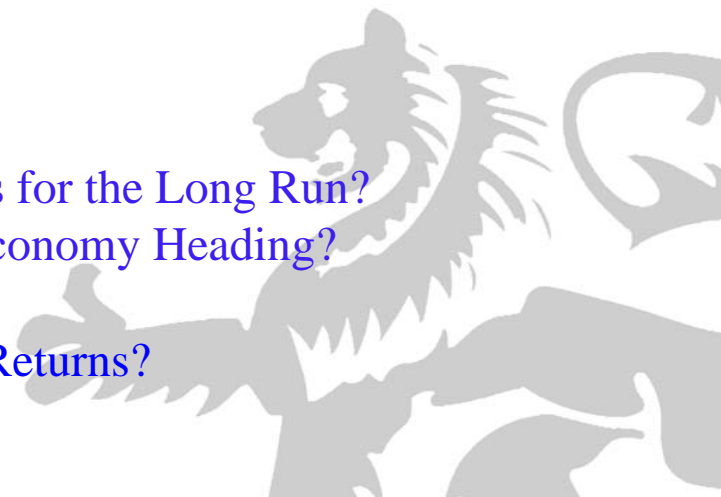

RESEARCH REPORT

Third Quarter 2003

In this report . . .

- ✓ Investing in a Low Return Environment—Alternatives for the Long Run?
- ✓ GDP Growing, Employment Falling—Where is the Economy Heading?
- ✓ Reflation on the Horizon?
- ✓ Hedge Funds: Does Past Performance Predict Future Returns?



Investing in a Low Return Environment

Portfolio Strategy

September 2003

Institutional investors face a particularly difficult environment at this time. Despite the bear market, valuations on domestic equities are well above the historical norm, which suggests that equities are likely to provide below average returns in the future. In our view, the S&P 500 is likely to earn real returns in the low single digits over the next ten years. And a resurgence of the bear market remains

a significant risk. Fixed income also looks uninspiring with *real* yields on intermediate-term Treasuries of only 2%, far less than the spending rate for most institutions. If US equities and fixed income, which make up the bulk of most institutions' portfolios, are priced to provide low returns, how should institutions react? The painful truth is that it will be necessary to learn to live with smaller returns. The 9% annual *real* return achieved by the median National Association of College and University Business Officers (NACUBO) reporting institution during the 1980s and 1990s, which allowed them to generously grow their endowments net of spending, will likely be next to impossible to achieve over the next 10 years. In fact, without the assistance of gifts, we believe that the median NACUBO institution will fail to maintain purchasing power after spending over the next decade.

That said, we still believe it is possible to create a portfolio that will provide sufficient return to overcome a typical spending rate, while modestly growing the endowment in real terms. It's just going to be much harder than it was in the past and will require the de-emphasis of US equities and greater exposure to alternative asset classes. In this paper, we outline our current Model Portfolio for institutions with a long time horizon.

Today's Environment

Investors in the 1980s and 1990s were extremely fortunate. In the early 1980s, equities and bonds were both exceptionally cheap. The P/E ratio on the S&P 500 was less than 10 and long-term Treasury bond yields reached 15%. While inflation was rampant and investors feared that Corporate America had lost its competitiveness, with the benefit of hindsight, it was a very attractive time to invest in both US stocks and bonds. Investors earned healthy returns in the 1980s as equity prices rose to fair value and even better returns in the 1990s as valuations reached the stratosphere.

Inflation-Adjusted Returns

Note: In most of this report we refer to real, net of inflation, returns. To convert to nominal returns add 2 to 3 percentage points.

Fast forward 23 years—because of the returns earned during the 1980s and 1990s, we are now at the opposite end of the continuum. The long-bond has a nominal yield of 4.9%, about one-third the level in 1981. With the Fed's preference to err on the side of inflation over deflation and the looming budget deficits over the foreseeable future, inflation may again rear its head, making the real return available from traditional bonds uncertain. TIPS are attractively priced versus traditional bonds, providing a real yield of 2.0% over 10 years, but that figure represents less than half of what is required to overcome spending for most institutions.

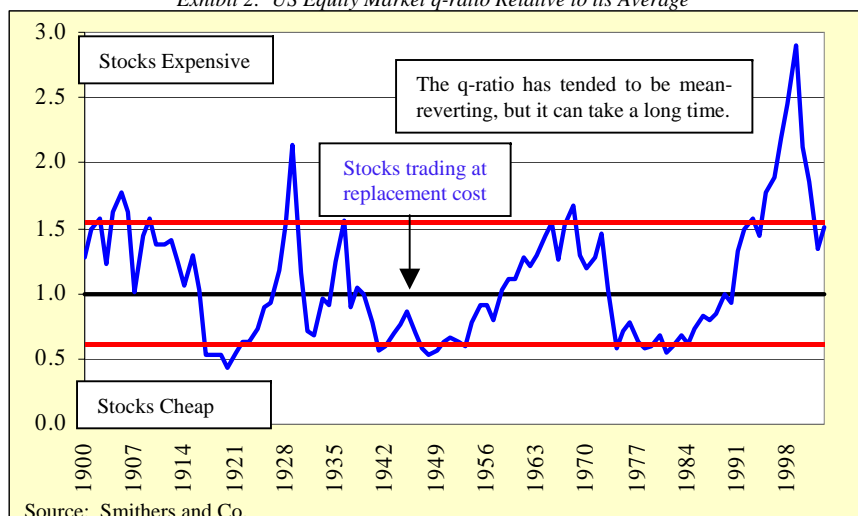
Moreover, despite the carnage over the past three years, domestic equities, which are the foundation of most institutions' portfolios, remain expensive. Based on our calculation of normalized earnings, the P/E ratio on the S&P 500 is 26, four times the 1981 level and 60% greater than the historical average of 16. While the fair value P/E is open to debate, one thing is difficult to dispute—high P/E ratios portend lower future returns. Assuming no change in the P/E ratio, we estimate that stocks will provide a *real* return of about 4% to 5% over the next 10 years, about a two percentage point return premium over bonds.

Exhibit 1: Normalized P/E Ratio History for the S&P 500



Another measure of the market, the q -ratio, also suggests that the market is richly priced. James Tobin first introduced the idea of q , which posited that the total market capitalization of stocks should trade at the replacement cost of the assets less liabilities. When stocks trade significantly above replacement cost, business investment should rise, leading to competition and lower profit margins, driving stock prices down. When stocks are trading below replacement cost, there is little incentive for businesses to invest, so competition declines and profit margins increase, resulting in higher stock prices.

Exhibit 2: US Equity Market q -ratio Relative to its Average



In their book *Valuing Wall Street*, Andrew Smithers and Stephen Wright argued that the q -ratio is the most meaningful market valuation metric, because there is a strong tendency for the q -ratio to mean revert. Based on Smithers' and Wright's measure of the q -ratio (the market value of stocks divided by the replacement cost of the underlying assets less liabilities), it stood at 1.5 as of September 2003 (down from 2.8 at the March 2000 peak). Interestingly, this is where the q -ratio stood just before the 1973-74 bear market. At a q -ratio of 1.5, stocks need to fall by a third to reach fair value of 1.0. We examined the predictive ability of the q -ratio on returns over the past century, and found it to be fairly reliable. As shown in Exhibit 3, a q -ratio of 1.5 has been associated with future real equity returns of 1.3% on average over the following ten years and 2.8% over twenty years.

Exhibit 3: Predictive Ability of the q -ratio (1900-2002)

q -ratio at Beginning of Period		Subsequent Annualized Real Return (%)			
		3 Years	5 Years	10 Years	20 Years
>1.55	Average	0.6	0.9	1.1	4.0
	Range	-28.4 to 23.7	-11.1 to 19.4	-3.1 to 4.2	1.8 to 10.4
1.20 to 1.55	Average	1.6	2.4	1.3	2.8
	Range	-29.4 to 25.9	-13.3 to 23.8	-4.5 to 8.5	0.3 to 11.8
0.85 to 1.20	Average	6.0	4.3	6.2	6.5
	Range	-8.1 to 26.9	-14.8 to 12.4	-1.4 to 15.6	1.5 to 13.0
0.60 to 0.85	Average	11.7	12.1	9.3	8.6
	Range	-2.0 to 30.7	-1.7 to 25.4	-0.1 to 17.0	2.6 to 13.4
<0.6	Average	12.1	11.7	11.5	8.7
	Range	-2.6 to 27.1	2.4 to 22.4	2.9 to 18.2	4.5 to 15.4

Source: Smithers and Co., Hammond Associates

Lofty valuation levels suggest that a second shoe of the bear market may yet fall. In his book *Irrational Exuberance*, Robert Shiller observed that when bubbles burst, markets typically do not simply fall back to fair value. Rather, they overshoot significantly on the downside as investors become disenchanted, by extrapolating past losses into the future. The P/E ratio on the S&P 500 at the trough of bear markets has averaged 11. Following the 1973-74 bear market, the P/E ratio on the index was only 8, one-half the historical average and 70% below today's levels. The q -ratio following the 1973-74 bear market was 0.6, 60% lower than today's level. While we consider it unlikely that equities will fall to those depths, the possibility must be acknowledged.

Exhibit 4 shows the impact of declining valuations on 10-year real returns. If the P/E ratio falls back to the historical average of 16, stocks will struggle to keep pace with inflation, let alone provide sufficient growth to overcome spending. If the P/E ratio declines to 20 over the next 10 years, stocks are likely to earn around 2% in real terms, no better than the real yield on 10-year inflation-protected bonds. If we have a repeat of the 1973-74 experience when the P/E ratio fell to single digits, equities will fall by a third in real terms over the next 10 years.

Exhibit 4: Expected Annualized Real Return on the S&P 500 Over Next 10 Years

Annualized GDP Growth	Normalized P/E Ratio at Year 10					
	10x	15x	20x	25x	30x	40x
2.0%	-4.7%	-1.1%	1.6%	3.7%	5.5%	8.4%
2.5%	-4.2%	-0.6%	2.1%	4.2%	6.0%	8.9%
3.0%	-3.7%	-0.1%	2.6%	4.8%	6.6%	9.5%
3.5%	-3.2%	0.4%	3.1%	5.3%	7.1%	10.0%
4.0%	-2.8%	0.9%	3.6%	5.8%	7.6%	10.6%

Source: Hammond Associates

Opportunities remain in public equity markets. International equities appear priced to provide more attractive returns than US equities due to valuation differences, particularly in emerging market countries. Unlike US equities, we expect that international equities will provide sufficient returns over the next 10 years to overcome spending and inflation. However, there remains risk in this view. International economies are in more fragile shape than the US economy. Furthermore, a significant contraction in domestic equity valuations would likely extend to international equities, although we would expect international stocks to better weather the storm. While international equities should have a significant role in portfolios, they alone will not fix the problems facing institutions today.

Portfolio Strategy

Given our somewhat bleak outlook for the two asset classes that make up the lion's share of most institutions' portfolios—US equities and fixed income—where do we go from here? To succeed in the coming decade, we believe it will be necessary to de-emphasize US equities and fixed income in favor of other asset classes that offer more bang-for-the-buck, such as international equities and alternative investments. This has been the trend for NACUBO reporting institutions with more than \$1 billion in assets. US equities make up only 33% of the average portfolio today, versus 43% in 1990. Fixed income has declined from 40% to 23% since 1990, while alternative investments have increased from 8% to 32%.

Exhibit 5 shows the asset allocation for the Hammond Associates Model Portfolio, along with our return expectations. For comparison purposes, we also show the asset allocation for the average NACUBO reporting institution and the average allocation for NACUBO-reporting institutions with more than \$1 billion in assets. Our Model Portfolio contains a 45% allocation to traditional equities (24% to US equities and 21% to international equities), 45% to alternative investments (15% real assets, 15% to private equity, and 15% to absolute return strategies) and 10% to fixed income.

We share many of the concerns that skeptics voice over alternatives. Indeed, we suspect that many investors will be disappointed with their alternative investment returns in the coming years. The wave of money flowing into the various alternative asset classes, coupled with exorbitant fees, will make navigating these waters treacherous. Therefore, alternative investments must be entered into with caution. In implementing an alternatives portfolio, manager selection is, of course, the key. Generally, investments off the beaten track may offer the best opportunities in the future.

Exhibit 5: Asset Allocation Comparison

	<i>Model Portfolio</i>	<i>NACUBO Average</i>	<i>NACUBO >\$1B</i>
Equities / Alternatives / Bonds	45/45/10	59/9/32	45/32/23
US Equity	24%	50%	33%
Intl Equity	21%	9%	12%
Total Equity	45%	59%	45%
Real Assets	15%	2%	6%
Private Equity	15%	2%	8%
Absolute Return	15%	5%	18%
Total Alternatives	45%	9%	32%
US Fixed Income	5%	26%	21%
US Inflation Protected Fixed	5%		
Intl Fixed Income		1%	
Cash		5%	2%
Total Fixed Income	10%	32%	23%
Total	100%	100%	100%
Return			
10-Yr Horizon Real Expected Return	5.7%	3.1%	4.2%
Long-Term Real Expected Return	7.1%	5.3%	6.0%
Standard Deviation (1 Yr.)	±13.2%	±11.3%	±11.1%
Sharpe Ratio (L/T Expectations)	0.39	0.29	0.36

Source: 2002 NACUBO Endowment Study, Hammond Associates

The long-term expected returns reflect our estimate of what asset classes should earn at equilibrium. However, as outlined in the previous section, we believe that US equities and bonds are currently priced above equilibrium. The 10-year expected returns in the table above represents our best estimate of returns over the next 10 years with the assumption that valuations (and interest rates) revert to their equilibrium values. For instance, they assume that the normalized P/E ratio on the S&P 500 declines from the current level of 26 to 18. Based on that assumption, equities would provide a real return of roughly 1.5% over the next ten years. Since internationals appear to be fairly valued at today's levels, we assume that they will provide their long-term expected return (5.2% real for international large).

We estimate that our Model Portfolio will earn a real return of 5.7% over the next 10 years (not including any manager alpha, except for absolute return strategies which are primarily alpha). While the expected return is modest in the context of historical returns, we believe it will be sufficient to maintain purchasing power for the typical institution with a 5% spending rate. In addition, we believe it will perform significantly better than the NACUBO average asset allocation from the 2002 survey. Indeed, we estimate that the NACUBO average portfolio will earn a real return of 3.1%, which will be insufficient to maintain purchasing power given a 5% spending rate, without additions to capital from new gifts.

In the following sections, each of the asset classes in our Model Portfolio is discussed in detail.

Traditional Equities

Our traditional equity portfolio, which comprises 45% of the model portfolio, will provide exposure to the global economy. While it appears that equities, particularly in the US, are priced to provide low returns in the future, it is still reasonable to expect that stocks will outperform bonds over a long horizon. Nearly half of the allocation to traditional equities is in foreign stocks, which roughly corresponds to their weighting in the global equity market. Financial theory suggests that the most “efficient” equity portfolio is one that is weighted the same way as the global equity market. The relative valuations of international equities make this approach particularly attractive today.

US Equities - We suggest dividing the US equity allocation into three parts—(1) 50% to an all-cap index fund (Wilshire 5000 or Russell 3000), (2) 25% to a large/mid-cap value manager, (3) and 25% to a small-cap value manager. The purpose of the all-cap index allocation is to provide core exposure to the US equity market. The other two mandates provide additional (over weighted) exposure to small-capitalization stocks and value stocks, both of which have been shown to generate excess returns to the broad equity market. This model differs from our past practice of recommending five distinct asset classes within domestic equities. With less than a quarter of the portfolio in domestic equities, we do not believe cutting the pie into many smaller slices will materially enhance the portfolio.

International Equities - We divide the international allocation into three parts—international large/mid-cap stocks, international small-cap stocks, and international emerging market stocks. As in the US equity allocation, we suggest overweighting small-cap stocks and value stocks within developed markets to provide additional return. The portfolio’s substantial allocation to emerging market stocks will provide direct exposure to the world’s fastest growing economies, which should translate into a significant return premium over developed market stocks.

Alternative Investments

Our allocation to alternative investments is split evenly among three broad categories—(1) real assets, (2) absolute return strategies, and (3) private equity.

Real Assets - The primary reason for including real assets in the portfolio is for diversification. These investments are expected to help the portfolio most during periods of inflation. Over the long-term, we expect real assets to provide *real* returns in the mid-single digits. Within the real asset portfolio, we anticipate an allocation to real estate, along with commodity-based investments in oil, natural gas, and timberland.

Absolute Return Strategies - The goal of the absolute return strategies allocation (or hedge funds) is to provide equity-like returns over the long term, while moderating portfolio volatility by gaining exposure to risk uncorrelated with public equity markets. In this area, it is especially important to be cautious. We suspect that the return on the average fund of hedge funds will equal that of cash in the coming years, after the double layer of fees. With nearly \$600 billion in assets (and, perhaps, three to five times more when leverage is considered), there are now more hedge funds attempting to pick the pockets of long-only investors, such that hedge funds are increasingly competing against themselves. How can the hedge fund industry as a whole continue to provide substantial alpha when they have an ever-increasing share of the market?

While the entire hedge fund industry may post disappointing returns in the coming years, we still believe that certain managers can succeed in this environment. It will take far more selectivity and diligence to create a winning strategy in the future. With respect to strategies, the broad goal will be to seek out managers who can provide alpha with minimal net exposure to the equity market. In particular, we prefer multi-strategy managers who have the flexibility to exploit inefficiencies wherever they arise in global markets.

Private Equity - Private equity should serve to enhance portfolio returns. By sacrificing liquidity, investors should receive additional return over public equity markets. If equity markets struggle over the coming years, as we expect they might, private equity investments will have significant headwind. Nevertheless, returns in the low to mid-teens should be achievable in a prudently constructed private equity portfolio.

We expect that the private equity portfolio will have a core exposure to buyouts and venture capital, with opportunistic investments in special situations and other investments as opportunities arise. Of course, an issue with private equity for those institutions that have not yet started a program will be the implementation period. It will likely take five to seven years to get a private equity program fully off the ground and perhaps a decade to realize significant benefits.

Fixed Income

The 10% allocation to fixed income should serve to modestly reduce portfolio volatility. We recommend splitting the fixed income allocation between traditional US Treasury Bonds and Treasury Inflation-Protected Securities (TIPS). The nominal bonds will act as a hedge against deflation, while the TIPS allocation will provide inflation protection. Note that with such a small allocation to fixed income, we recommend taking no credit risk. There will be ample direct and indirect credit exposure through the private equity and absolute return allocations.

Maverick Risk

One topic we feel it is incumbent upon us to deal with is maverick risk. John Maynard Keynes best described this risk—“Worldly wisdom teaches us that it is better to fail conventionally than succeed unconventionally.” Maverick risk is, perhaps, one of the more important risk factors to consider, but is very difficult to quantify. While we consultants can preach the long-term and the irrelevance of peer comparisons, in a world where the administration must answer to the investment committee, the investment committee to the board, and the board to a variety of outside influences including donors, politicians, and the news media, the implications of being different, and worse, different and wrong, must be considered.

Our Model Portfolio is very different from the *average* NACUBO portfolio, containing half the allocation to US equities, twice the allocation to international equities, one-third the allocation to fixed income, and four times more in alternatives. While institutions with more than \$1 billion have allocations to alternatives similar to those that we propose, the average institution has less than 10% in alternative asset classes. Boards that implement the Model Portfolio will be subject to criticism if US equities go on another run (whether rational or not) as in the late 1990s.

To measure one aspect of maverick risk, we show in Exhibit 6 the peer ranking expectation distribution for the Model Portfolio. Over the long-term, we believe that our Model Portfolio will outperform the NACUBO average portfolio by 1.8 percentage points, with an annual tracking error of 5.6%. Based on the historical spread between the top quartile and median, we estimate that our Model Portfolio has a two-in-three chance of landing in the top quartile over any 10-year period. However, there is a fairly high likelihood of landing in the third or fourth quartile over shorter periods. Indeed, over any three-year period there is nearly a one-in-three chance of landing in the bottom half and a one-in-six chance of landing in the bottom quartile. Over the course of a decade, it is likely that there will be at least one three-year period of bottom quartile performance. Even well constructed portfolios for the long-term can have short-term periods of underperformance.

Exhibit 6: Peer Ranking Expectations for Model Portfolio

	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Expected L/T Excess Return to NACUBO Average			1.8%	
Tracking Error to NACUBO Average			±5.6%	
First Quartile	48%	56%	59%	67%
Second Quartile	15%	15%	17%	17%
Third Quartile	13%	13%	12%	10%
Fourth Quartile	24%	16%	12%	6%

One way to overcome maverick risk is to implement the Model Portfolio over the course of several years, which will allow a board and other stakeholders to become more comfortable with the direction. (This is necessarily the case for implementing private equity and other illiquid asset classes, due to the lag between commitments and capital calls.) While ramping in may not be optimal from an investment standpoint, it may foster buy-in, which will help keep the plan on track during the inevitable periods of disappointing performance relative to peers.

Conclusion

Over the next decade, we suspect that it will be difficult for the typical institution to maintain purchasing power on their portfolios due to today’s high prices of financial assets. In this paper, we have outlined our Model Portfolio. The portfolio is certainly not ideal for all institutions, but for those that are willing to accept the maverick risk that it entails, we think that it will increase the likelihood of success.

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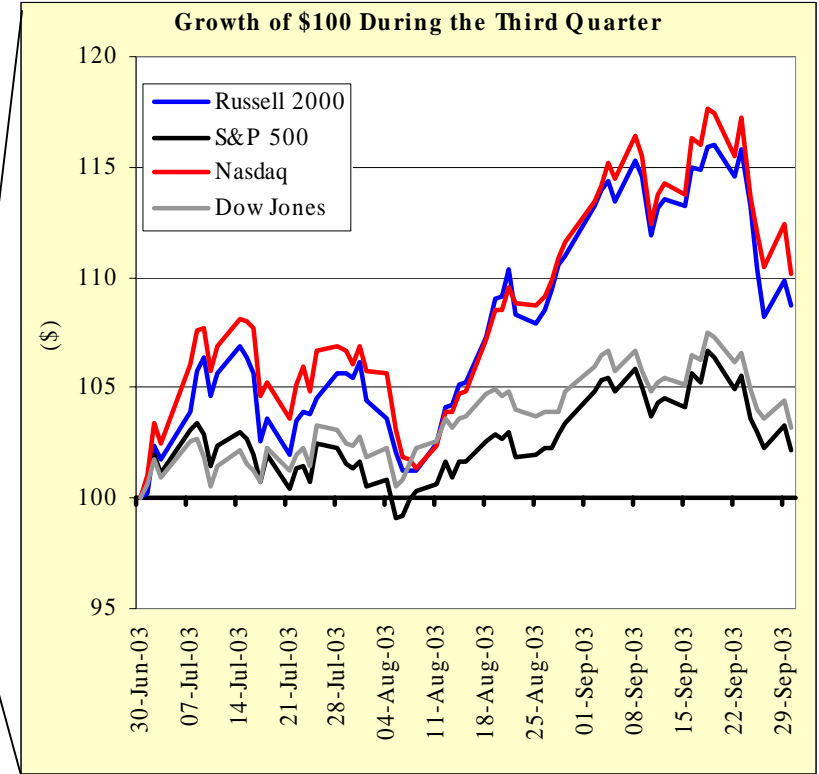
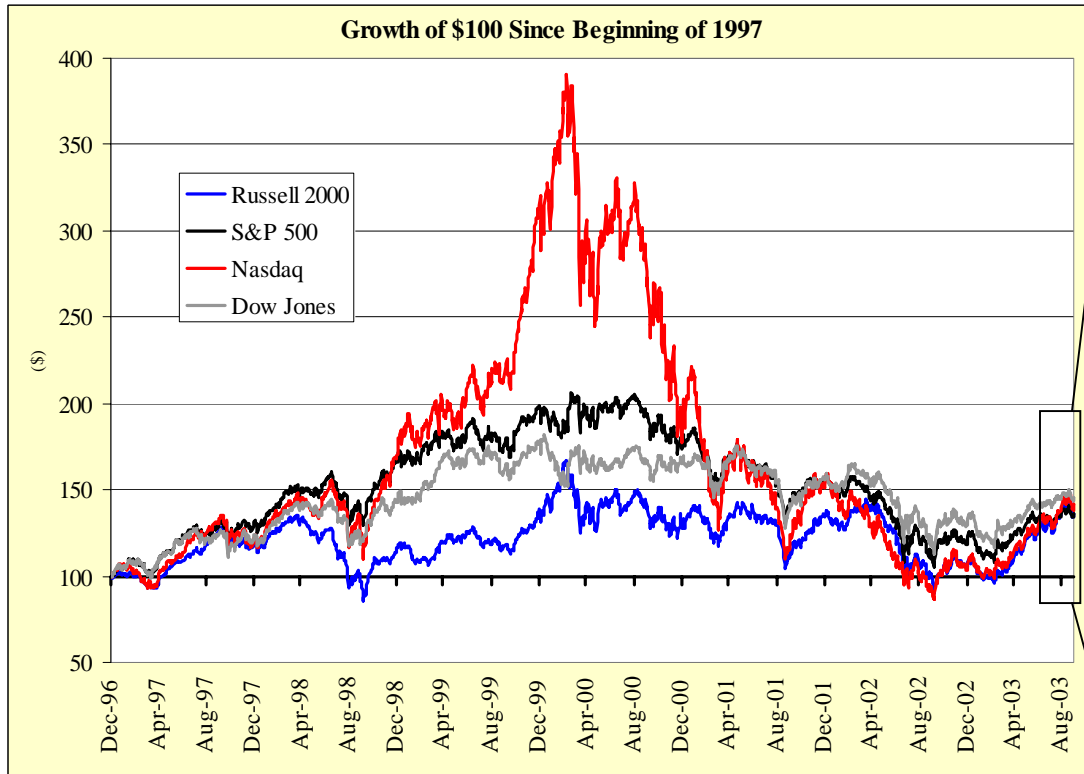
We are interested in your thoughts, questions, and feedback about this article. Please feel free to e-mail Anthony with your comments at abrown@haifc.com. Next quarter’s research report will contain a Q&A session with Anthony based on submitted questions. We look forward to hearing from you.

*Dennis Hammond, JD, LLM
Managing Director*

Third Quarter Executive Summary

- Equity markets worldwide experienced gains during the third quarter. The S&P 500 gained 2.6% for the quarter-ended September 30, 2003. Other equity asset classes performed much better. US small-cap stocks (Russell 2000) jumped 9.1%, international large stocks (MSCI EAFE) gained 8.1%, and emerging market stocks (MSCI EMF Index) surged 14.2%.
- The US economy performed unexpectedly well in the second quarter, growing at a 3.3% annualized rate. Robust economic growth is expected through the remainder of the year. Nevertheless, US households have borrowed too much and saved too little. Eventually, households will have to repair their balance sheets, which could lead to below-average economic growth over the coming years.
- The dollar continued to lose ground during the third quarter. The greenback shed 7.0% against the Japanese yen and 1.3% against the euro. There is little reason to expect the dollar to reverse its trajectory anytime soon. The US current account deficit is unsustainable. Given the state of the global economy, it appears very unlikely that it can be corrected on the export side in light of current exchange rates; therefore, the dollar must continue to decline to reduce imports and increase exports.
- The third quarter was tumultuous for bondholders. Bond yields began rising sharply during the last two weeks of the second quarter and continued through the end of July. From June 13 to July 31, the yield on the 10-year bond surged from 3.1% to 4.5% and from 4.2% to 5.4% for the last issued 30-year bond. In September, interest rates began to decline, taking the yield on the 10-year and 30-year bonds down to 3.9% and 4.8% respectively, which are near beginning of the year levels.
- Inflation remains very tame in the US. Excluding food and energy prices, the CPI increased by only 1.3% over the twelve months ended August, the lowest level since the Johnson administration. While the possibility of deflation still cannot be dismissed, it appears that inflation represents a greater threat in the future. The Fed has a preference to err on the side of inflation over deflation as a result of Japan's experience. Higher inflation will also help to relieve the US debt burden (households, government, and corporate) by allowing debtors to pay their loans back with cheaper dollars. Inflation-protected bonds appear safer than traditional bonds in today's environment.
- With a normalized P/E ratio of 26, the S&P 500 is priced to provide a real return of 4.0% in the future (assuming 5% sales growth over the next 12 months), which reflects a 1.5 percentage point premium to TIPS. International equities are trading at more reasonable valuations. Coupled with our expectation that the dollar will continue to weaken, we expect the recent outperformance by international equities to continue.
- REITS have been one of the best performing asset classes during the bear market. Nevertheless, the combination of shaky real estate fundamentals and REITS' premium to NAV makes us very cautious on them. It may be prudent to diversify into other areas of real assets that have a higher probability of benefiting from higher inflation and a weaker dollar, such as oil & gas and other commodity-based investments.
- We conducted a study to determine whether a fund's returns over one five year period (7/93 to 6/98) explains the return over the next five year period (7/98 to 6/03). The results of this simple study suggest that managers' past performance, taken by itself, is not a good predictor of future returns. Qualitative factors are of primary importance when selecting hedge fund managers.

Small-Caps and Tech Led the Way in the Third Quarter



	Sep. 30 2003 Close	Date Level First Reached	Date Peak	Date Trough	Peak-to- Trough	% Below Peak	% Above Trough	YTD 2003	3Q 2003
Dow	9275	7/16/98	11723	1/14/2000	7286	(37.8)	27.3	11.2	3.2
Nasdaq	1787	3/16/98	5049	3/10/2000	1114	(77.9)	60.4	33.8	10.1
S&P 500	996	2/2/98	1527	3/24/2000	777	(49.1)	28.2	13.2	2.2
Russell 2000	488	4/20/98	606	3/9/2000	327	(46.0)	49.1	27.3	8.8
MSCI EAFE	1103	7/95	1774	1/3/2000	824	(53.6)	34.0	15.8	7.6

All returns exclude dividends.

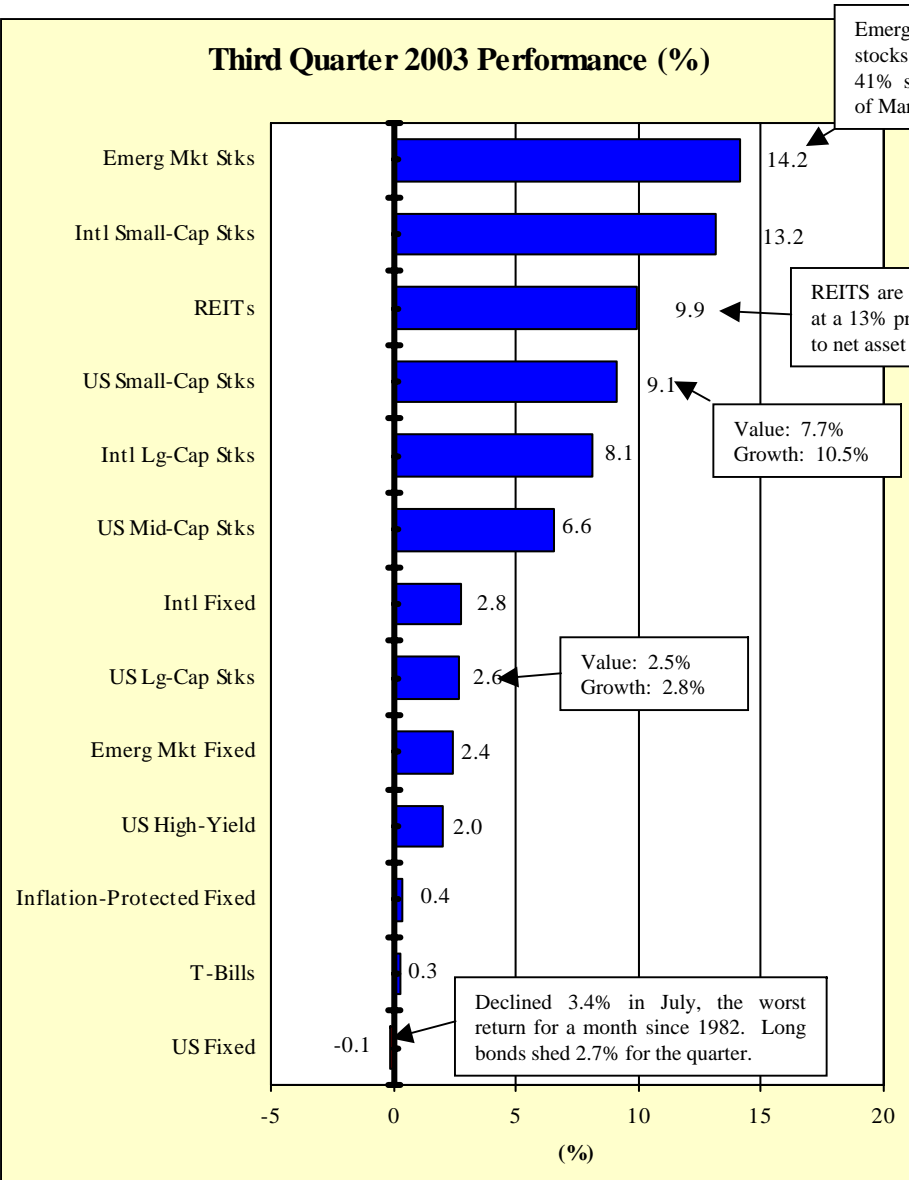
Despite the 2003 gains, domestic equity indices are at levels first reached in 1998.

Domestic equities are nearly a year away from their lows.

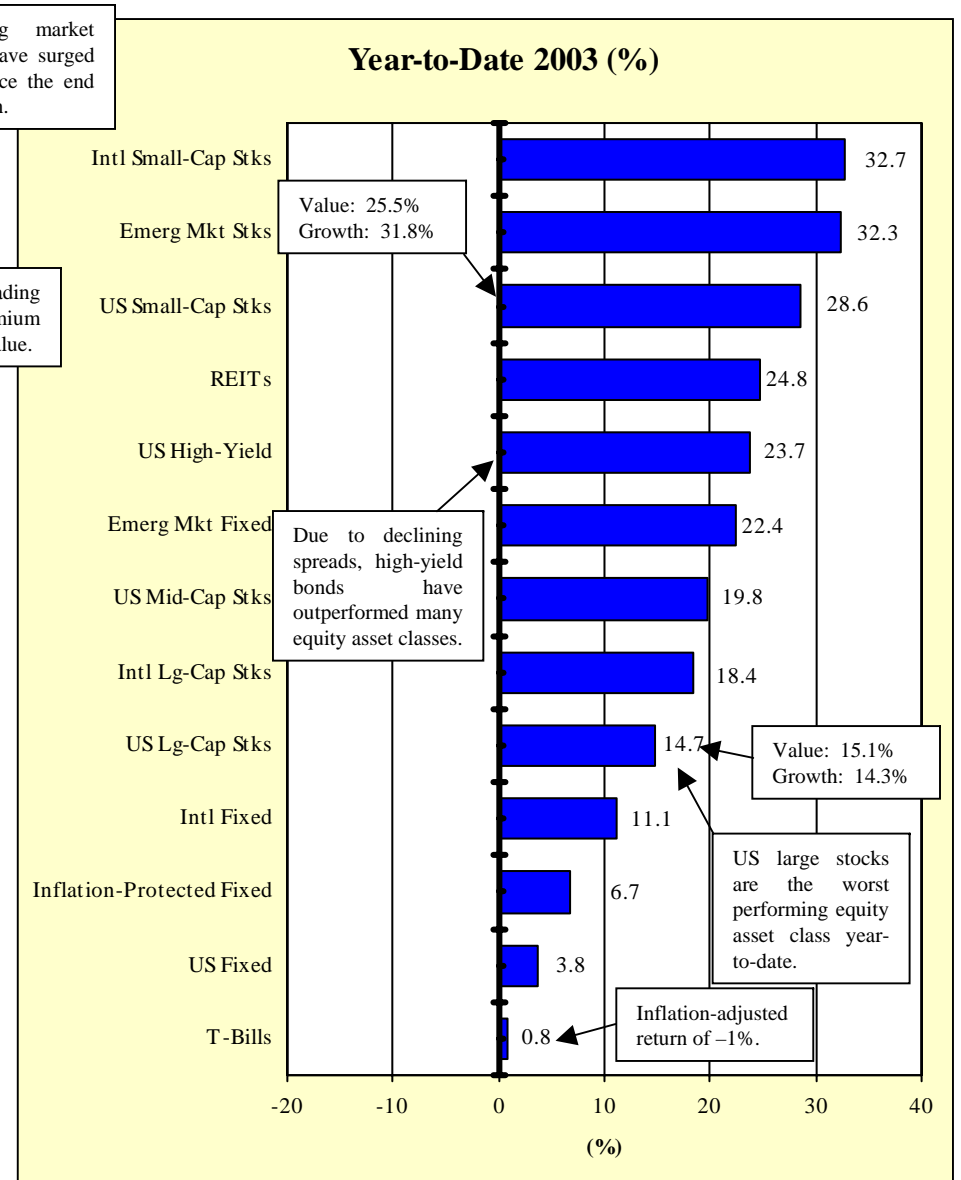
Small-caps and tech stocks have rebounded the most.

Risk Has Been Rewarded in 2003

Third Quarter 2003 Performance (%)



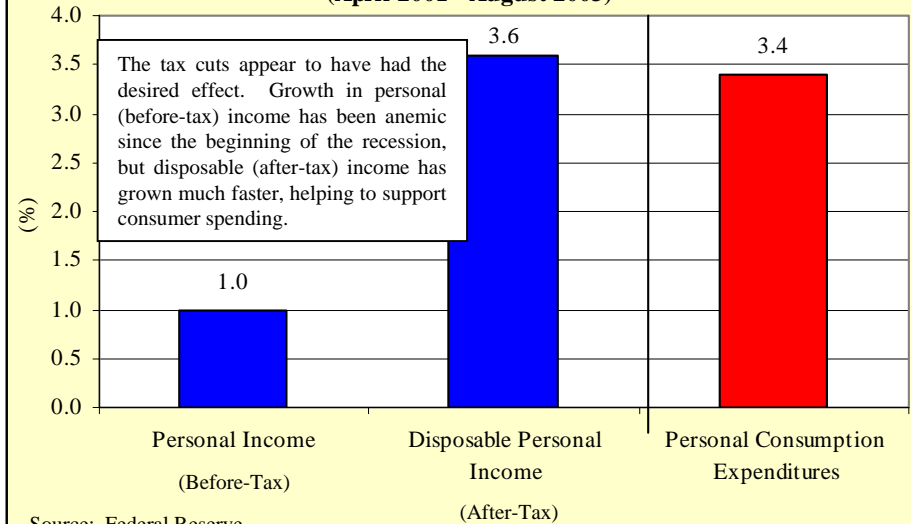
Year-to-Date 2003 (%)



GDP Growing, Employment Falling

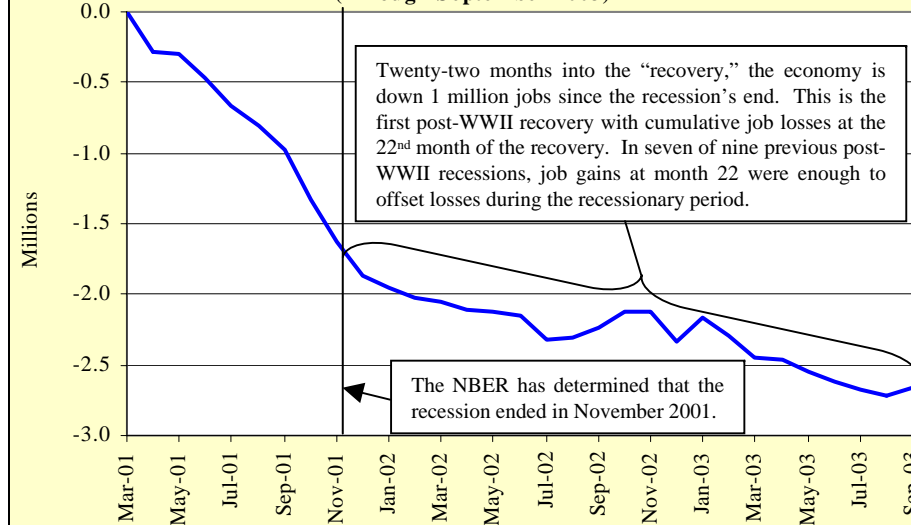
- The economy performed unexpectedly well in the second quarter, growing at a 3.3% annualized rate. Consumer spending continued to hold firm and government spending increased 8.5% due to higher defense expenditures. Encouragingly, business investment rose 7.3%, which was the strongest quarter in three years. Robust economic growth is expected through the remainder of this year. Economists expect growth in the second half of 2003 to top 4%. Will this growth carry into 2004?
- A modest rebound in business investment should continue into 2004 since investment as a percentage of the economy remains well below average. Federal government spending should be a strong contributor to growth in 2004. The CBO estimates that government spending will increase by 6% during FY 2004.
- With a two-thirds share of economic activity, the key to the sustainability of the recovery remains the US consumer, and this is the root of our concern. Two sources of fuel during the recession are just about depleted—the housing market and tax cuts. With mortgage interest rates well above their summer lows, the housing market should begin to slow and refinancings decline. Additional tax cuts appear unlikely given that the US budget deficit is expected to reach \$480 billion in FY 2004.
- The wildcard for 2004 will be the jobs market. The economy shed 41,000 additional jobs during the third quarter, increasing the total job losses since the beginning of the recession to 2.6 million. Without improvements in the job market, it will be difficult for consumers to maintain spending.
- US households have borrowed too much and have saved too little. Eventually, households will have to put their balance sheets in order, which could lead to below average economic growth over the coming years.

**Annualized Real Personal Income and Expenditures Growth
(April 2001 - August 2003)**



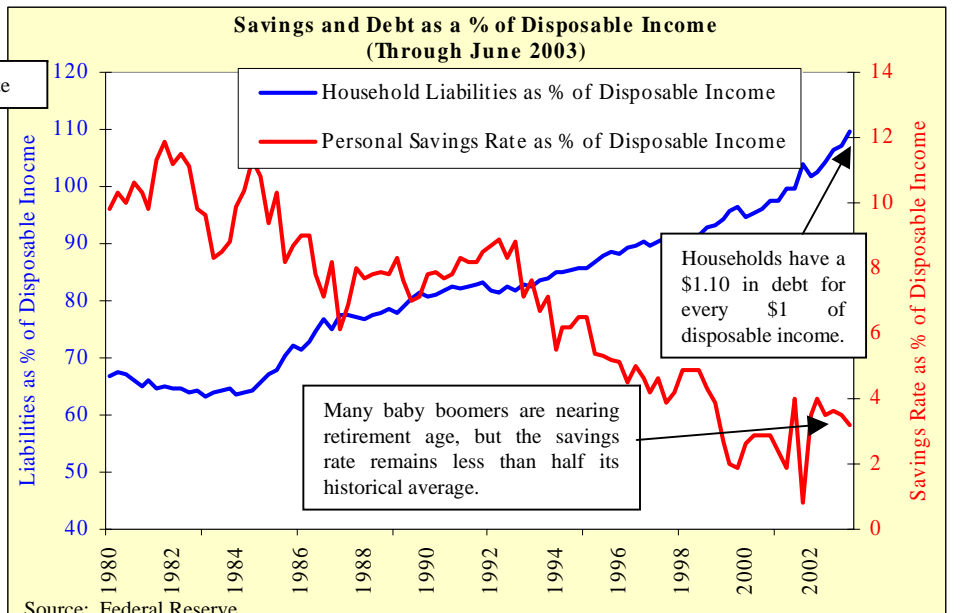
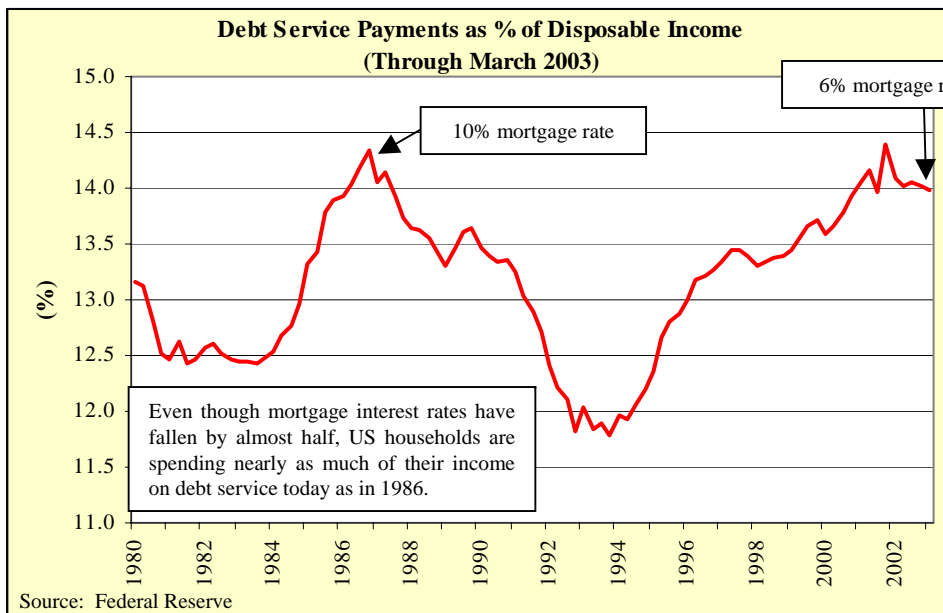
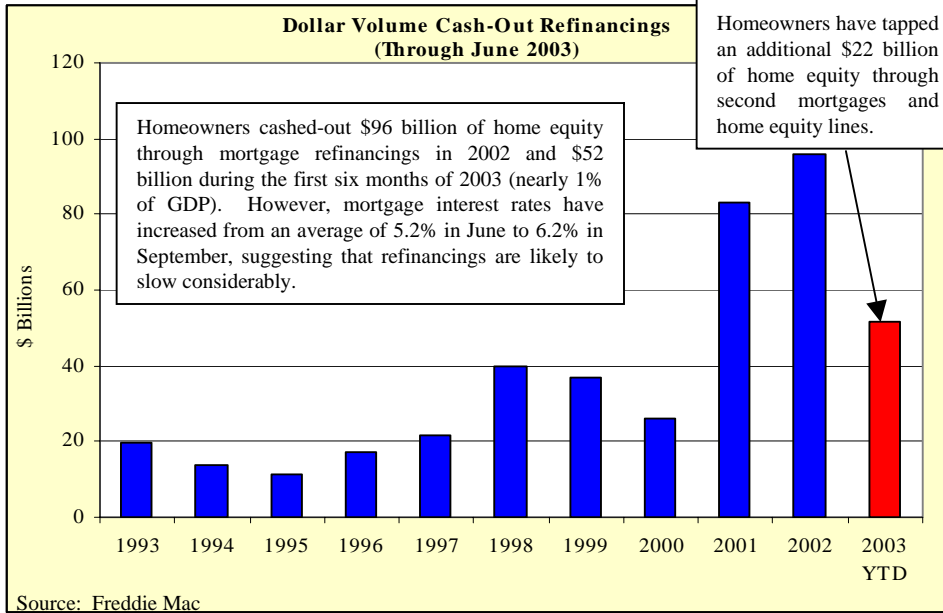
Source: Federal Reserve

**Change in Non-Farm Employment Since March 2001
(Through September 2003)**



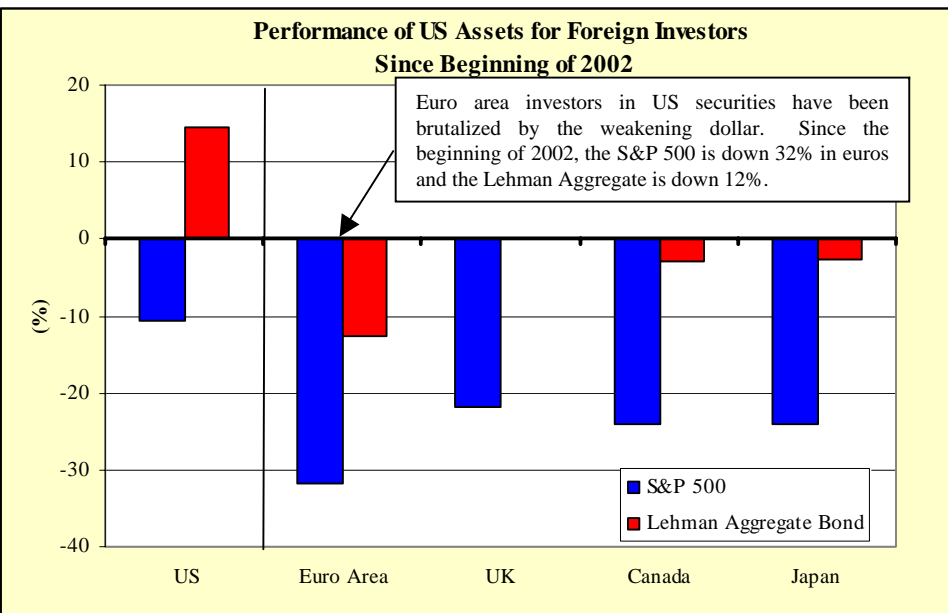
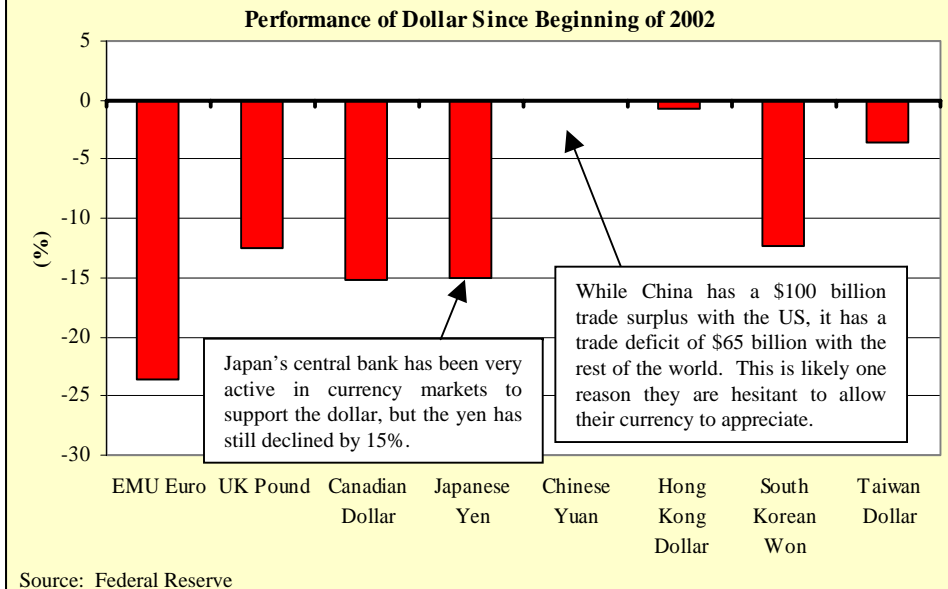
Source: Department of Labor

GDP Growing, Employment Falling (cont.)



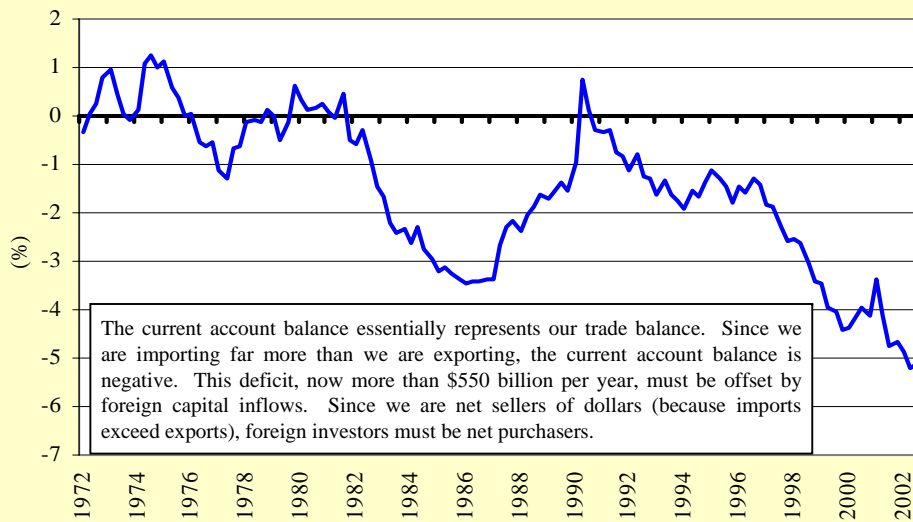
The Greenback's Fall Continues

- The dollar continued to lose ground during the third quarter. The greenback shed 7.0% against the Japanese yen and 1.3% against the euro. Since the beginning of 2002, the dollar has declined by 15.0% against the yen and 23.6% against the euro.
- There is little reason to expect the dollar to reverse its trajectory anytime soon. The US must still attract more than \$550 billion a year, or 5% of GDP, to offset the current account deficit, which amounts to roughly 80% of world savings. How much longer will foreign investors be willing to finance US consumption?
- Asian central banks continue to be significant purchasers of US assets to keep their currencies from appreciating against the dollar. Asian central banks hold currency reserves of \$1.6 trillion, much of which are held in dollars. A weak dollar makes their goods more expensive to US consumers. Therefore, a weak dollar could impair their export-dependent economies. (According to *The Economist*, exports make up 64% of Asia ex-Japan's GDP.)
- The US current account deficit is unsustainable. Given the state of the global economy, it appears very unlikely that the deficit can be corrected on the export side in light of current exchange rates; therefore, the dollar must continue to decline to reduce imports (by making them more expensive) and increase exports (by making them more competitive in foreign markets).
- Asian central banks must play their part by allowing their currencies to *gradually* increase against the dollar instead of forcing the euro to bear the burden. Otherwise, there could be more serious consequences for the global economy down the road.



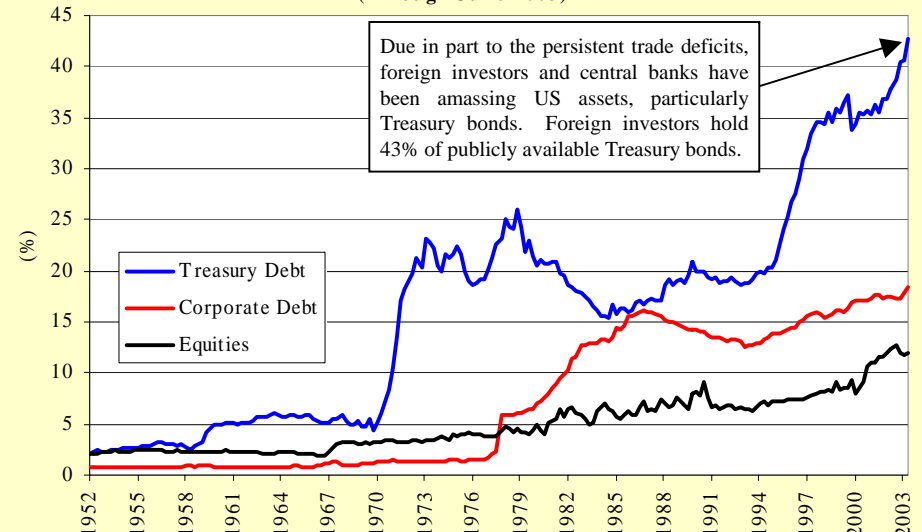
The Greenback's Fall Continues (cont.)

**Current Account Balance as a % of GDP
(Through June 2003)**



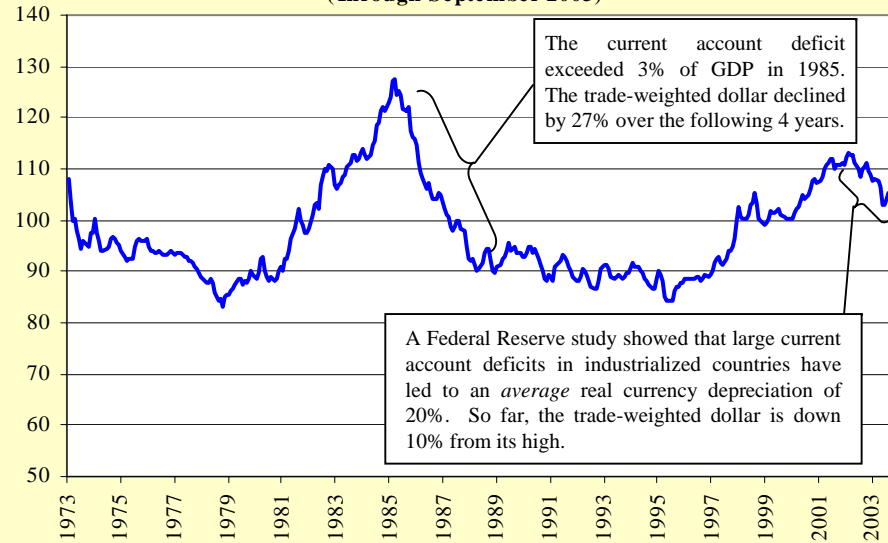
Source: Federal Reserve

**Foreign Holdings of US Assets
(Through June 2003)**



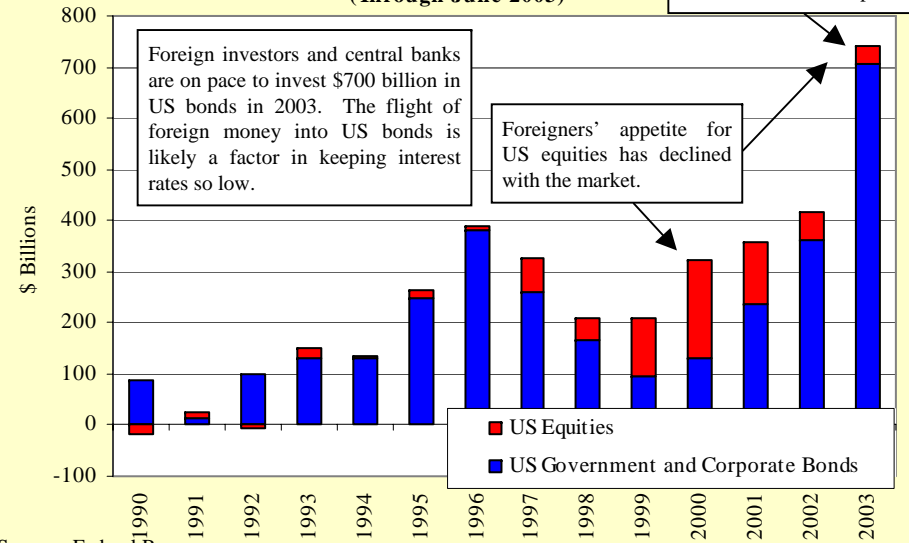
Source: Federal Reserve

**Real Trade-Weighted Dollar (Broad)
(Through September 2003)**



Source: Federal Reserve

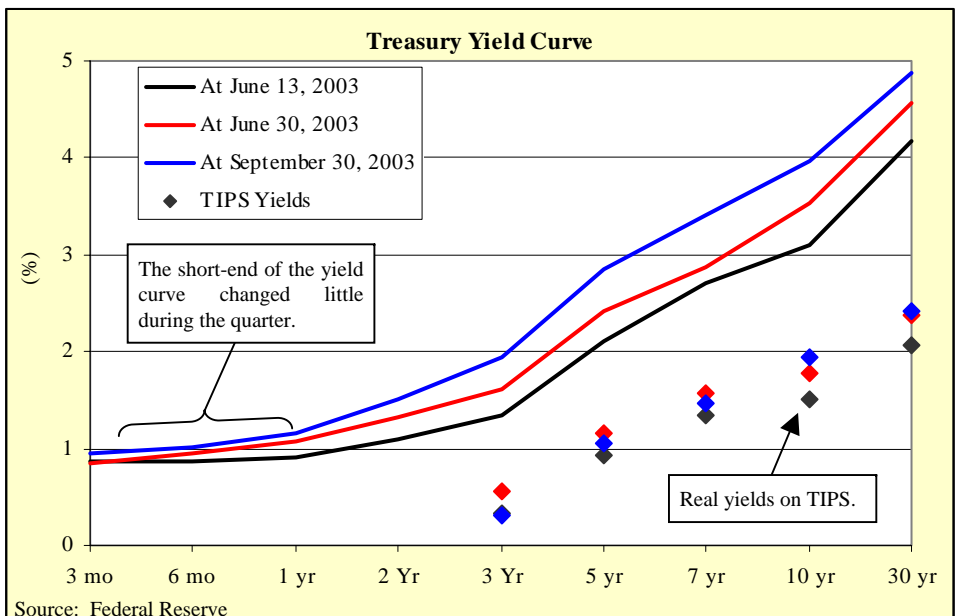
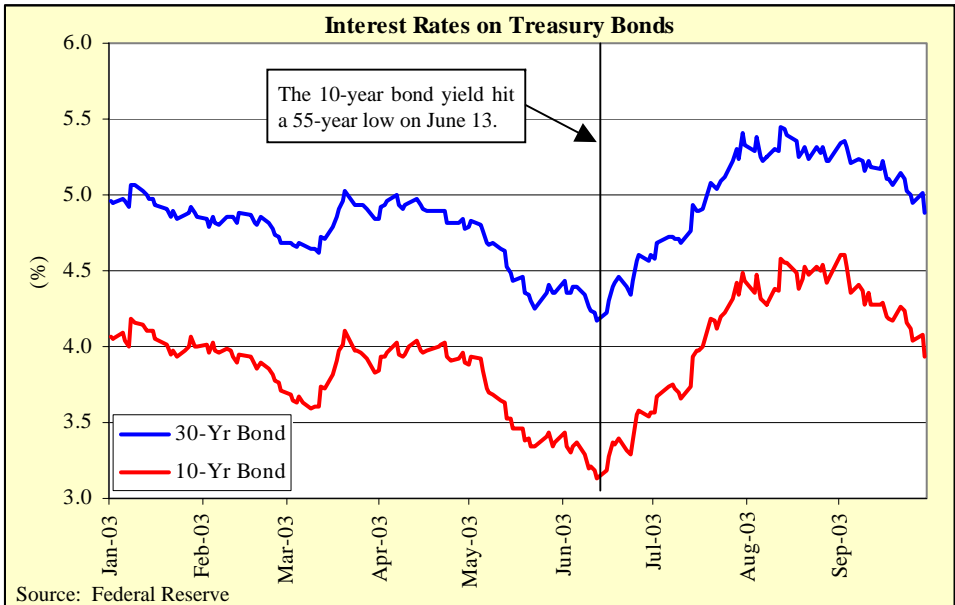
**Foreign Inflows into US Markets
(Through June 2003)**



Source: Federal Reserve

Rocky Quarter for Fixed Income

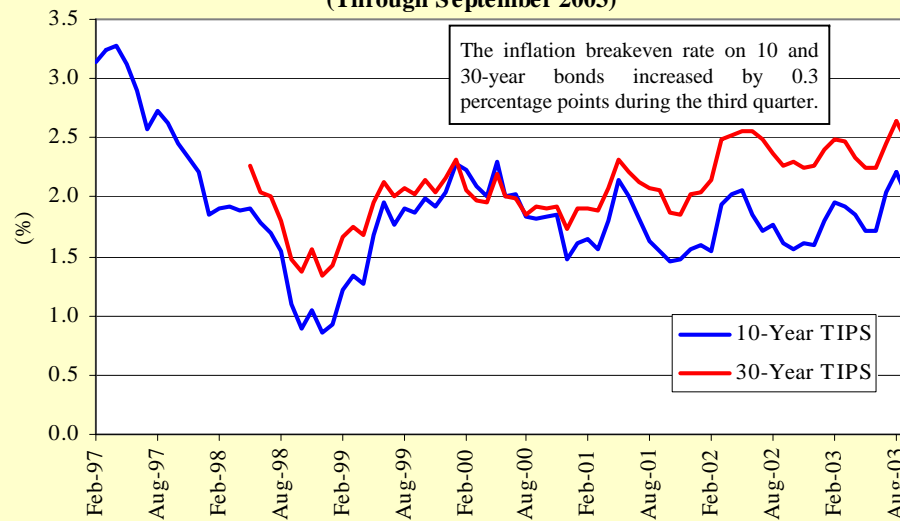
- The third quarter was tumultuous for bondholders. Bond yields began rising sharply during the last two weeks of the second quarter and continued through the end of July. From June 13 to July 31, the yield on the 10-year bond surged from 3.1% to 4.5%, and from 4.2% to 5.4% for the last issued 30-year bond.
- Potential explanations for the sharp increase in rates are numerous. Some cite confusing signals from Greenspan and the Fed during June and July as the cause of the increase in rates. The Federal budget deficit may have also been a factor. The Administration announced in early July that the deficit would top \$450 billion in FY 2003. Higher inflation expectations also appeared to be a factor, as the inflation breakeven rate on TIPS increased during this period. Finally, it may be that yields dropped to irrationally low levels in June.
- The increase in rates may have been exacerbated by a technical correction. As interest rates rose, the duration of mortgages increased because prepayments decline during periods of rising interest rates. Holders of mortgages (such as Freddie Mac, Fannie Mae, and hedge funds) had to then decrease the duration of their portfolio to keep their assets and liabilities balanced by selling bonds (causing yields to rise), which may have led to a vicious cycle.
- In September, interest rates began to decline, taking the yield on the 10-year and 30-year bonds down to 3.9% and 4.8% respectively, which are near beginning of the year levels.
- Greenspan has signaled that the Fed does not intend to increase overnight rates over the near-term. The Fed Funds Futures market predicts that the Fed will leave the overnight lending rate at 1% until at least next summer.



Reflation on the Horizon?

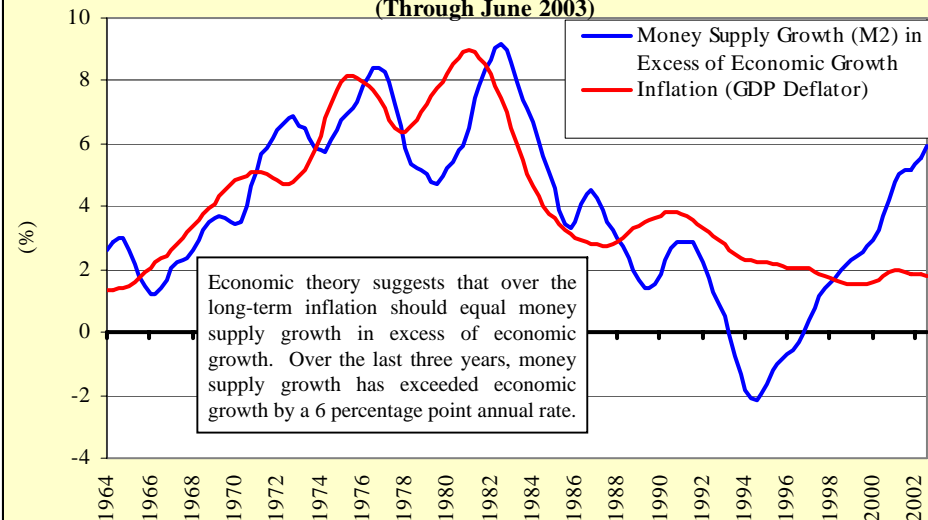
- Inflation remains very tame in the US. The CPI has increased by only 2.2% over the last twelve months (ended August). Excluding food and energy prices, the CPI increased by only 1.3% over twelve months, the lowest levels since the Johnson administration.
- The bond market expects inflation to remain mild. The inflation breakeven rate on 10-year and 30-year inflation-protected bonds stands at only 2.0% and 2.5%, respectively.
- While the possibility of deflation still cannot be dismissed, it appears that inflation represents a greater threat in the future.
- The Fed has a preference to err on the side of inflation over deflation as a result of Japan's experience. Higher inflation will also help to relieve the US debt burden (households, government, and corporate) by allowing debtors to pay their loans back with cheaper dollars. The Fed's accommodative policy has led to rapid expansion in the money supply, which tends to be inflationary. The money supply has grown at an 8% annual rate over the last 3 years.
- Continued dollar depreciation will also increase inflationary pressures. A weak dollar causes the prices of imports to rise. Imports account for 16% of GDP. Commodity prices have risen (due in part to the weak dollar)—the CRB Commodity index is up 28% since the beginning of 2002.
- Inflation-protected bonds appear safer than traditional bonds. Given the inflation breakeven rate, investors in traditional bonds are not being paid well for accepting inflation risk. Institutions whose liabilities are sensitive to inflation, in particular, should favor inflation-protected bonds.

**Inflation Breakeven Rate on TIPS
(Through September 2003)**



Source: Federal Reserve

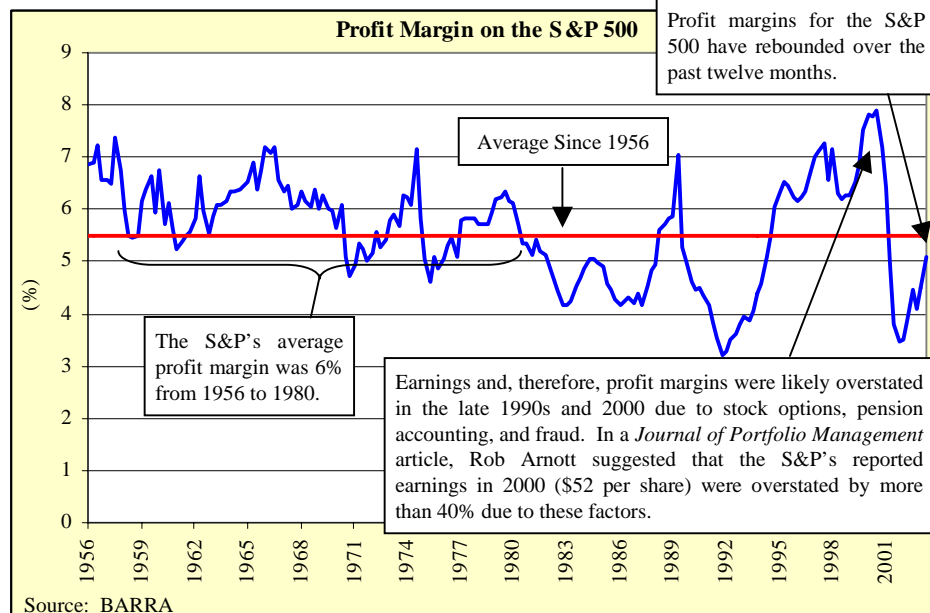
**Three-Year Average Money Supply Growth and Inflation
(Through June 2003)**



Source: Federal Reserve

Are Stocks Overvalued?

- The question of whether stocks are overvalued comes down to their earnings power and the required risk premium over bonds. We estimate the S&P 500's earnings power by applying the index's historical average profit margin of 5.5% to sales. Based on this measure, the index's P/E ratio is currently 26, versus 27 based on reported earnings.
- With a normalized P/E ratio of 26, the S&P 500 is priced to provide a real return of 4.0% in the future (assuming 5% sales growth over the next 12 months), which reflects a 1.5 percentage point premium to TIPS.
- If the current estimate for forward operating earnings represents the S&P's true earnings power (P/E of 17), then stocks are priced to provide about a 3 percentage point risk premium to TIPS. As has been pointed out in this report before, we do not believe that operating earnings are an appropriate estimate of the S&P's earnings power.

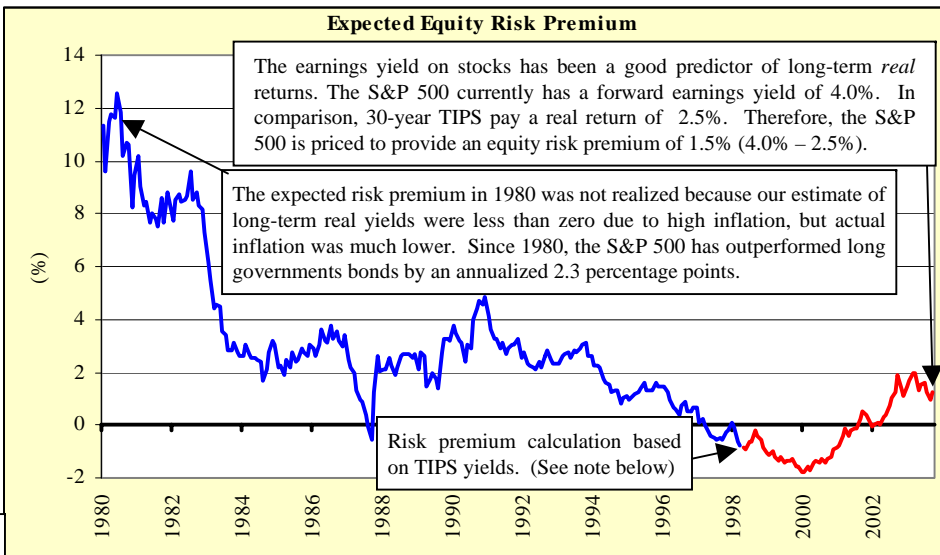


Price Change Required for the S&P 500 to Reach Fair Value						
Expected Long-Term Profit Margin	Required Equity Risk Premium					
	1.0%	1.5%	2.0%	2.5%	3.0%	4.0%
4.5%	(8%)	(19%)	(28%)	(35%)	(41%)	(50%)
5.0%	3%	(10%)	(20%)	(28%)	(35%)	(45%)
5.5%	13%	(1%)	(12%)	(21%)	(28%)	(39%)
6.0%	23%	8%	(4%)	(14%)	(22%)	(34%)
7.0%	44%	26%	12%	0%	(9%)	(23%)
8.0%	64%	43%	27%	15%	4%	(12%)

Average profit margin since 1956.

Profit margin based on forward estimated operating earnings.

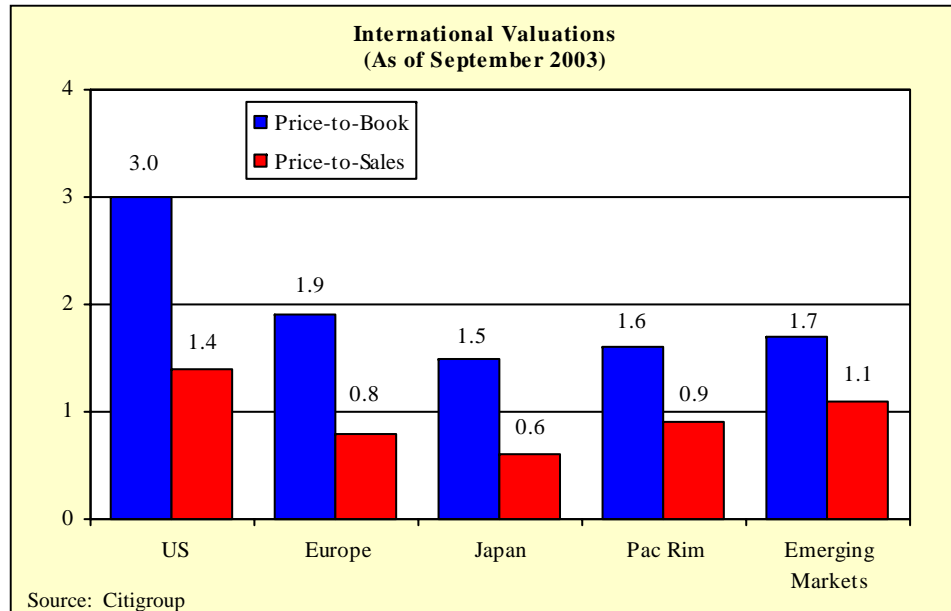
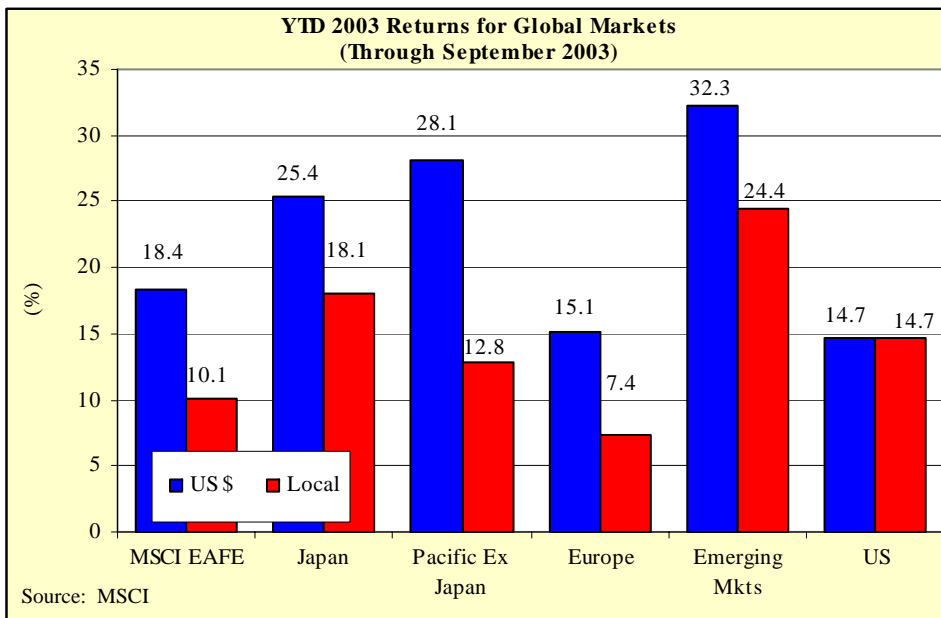
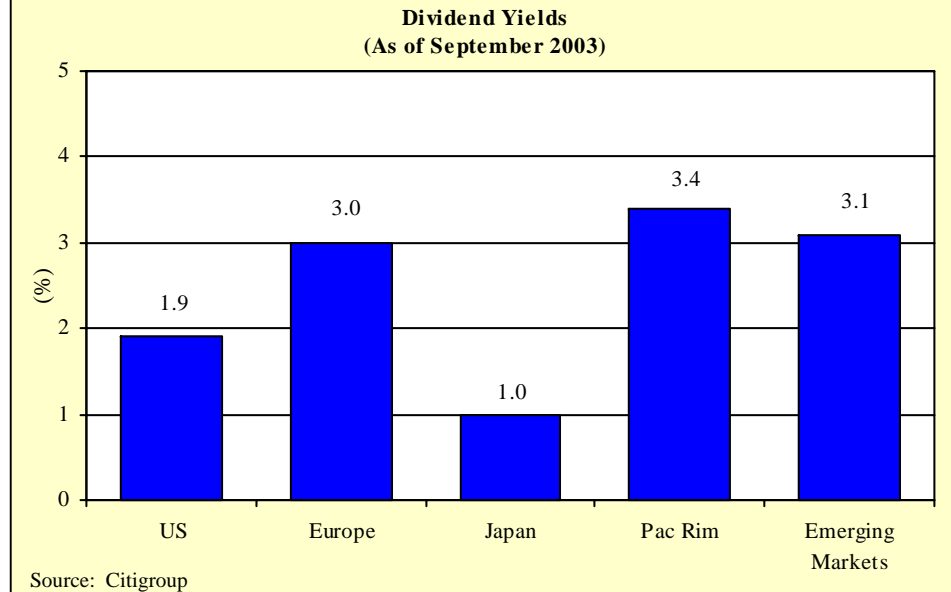
Based on the current TIPS yield, equities would provide a real return of 4.5% at a 2.0% equity risk premium, which is less than most institutions' spending rate.



Note: To estimate the expected equity risk premium priced into stocks, an estimate of the long-term real interest rate is required. However, prior to the introduction of inflation-protected bonds in 1997, the real interest rate was not observable. To estimate the real interest rate prior to 1997, we deducted the three-year annualized change in the CPI from the long-bond yield.

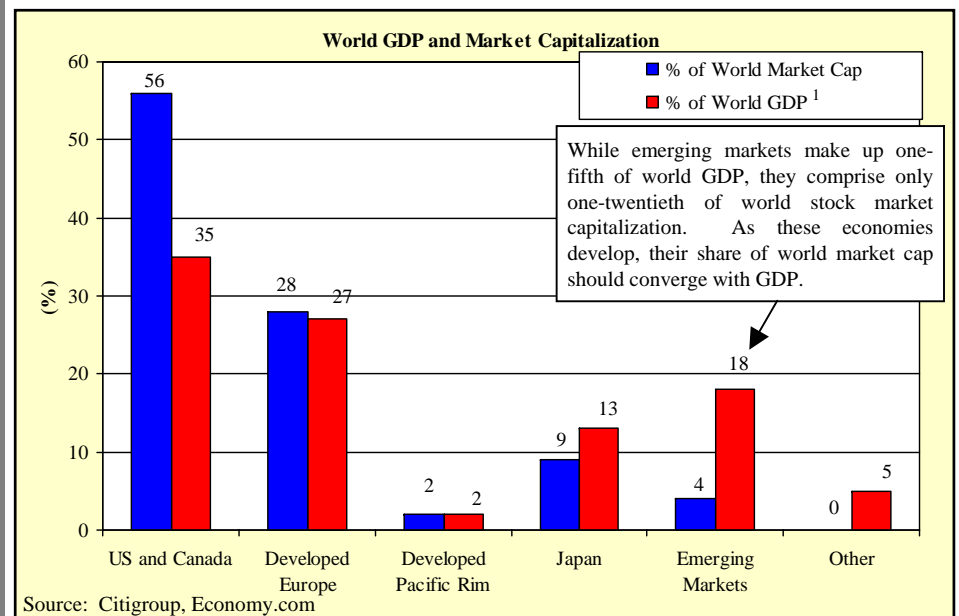
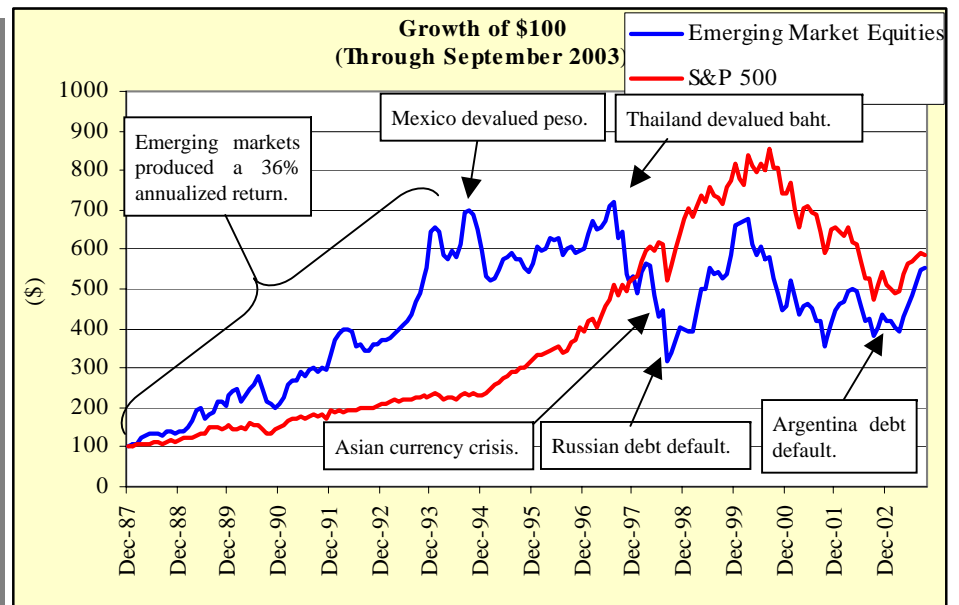
International Equities Buoyed By Weak Dollar

- International stocks outperformed domestic stocks again in the third quarter, thanks in part to the weakening dollar.
- Still, internationals appear to offer better value than US equities. The dividend yield on European, Pacific Rim, and emerging market equities exceeds 3%, versus just 1.9% for the US. Based on other valuation metrics, such as price-to-book and price-to-sales, internationals also look comparatively cheap.
- Given the valuation differences and our expectation that the dollar will decline, we continue to expect international equities to outperform US equities.



Why Invest in Emerging Markets?

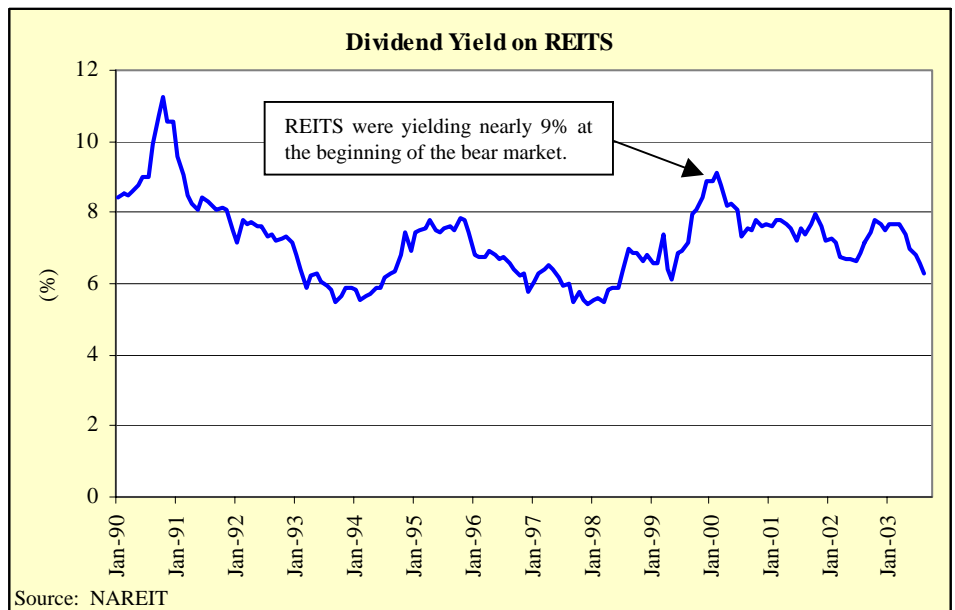
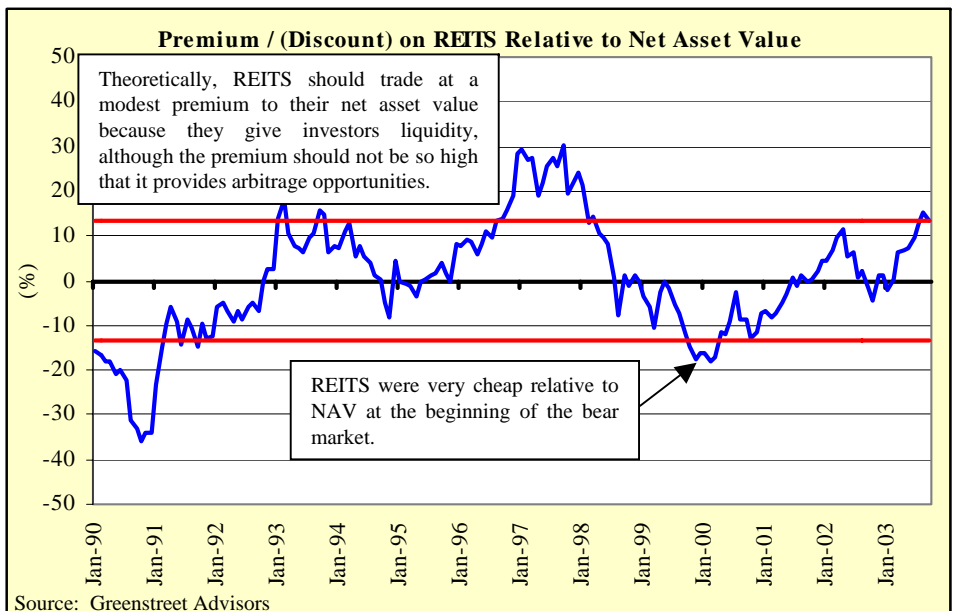
- Emerging markets have been one of the best performing asset classes so far in 2003, producing a return of 32%. Nevertheless, emerging markets are about 20% below the level reached in 1994. Given the inconsistent returns that these markets have produced, does it still make sense to invest in these markets?
- As shown on page 17, emerging markets still trade at compelling valuation ratios relative to US equities.
- Emerging markets have grown faster than developed markets over the past decade and should continue to do so. Emerging market countries contain 85% of the world's population. This provides tremendous growth opportunities as these populations become more productive and standards of living increase. Furthermore, emerging markets do not have the demographic and pension problem that many developed markets must face.
- Emerging markets still represent risky investments. The political risks cannot be ignored, and cronyism still exists. Furthermore, as 1998 showed, problems in one country or region can spread throughout all emerging market countries.
- Still, we are optimistic about the future. The problems of the mid-1990's were caused by asset bubbles (equities and real estate) in emerging market countries fed by foreign capital inflows and current account deficits. The asset bubbles have since been pricked (although another is arguably developing in China), most of these countries have current account surpluses, and they maintain significant currency reserves that will help defend against currency runs.
- One event that points to a lesser risk of contagion was Argentina's devaluation and debt default in 2002. While damaging to the Argentinean economy, it did not spread to other economies.



¹Gross domestic product is a misnomer in this case since it includes the entire world's output.

Real Assets: REITS Becoming Pricey

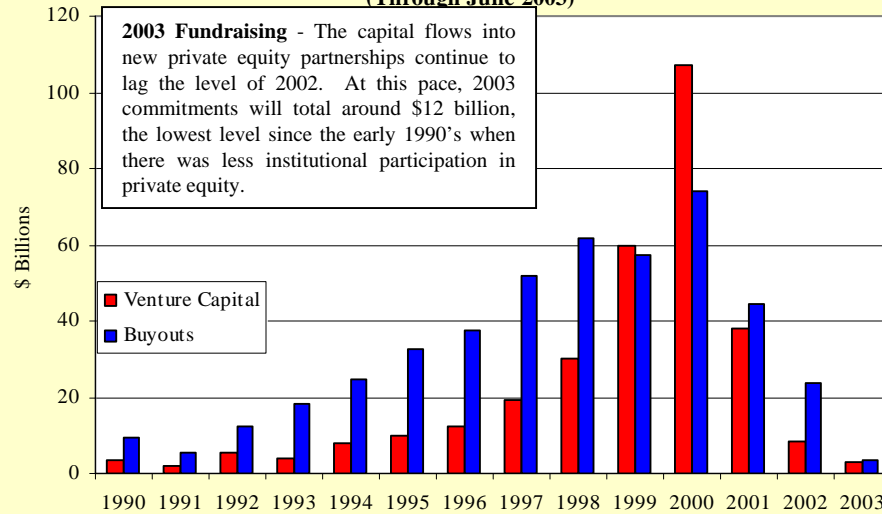
- Real estate investment trusts have been one of the best performing asset classes during the bear market, having appreciated 85% since April 2000 versus a 30% decline for the S&P 500. Year-to-date, REITS are up 29%. However, property fundamentals continue to decline. The national vacancy rate for office properties has increased to nearly 17%, and industrial vacancies have increased to over 11%, both well above their long-term averages. The one bright spot has been in retail properties, which remain strong due to continued strength in consumer spending.
- Despite deteriorating fundamentals, capital continues to flow into real estate (private and public), likely due to its relatively high yield, thereby pushing capitalization rates (net operating income as a percentage of value) down and lifting prices. In other words, investors are placing higher values on lower levels of income.
- Even with rising real estate values, REITS are trading at a 13% premium to the value of their assets according to data tracked by Green Street Advisors. Historically, REITS have traded at net asset value on average.
- While REITS appear expensive on an absolute basis, they still represent a better value than US equities. REITS offer a dividend yield above 6%. If REITS can grow rents and dividends along with inflation over the next decade, they should be able to provide a real return to investors of 4% to 5% even if the premium evaporates. We fear that the broad US equity market will not be so kind to investors over the next decade, and ten-year inflation-protected bonds offer only a 2% real yield.
- The combination of shaky real estate fundamentals and their premium to NAV makes us very cautious on REITS. While we would not recommend abandoning them at this point, it may be prudent to diversify into other areas of real assets that have a greater likelihood of benefiting from higher inflation and a weaker dollar, such as oil & gas, timberland, and other commodity-based investments.



Observations on Private Equity

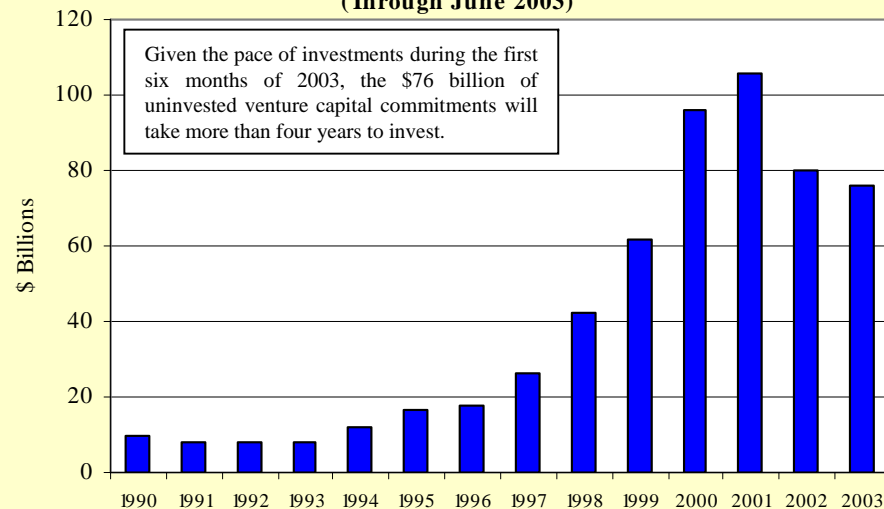
- Freedom of Information Act Paranoia** - Sequoia Capital raised roughly \$410 million for its eleventh venture capital fund in April and has subsequently kicked both U. of California and U. of Michigan out of Fund XI. Recent court rulings have required the universities to reveal private equity return data under their states' Freedom of Information Acts. Whether taking such a step is the prudent course to protect more sensitive portfolio details from the slippery slope of disclosure, or simply a case of sheer paranoia, has been a subject of debate within private equity circles.
- Top VC Funds** - The upcoming venture capital funds from the likes of Charles River, Venrock, and other premier firms are going to be significantly smaller than their last offerings. It appears that there will be plenty of demand for these new funds from existing investors. The smaller funds are expected to be able to hold onto the aggressive terms set during the late 1990s.
- Distressed pays off** - For those investors with the foresight or good timing to invest in distressed debt funds during the summer of 2002, the returns have been excellent. One prominent fund has decided to return roughly 60% of capital back to its investors now that the prices in the high yield markets have rebounded fully.
- Mid-Market Buyouts** - Investors disenchanted with venture capital have turned their attention to middle market buyout funds, those specializing in deals under \$500 million. Nearly half of the new capital committed to private equity funds in 2003 is in this arena. Not surprisingly, the prices paid for companies within this space have increased from 6.2 times EBITDA to 6.6 times EBITDA since 2001. There is still a lot of committed capital raised over the last five years that remains uninvested.
- Life Science Investments** - Investors in life science venture capital funds may be able to look forward to some liquidity events in the not too distant future. Nearly all of the life science groups we have been in contact with are anticipating that the market will be receptive to initial public offerings from this sector beginning sometime later this year. Expectations are for this IPO "window" to last from three to nine months.

Private Equity Commitments by Year
(Through June 2003)



Source: Venture Economics

Uninvested Venture Capital Commitments
(Through June 2003)



Source: Venture Economics, Hammond Associates

Hedge Funds: Does Past Performance Predict Future Returns?

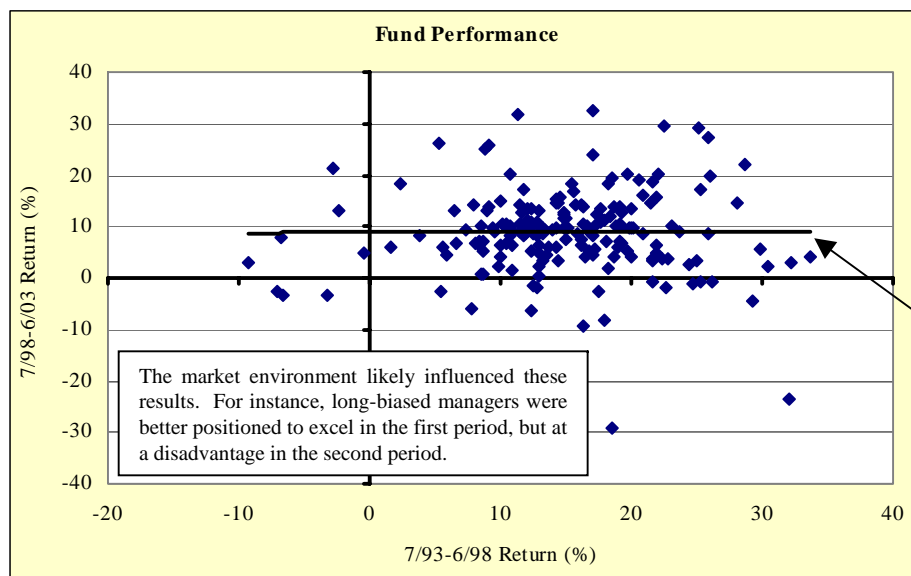
- Using returns for 182 hedge funds that report to InvestorForce's database with at least ten years of performance data, we conducted a study to determine whether a fund's return over one five-year period (7/93 to 6/98) explains the return over the next five-year period (7/98 to 6/03).
- Managers in the first quartile during the first period were more likely to finish in the fourth quartile in the second period than stay in the first quartile. On average, the top 20 performers in the first period were below average performers in the second period.
- The results of this simple study suggest that managers' past performance, taken by itself, is not a good predictor of future returns. Qualitative factors are of primary importance when selecting hedge fund managers.

The table below shows how funds, ranked by quartile in the first 5-year period, performed over the next 5 years. Naturally, if a manager's future performance has no relationship with the past, we would expect a fund to have a 25% chance of falling in a given quartile in the second period.

Performance of Funds from First Period to Second Period				
Quartile Rank (7/93 - 6/98)	Quartile Rank (7/98 - 6/03)			
	1	2	3	4
1	33%	13%	17%	37%
2	27%	31%	24%	18%
3	20%	33%	27%	20%
4	22%	22%	30%	26%

Based on these data, investors were better off picking managers in the second quartile (and the third to a lesser extent), rather than the top quartile. Second quartile managers had the highest likelihood of landing in the top half in the second period and the lowest likelihood of landing in the bottom quartile.

More than half the top quartile managers in the first period landed in the bottom half in the second period.



Descriptive Statistics		
Statistic	Top 20 Funds	All Funds
Average Return (7/93-6/98)	27.2%	14.9%
Average Return (7/98-6/03)	7.4%	8.9%

This chart plots returns in the first period against those in the second period for each of the funds in our study. An upward-sloping, linear pattern to the data would suggest persistence in returns. The pattern we observe reflects the low correlation between returns in the two periods.

The top 20 funds in the first period underperformed the average fund in the second period by 1.5 percentage points.

The Presidential Election Cycle and S&P 500 Returns

President(s)	Party	Inauguration Year	Return (%)				
			Inauguration Year	Year 2	Year 3	Election Year	Annualized Average
McKinley, T. Roosevelt	Republican	1901	20.0	4.5	(15.5)	30.1	8.4
T. Roosevelt	Republican	1905	19.0	6.4	(29.7)	45.4	6.7
Taft	Republican	1909	19.5	(7.9)	6.2	8.7	6.2
Wilson	Democrat	1913	(7.2)	(1.9)	34.2	7.2	7.0
Wilson	Democrat	1917	(26.6)	22.2	18.2	(21.5)	(4.5)
Harding, Coolidge	Republican	1921	10.4	24.9	3.6	25.4	15.7
Coolidge	Republican	1925	27.6	11.6	37.5	43.6	29.5
Hoover	Republican	1929	(8.4)	(24.9)	(43.3)	(8.2)	(22.6)
F.D. Roosevelt	Democrat	1933	54.0	(1.4)	47.7	33.9	31.6
F.D. Roosevelt	Democrat	1937	(35.0)	31.1	(0.4)	(9.8)	(6.5)
F.D. Roosevelt	Democrat	1941	(11.6)	20.3	25.9	19.7	12.5
F.D. Roosevelt, Truman	Democrat	1945	36.4	(8.1)	5.7	5.5	8.7
Truman	Democrat	1949	18.8	31.7	24.0	18.4	23.1
Eisenhower	Republican	1953	(1.0)	52.6	31.6	6.6	20.6
Eisenhower	Republican	1957	(10.8)	43.4	12.0	0.5	9.5
Kennedy, Johnson	Democrat	1961	26.9	(8.7)	22.8	16.5	13.4
Johnson	Democrat	1965	12.5	(10.1)	24.0	11.1	8.6
Nixon	Republican	1969	(8.5)	4.0	14.3	19.0	6.7
Nixon, Ford	Republican	1973	(14.7)	(26.5)	37.2	23.8	1.6
Carter	Democrat	1977	(7.2)	6.6	18.4	32.4	11.6
Reagan	Republican	1981	(4.9)	21.6	22.4	6.1	10.7
Reagan	Republican	1985	31.6	18.2	5.2	16.5	17.5
G. Bush	Republican	1989	31.4	(3.2)	30.6	7.7	15.6
Clinton	Democrat	1993	10.0	1.3	37.4	23.1	17.2
Clinton	Democrat	1997	33.4	28.7	21.0	(9.1)	17.2
G.W. Bush	Republican	2001	(11.9)	(22.1)	14.7*	?	(5.8)
Arithmetic Average Since 1901			7.8	8.2	15.6	14.1	10.0
Republican Administrations			7.1	7.3	9.0	17.3	8.6
Democratic Administrations			8.7	9.3	23.2	10.6	11.7
Post-WWII Arithmetic Average			7.5	9.8	22.5	13.3	12.0
Republican Administrations			1.4	11.0	21.0	11.4	9.6
Democratic Administrations			15.7	8.3	24.6	15.4	15.2

- Historically, the presidential election cycle appears to have had an impact on stock market returns.
- The third year of presidential terms has been the best year for the stock market, and the fourth year has been the second best. The theory behind this phenomenon is that expansionary fiscal policies are undertaken around election years to improve the chances of reelection for the incumbent party.
- This suggests that 2004 may be another good year for the stock market, but watch out for 2005 and 2006.
- Interestingly, the market has performed substantially better during Democratic administrations. Since 1901, Democrats have outperformed Republicans by 3.1 percentage points and by 5.6 percentage points since WWII.

Only negative return in an election year since WWII.

Bush is in danger of being the first President since WWII to see the stock market lower from the beginning of the term.

Excludes the Roosevelt/Truman term beginning in 1945.

*Year-to-date through September

The stock market has declined in 50% of the post-WWII inauguration years.

The market has posted a positive return in the third year of every term since WWII.

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Hammond Associates Welcomes New Senior Consultants

Milton P. Wilkins, Jr., MBA

Milton holds an MBA degree from Harvard Business School and a BA degree from Morehouse College. Milton's professional career prior to joining Hammond Associates includes positions at the First National Bank of Chicago, McKinsey and Company, and Monsanto Company where he held senior positions as Regional Director of Latin America of the Agricultural Company, Vice President of the Plant Sciences Division, and Vice President of Corporate Development in the corporate mergers and acquisitions group. Milton entered the investment management profession as a Partner of Roman, Butler, Fullerton & Co., a \$200 million money management firm located in St. Louis, where he worked for six years before joining Hammond Associates. Milton currently serves on the Board of Trustees of Cardinal Glennon Hospital in St. Louis, St. Louis Priory School, St. Louis Science Center, Maryville University, and St. Louis University High School.

Jerry V. Woodham, MBA

Jerry holds an MBA in Finance from Chapman University as well as a BS in Economics from the University of Missouri. He is currently transitioning from his role as the Chief Investment Officer for the San Diego County Employees Retirement Association, a \$3.8 billion plan with \$300 million in direct alternative investments, to Hammond Associates. Jerry will be joining the firm full time in January. In addition to his experience at San Diego, Jerry spent twenty years working as Chief Investment Officer for two university endowments, Washington University and St. Louis University. From 1996-2001 he served as Treasurer and Chief Investment Officer at St. Louis University where he was responsible for managing the institution's endowment and operating funds, which totaled \$1 billion and included more than \$200 million in direct alternative investments. From 1981-1996 he served as the Treasurer and Chief Investment Officer at Washington University. At that time endowment assets exceeded \$3 billion, including nearly \$500 million in direct alternative investments. In addition to his Chief Investment Officer positions, he also spent seven years (1989-1996) on the Commonfund Alternative Equity Committee. Jerry has served as Board member and Chairman of the Board for Firstar Mutual Funds, and as President and Chairman for Mercantile Mutual Funds. He has also served as a member of the Investment and Finance Committees for the Missouri Historical Society and Mary Institute and Country Day School.

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Unless otherwise noted, asset class performance throughout this report is represented by the following indices: *US Large Stocks* – S&P 500, *US Large Value Stocks* – S&P 500 / BARRA Value, *US Large Growth Stocks* – S&P 500 / BARRA Growth, *US Mid Stocks* – S&P MidCap 400, *US Small Stocks* – Russell 2000, *US Small Growth Stocks* – Russell 2000 Growth, *US Small Value Stocks* – Russell 2000 Value, *Intl Large Stocks* – MSCI EAFE, *Intl Small Stocks* – Citigroup EMI EPAC, *Intl Emerg Stocks* – Morgan Stanley Emerging Markets Free, *US Fixed Income* – Lehman Aggregate Bond, *US High Yield Fixed* – Citigroup High Yield Bond, *Inflation-Protected Bonds* – Citigroup Inflation-Linked Bonds, *REITS* – Wilshire REIT, *Cash* – Citigroup 3-Month T-Bill