THE ENDOWMENT MODEL: STRIKING THE BALANCE BETWEEN SIMPLE & COMPLEX

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Introduction

The discussion among many small and mid-sized Endowment and Foundation investment committees of late is about whether the Endowment Model is worth all the trouble. This debate rolls on as a simple "60% equity/40% fixed income" portfolio continues to post strong returns. Accordingly, many Endowments and Foundations are still searching for the most appropriate structure. For many small and mid-sized Endowments, the answer likely lies somewhere in between the two extremes, and should be driven largely by the combination of each organization's return goals, liquidity needs, dependence on spending to support operations, access to debt markets and appetite for complexity.

Over the last 10 years, many Endowments[1] pursued what came to be known as the Endowment Model. Some followed this path on the heels of very successful results from some of the top colleges and universities. However, recent results have some Endowments questioning the validity of this approach, as a simple 60/40 portfolio has produced superior results to that of the average Endowment portfolio, depicted here by the results of the 2013 NACUBO-Commonfund Study of Endowments (Exhibit 1).

These results, especially in the near term, have fueled intense debates among investment committees, boards and staff members who continue to ask: Is the Endowment Model appropriate for all institutions?

This paper will endeavor to define the Endowment Model, offer considerations for small to mid-sized endowments and provide a case study to highlight the positives and negatives to various approaches.

Defining the Endowment Model

The Endowment Model is often depicted as an investment approach with a high allocation to alternative investments (e.g., private equity, hedge funds, illiquid real assets). While this is true, alternative investments are just some of the many characteristics of the Model. We believe the Endowment Model, and those investment programs pursuing it, often contain the following key characteristics:

- Flexible governance structure
- Dedicated and stable investment staff
- Long-term time horizon
- Substantial active manager risk budget
- Dynamic asset allocation structure

Exhibit 1: NACUBO Performance

Annualized Returns as of June 30, 2013				
	1 Year	3 Year	5 Year	10 Year
NACUBO (All Institutions)	11.70%	10.20%	4.00%	7.10%
S&P 500(60%) / BC Agg(40%)	20.60%	18.50%	7.00%	7.30%

Source: 2013 NACUBO-Commonfund Study of Endowments

[i] *Throughout the paper, we use "Endowments" to refer to both Endowments and Foundations*

Exhibit 2: NACUBO Performance by Size

Performance by Asset size as of June 30, 2013							
	Total Institutions	Over $1 Billion	$501 Million - $1Billion	$101 -$500 Million	$51 - $100 Million	$25 - $50 Million	Under $25 Million
1-year net return	11.7%	11.7%	12.0%	11.9%	11.5%	11.4%	11.7%
3-year net return	10.2%	10.5%	10.2%	10.2%	10.0%	10.1%	10.6%
5-year net return	4.0%	3.8%	4.0%	3.8%	4.0%	4.3%	4.9%
10-year net return	7.1%	8.3%	7.6%	7.0%	6.7%	6.4%	6.3%

Source: 2013 NACUBO-Commonfund Study of Endowments. Past performance is no guarantee of future results.

- Capacity to take on significant illiquidity and complexity
- Ability to identify and access top managers
- Scale to drive down fees
- Willingness to invest in niche areas
- Ability to issue debt

The typical implementation may be better suited for larger Endowments that maintain most, if not all, of these attributes. This stacks the deck against smaller Endowments— that is, those with assets of less than $500 million— to execute a strategy they may not be adequately equipped for. This is illustrated in Exhibit 2, which highlights larger funds outperforming their smaller counterparts over the long-term.

Over the years, the Endowment Model gained traction, due to outsized gains achieved by Yale, Harvard, Stanford and others. David Swenson of Yale and other Chief Investment Officers received high praise, and deservedly so, as they took unique approaches to Endowment investing that helped support the growth of their respective organizations' operations.

Fast-forward to the present: Endowments have sizable asset allocations to alternative assets, according to the 2013 NACUBO-Commonfund Study of Endowments (Exhibit 3).

For appropriate adopters, we believe the Endowment Model is a very viable approach. In fact, the Endowment Model has many features that NEPC has long espoused as sources of value add for client portfolios. Fortunately, many of these features are attainable even within a more liquid framework. We offer an alternative framework in the following section.

Considerations for Small & Mid-Sized Endowments and Foundations

We believe small and mid-sized Endowments should consider some additional factors in constructing their investment programs, particularly if their resources are limited. As we've mentioned, the Endowment Model is not a "one size fits all" solution. Therefore, most Endowments should position their portfolios somewhere between the illiquid, complex Endowment Model and the liquid, traditional 60/40 portfolio (Exhibit 4). In addition, portfolio construction should reflect the organization's reliance on spending from its investment program to support operations or grant-making.

With this in mind, we offer some guiding principles that we believe help strike the right balance.

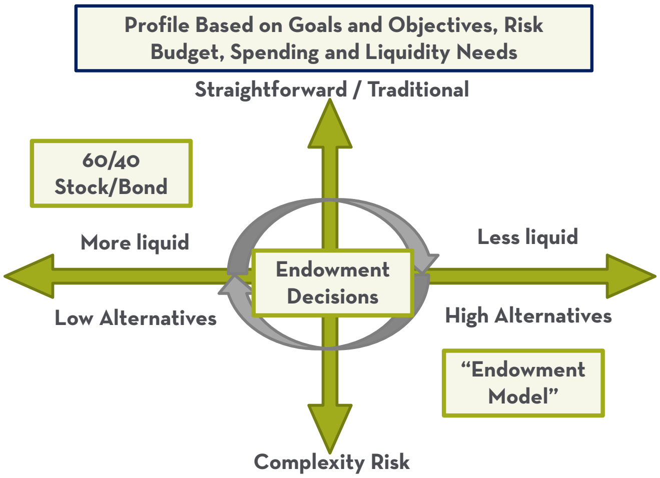
- Utilize Total Enterprise Management (TEM) – NEPC believes that a holistic approach that integrates the spending needs of the

Exhibit 3: NACUBO Asset Allocation by Asset Size

Allocation by Asset Size as of June 30, 2013							
	Total Institutions	Over $1 Billion	$501 Million - $1Billion	$101 -$500 Million	$51 - $100 Million	$25 - $50 Million	Under $25 Million
Domestic Equity	16%	13%	20%	27%	33%	36%	43%
International Equity	18%	17%	19%	19%	20%	17%	14%
Fixed Income	10%	8%	11%	15%	20%	22%	26%
Alternative Strategies	53%	59%	45%	34%	23%	20%	11%
Short-term Securities/Cash/Other	3%	3%	5%	5%	4%	5%	6%

Source: 2013 NACUBO-Commonfund Study of Endowments

Exhibit 4: Striking the Right Balance



Source: NEPC

Endowment with the operating budget is central to success. For organizations that utilize Total Enterprise Management tools, we have found that the communication among staff, investment committees, finance committees and the Board has increased markedly. Importantly, these organizations have a better understanding of how their portfolios and their organizations might fare under various scenarios.

- Employ a Multifaceted Asset Allocation Structure – Investors should consider a structure that allows for a more dynamic approach to asset allocation, but one that is not excessively burdensome for staff or the investment committee to implement. This approach includes three core steps: (1) Frequently reviewing and adjusting strategic asset allocation based on longer term, market-driven assumptions. (2) Incorporating an opportunistic component, with a 0-10% range, in order to take advantage of intermediate term opportunities. (3) Delegating a portion of assets to flexible strategies such as global asset allocation and global macro that can take advantage of short-term opportunities. The output of this process is a portfolio that is generally fee efficient, flexible, liquid, transparent and customized to the unique characteristics of the organization.

- Take Advantage of the Illiquidity Premium – With long-term time horizons, many Endowments have the ability to take on some level of illiquidity. Each organization should determine how much spending from the investment portfolio contributes to their overall operating budget. In situations where spending supports a small portion of the operating budget, the ability to take on illiquidity may be greater than those organizations where spending supports a large portion of the operating budget. Additionally, an organization's ability to access the debt markets (which can be limited in certain market environments) can also influence its ability to take on various risks, including greater illiquidity.

- Rationalize the Number of Managers in the Portfolio – With limited staff and investment committee time, it is important to maintain a practical number of manager relationships. While there is no magic formula to determine a reasonable number of manager relationships, inputs such as Endowment asset levels, allocations to alternatives, dedicated investment staff, consultant involvement and investment committee engagement should influence the ultimate outcome.

- Consider the Use of Active and Passive Management – The use of active management can place a greater burden on all parties. If a decision is made to pursue active management, it should be implemented in areas where there are high levels of conviction around achieving success, a sound thesis in regard to what makes the manager different and access to top investment management teams. Incorporating passive solutions in certain areas can reduce overall fee levels, provide liquidity and reduce administrative burden.

- Maintain a Long-Term View and Consistent Approach – Many Endowments were attracted to the Endowment Model based on historical investment returns. While a simple 60/40 portfolio has performed admirably over the last five years, the pendulum will likely swing back in favor of a more diversified approach. NEPC believes the path to strong risk-adjusted results is based upon a long-term view and the implementation of a consistent, diversified approach.

Case Study: A Small Endowment Solution

As an example of a practical implementation, we examine a $200 million Endowment, with a 5% spending rate that supports a sizable (25%) portion of the organization's operating budget (Exhibit 5). This Endowment is also looking to achieve a return goal of inflation-adjusted spending, has a moderate risk tolerance, sizable liquidity needs and a relatively long-term time horizon. Incorporating these inputs provides a more holistic approach akin to what TEM can provide.

Exhibit 5: Case Study Characteristics

	Input	Comment
Market Value of Assets	$200 million	Small endowment
Spending Rate	Rate of 5% on assets	Based on a three year smoothing
Spending Contribution to Operating Budget	25%	Spending is a significant portion of the operating budget
Return Goal	Spending Plus Inflation	8% target return (assumes 3% inflation); difficult to achieve in the current market environment
Risk Tolerance	Moderate	Due to concerns with the volatility of spending
Liquidity Needs	Moderate	Due to spending being a significant part of the operating budget
Time Horizon	Long Term	However, need to be aware of short term operating needs and the volatility of the spending rate
Debt	Limited Access	Debt may be accessible, but the endowment is not a regular issuer

Source: NEPC. For illustrative purposes only.

With these characteristics in mind, a portfolio with an outsized allocation to alternative assets would not be appropriate due to its heavy reliance on illiquid assets. While the 60/40 portfolio addresses some of the needs, it has the potential to fall short of the return objectives in light of forward-looking returns for traditional stocks and bonds. Therefore, we believe a solution that lies somewhere between 60/40 and the Endowment Model would likely be the best solution to satisfy the Endowment's goals and objectives. We analyze these different asset allocation structures through various portfolio construction tools to ensure we are evaluating the portfolio from a number of perspectives.

The asset allocation solution highlighted as the "Alternative Target" in Exhibit 6 satisfies all of the goals and objectives laid out above. By limiting the alternative asset exposure to 30%, compared to 60% in the Endowment Model example, we are able to capture an illiquidity premium on a portion of the assets, while maintaining enough liquidity to survive sizable drawdowns. Further, the combination of a balanced strategic allocation, an opportunistic bucket and the utilization of Multi Asset Class strategies provides for a tactical asset allocation structure that is not overly burdensome. While the Alternative Target portfolio falls slightly short of the Endowment Model's forecasted return, it does offer a projected return in excess of 7%, which has the potential to satisfy the investment program return goals if active management is incorporated into the investment program. Conversely, we do not believe a 60/40 portfolio is built to provide returns that align with these goals as it projects just over a 5% return based on NEPC's forward view. With a moderate risk tolerance, the Alternative Target portfolio also fits the bill, as it has lower forecasted volatility than the Endowment Model but still projects higher risk-adjusted returns as measured by the Sharpe ratio.

Exhibit 6: Asset Allocation

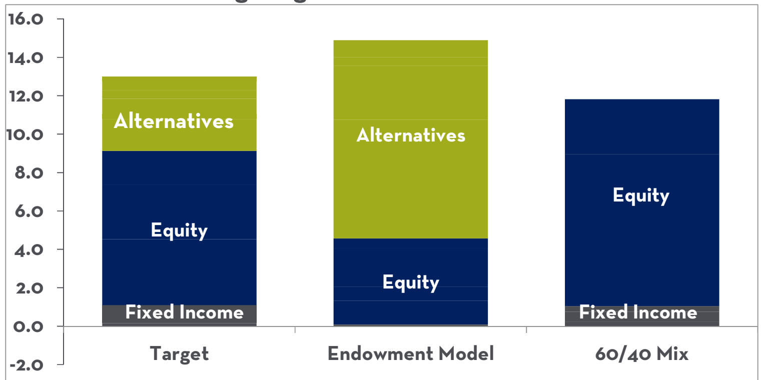
	60/40 Mix	Alternative Target	Endowment Model
Cash	**0%**	**0%**	**3%**
All Cap Domestic Equity	60%	12%	12%
International Equity	0%	8%	12%
Emerging Market Equity	0%	5%	3%
Global Equity	0%	10%	0%
Total Equity	**60%**	**35%**	**27%**
Core Bonds	40%	5%	10%
Unconstrained Bonds	0%	5%	0%
Emerging Market Debt	0%	5%	0%
Total Fixed Income	**40%**	**15%**	**10%**
Multi Asset Class	**0%**	**20%**	**0%**
Real Assets	0%	10%	15%
Absolute Return	0%	10%	25%
Private Market	0%	10%	20%
Total Alternatives	**0%**	**30%**	**60%**
Opportunistic*	**0%**	**0%**	**0%**
Expected Return 5-7 Year	*5.3%*	*7.1%*	*7.6%*
Standard Deviation	*11.8%*	*13.0%*	*14.9%*
Sharpe Ratio	0.38	0.49	0.46

**Opportunistic allocation has a 0% target and 0-10% range.*

Source: Based on NEPC's 2013 5-7 year assumptions for return, risk and correlation. For illustrative purposes only. It shows an allocation NEPC might utilize based on the case study facts. It does not represent actual or hypothetical performance and is not a recommendation to buy or sell any security type.

While capital allocation is an important perspective to consider, it represents the starting point of NEPC's review of the different asset mixes. When we look at the portfolio from a risk budgeting perspective, we are trying to gain perspective on how the portfolio's overall risk is distributed. For many, the ultimate goal of the risk-budgeting exercise is to maintain a reasonable balance not only between different asset classes, but also within these broad asset classes. In the example, the Alternative Target strikes a better balance between public equities, fixed income and alternative assets (Exhibit 7). Conversely, the 60/40 portfolio has a risk budget that is almost entirely consumed by public equities. The Endowment Model portfolio is also heavily dominated by one risk, in this case with alternative assets.

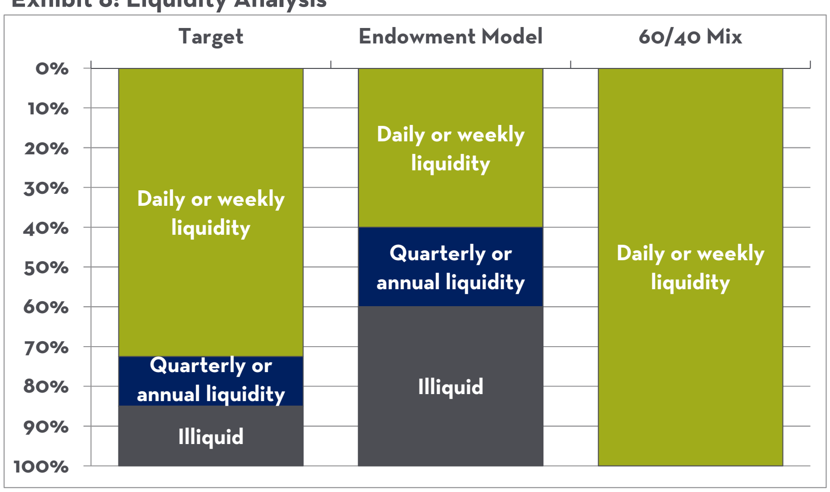
Exhibit 7: Risk Budgeting



Source: NEPC 2013 Risk Budgeting Analysis. Please be advised this is not an exhaustive representation of risks associated with each model.

We also analyze these portfolios from a liquidity standpoint (Exhibit 8). Again, we find the analysis quite different as the Endowment Model has over 60% allocated to strategies with quarterly or longer liquidity. On the other hand, the 60/40 mix is highly liquid, allowing for administrative ease. The Alternative Target represents the appropriate liquidity for this Endowment as over 70% of the portfolio is highly liquid, allowing for access to capital for spending needs and general rebalancing.

Exhibit 8: Liquidity Analysis



Source: NEPC 2013 Liquidity Analysis

Conclusion

Despite its recent struggles, the Endowment Model remains firmly entrenched as an investment strategy that has the potential to generate compelling returns for appropriate adopters over the long term. While the 60/40 portfolio has produced outsized returns over recent periods, NEPC does not believe it is positioned for outperformance going forward, and that it represents a risky portfolio in many regards.

We revisit our original question, the one that many committees are struggling with right now: Is the Endowment Model worth the trouble? While the answer for many is a resounding "no," small and mid-sized Endowments can capitalize on certain components of the Endowment Model.

As many organizations evaluate alternative approaches, we suggest that small and mid-sized Endowments seek solutions that fall somewhere on the continuum between the simple portfolio and the complex one. Ultimately, the ideal structure for most small and mid-sized endowments is a customized approach that incorporates Total Enterprise Management, a multifaceted asset allocation process, a modest allocation to illiquid assets, an operable number of investment managers, a blend of active and passive strategies and a long-term perspective.

Why is Total Enterprise Management Important?

Based on the results of a recent NEPC survey focused on small and mid-sized Endowments, we found that there is a gap between the decision-making processes for investments and operations. We also found that many organizations do not have a formal process in place to link operational and spending needs with investment return and risk, despite claiming to be concerned about both issues independently (Exhibit 9).

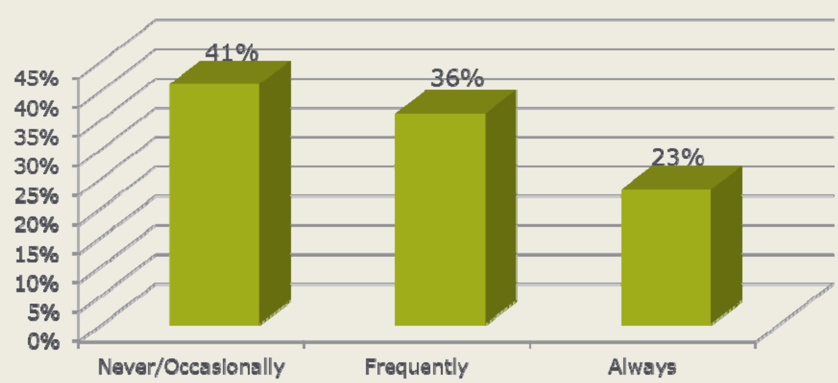
Exhibit 9: The Biggest Concerns Around Investment Programs

Source: NEPC Introduces Total Enterprise Management for Endowments and Foundations, April 23, 2013

Additionally, a sizable percentage of respondents indicated that operating needs comprised 20% or more of spending from the investment portfolio. Respondents to the survey were most concerned with the spending draw of their endowment decreasing, the availability of cash for operations and the volatility associated with revenues. Despite these concerns, a sizable portion of respondents rarely discuss operational issues at investment committee meetings (Exhibit 10).

As previously mentioned, we have found that for the clients that have utilized NEPC's Total Enterprise Management tools, the communication among staff, investment committees, finance committees and the Board has increased markedly.

Exhibit 10: Frequency of Budgets/Operational Issues Discussed at Investment Committee Meetings



Source: NEPC Introduces Total Enterprise Management for Endowments and Foundations, April 23, 2013

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"NEPC Introduces Total Enterprise Management for Endowments and Foundations", April 23, 2013.

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