

2003 Performance Review and Analysis

As of December 31, 2003, the composite asset allocation for the 84 Massachusetts local systems that invest on their own was: Domestic Equity, 47.3%; International Equity, 12.5%; Domestic Fixed Income, 28.9%; International Fixed Income, 2.5%; Real Estate, 4.9%; Alternative Investments, 1.9%; Cash and Other, 2.0%. Assets in these systems totaled \$13.3 billion. Among these 84 systems, 72 invested in international equity, 13 in international fixed income, 50 in real estate, and 35 in alternative investments. Eight systems had partial investments in the PRIT Core Fund and fifteen participated in the PRIT Fund's segmentation program.

Twenty local systems with assets totaling \$1.0 billion invested entirely in the PRIT Core Fund as of year-end. The asset allocation of that \$32.0 billion fund as of December 31, 2003 was Domestic Equity, 41.1%; International Equity, 17.4%; Emerging Markets, 5.8%; Fixed Income, 18.7%; High Yield Debt, 3.3%; Alternative Investments, 5.6%; Real Estate, 5.4%; and Timber, 2.8%.

Recapping financial market performance in 2003, equities were the place to be as a dramatic rally brought a resounding end to the three-year bear market. Within equities, small and midcaps continued to significantly outperform large caps and, largely reflecting the effects of the weaker US Dollar, international stocks outperformed the domestic market. Among major benchmark indices, the S&P 500 (large caps) was up 28.7%, the Russell 2000 (small caps) 47.3%, and the MSCI-EAFE (international) 38.6%. The technology-laden NASDAQ Composite rose by a remarkable 50%, although that still left it more than 150%

below its 2000 peak. For the first time in four years, fixed income failed to outperform equities but returns were still positive (the Lehman Brothers Aggregate Index rose 4.1%) and were particularly strong in the high yield sector. In real estate, returns were spectacular for REITs (up 37%) and more moderate (about 9%) for private holdings. Reflecting the improved market for IPOs as well as for acquisitions, returns on venture capital (up 8.1% according to Venture Economics) and overall private equity (up 18.3%) showed clear improvement after the despair of the bear market years.

Performance among the 104 local systems ranged between 12.0% and 28.5%, with one system registering a reduced return of 11.1% due to one-time extraordinary factors. For the 84 systems that invest on their own, the median return was 20.4%. The composite median return for all 104 local systems was 21.1%.

The median return for the 20 systems that invest totally with PRIT was 26.2%. For these systems, internal cash positions and cash flows enhanced or subtracted from the PRIT Fund's return of 26.3%. The PRIT Fund is typically more aggressive in its investment strategy than most of the local systems and, in 2003, the Fund's return not only benefited from strong relative performance by managers in all asset classes but was also enhanced by the Fund's significant exposures to international equity, emerging markets, and high yield bonds. Its fixed income performance benefited from a position in TIPS (Treasury Inflation Protected Securities).

The returns noted above can be compared to the median return of the public fund universes

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of the following national investment consultants: Wilshire, 21.4%; New England Pension Consultants/ICC, 22.1%; Mercer, 24.3%; Callan, 21.0%, and TUCS (Trust Universe Comparison Service), 22.8%.

As always, the major determinants of performance among the non-PRIT systems were asset allocation and the relative performance of investment managers. Not surprisingly, in terms of asset allocation, the characteristics distinguishing the best and worst performing systems changed dramatically from 2002 to 2003. In the prior year, the last—and worst—year of the bear market, the best performing systems were generally smaller systems with conservative portfolios having above average allocations to fixed income. In 2003's sharp market recovery, these systems fared the worst and the best performers were generally larger systems with more aggressive and better-diversified asset allocation.

Among the decisive characteristics of the best performing systems in 2003 were: asset allocation of at least 60% in domestic and international equity (one system had a 75%/25% equity/fixed income allocation) and all managers meeting or exceeding their benchmarks; within domestic equity, healthy allocations (20% or more) to small and mid-caps, where returns from some managers were as high as 70%; within international equity, exposure to emerging markets, where some managers delivered returns as high as 57%; exposure to Real Estate Investment Trusts, where returns were as high as 34%; and within fixed income, meaningful exposure to high yield "junk" bonds, where returns were as high as 34%.

The systems with lagging performance in 2003 were characterized by: below average (as low as 33%) exposure to equities; reasonable overall exposure to equities but entirely invested in domestic large cap stocks, with little or no investment in small or midcaps or in international stocks; reasonable overall asset allocation but equity and/or fixed income managers who significantly lagged their benchmarks.

The past two years of tumultuous market activity have vividly demonstrated both the risks and the rewards of having portfolios that are explicitly conservative (above average fixed income, below average equity) or clearly aggressive in their asset allocation. Since a typical year is unlikely to have either the upside or downside volatility of either of the past two, systems are well advised to maintain a moderate asset allocation that avoids either extreme in stock/bond apportionment but which also includes appropriate exposure to as many asset classes and subclasses as possible. Just as it is important to have reasonable well-diversified asset allocation in order to dampen portfolio volatility and smooth out future returns, it is crucial to have managers who successfully fulfill their mandates. Asset allocation goes hand in hand with the diligent selection and careful monitoring of investment managers.