Jeff Speakes May 14, 2014

Yale University boasts one of the most successful endowment funds in the country, and maybe the world. The Yale fund ("the fund") has outperformed 99% of like funds for the past two decades. The manager of the fund, David Swensen, is a superstar in the investment management industry. I recently perused the 2013 Yale Endowment Fund Report and noticed several interesting points.

First, thanks to large contributions and exceptional investment performance, the scale of the fund is huge. Total assets at year-end were a bit greater than \$20 billion, and the contribution in 2013 to Yale's operating budget was \$1.1 billion (or about four times combined tuition and room and board). The long-term objective of the fund is to earn a real (after inflation) return exceeding five percent per year. This would enable the fund to contribute five percent of assets per year (the actual spending formula is a bit more complex than this) and still grow in real terms (even before receiving additional gifts).

Second, the investment strategy is unconventional, or at least it was until other endowment funds began attempting to emulate Yale. Based on the twin premises a) you must take on equity-like risk to earn positive risk premiums and b) it is very difficult to outperform the market in highly liquid markets, Swensen has led the fund to emphasize non-traditional asset classes including private equity, absolute return, and natural resources over the more traditional equity, fixed income and real estate allocations. For example, the target allocation to US equities is 6% and the target allocation to private equity is 31%.

Yale's objective is to perform in the top quartile of each asset class. To accomplish this, the fund employs a staff of very sophisticated, and highly paid, investment analysts to review and select investment managers to run portfolios. The assumption is that it is possible to identify top management talent in most every asset class, particularly the less liquid asset classes. Only the fixed income portion of the fund (target allocation 5%) is managed in-house.

At first blush, the Yale strategy seems to contradict some of the assertions I have made in the past. For example, for most individual investors I favor the passive investment strategy promulgated by Vanguard founder John Bogle: buy low cost broad based index funds. Second, I have argued that annual spending 3% of your wealth is reasonable but not really conservative. Spending 1% each year is conservative. How is it that the Yale fund can target spending more than 5%?

What is going on? Well, you are not Yale. For one thing, endowment funds pay very little or no taxes. It is much easier to earn a 5% return pre-tax than after-tax. Second, the scale of the Yale fund is such that they can retain very highly paid investment professionals. This gives them a much better chance of identifying and negotiating with managers that are able to outperform the overall market. Finally, it is highly likely that Yale will receive large future gifts from successful alumni. The analogous thing for an individual would be receiving a large inheritance or winning the lottery. Do you want to count on that?

Evidence in favor of the benefits of large scale comes from the wide ranging magnum opus "Capital for the 21st Century" written by French economist Thomas Piketty. Piketty's general argument, which I will address in future blogs, is that the natural dynamics of capitalism result in growing wealth inequality over time. One part of the argument is that larger portfolios earn higher rates of return due to economies of scale in investment management.

Piketty's primary evidence in support of scale economies in asset management is, you guessed it, University endowment fund returns. He reports that the top funds, including Yale, Harvard and Princeton, each have more than \$20 billion in assets and have achieved 10% average annual returns over the period 1990-2010. Meanwhile, medium-sized funds (assets between \$500 million and \$1 billion) have earned 8% over the same period, and small funds (less than \$100 million) have earned just 6% on average. Piketty points out that Harvard's internal cost to manage their fund is negligible in terms of return, just 0.3% of assets. But on Harvard's \$30 billion fund, this is \$100 million. Obviously, smaller funds cannot match this level of expenditure.

The argument that scale contributes to return in a positive way is interesting, but to me not convincing. A counter-argument is that superior managers have greater opportunity to outperform when assets under management are smaller, simply because there is a greater array of potential investments that could have a meaningful impact on overall returns. Many of the great investors have performed much better when they had small portfolios to run instead of large ones. For example, the returns on Warren Buffett's partnerships in the 1950s and 1960s are much greater than the returns on Berkshire Hathaway in the 1990s or 2000s. This is because Warren was able early in his career to discover small illiquid securities that were highly under-valued. Such opportunities, even if he could find them today, would not be material to the giant Berkshire Hathaway portfolio. Evidently, Harvard and Yale have figured a way to offset this problem, but it would be a mistake to assume that bigger size generally means higher return.

The Yale Endowment Fund is a terrific case study; one that I am embedding into my classes on investment management and financial economics. But it is not feasible for the vast majority of individuals to attempt to replicate the strategy. In particular, don't count on achieving a 5% return on investment, after adjusting for inflation and taxes.