FAQs • CEM Benchmarking Study

JUNE 2016

1. WHAT IS CEM BENCHMARKING?

CEM Benchmarking is a Toronto-based provider of investment cost and performance benchmarking data for large institutional investors, including pension funds, sovereign wealth funds and others.

2. WHAT IS THE CEM PENSION FUND STUDY?

Sponsored by the National Association of Real Estate Investment Trusts (NAREIT), CEM conducted a study on U.S. defined benefit pension fund allocations and performance. The study, Asset Allocation and Fund Performance of Defined Benefit Pension Funds in the United States, 1998-2014, provides a comprehensive review of investment allocations and actual investment performance across 12 asset groups. The analysis looked at fund performance over 17 years and utilized a proprietary dataset covering more than 200 public and private sector pension plans with more than $3 trillion in assets under management. The study expands on an earlier study released in 2014.

3. WHY IS THE CEM PENSION FUND STUDY IMPORTANT?

With a total of $8.4 trillion in assets under management, public and corporate sector pension funds represent a major portion of the $24.7 trillion of assets on which millions of Americans rely for their retirement security. With funding liabilities on the rise, pension funds are under increased pressure to maximize returns and generate steady income. Many funds have responded by shifting their asset allocations, including increasing their allocations to alternative investments and real assets. The purpose of the CEM study is to measure the performance of actual investments made by the pension fund industry over the past 17 years.

4. HOW IS THIS STUDY DIFFERENT FROM THE PREVIOUS CEM PENSION FUND REPORT?

This is the second edition of a study that that was originally released in 2014. This version extends the timeframe of the analysis by an additional three years. Additionally, this study incorporates a new approach to standardizing illiquid asset returns to correct for reporting lag and obtain more reliable comparisons to their liquid counterparts.

5. WHAT WERE THE BEST AND WORST PERFORMING ASSET CLASSES OVER THE ANALYZED PERIOD?

Listed Equity REITs outperformed all other 11 assets in the study, generating average annual net returns of 11.95 percent. U.S. Other Fixed Income, a category that included cash, was the worst performing asset with an average annual net return of 4.52 percent. Excluding cash from U.S. Other Fixed Income assets, Hedge Funds were the worst performing asset segment in the study, generating an average annual net return of only 5.50 percent and underperforming all other categories of stock, fixed income, real assets and alternative investments.

6. HOW DID MANAGEMENT FEES IMPACT ASSET RETURNS?

While Private Equity had a higher average annual gross return than REITs at 13.46 percent, its net return was lower at 11.37 percent, pulled down by management fees that were nearly four times higher than those of REITs. Additionally, average annual investment costs among Hedge Fund assets were twice those of REITs at 1.02 percent.

7. WHAT CAPITAL ALLOCATION TRENDS EMERGED FROM THE STUDY?

Pension funds made substantial changes to their capital allocation strategies over the course of the study period, especially their allocations to Hedge Funds. This asset category averaged 1.46 percent of pension fund portfolios at the start of the study period in 1998 and grew to 8.36 percent of portfolios in 2014 – a nearly 500 percent increase.

Despite being the top performing asset class over the analyzed period, Listed Equity REITs represented only 0.6% of total allocations, the lowest allocation in the study, and have only realized an increase in capital of 30 basis points since 1998.

8. WHAT WOULD HAVE BEEN THE IMPACT OF REVERSING THE REIT AND HEDGE FUND ALLOCATIONS?

If the pension plans included in the CEM study had reversed their REIT and Hedge Fund allocations over the 1998 through 2014 period, at the end of 2014, they would have had plan asset balances that were 2 percent larger. Applying the 2

percent additional assets to the approximately $3.2 trillion in private defined benefit plan assets in the U.S. would yield an additional $64 billion in assets – more than three times the estimated $20 billion in private pension underfunding. Applying the 2 percent additional assets to the $3.8 trillion in non-federal public defined benefit plan assets would yield an additional $76 billion in assets – nearly 6 percent of the estimated $1.3 trillion in underfunding in these plans.

9. HOW DID THE VOLATILITY OF ASSETS IN THE STUDY COMPARE?

U.S. Broad Fixed Income assets had the lowest level of average annual volatility at 5.33 percent while Private Equity recorded the highest level of volatility at 28.00 percent. REITs and Unlisted Real Estate had the fourth and fifth most volatile net returns with similar volatilities of 20.7 and 19.0, respectively, reflecting their similar underlying assets.

10. HOW DID ASSETS PERFORM ON THE BASIS OF RISK ADJUSTED RETURNS?

In spite of their modest returns, two fixed income classes, U.S. Broad Fixed Income and U.S. Long Bonds, had the highest Sharpe ratios of 0.64 and 0.62 respectively, reflecting their extremely low volatilities. Outside of fixed income, REITs had the highest Sharpe ratio of 0.45, reflecting their high returns and average volatility. Unlisted Real Estate had a much lower Sharpe ratio than REITs of 0.32, reflecting their lower returns and comparable volatility. Hedge Funds/TAA had the lowest Sharpe ratio of 0.25, reflecting their low returns.