The executive summary of the 2018 NACUBO-TIAA Study of Endowments® (NTSE), covering July 1, 2017–June 30, 2018, was recently released. The study gathers data from 802 U.S. colleges and universities regarding their investment programs.

The investment objective of an endowment may vary depending on the overall mission of an organization. However, the underlying fundamentals are typically the same; that is, the investment portfolio is generally expected to provide a modest source of ongoing revenue and income, while preserving purchasing power, to help support the operating budget of the organization and any donor-designated programs.

Here we review the current state of endowments, focusing on returns based on asset allocation and endowment size, using preliminary information from the forthcoming full 2018 NTSE, published by the National Association of College and University Business Officers (NACUBO).

Performance by Endowment Size

Based on data compiled over the past few years, the primary differentiating factor in performance among endowments has been size. On average, large endowments, those with assets exceeding $1 billion, historically have outperformed smaller endowments, those with less than $500 million in assets. These large endowments, which account for about 12% of all endowments tracked in the NTSE report, typically attract the most headlines and scrutiny, resulting in several misconceptions about overall endowment performance.

In general, this year returns were positively correlated with endowment size, with the larger endowments outperforming the smaller ones. However, the difference in overall performance was slightly larger than in recent years. The gap between net returns of the largest endowments in the study (9.7% for endowments with more than $1 billion in assets) and the smallest in the study (7.6% for endowments less than $25 million in assets) was 2.1 percentage points, as compared to the 1.3 percentage point gap seen last year (Chart 1).

While one-year performance is not insignificant, most endowment managers use a longer-term view for planning purposes. While the largest endowments remain the best performing cohort over longer investment horizons, the relative outperformance narrows as the investment period is extended. The 3-year spread is 0.6 percentage point, the 5-year spread return spread is 0.7 percentage point, and the 10-year shrinks to 0.2 percentage point.

Over the majority of timeframes, the best performing cohort was the largest, with an average return of 6.8%, 8.2%, and 6.0% over 3 years, 5 years, and 10 years, respectively. Similar to the prior fiscal year reported, there was little correlation this year between size and return. Indeed, the smallest endowments were not the worst performing; instead, the medium-sized endowments, that is, those with $25–500 million in assets, were the worst. This U-shaped return curve, where the largest and smallest endowments on average outperformed mid-sized ones, appeared in every return series with the exception of the 10-year.
where returns are fairly evenly distributed around the 5.8% average return level.

With regard to that important 10-year number, both the largest and smallest sized cohorts posted the largest average\(^1\) annual returns, with the averages coming in between 5.8 to 6.1%; meanwhile the medium-sized cohorts posted slightly weaker returns. The gap between best and worst performance was exceptionally narrow, at just half a percentage point.

These weak short- and long-term returns among all endowments may be a cause for concern, in our view. According to past survey results, many endowments report they require an annual return of 7.2% to maintain their purchasing power after spending, inflation, and investment management costs. The fact that the 10-year average return, described as “mission-critical” by the industry, increased from 4.6% in 2017 to 5.8% in 2018 is promising, but nevertheless short of the level that would preserve purchasing power for these pools of assets. For the first time, NACUBO provided new data showing how institutions were allocating endowment spending dollars, and 49% of withdrawals went towards financial aid programs, while 7% supported campus operations. These numbers can vary significantly by institution, but, nonetheless, we believe a weaker return stream may make it difficult for endowments to meet this funding objective.

**Asset Allocation by Endowment Size**

A more granular look helps decipher how endowments have adjusted their asset allocations based on size. Only firms with assets in excess of $1 billion have an above-average allocation to alternatives on a dollar-weighted basis; on an equal weighted basis, the $251-500 million and $501 million to $1 billion cohorts also have an above average allocation to alternatives. It seems that the smaller the endowment, the more traditional the asset allocation; that is, there is greater emphasis on public equities and fixed income with less exposure to alternative strategies (Chart 2).

Over the past fiscal year, smaller endowments benefited from their higher allocation to public equities relative to the larger cohorts. For the 2018 fiscal year, domestic equities were the best performing asset class, with the S&P 500\(^2\) up over 14%. Meanwhile, non-U.S. equities were up 7%, and fixed income lagged as the Barclays U.S. Aggregate Bond Index was down -0.4%. Alternative investments experienced a slight pickup in performance, rising from 7.8% in the 2017 fiscal year to 8.3% in the 2018 fiscal year.

**Reevaluating Allocations and Strategies**

Every endowment must balance multiple and sometimes conflicting goals, including meeting return objectives, limiting undue volatility, managing shortfall risk, and minimizing expenses. It can be a tall order, and some endowments appear to be managing these objectives better than others.

One of the biggest challenges facing investors today is the possibility of low economic growth and below-average investment returns for most asset classes over the next 10 years. The reality of what we believe to be a lower-return environment has been consistently reflected in our Capital Market Assumptions (CMAs). Our CMAs have been steadily falling over the course of this cycle, but 2018 was the first year where we started to see a stabilization of returns in certain asset classes. Our 2019 analysis suggests 2018 may have been the inflection point in returns, although one year does not necessarily make a trend. As we documented last year, 10 years into the economic expansion, valuations are now quite full by

\(^{1}\) Averages reported in the study and referenced in the Market Update are dollar-weighted.

\(^{2}\) Chart 2

Asset Allocation by Endowment Size

As of 6/30/2018

<table>
<thead>
<tr>
<th>Dollar Amount</th>
<th>Equities</th>
<th>Fixed Income</th>
<th>Alternatives</th>
<th>Cash/Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 25 million</td>
<td>60%</td>
<td>24%</td>
<td>11%</td>
<td>5%</td>
</tr>
<tr>
<td>25-50 million</td>
<td>57%</td>
<td>22%</td>
<td>16%</td>
<td>5%</td>
</tr>
<tr>
<td>51-100 million</td>
<td>56%</td>
<td>19%</td>
<td>22%</td>
<td>5%</td>
</tr>
<tr>
<td>101-250 million</td>
<td>53%</td>
<td>15%</td>
<td>27%</td>
<td>5%</td>
</tr>
<tr>
<td>251-500 million</td>
<td>48%</td>
<td>12%</td>
<td>36%</td>
<td>4%</td>
</tr>
<tr>
<td>501 million-1 billion</td>
<td>44%</td>
<td>10%</td>
<td>41%</td>
<td>5%</td>
</tr>
<tr>
<td>Over 1 billion</td>
<td>32%</td>
<td>7%</td>
<td>58%</td>
<td>3%</td>
</tr>
<tr>
<td>Average</td>
<td>36%</td>
<td>8%</td>
<td>53%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Sources: NCSE, Bloomberg L.P., PNC
most metrics we track, which suggests more muted price appreciation in the longer term.

In order to address low-return expectations, we believe investors need to continue to look outside of the traditional 60/40 investment allocation in stocks and bonds. Specifically, we believe alternative investments can be an effective means of diversifying risk and ultimately reducing overall portfolio volatility. Given the volatility experienced in global markets in fourth-quarter 2018, we believe it is especially important to key in on the diversification of risk and volatility mitigation that alternative investments may provide. In market environments that have low volatility, high correlation, and low dispersion, active management in general struggles. We believe, however, that the environment for active managers and alternatives, in general, will improve as the economic cycle matures.

Regardless, the use of alternative investments and their active management nature requires significant due diligence. Alternatives are often sought for diversification benefits, which could lead to better risk-adjusted returns. However, alternatives tend to be less liquid, charge higher fees, and can be subject to regulatory limitations. While we continue to believe a reasonable allocation to alternatives can add value to the average endowment’s portfolio, we nevertheless suggest that all endowments, and in particular smaller ones, perform prudent due diligence when selecting those allocations.

To Be Continued...

The full NACUBO-TIAA Study of Endowments is scheduled to be released in March. The full report is expected to provide more details on asset allocations and returns as well as information on investment criteria, expenses, and management outsourcing.

Amanda E. Agati, CFA®
Chief Investment Strategist
Institutional Advisory Solutions

Christopher Dall
Director of Content
Institutional Advisory Solutions

©2019 The PNC Financial Services Group, Inc. All rights reserved.