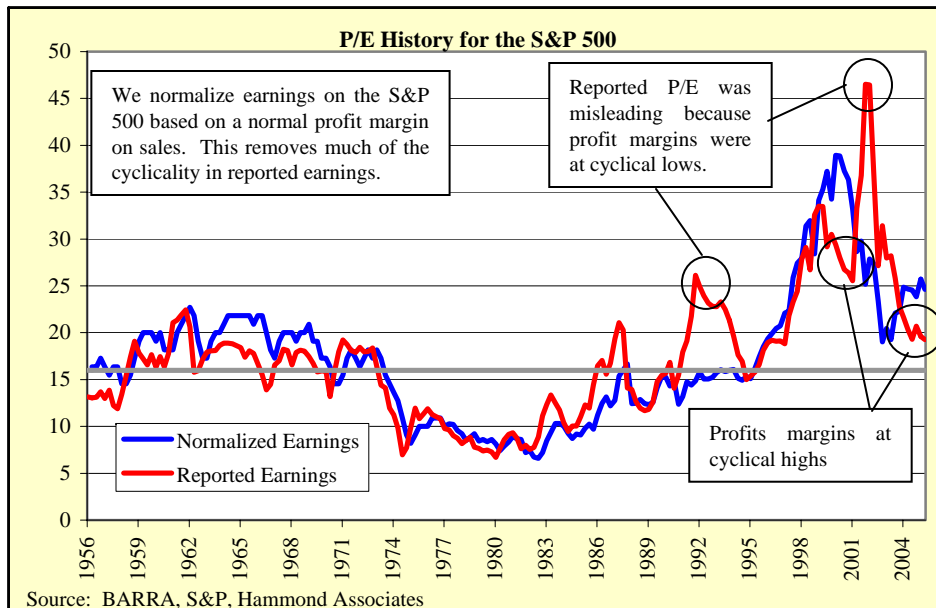
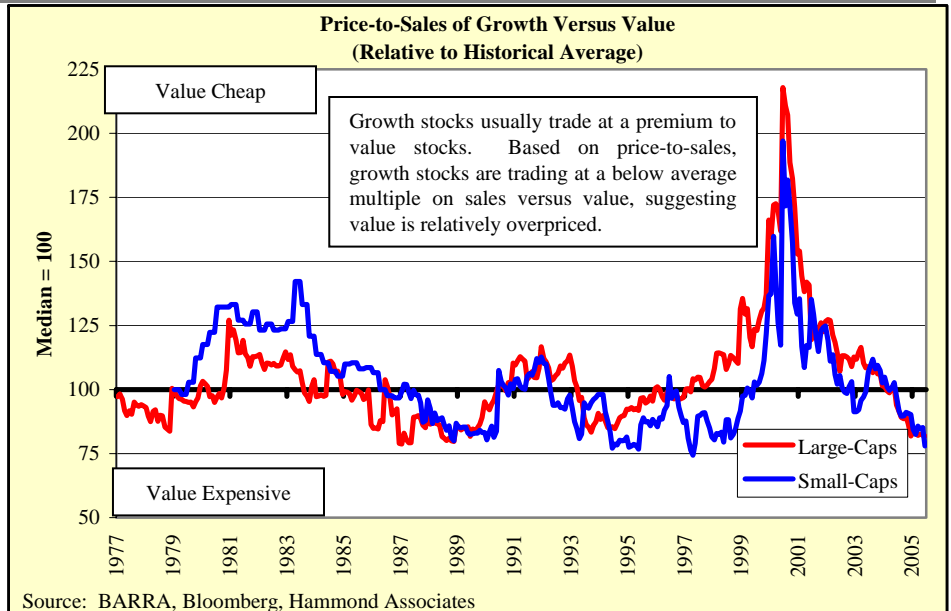
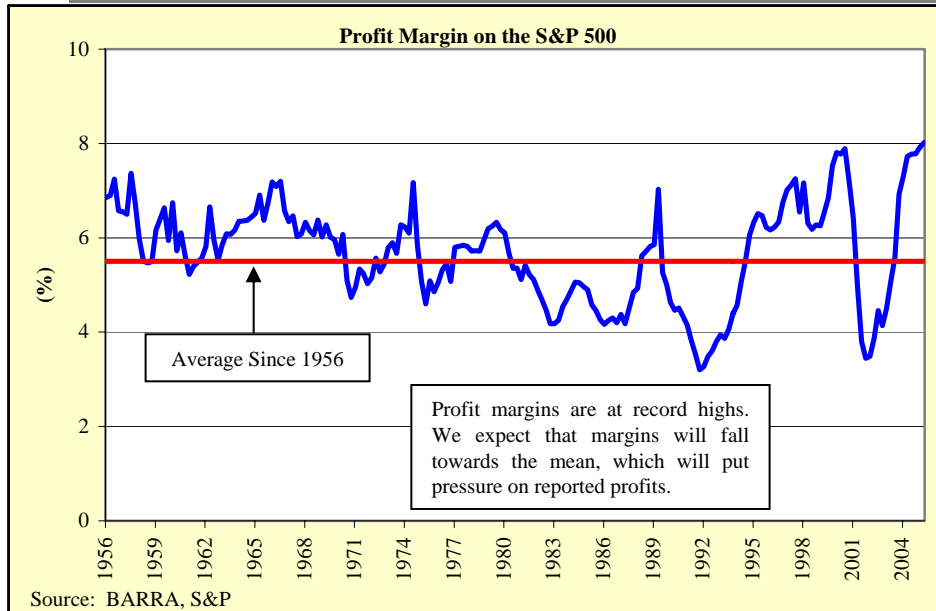
- The S&P 500 earned 1.4% during the second quarter. Year-to-date, the index is down 0.8%. Small-caps rebounded from a 5.3% loss in the first quarter, but remain 1.2% underwater year-to-date.
- Reported earnings continue to improve, but the pace of growth is slowing. The S&P 500's P/E ratio on trailing report earnings stands at 19. However, profits appear unsustainably high due to a cyclical peak in profit margins. Based on normalized earnings, the index is trading at a P/E of 24. This implies a real expected return of 4.2% (1/24), provided that valuations stay the same.
- The low level of real interest rates is supportive of higher stock valuations. If real interest rates stay at their current level (1.7% on long-term TIPS) and investors are satisfied with a 2.5% equity risk premium, equities appear fairly valued. If real interest rates were to rise, stocks would come under renewed valuation pressures.
- Within the US market, there are no obvious bargains. As a result of their outperformance in recent years, small-cap stocks appear overvalued relative to large-caps. Value stocks appear richly priced relative to growth stocks.

Long-Term TIPS Yield (%)	Price Change Needed for S&P 500 to Reach Fair Value					
	Required Equity Risk Premium Over TIPS (%)					
	1.5	2.0	2.5	3.0	3.5	4.0
1.5	38.9	19.0	4.2	(7.4)	(16.7)	(24.2)
1.7	30.2	12.6	(0.8)	(11.3)	(19.9)	(26.9)
2.0	19.0	4.2	(7.4)	(16.7)	(24.2)	(30.6)
2.5	4.2	(7.4)	(16.7)	(24.2)	(30.6)	(35.9)
3.0	(7.4)	(16.7)	(24.2)	(30.6)	(35.9)	(40.5)
3.5	(16.7)	(24.2)	(30.6)	(35.9)	(40.5)	(44.4)

Based on a 2.5% required equity risk premium, the S&P 500 is essentially fairly valued if real interest rates stay at current levels. However, the S&P is priced to provide a real return of only 4.2%, or 6.7% nominal.

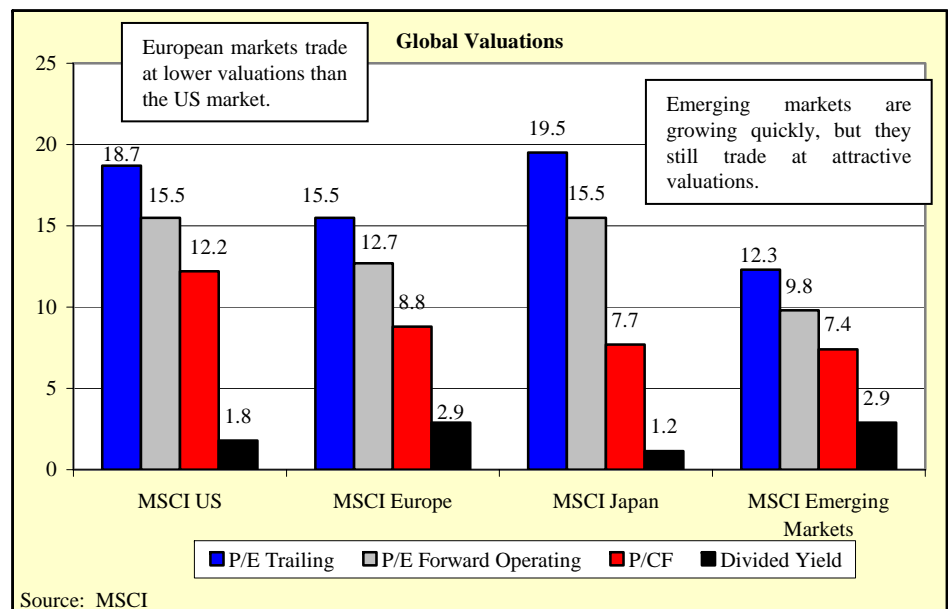
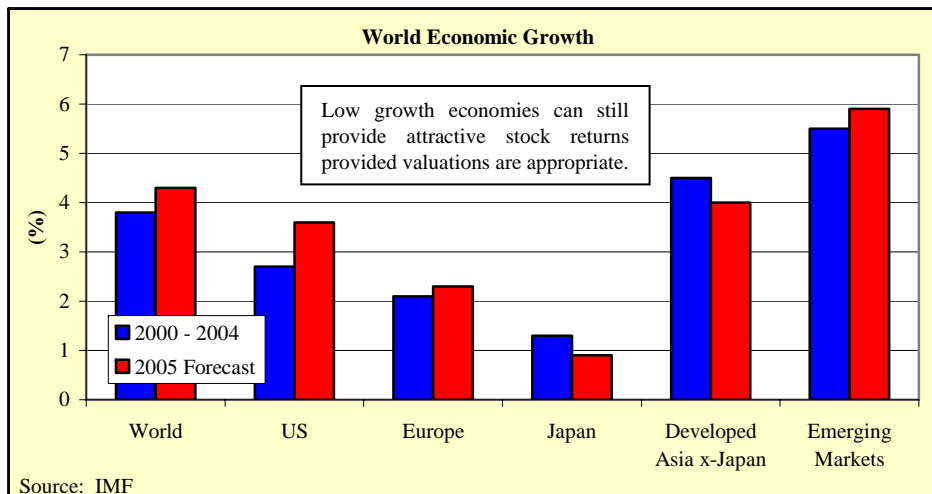
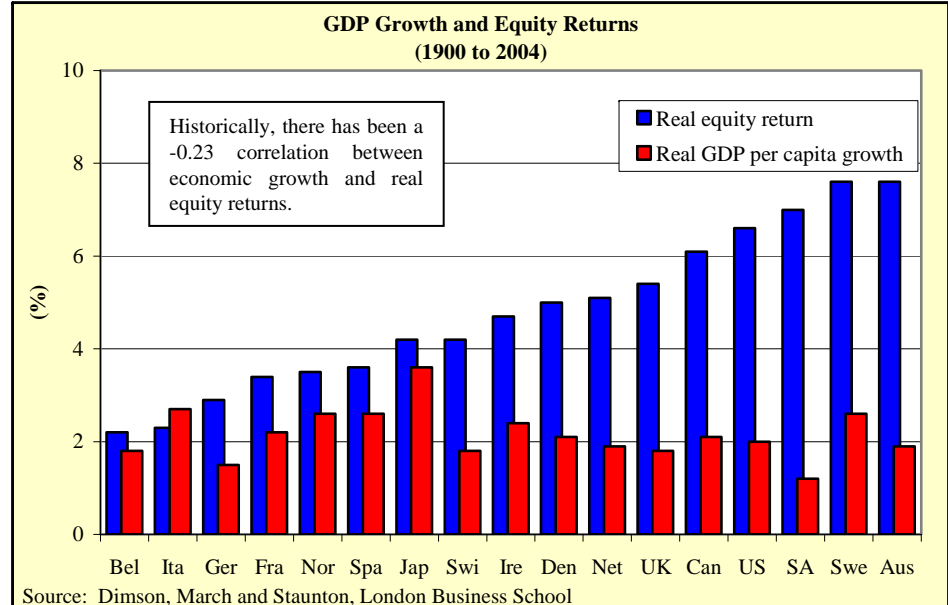


# US Equities Posted Modest Gains During the Quarter (cont.)



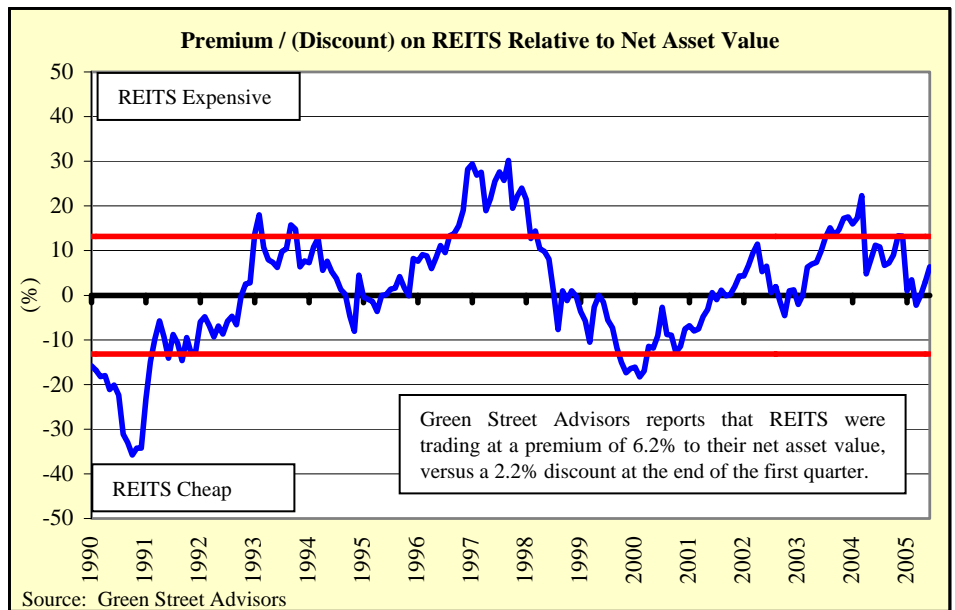
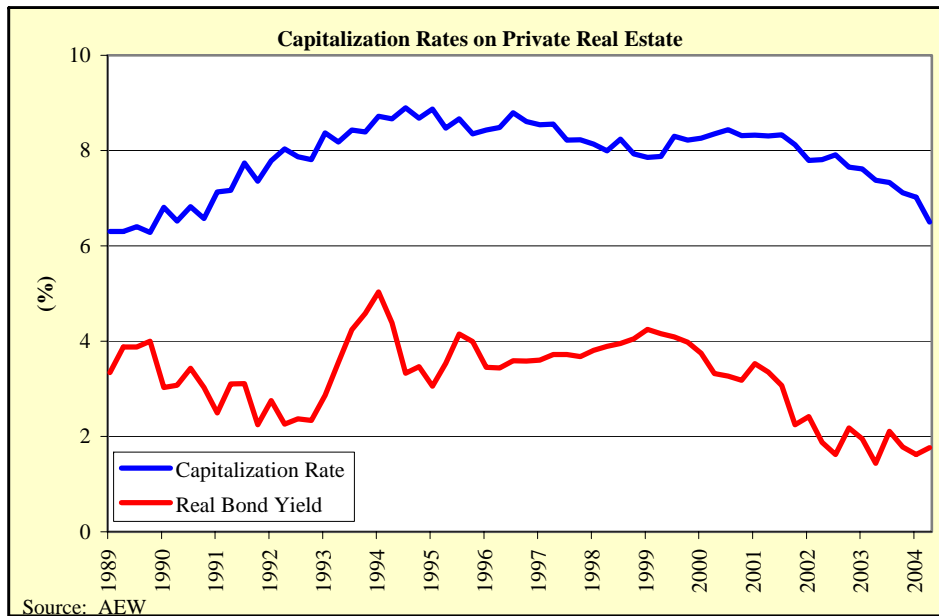
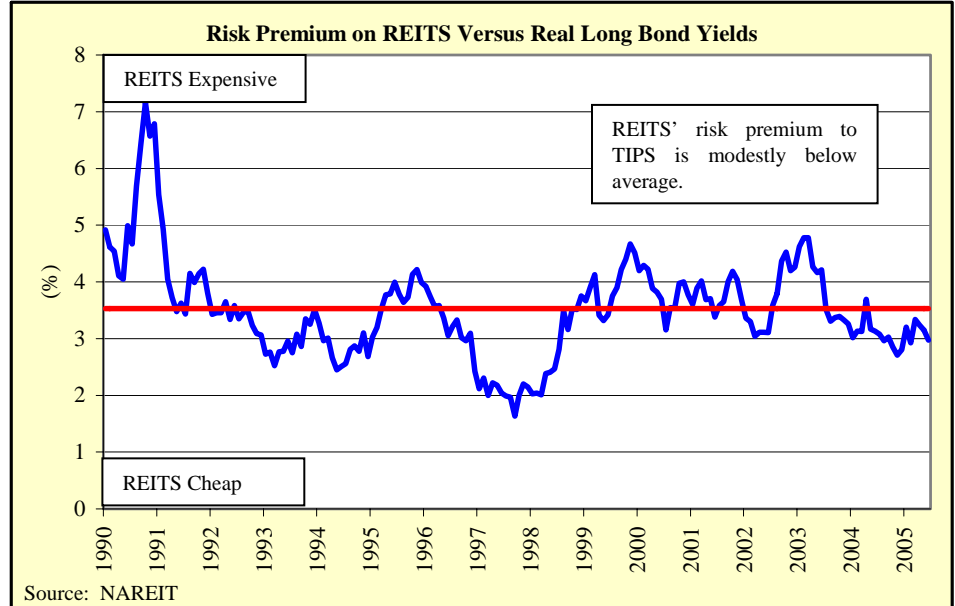
# Does High Economic Growth Lead to High Stock Returns?

- Elroy Dimson, Paul March, and Mike Staunton of the London Business School (and authors of *Triumph of the Optimists*) recently published research that disputes the conventional wisdom that high economic growth leads to high stock returns. They studied economic growth and equity returns between 1900 to 2004 for 17 countries and found that there was a perverse relationship—lower growth countries tended to experience higher stock returns.
- From a theoretical standpoint, high expected economic growth alone should not mean high expected stock returns. The cost of equity capital (and by extension, the expected return on stocks) in countries expected to experience high growth should only be higher than the norm if the growth is expected to be accompanied by higher risk.
- The authors believe that there may be a value effect—investors are overly optimistic about stock markets in high growth countries, as they have been with high growth stocks.
- Valuation, not economic growth, will likely be the primary driver of stock returns in global markets.



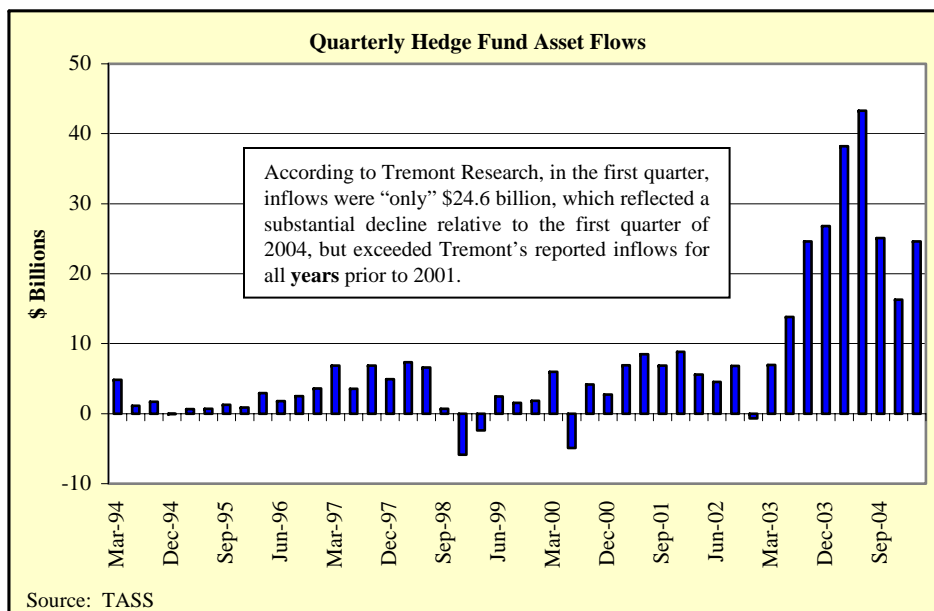
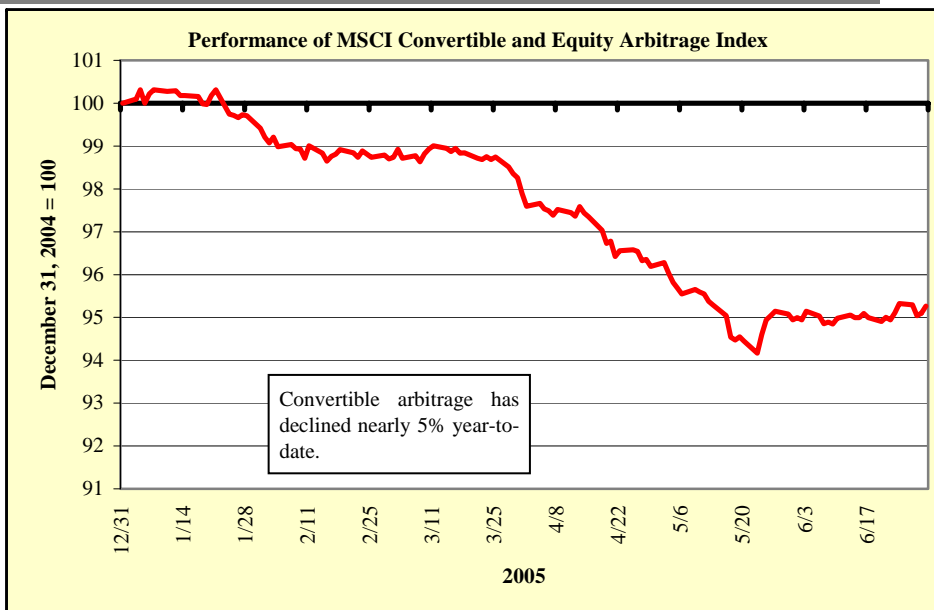
# REITS Enjoy Benefits of Lower Rates

- REITS jumped 15.2% during the second quarter, apparently benefiting from lower interest rates. The dividend yield on the index dropped from 5.2% to 4.6% during the quarter.
- REITS are pricey, but they still appear to offer reasonable value on a relative basis. Their dividend yield exceeds the real yield on long-term TIPS by 2.9%. This is below the historical average (since 1990) of 3.5%, but it exceeds the 2.5% risk premium we estimate for the S&P 500. A reversal in interest rates represents a risk for REITS. For instance, they tumbled 15% in April 2004 when the 10-year bond yield increased 67 bps.
- Capitalization rates (net operating income as a percentage of value) for private real estate have fallen below 7%. Considering the level of real interest rates, current cap rates appear reasonable. A concern is that net operating income is still falling.



# An Exciting Quarter for Hedge Funds

- Hedge funds generated slightly positive returns during the second quarter, with the average fund of funds gaining 0.3%, according to HFR. While the return appears mundane, there was no shortage of excitement in generating it.
- It seems that redemption-forced selling continued in convertible arbitrage through April, as the HFR Convertible Arbitrage index fell 2.7% for the month. Then things got really exciting. During the first week of May, GM was downgraded to junk status by Standard & Poor's, while financier Kirk Kerkorian launched an offer to purchase nearly 5% of GM stock. The downgrade sent GM debt, including convertible bonds, lower, while Kerkorian's announcement shot GM's stock 18% higher on May 4. As a result, convertible arbitrage managers lost money on both sides of the trade.
- The ramifications of General Motors' problems were felt beyond convertible arbitrage strategies. The breadth of GM-related trades was surprising. Capital structure arbs, who were long GM debt and short the equity, felt similar pain as the convert arbs. CDO (collateralized debt obligations) tranche trading was also adversely impacted by the GM downgrade. A flight to quality ensued and credit spreads widened, which hurt credit-sensitive strategies. Then the rumor mill started, as a number of high profile hedge funds were supposedly "on the ropes."
- Most strategies rebounded in June, with the average fund of funds posting a 1.4% gain. Not surprisingly, we received indications that second quarter market turmoil slowed asset flows into hedge funds. However, with a few more months of nice returns, like those in June, the money will flow again.
- Hedge funds are not an asset class, rather a heterogeneous collection of active managers implementing different strategies and accepting different risks. As such, a bubble bursting scenario is unlikely. However, the GM-related tremors in the hedge fund space are illustrative—there are pockets of common risk exposures among hedge fund managers that may be prone to correction, perhaps severely.





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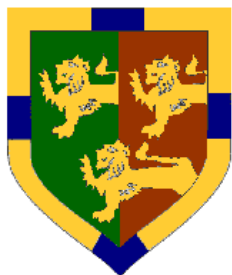
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