2007 Financial Market & Retirement Board Performance Review

Optimism was rampant during the first half of 2007 as major equity market indices reached new highs and nothing but blue skies appeared on the horizon. However, the outlook became cloudy in May when problems in sub-prime mortgages began to surface. By the summer, a full fledged credit crunch emerged as continued weakness in the housing market and troubles with mortgage-backed securities spilled over into the broader credit markets. As the year came to an end, it was apparent that the mortgage crisis had spawned the most serious financial crisis since the savings and loan debacle of the 1980s. As investors began to worry about a possible recession, US equities finished well off their highs.

Equity Market

For the year, the US equity market registered below-average 12-month returns but did so with volatility that was the highest in several years. The broad market (DJ Wilshire 5000 Index) was up 5.7%, but this masked a huge differential between large and small cap stocks. Large caps (S&P 500) enjoyed a 12-month total return of 5.5% and mid caps (S&P 400) did even better at 8.0%. In times of economic uncertainty, investors generally favor the greater earnings stability of larger companies and these companies are also generally benefiting more from the stronger growth being experienced by foreign economies. In a decisive reversal of small caps' decade-long outperformance, these fundamental factors contributed to the Russell 2000 registering a 1.6% decline for the year.

Reflecting strong growth as well as many successful new product introductions and innovations, technology staged a successful comeback in 2007 as the NASDAQ Composite rose 9.8%, this market's best return since 2003.

In another decisive reversal of a longstanding trend, growth handily outperformed value. According to the Russell indices, the 12-month differential was 12% in large caps and nearly 17% in small caps. Most of the year's worst performing sectors were in the value tent.

The year's best performing sectors included utilities and consumer staples — sectors that would be expected to hold up well during a period of economic slowdown. The lagging sectors included some that are most vulnerable to economic weakness in general and housing problems in particular, such as financials and consumer-related sectors including retail. Among the S&P 500's major sectors, energy and materials were up 32% and 20%, respectively, while financials and consumer discretionary lost 21% and 14%, respectively.

Reflecting the sharp disparity in industrial sector returns, there were unusually wide differentials in the performance of individual stocks. Among the Dow Industrial stocks, Merck, McDonalds, Honeywell, and Intel all enjoyed yearly gains in excess of 30%, while AIG (-18.6%), Home Depot (-32.9%), and Citigroup (-47.1%) were big disappointments. Among other stocks, Google (+50.2%), Amazon.com (+134.8%), and Apple (+133.5%) had stellar years while Merrill Lynch (-42.3%), E-Trade (-84.2%), Countrywide Financial (-78.9%), and MBIA (-74.5%) suffered major declines that were impacted by subprime mortgage investments. The CEOs of Citigroup and Merrill Lynch were two of the most notable casualties of the enfolding meltdown in mortgage-related securities.

For the fifth consecutive year, world stock markets outperformed the US but performance was far from uniform. Many European markets were hampered by spillover effects of the US credit crunch and troubled subprime mortgages. Only Germany, buoyed by strong exports, bucked the trend and enjoyed a stellar year. In Asia, Japan was still mired in economic malaise but China and India posted sizeable gains as their economies showed robust growth and were unaffected by the US problems. Led by Brazil, most Latin American markets enjoyed strong years, fueled in part by a worldwide commodity boom. For the year, the MSCI-EAFE Index was up 11.2% in dollar terms while the MSCI Emerging Markets Index was up 39.4%. Annualized returns for the trailing five years were 21.6% for MSCI-EAFE, 37.0% for MSCI-EM, and 12.8% for the S&P 500.

The decline in the dollar contributed to the strong gains in non-US stocks. In local currency terms, last year's returns for MSCI-EAFE and MSCI-EM (reported above) would have been reduced to 3.5% and 33.2%, respectively. With the credit crunch — and the lower interest rates engineered by the Fed in response to it — aggravating an ongoing trend, the dollar had one of its worst years ever in 2007, falling to its lowest level in a decade according to the Fed's trade-weighted index. The dollar fell to a record low against the Euro (having declined over 60% over the past five years vs this currency), a 26-year low against the British pound, and a level not seen in a century vs the Canadian dollar.

Bond Market

For the first time since 2002, Treasury securities outperformed the S&P 500. This was largely a manifestation of investors' flight to quality as most other segments of the fixed income market were negatively impacted by the subprime mortgage debacle, regardless of the actual extent, if any, that the credit of the securities in question was actually affected. While the yield on the benchmark 10-year Treasury note fell to 4.03% at year-end compared to 4.71% a year earlier (and from 4.58% at the end of the third quarter), the yield spread between corporate bonds and Treasuries widened by over 1% despite the absence of any overall deterioration in corporate balance sheets or leverage ratios. High yield "junk" bonds were particularly impacted as yield spreads over Treasuries widened over 2.5% to nearly 6% and new issuance slowed to a trickle.

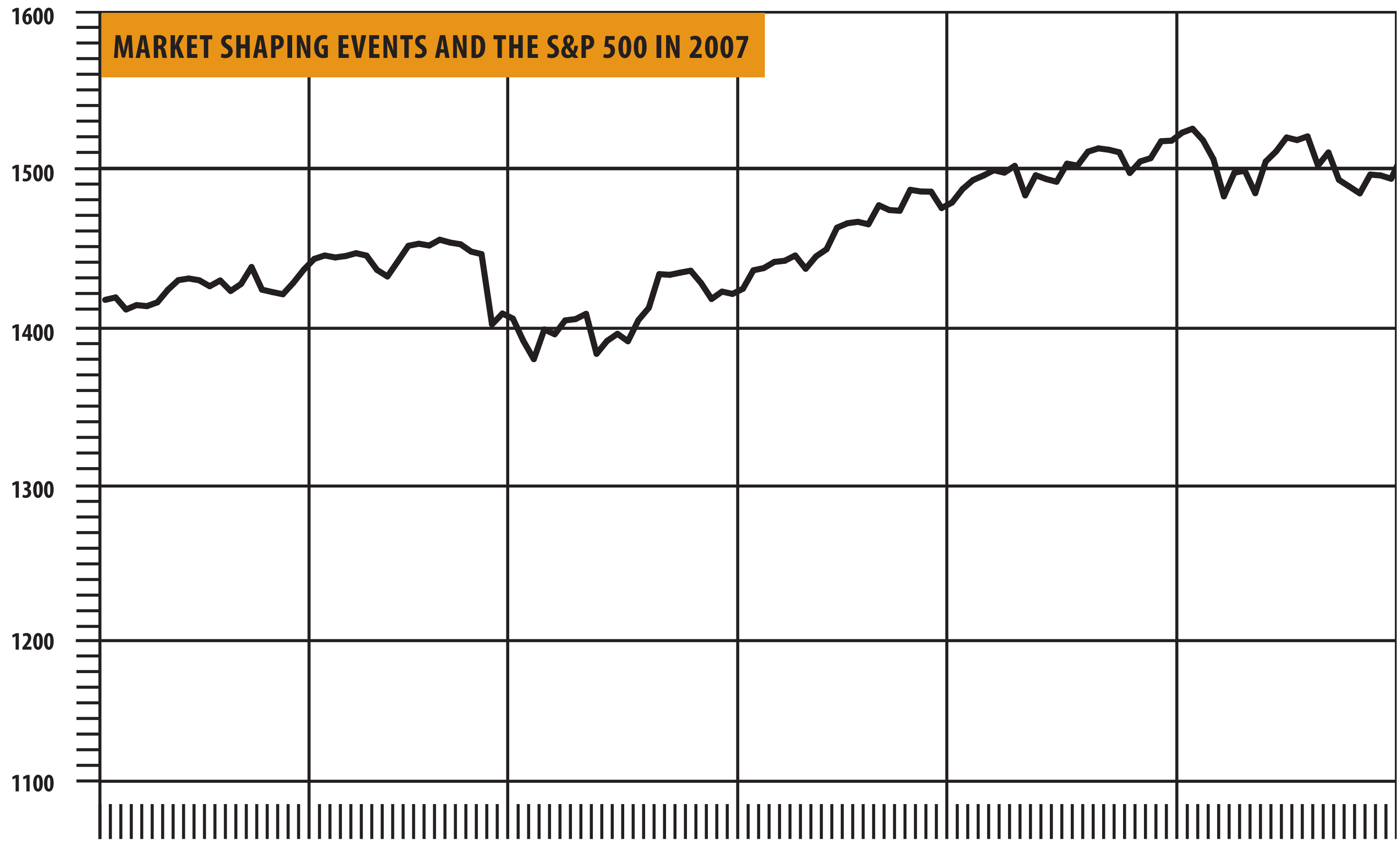
Thus, while the Lehman Brothers Aggregate Index rose 7.0% for the year, Treasuries gained about 9% for the year while junk bonds struggled to return about 2%. The annualized five-year return for the Lehman Aggregate was 4.4%.

In the short end of the market, Treasury bill rates fell as the Federal Reserve lowered the federal funds rate by 1% in three moves over the second half of the year, but the market remained weak for any securities that carried either real or perceived credit risk. Many large institutions struggled with a severely impacted market for Structured Investment Vehicles (SIVs), a form of commercial paper used to finance long-term investments, including mortgage securities.

Other Asset Classes

2007 was one of the most painful years in memory for residential real estate but it was also the year that the market for previously strong commercial real estate also began to soften. With credit tightening, commercial property values declined for the first time in several years and the market could continue to soften as slower economic growth puts a cap on rent increases. The first rise in office vacancy rates in four years was recently announced. Going forward, however, the outlook for commercial real estate remains favorable since none of its major sectors — office, apartment buildings, shopping centers, hotels, etc — has seen overbuilding. After a run of extraordinary returns, publicly-traded REITs suffered an inevitable correction, falling 15.7% in 2007. (Even with the loss, the market's 5-year average annualized return was 18.2%.) In contrast, the NCREIF Index for private real estate returned a positive 15.8%, down only modestly from the 16.6% return for 2006.

The booming private equity market was seen as one of the driving forces behind the stock market's first half strength but the market slowed considerably



JANUARY

JAN 3 1416.60

JAN 31 1438.24

- Democratic-controlled Congress convenes. Nancy Pelosi is first woman speaker.
- Apple, Inc., introduces the iPhone, due to go on sale in June.
- President Bush announces "surge" strategy for Iraq.
- Ford Motor Company announces its worst loss ever.

FEBRUARY

FEB 1 1445.94

FEB 28 1406.82

- Exxon Mobil announces the largest annual profit in US history.
- Concerns rise over the housing market as vacant homes for sale surge to a 40-year high.
- Shares of mortgage lenders plunge as subprime delinquencies surge.
- DaimlerChrysler posts a 40% drop in profit.
- The Dow falls 416 points on February 28, after the Shanghai market declined 9%, signaling investors' re-evaluation of risk.

MARCH

MAR 1 1403.17

MAR 30 1420.86

- Funding tightens for subprime mortgage lenders as concerns rise.
- Blackstone Group, a private equity giant, files for an IPO.

APRIL

APR 2 1424.55

APR 30 1482.37

- 32 people die at Virginia Tech, the worst mass murder in US history.
- For the first time, Toyota surpasses GM in quarterly worldwide sales.
- Spurred by strong corporate profits, the Dow closes above 13,000 for the first time on April 26.

MAY

MAY 1 1486.30

MAY 31 1530.62

- NewsCorp makes a $5 billion offer for Dow Jones.
- DaimlerChrysler sells an 80% stake to private equity firm Cerberus Capital Management.

JUNE

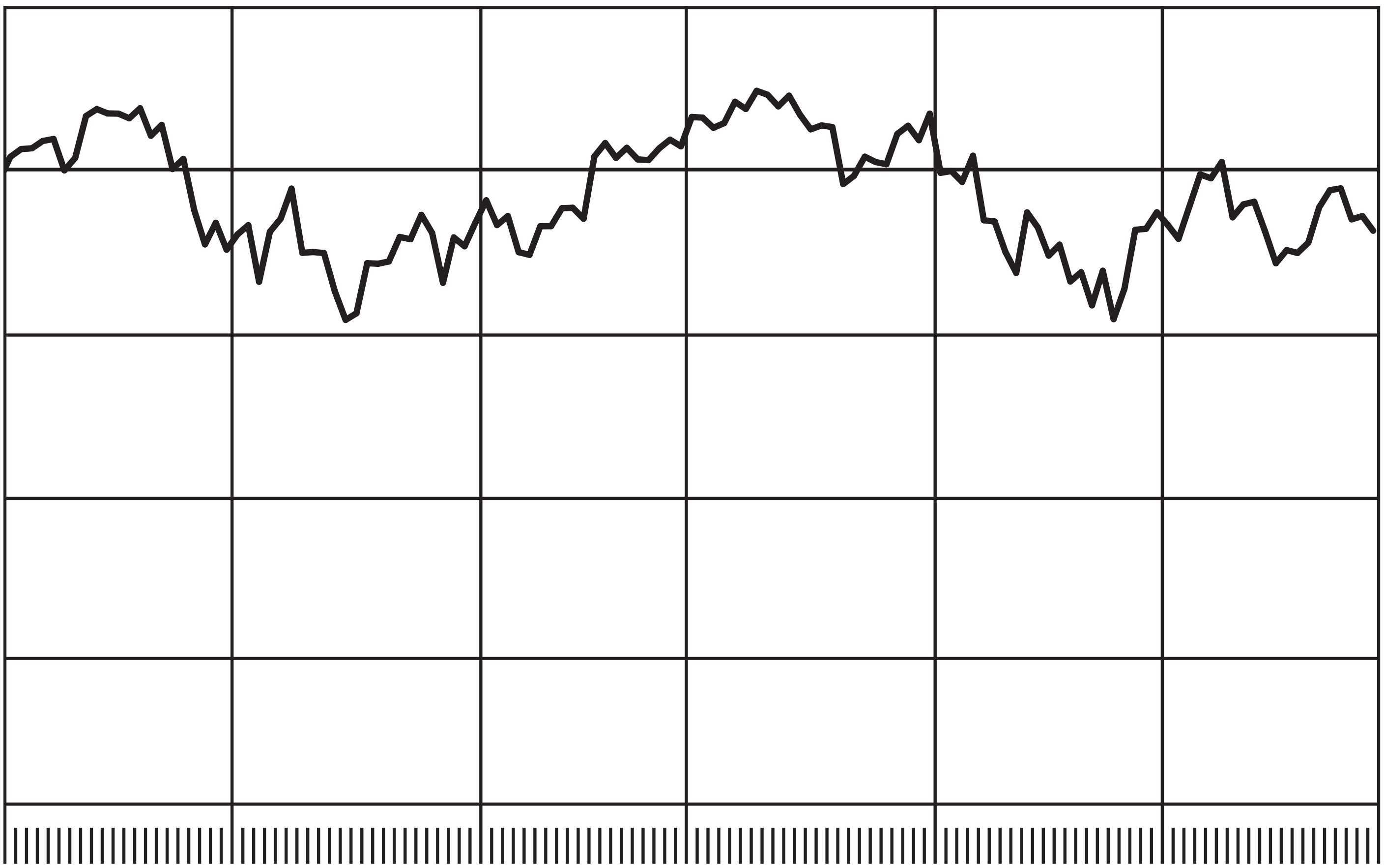
JUN 1 1536.34

JUN 29 1503.35

- US Treasury bond yields rise to a 5-year high as inflation concerns rise.
- Concerns rise over two Bear Stearns hedge funds that had invested in subprime mortgages.
- Concerns also rise over the safety of various Chinese imports.

during the second half as higher interest rates and growing risk aversion by lenders put a crimp in deal making. Reflecting the changed market conditions, the private equity giant Blackstone Group successfully went public in June but its stock was off almost 30% by year-end. In terms of new investments made, 2007 was also one of the best years of the decade for venture capital. The industry also benefited from an improved market for Initial Public Offerings. Composite 2007 benchmark returns for private equity/venture capital are not yet available but, through the end of the third quarter, Cambridge Associates' twelve month benchmark returns were 23.1% for venture capital and 29.9% for private equity.

Hedge funds weathered a summer storm when a small number of funds (e.g., Sowood Capital, two Bear Stearns funds) collapsed as a result of ill-fated investments in subprime mortgages and a larger number of quantitatively-focused funds faced at least temporary losses when their models failed to successfully navigate the unexpected effects of the credit crunch. Nevertheless, on the whole, the volatility in the markets created opportunities for impressive



JULY

JUL 2 1519.43

JUL 31 1455.27

- S&P and Moody's announce downgradings of many subprime mortgage securities.
- Dow Jones board votes to accept News Corp offer.
- The two troubled Bear Stearns hedge funds are declared virtually worthless.
- Boosted by strong corporate earnings growth, the Dow finishes above 14,000 for the first time.
- Apple's profit surges but that of Countrywide Financial (the country's largest mortgage lender) falls sharply.

AUGUST

AUG 1 1465.81

AUG 31 1473.99

- On August 7, Fed Chairman Bernanke expresses concern over credit turmoil but Fed leaves rates unchanged.
- Stocks tumble as credit crisis fallout intensifies. Central banks make cash injections.
- Concerns grow that the US credit crunch could spur a global economic slowdown.
- On August 18, Fed acts to cut the discount rate by 50 basis points and to encourage bank borrowing.
- In a flight to quality, short-term Treasury yields plummet.
- Seeking to bolster investor confidence, Bank of America makes a $2 billion investment in Countrywide Financial.
- Attorney General Alberto Gonzales, Senator Larry Craig, and Michael Vick have bad days.

SEPTEMBER

SEP 4 1489.42

SEP 28 1526.75

- In an aggressive move reflecting concern over credit market fallout, the Fed cuts the federal funds rate by 50 basis points to 4.75%.
- Following a strike by auto workers, GM sets up a $30 billion health care trust.

OCTOBER

OCT 1 1547.04

OCT 31 1549.38

- Swiss bank UBS AG announces mortgage-related writedown of $3.4 billion.
- Citigroup announces a 57% drop in profit after major writedowns. Its CEO resigns in November.
- Following an $8.4 billion writedown, Merrill Lynch's CEO steps down.
- For the second time in four years, the Red Sox sweep the World Series.

NOVEMBER

NOV 1 1508.44

NOV 30 1481.14

- The Fed cuts the fed funds rate another 25 basis points to 4.5%.
- For the first time in twenty years, film and TV writers go on strike.
- Increasing fears of a credit squeeze and economic downturn lead to a 10% drop in the Dow from its October 9 peak.
- Seeking to restore investor confidence, Citigroup receives a $7.5 billion cash infusion from Abu Dhabi government investment arm.
- Crude oil hits a record $98 per barrel.

DECEMBER

DEC 3 1472.42

DEC 31 1468.36

- UBS announces additional writedowns of $10 billion, as well as major cash infusions from Asian and Middle East investors.
- The Fed reduces the fed funds rate again to 4.25%, but, reflecting disappointment that the cut was not larger, stocks decline over 2% in response.
- After a $9.4 billion writedown of its mortgage assets, Morgan Stanley receives a $5 billion investment from a Chinese fund.
- Bear Stearns posts the first loss in its 84-year history. Its CEO would step down in January.
- Stocks fall on last trading day, but for the year, large caps rose (5.5%) for the fifth straight year while small caps declined (-1.6%) for the first time in five years.

profits by many managers. Performance would vary by strategy and manager, but composite hedge fund returns for the year were reported in the 10-12% range, about double the S&P 500's 5.5% return. Overall, hedge fund assets — and institutional participation — continued to grow.

Outlook

Looking back at 2007, the year once again demonstrated the benefits of diversified asset allocation. Retirement boards that were predominantly invested in US stocks and bonds most likely did not achieve their target rates of return last year. Returns for such boards would have been enhanced by meaningful exposure to international equity and particularly to emerging markets. Hedge funds also generally outperformed US stocks and bonds last year, while returns from real estate were mixed. Boards that had investments with top tier alternative investments managers also had a greater chance of meeting their target rates.

The events of 2007 proved the wisdom of former Fed Chairman Alan Greenspan's warning in 2004 that "History has not dealt kindly with the aftermath of protracted periods of low risk premiums". Indeed, some valuable lessons were learned in 2007, starting with the importance and true meaning of liquidity, which has too often been confused with credit. Some of the under-appreciated dangers of some of today's financially-engineered investment products became apparent, not only in how they are rated by the rating agencies by also in how they are valued in the market. Many financial institutions were painfully reminded about the danger of going too far in relaxing conventional lending standards. Most importantly, investors of all types gained a new appreciation of the persistence of risk and the importance of assessing risk premiums before lending money or making an investment.

Retirement Board Review

As of December 31, 2007, the composite asset allocation for the 63 local systems that invested predominantly on their own was: 38.5% Domestic Equity, 15.5% International Equity, 2.4% Emerging Markets, 21.5% Fixed Income (Domestic and International, including TIPS), 1.9% High Yield, 7.8% Real Estate, 0.3% Timber, 3.0% Alternative Investments, 4.7% Hedge Funds, 1.3% Balanced Funds, 1.5% PRIT Core, and 1.5% Cash. Assets in these systems totaled nearly $15.4 Billion. The composite asset allocation of these systems is similar to reported average asset allocations from national surveys of state and local pension plans. Nevertheless, there is a wide divergence in our local systems' asset allocations compared to the composite levels. For instance, allocations to domestic equity ranged from 11% to 66% and allocations to international equity ranged from zero (4 systems) to 39%. While several systems had allocations in excess of 10% in real estate, fifteen systems had no explicit exposure to this asset class, including five systems with assets in excess of $100 million. Forty four systems had at least some exposure to alternative investments, but only 22 of these systems had allocations of at least 2%. Fifteen systems had allocations to emerging markets, 14 systems had explicit allocations to high yield fixed income, and 7 systems invested in timber.

At the beginning of 2007, 26 local systems invested all (or essentially all) of their assets in the PRIT Core Fund. During the year, another 15 systems joined PRIT, either independently or as a result of Chapter 68. Assets of these 41 systems totaled nearly $5.2 billion at year-end. The asset allocation of that $53.7 billion fund as of December 31, 2007, was 23.8% Domestic Equity, 19.7% International Equity, 5.9% Emerging Markets, 17.9% Fixed Income (11.5% US Bonds and 6.4% TIPS), 4.5% High Yield, 9.6% Real Estate, 2.0% Timber, 7.4% Alternative Investments, 4.9% Absolute Return (Hedge Funds), and 4.4% Portable Alpha (Hedge Funds). Compared to public funds nationwide, PRIT has below-average allocation to domestic equity and above-average exposure to nontraditional asset classes. In addition to the 41 systems that invested essentially all their assets in the PRIT Core Fund at year-end, 11 systems had partial investments in the PRIT Core Fund (in some cases, representing a significant portion of total assets) and over 40 systems participated in one or more of the PRIT Fund's segmentation options.

Performance for 2007 among the 104 local systems ranged from 4.8% to 16.4%. The median return was 9.7% and the composite return was 11.3%. For the 78 systems that began 2007 investing on their own, the median return was 8.6%. Fifteen of these systems joined the PRIT Fund at various times during 2007, mostly during the latter part of the year. For the 63 systems that still invested on their own at year-end, the median return was 8.5%.

The median return for the local systems that invested totally with PRIT for the entire year approximated that of the Fund itself, which was 11.9%. Internal cash positions or cash flows may have enhanced or subtracted from the returns of individual systems relative to PRIT's basic return. In recent years, a fundamental fact of institutional investing involving endowment funds, foundations, and public and private pension funds is that larger entities have performed decisively better than smaller ones. Indeed, the PRIT Fund's size has enabled it to invest meaningfully in a wider range of asset classes than many of the local systems, and its clout has enabled it to gain access to the top tier of managers in these nontraditional asset classes, particularly in alternative investments. Thus, the PRIT Fund's performance in 2007 was enhanced by its holdings in several asset classes that provided returns greater than those from US stocks or bonds: Alternative Investments, up 39.3%; Timber, up 38.6%; Emerging Markets, up 33.6%; Hedge Funds, up 11.0%; and Real Estate, up 9.1%. Returns from Alternative Investments and Timber reflected PRIT's access to top tier managers in those asset classes.

It's important to emphasize that, although most systems have lagged behind the PRIT Fund, the local systems that invest on their own have, on the whole, still done well. As in previous years, the 2007 median return (8.6%) for the non-PRIT local systems was within the range of the median returns of the public fund medians, such as New England Pension Consultants/ICC, 8.38%, and Wilshire/TUCS, 7.43% (public funds less than $1 billion) and 8.70% (public funds greater than $1 billion).

Among the non-PRIT systems that performed best in 2007, some benefited from strong returns from several asset classes in a well diversified portfolio while others had relatively basic asset allocations but enjoyed extraordinary returns from their equity manager. Of the five systems that outperformed PRIT, three did so as a result of their equity manager reaping huge profits from some aggressive sectoral bets and excellent stock selection in the equity market, including underweighting financial stocks and overweighting technology and energy. This manager has had very volatile performance over the years but last year provided the firm's public fund clients with returns of over 20% from domestic equity, compared to the S&P 500's 5.5% rise. One system that outperformed PRIT did so with outstanding performance from domestic and international equity managers as well as from a tactical asset allocation manager, while another system had strong returns from emerging markets and real estate to go along with excellent equity performance. Two of the top ten performing local systems benefited from investing the majority of their assets in the PRIT Fund.

In contrast to the extraordinary equity returns in excess of 20% enjoyed by the best performing local systems last year, the worst performing system registered 2.3% from domestic equity and also had little portfolio diversification. Other systems similarly exemplified the sure-fire formula for poor performance in 2007: insufficient asset class diversification and below-benchmark stock and/or bond returns. Some systems among the worst performers did have reasonably diversified asset allocation but suffered from mediocre performance across the board from their managers.