

# PERAC

FINANCIAL BULLETIN

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# GLOOM 2002

**After a third quarter which saw the stock market's worst performance since the crash of 1987, and as major equity indexes fell to their lowest levels in five or six years, it was apparent that we are now in the midst of the worst bear market since the Great Depression and that the pain of this down cycle would be comparable to the excesses of the up cycle. Interest rates may be historically low, but with stocks still not cheap relative to earnings and with tepid economic growth, weak corporate profits, and a possible war with Iraq adding to the uncertainty over continued terrorist attacks, investor sentiment remained mired in gloom as the fourth quarter began.**

## TOTAL RETURNS | THIRD QUARTER, 2002

INDEX	THIRD QUARTER, 2002	YEAR- TO-DATE, 2002
<b>US EQUITY MARKET</b>		
Dow Jones Industrial Avg.	- 17.45%	- 23.15%
Standard & Poor's 500 (Large Cap)	- 17.28%	- 28.16%
NASDAQ Composite	- 19.90%	- 39.91%
Wilshire 5000 (Broad Market)	- 16.81%	- 26.60%
Standard & Poor's Mid-Cap 400	- 16.55%	- 19.23%
Russell 2000 (Small Cap.)	- 21.40%	- 25.10%
<b>GROWTH VS. VALUE</b>		
S&P 500 Growth	- 14.12%	- 28.65%
S&P 500 Value	- 20.46%	- 27.98%
S&P Midcap 400 Growth	- 14.56%	- 23.11%
S&P Midcap 400 Value	- 18.48%	- 15.65%
Russell 2000 Growth	- 21.52%	- 35.13%
Russell 2000 Value	- 21.29%	- 15.58%
<b>INTERNATIONAL EQUITY</b>		
M.S.C.I. - E.A.F.E.	- 19.73%	- 21.04%
M.S.C.I. - Emerging Markets	- 16.30%	- 14.57%
<b>FIXED INCOME</b>		
Lehman Brothers Aggregate Index	+ 4.58%	+ 8.55%
First Boston High Yield Index	- 2.82%	- 2.66%
<b>REAL ESTATE</b>		
NAREIT - Equity Real Estate Investment Trusts	- 9.05%	+ 3.40%
NCREIF Property Index	+ 1.70% (Q2)	+ 5.60% (Trailing)

## FINANCIAL MARKET REVIEW | THIRD QUARTER, 2002

**A**FTER THE SECOND QUARTER'S EQUITY DECLINES HAD ADDED FURTHER PAIN TO A BRUTAL BEAR MARKET THAT WAS WELL INTO ITS THIRD YEAR, MANY INVESTORS WERE HOPEFUL THAT THE SUMMER MIGHT AT LEAST BRING A RESPITE FROM FURTHER LOSSES, IF NOT THE BEGINNING OF A REVERSAL OF TREND. What they were not expecting was that the third quarter would turn out to be the market's worst since the crash of 1987, with losses that brought some major indices down to levels not seen since 1996.

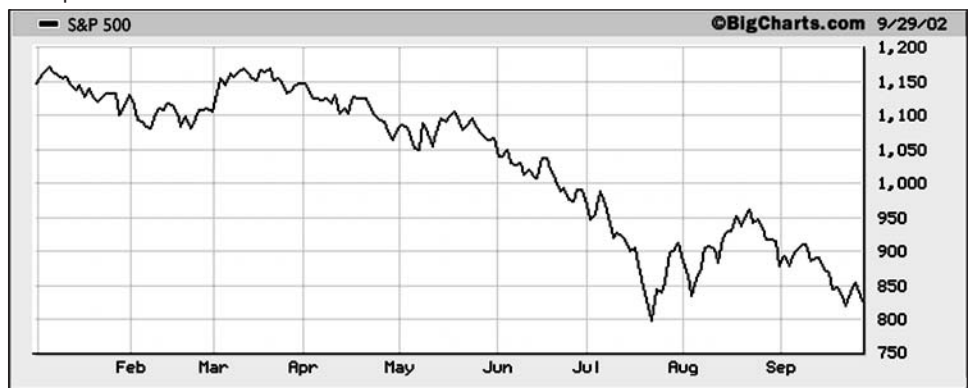
Corporate governance issues continued to make the news, along with more disclosures of questionable practices by major Wall Street firms in terms of the integrity of both their research and their underwriting practices. Some major banks suffered from actual losses in telecom loans and potential losses from loans in shaky South American countries. "Heightened geopolitical risks" (in the Federal Reserve's words), referring to the threat of war with Iraq, were another major concern overhanging the market.

Nevertheless, these factors were secondary to the overriding force driving the market down—weakness in corporate earnings and sharply lowered expectations for future earnings. The technology sector, in particular, continued to suffer from excess capacity, weak

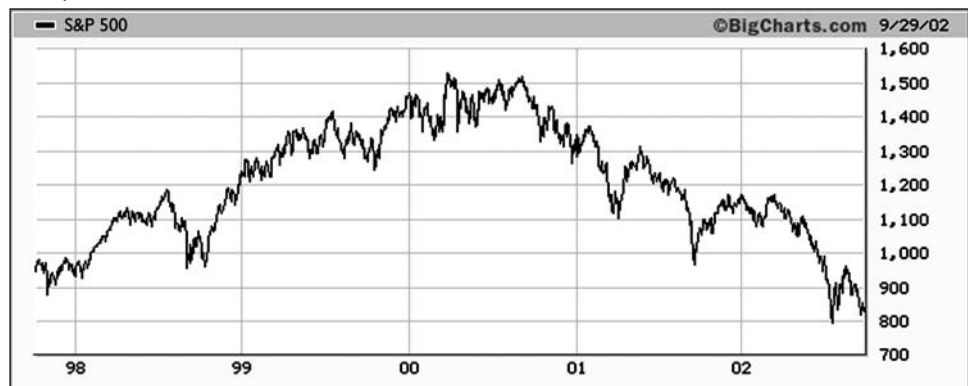
pricing power, and lackluster corporate spending. Economic growth remained slightly positive but pressured by the fact that whatever earnings growth there was in the economy largely came not from revenue growth but from cost-cutting.

In falling to its lowest level in over four years, the Dow Jones Industrial Average had its worst September (-12.4%) since 1937, its worst quarter since (-17.9%) since 1987, and it registered six straight monthly declines for the first time since 1981. The Dow appeared well on its way to its first period of three consecutive declining years since 1939-41.

#1 | 2002: STOCKS DOWN AND DIRTY



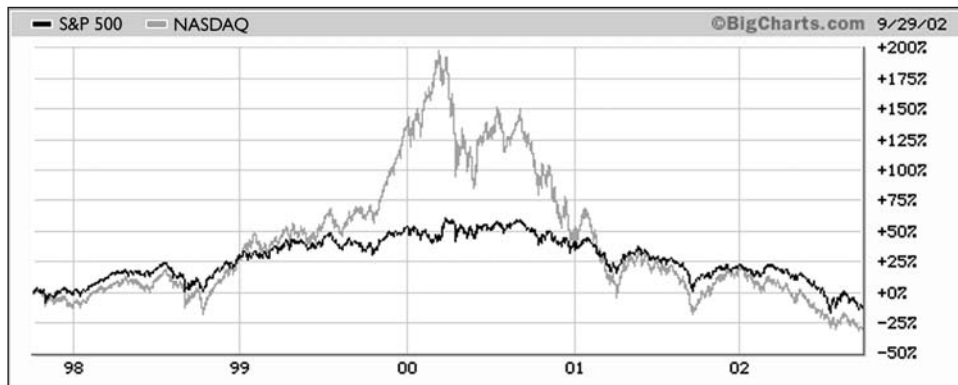
#2 | FIVE YEARS: RISE AND FALL OF THE S&P 500



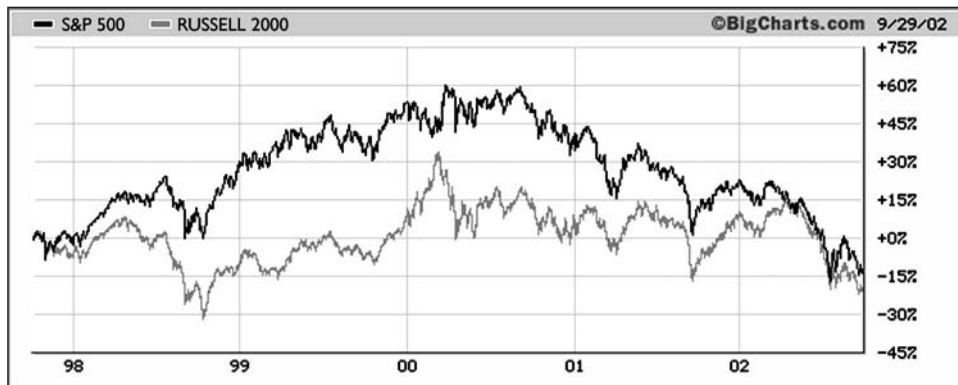
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# Down 47% from its early 2000 peak, the S&P 500 has now given back about two thirds of its gains recorded from January 1, 1995 through its record high.

## #3 | FIVE YEARS: NASDAQ NOW TRAILS THE S&P 500



## #4 | AFTER FIVE YEARS, LARGE CAPS SLIGHTLY AHEAD OF SMALL CAPS



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The widely-followed S&P 500 large cap index fell to its lowest level in more than five years in late July and remained only slightly higher at quarter-end. It was down over 17% for the quarter. Down 47% from its early 2000 peak, the S&P 500 has now given back about two thirds of its gains recorded from January 1, 1995 through its record high reached a little over five years later.

While the S&P 500 was down almost 27% year-to-date, the NASDAQ composite was in its third year of utter collapse, down 20% for the quarter and 40% this year. The technology-laden index fell to its lowest level

in six years, a startling 77% off its peak. Over the trailing five years, the NASDAQ's return now trails that of both the Dow and the S&P 500.

The third quarter's decline was broadly based, with all but one of the ten sectors of the S&P 500 registering double-digit losses; the exception was health care, which lost "only" 7.6%. Only 41 of the stocks in the S&P 500 managed a positive return for the quarter. Year-to-date, consumer staples, which returned -6.8%, has been the only S&P sector to avoid a double-digit loss with information technology and telecommunication services posting particularly ugly results of -48.9% and -53.0%, respectively.

The winning streak of small caps relative to large caps came to an end as the Russell 2000 suffered its worst quarter since 1990 and under-performed all large and midcap indices for the quarter. The two-year out-performance of value over growth stocks also ended during the quarter, although value still had an advantage, ranging from slight (large caps) to large (small caps), on a year-to-date basis.

Adding to the pain of the market's losses was the market's gut-wrenching volatility. In movement reminiscent of the 1930s, the S&P 500 showed gains or losses of at least 1% in

## *International markets also generally failed to offer any protection as the MSCI-EAFE Index declined nearly 20% over the quarter.*

69% of the trading sessions, with changes of at least 2% on 41% of the days. Similarly, while there were just ten days on which the S&P 500 moved 2% or more during the five-year period 1992-96, there were 26 such days during the past quarter.

Not only were there few if any havens from the carnage in the US market, but international markets also generally failed to offer any protection as the MSCI-EAFE Index declined nearly 20% over the quarter. Europe was mired in its worst bear market in 60 years and its markets generally did even worse than the US during the quarter. Former economic powerhouse Germany's performance has been particularly disappointing as the continent suffers from weak consumer spending and stale economic policies. Japan's stock market fell to 1983 levels as the nation continued to search for ways to stimulate economic growth while its banking system remained very fragile. Emerging markets were a mixed bag with major declines in politically uncertain countries like Brazil while some Asian markets held up reasonably well.

Once again, bonds—particularly US Treasuries—were the place to be to escape the equity carnage. Although the Federal Reserve has been on hold during the first three quarters of the year, yields surged lower during the third quarter as investors sought refuge from the sinking stock market, an uncertain economy, and the prospect of war. The yield

#5 | S&P 500: A TEN-YEAR PERSPECTIVE

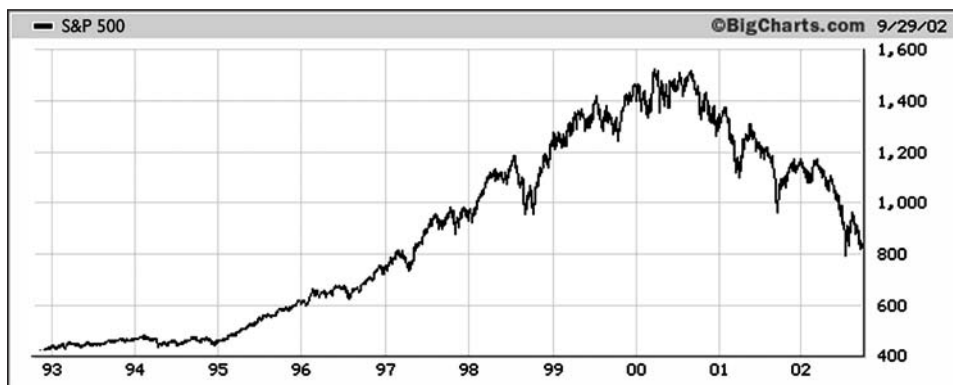


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on the benchmark 10-year Treasury note declined from 4.80% to 3.59%, the lowest level since 1958, while that on the 30-year bond fell from 5.51% to 4.67%, a rarely-reached range. The two-year note declined from 2.97% to 1.69%, the lowest rate since issuance began in 1972. At that level, the note yielded less than the prevailing Federal Funds rate, a situation that could be the precursor of Fed easing later this year. Since falling interest rates imply higher market prices for existing bonds, holders of Treasuries enjoyed positive returns during the quarter, with the gains proportional to the maturity of holdings. With yields having fallen to historically low levels, significant further capital appreciation from Treasuries seems unlikely in the absence of a prolonged economic downturn.

Holders of fixed income securities other than Treasuries did not fare as well. Corporate bonds were generally stagnant under concerns of a lackluster economy and continuing corporate controversies. High-yield ("junk") bonds, which typically trade in sympathy with the equity market, lost value

during the quarter and have generally posted negative returns year-to-date.

There were increasing signs that the surprisingly robust real estate market was finally beginning to succumb to the realities of a weak economy and falling stock market. Returns on national property indices were not yet available, but anecdotal evidence reveals a trend toward somewhat higher vacancy levels. Third quarter returns on publicly traded REITs approached double-digit losses, although performance remained positive year-to-date. Demographic and industry analysis indicated that a major collapse of real estate prices was unlikely, but after almost three years of substantially outperforming the stock market, a more cautious view of real estate appears warranted.

Industry returns are lagged by more than a quarter, but there is no question that venture capital and other aspects of private equity are still suffering a bloody reversal of the heady gains of the late 1990s. New investment has declined to levels not seen since 1998, with much of the money earmarked for previously-funded late-stage companies since the IPO market remains essentially closed. An industry survey indicated that of all start-up companies financed by venture capital partnerships in 1999, 22% are already out of business; 18% of companies financed in 2000 are already defunct. In an unprecedented trend, venture capital funds returned more money to their limited partners than they raised in new funds during the second quarter; this reflected general partners' doubts that investments made in the current environment could reap the returns that investors have come to expect. On the other hand, there are those who are somewhat optimistic about the current environment since company valuations and expectations have fallen to much more realistic levels.

Not unexpectedly, a stock market that

gave us extraordinary gains during the late 1990s is now giving us a bear market of historic proportions. For public pension funds, 2002 is shaping up as the third consecutive year of failing to meet actuarial rates of return. Some market strategists think that with interest rates having fallen to extraordinarily low levels and price/earnings ratios having declined to more reasonable levels, the market may be primed for a recovery. Others say that valuations are still too high by historical standards, particularly in light of continuing accounting controversies over how to properly calculate corporate profits and also considering the major uncertainties overhanging the economy.

The past few years have shown the wisdom and importance of asset allocation. Diversification hasn't enabled any major public pension fund in the country to totally offset their losses from equities, but it has allowed them to substantially temper the potential losses from the brutal bear market. Going forward, other than to consider rebalancing if and where appropriate, there remains no alternative other than to make sure portfolio assets are well diversified in both major asset classes as well as subclasses and, more than ever, closely monitoring and analyzing portfolio performance.

*As always, we welcome your comments on this report and encourage your suggestions for future investment research reports. For those systems that would like to discuss their portfolios and strategies in the context of the current market or to talk about any other relevant investment topics, we would welcome an invitation to attend one of your board meetings.*

## 2001 PERFORMANCE ATTRIBUTION

AS ALWAYS, THE DIFFERENTIAL BETWEEN THE BEST AND WORST PERFORMING NON-PRIT RETIREMENT SYSTEMS WAS RELATIVELY LARGE BUT, ON THE WHOLE, THE SYSTEM WEATHERED THE STORM OF 2001'S ROCKY FINANCIAL MARKETS RELATIVELY WELL. Returns ranged from +4.3% to -9.8%. While no system was able to meet its actuarial objective and only 11 of the 106 systems had a positive return, the overall returns were respectable in the context of the -4% approximate return that would have been expected from composite system asset allocation and major benchmark returns. Most national surveys of public pension fund performance in 2001 indicated losses of 4% or greater. The median return for the 85 local systems that invest on their own was -2.95%. Including the returns of the State, State Teachers, and the nineteen local systems whose total assets are managed by the PRIM Board, the median return for the entire system was -3.90%.

Briefly recapping the major market indices for 2001, the Standard and Poor's 500 Index (Large Caps) lost 11.88%, the NASDAQ Composite fell 21.05%, while the Russell 2000 (Small Cap) Index rose 2.49%. In all indices, value again outperformed growth, with small cap value up 14.03% while large cap growth lost 12.73%. It was another disappointing year for international equity as the MSCI-EAFE declined 21.21%. Bonds, up an aggregate 8.43%, and real estate (up 7-15%) were the only major asset classes offering positive returns. It was a brutal year for investors in venture capital, with the Cambridge Associates Index showing a loss of 38.9% for the twelve months.

Composite asset allocation for the 85 systems that invest on their own was as follows as of December 31, 2001: Domestic Equity, 46%; International Equity, 9%; Domestic Fixed Income, 33%; International Fixed Income, 2%; Real Estate, 5%; Alternative Investments, 2%; Other, 2%; Cash, 1%. Year-end asset allocation for the PRIT Fund was Domestic Equity, 41.6%; International Equity, 15.5%; Emerging Markets, 3.5%; Fixed Income, 25.2%; High Yield Debt, 2.8%; Alternative Investments, 5.4%; Real Estate, 6.0%.

We are unable to break down the total equity holdings of the non-PRIT systems among the various subclasses and styles. However, as general guidelines, small caps represent about one quarter of the total domestic equity capitalization while the universes of value and growth stocks, while not as sharply defined as the cap size sectors, are seen as being in generally similar proportions.

In general, those systems that did well in 2001 tended to have above average allocations to bonds and equity portfolios that had reasonable exposure to small and mid caps as well as value stocks. Exposure to real estate was also a positive in most instances, as was any holding of cash. Systems with above average (i.e., 60% or more) holdings of combined equities (domestic and international) tended to lag, as did systems whose equity holdings were concentrated in large cap growth stocks. Several systems with exposure to venture capital suffered hefty losses from those allocations. Beyond the vital importance of asset allocation, not just among the major asset classes but also among subclasses and styles, some systems benefited (or suffered) from managers who significantly outperformed

(or under-performed) their respective benchmarks.

Among the five best performing systems, two benefited from having over 50% of their assets in bonds while their equity portfolios performed relatively well, helped by healthy exposure to small caps and/or value stocks. Another had an asset allocation close to the composite system average, with equities well diversified by cap and style, but benefited not only from a 9% allocation to real estate but also from all their equity managers, particularly their managers for mid and large cap growth, handily outperforming their benchmark. Interestingly, the other two of these systems had overall equity allocations as high as 60% but benefited from overweighting in small cap and value as well as from excellent relative performance by their managers.

Among the five worst-performing systems, two were relatively similar in not only

having poor performance in their equity accounts but losses of nearly 50% in their private equity holdings, which in both cases began the year representing 6% of the portfolio. A third system had total equity exposure (domestic and international) below 50% but suffered from its only small cap exposure having a growth mandate and its large cap growth manager losing nearly 40%. Another system suffered the triple whammy of having above-average (63%) exposure to equities, a decided tilt toward large caps, and a roster of equity portfolio managers who all badly lagged their benchmarks for a composite underperformance of about 6%. A fifth system had two thirds of its assets in equities and its largest manager badly underperformed, losing 23%.

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