

PERAC Financial Bulletin

NO. 16, JANUARY 2003

H O P E

In 2002, the stock market suffered its worst performance in nearly 30 years while bonds continued to be a strong, positive buffer.

After a painful and historic three-year bear market, stocks are now more reasonably priced, interest rates are historically low, fiscal policy is stimulative, corporate accounting scandals are hopefully behind us, and there are signs of recovery in the economy. Yet, international tensions and the threat of war highlight the need to remain cautious.

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FINANCIAL MARKET REVIEW

Fourth Quarter, 2002

To the surprise of most prognosticators and the profound disappointment of most investors, 2002 not only failed to bring an end to the bear market of 2000 and 2001 but it actually turned out to be even worse than either of the previous two years. Burdened with corporate scandals, a weak economy, flagging corporate profits, and festering geo-political tensions, the US equity markets saw their first period of three consecutive annual declines in sixty years.

The fourth quarter was strongly positive for stocks, with the broad market up about 8%. A powerful rally began in early October and continued until December, when some of the gains were lost due to profit-taking as well as growing fears of possible war with Iraq and increasing tensions with North Korea.

Nevertheless, the fourth quarter failed to offset the damage of the first three. For the year, the Dow Jones Industrial Average was off 16.8%, its worst year since 1977 and down 29% from its 2000 peak. The S&P 500 Index of large cap stocks was off 23.3%, its worst year since 1974 and down over 40% from its peak. The technology-laden NASDAQ Composite

continued its catastrophic decline; after falling another 31.5% in 2002, it was nearly 74% off its high. The broad market Wilshire 5000 was down 20.9% for the year and is off 43.4% from its March 2000 high.

Beyond the magnitude of the losses, what made 2002 even more gut wrenching for investors was the volatility, which was generally the greatest since the 1930s.

The market's decline was broad and deep, as only one quarter of the S&P 500 stocks were up for the year and all of its ten major sectors declined. Consumer staples (-6.3%) and materials (-7.7%) held up the best while telecommunications (-35.9%) and information technology (-37.6%) once again

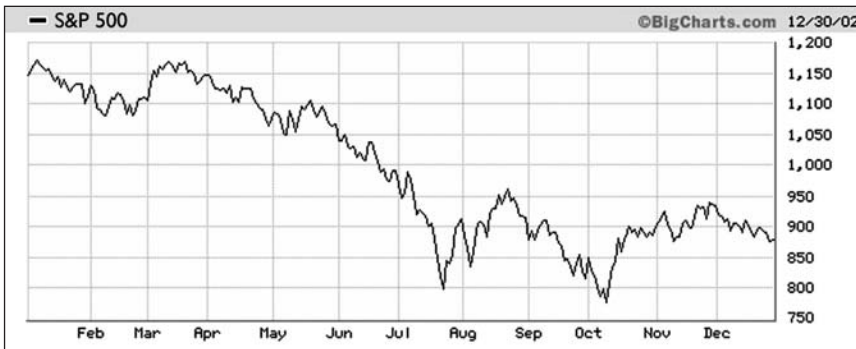
performed worst. Excluding dividends, only three (Eastman Kodak, Procter & Gamble, and 3M) of the thirty Dow Jones Industrial stocks showed a gain for the year.

Beyond the magnitude of the losses, what made 2002 even more gut wrenching for investors was the volatility, which was generally the greatest since the 1930s. On almost half the trading days of the year, one or more of the major market indices was up or down by more than 1%.

Among subclasses, small cap stocks (Russell 2000) lagged during the fourth quarter but slightly outperformed large caps (S&P 500) for the year. Over longer periods, small caps outperformed large caps by an annualized 7% over the past three years but the subclasses are about even over the trailing five years. Large caps outperformed by an annualized 2% over the trailing ten years.

In styles, growth outperformed value in small caps during the fourth quarter while value did better among large caps. According to S&P, value enjoyed a modest advantage over growth in all categories for the year and showed an annualized outperformance of 10-11% over the past three years. Over 5 and 10-year periods, value and growth were virtually even. However, the Russell Indexes indicate that

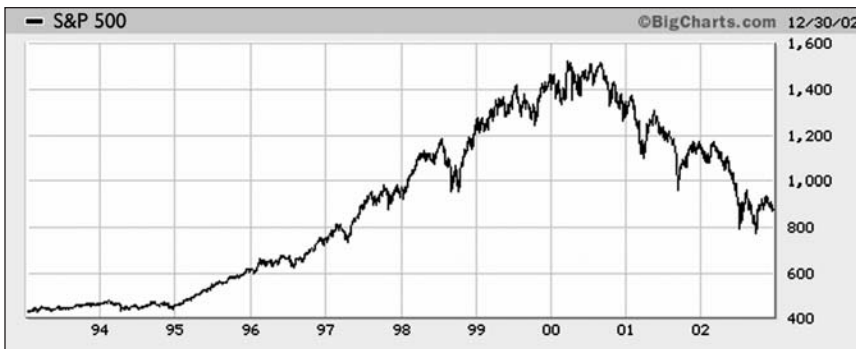
The S&P 500 in 2002



S&P 500: Three Down Years



S&P 500: A Ten-Year Perspective



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value has outperformed growth by greater margins in both recent and long-term time frames. For instance, Russell shows an annualized performance advantage for value over growth of 18.5% in large caps and 28.6% in small caps over the past three years, and corre-

sponding margins in the 5-9% range over five years.

Aided by the decline of the US dollar in the currency markets, the MSCI-EAFE Index outperformed the S&P 500 by about 6% during 2002 but generally failed to offer a meaningful hedge against the US mar-

ket. Financial crises dogged Latin America, political indecision still plagued Japan as that country's stock market declined to a 19-year low, economic stagnation continued in Europe (with Germany, its largest economy, particularly weak), and Asian economies remained sluggish. Lending further credence to those who question the value of international investing, the MSCI-EAFE also trails the S&P 500 over 3 year, 5 year, and 10-year periods. If one takes a longer, 30-year perspective, returns on US and international stocks are about even.

Bonds Rule Again

Besides the continuation of an historic three-year equity bear market, 2002 also marked the third consecutive year that bonds outperformed stocks, an occurrence not seen since 1939-41. With a 2002 return of 10.3%, the Lehman Brothers Aggregate Index has had three years of positive returns versus consecutive losses for stocks. In fact the cumulative outperformance of bonds over stocks had been over 70% for the past three years, one of the greatest differentials ever over a similar period.

The yield on the U.S. Treasury's benchmark 10-year note began the year at 5.06% and, after reaching a high of

Real estate joined fixed income as an asset class that has produced positive returns in each of the past three years, a valuable diversifier against the equity bear market.

5.40% in March and a 44-year low of 3.57% in October, ended at 3.82%. The Fed lowered the federal funds rate to a 41-year low of 1.25% in November, and the two-year Treasury note yield fell to a 58-year low of 1.57% at year-end, rendering the shape of the yield curve very steep. Supported not only by the lackluster economy and low inflation but by funds fleeing the equity market, US Treasury bonds provided the best returns for the year but high-grade corporate bonds also did very well. Battered by economic weakness and rising corporate bankruptcies, high yield "junk" bonds lagged badly, generally registering negative returns of

about -2%. With rates historically low, future returns on bonds could be impacted by the rising federal budget deficit, the possible inflationary implications of increasing oil prices, a recovering stock market, and a less supportive Federal Reserve. For now, though, high-grade bond investors can bask in the

the three years, and performance in 2002 reflected falling rent levels and office vacancy rates that have risen to the highest level since 1993. For Equity Real Estate Investment Trusts, 2002's annual composite return of 3.82% was comprised of income of 6.9% and price decline of -3.1%.

The NASDAQ Bubble: A Five-Year Perspective

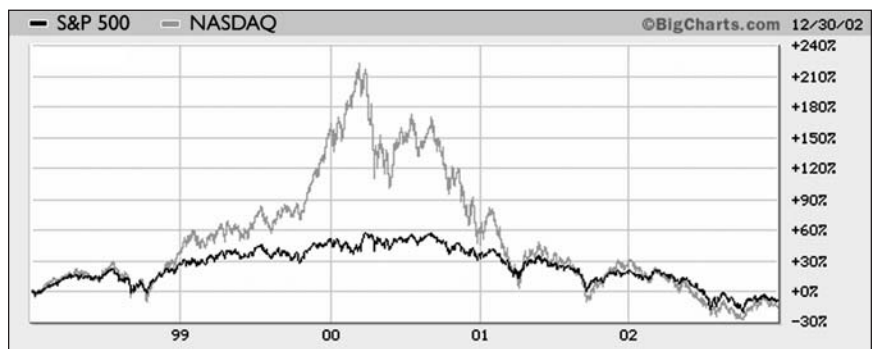


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satisfaction of having outperformed stocks by nearly 25% annualized over the past three years. Even going back to early 1994 and including the greatest years of the equity bull market, stocks and bonds are about even in cumulative performance.

Other Asset Classes

Real estate joined fixed income as an asset class that has produced positive returns in each of the past three years, a valuable diversifier against the equity bear market. Nevertheless, returns from real estate have been on a declining trend over

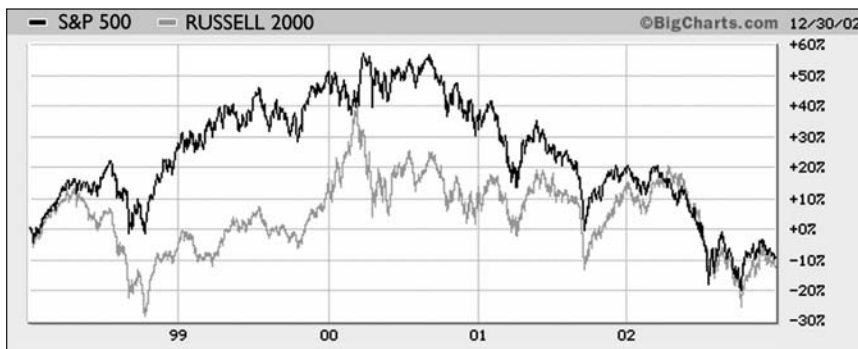
National indices of privately held real estate indicate that expected annual returns have fallen from the low double digit range of the late 1990s to about 6% today. Going forward, returns on real estate are likely to mirror national economic trends but REITs have the advantage of dividend rates that are much higher and price to earnings ratios that are much lower than those of the S&P 500 while private real estate might be buttressed by a generally healthy balance between supply and demand in most sectors and regions.

For venture capital, the return to a state of equilibrium

Large Cap vs Small Cap: Over Three Years, Small Caps Rule



Large Cap vs Small Cap: After Five Years, About Even



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after the heady days of the late 1990s continued to be very painful. New fundraising was only a small fraction of earlier levels and about 80% of invested capital went to shore up existing portfolio companies rather than to fund new start-ups. In order to re-assure anxious limited partners, many general partners have been reducing asset size and lowering management fees. 2002 saw a 20-year low in the number of Initial Public Offerings and many of those that were issued declined in the aftermarket. The latest available returns showed that the typical venture capital partnership lost between

-27% (Venture Economics) and -35.7% (Cambridge Associates) for the twelve months ending June 30, 2002.

Hedge funds are an aggregation of many discrete strategies rather than a separate asset class but, as an industry, they continued to attract assets (with increasing interest from public pension funds) and to provide reasonable diversification relative to the equity market. Benefiting from their ability to be short as well as long in their portfolios, the typical hedge fund posted flat to modestly positive returns for the year 2002. Nevertheless, unless hedge funds can once

again achieve more healthy positive returns, there could well be a shake-out among managers in the coming year.

Looking Ahead

After the first three-year market decline in 60 years, it would be reassuring to be able to conclude that all signs are positive for a rebound in 2003. However, the outlook—although hopeful—remains clouded. First of all, the market is still searching for equilibrium after a period even more unusual than a three-year decline—the unprecedented streak of nine consecutive annual gains during the 1990s (the previous record had been five years). At 17 times expected earnings for the coming year, the S&P 500's price/earnings ratio remains well above the average of 13 that had marked the end of previous bear markets, although some feel that higher valuations are justified during the current period of very low interest rates. Many industries still suffer from over-capacity arising from the excesses of the '90s, and many feel that the tech stock bubble is not fully deflated. There is a significant amount of cash recently diverted into cash reserves or bonds that could return to the stock market, and corporate America is entering the next cycle leaner and more efficient than before.

Nevertheless, even if lower interest rates, deficit financing, and possible other governmental stimulus succeed in reinvigorating the economy, the pace of recovery is likely to be moderate at best since the past recession was historically mild. The unabated threat of further terrorism and the uncertain outcome of possible war with Iraq also weigh heavily on the market.

Only time will tell whether 2003 will be the final leg of the first four-year market decline since 1929-32, the beginning of a meaningful market recovery, or just a directionless year of “muddling through”. The recent past has reminded us that when markets go to an extreme in one direction, it’s inevitable that they will ultimately go to the opposite extreme. Accordingly, after a bull market and technology “bubble” of epic proportions, the reversion to the mean has been both long and painful, and may not necessarily be over.

In addition to presenting opportunities for rebalancing out of full-priced bonds into more reasonably priced stocks, the past year has again vividly demonstrated the necessity to monitor portfolios for well balanced and diversified asset allocation and to be vigilant that all investment managers are satisfactorily fulfilling their mandates.

Considering the estimated composite asset allocation (45% domestic equity, 10% international equity, 35% fixed income, 5% real estate, 2% alternative investments, and 3% cash) of the commonwealth’s non-PRIT public retirement systems at the beginning of 2002 and using benchmark returns from the relevant market indexes for each asset class, we estimate that portfolio returns in

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the vicinity of -7.5% can be expected for the past year. The decline in funding levels following the past three years of portfolio losses adds further pressure to the already strapped budgets of cities and

towns as local administrators confront their most difficult fiscal situation in many years.

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.

TOTAL RETURNS | *Fourth Quarter, 2002*

INDEX	FOURTH QUARTER, 2002	12 MONTHS, 2002
US EQUITY MARKET		
Dow Jones Industrial Avg.	+ 10.60%	- 15.01%
Standard & Poor's 500 (Large Cap)	+ 8.44%	- 22.10%
NASDAQ Composite	+ 13.94%	- 31.53%
Wilshire 5000 (Broad Market)	+ 7.82%	- 20.86%
Standard & Poor's Mid-Cap 400	+ 5.83%	- 14.51%
Russell 2000 (Small Cap.)	+ 6.16%	- 20.48%
GROWTH VS. VALUE		
S&P 500 Growth	+ 7.11%	- 23.59%
S&P 500 Value	+ 9.90%	- 20.85%
S&P Midcap 400 Growth	+ 5.12%	- 19.17%
S&P Midcap 400 Value	+ 6.57%	- 10.11%
Russell 2000 Growth	+ 7.51%	- 30.26%
Russell 2000 Value	+ 4.92%	- 11.43%
INTERNATIONAL EQUITY		
M.S.C.I. - E.A.F.E.	+ 6.48%	- 15.94%
M.S.C.I. - Emerging Markets	+ 10.04%	- 6.17%
FIXED INCOME		
Lehman Brothers Aggregate Index	+ 1.57%	+ 10.26%
Merrill Lynch High Yield Index	+ 6.89%	- 1.89%
REAL ESTATE		
NAREIT - Equity Real Estate Investment Trusts	+ 0.41%	+ 3.82%
NCREIF Property Index	+ 1.65% (Q3)	+ 5.57% (Trailing)