In Defense of the Endowment Model

By Scott Welch, CIMA®

The endowment model of investing fell on hard times in 2008–2009 when many advocates of this approach (Yale, Harvard, etc.) suffered crippling portfolio losses following the credit collapse and subsequent equity market declines.[1]

Broadly speaking, the endowment model refers to globally diversified portfolios with limited investment constraints and heavy allocations to nontraditional investments such as hedge funds, private equity, and real assets. This approach was first popularized by David Swensen, chief investment officer of the Yale University Endowment Fund.[2]

Following a 20-year stretch of remarkable outperformance by Yale and other large endowments, many investment consultants and wealth managers adopted an endowment-like approach for client portfolios—and got caught in the same liquidity squeeze and forced-selling cycle. A significant industry and media backlash ensued. The endowment model, clearly, was dead.[3]

Before eulogizing the endowment model, however, it is worth asking the following questions:

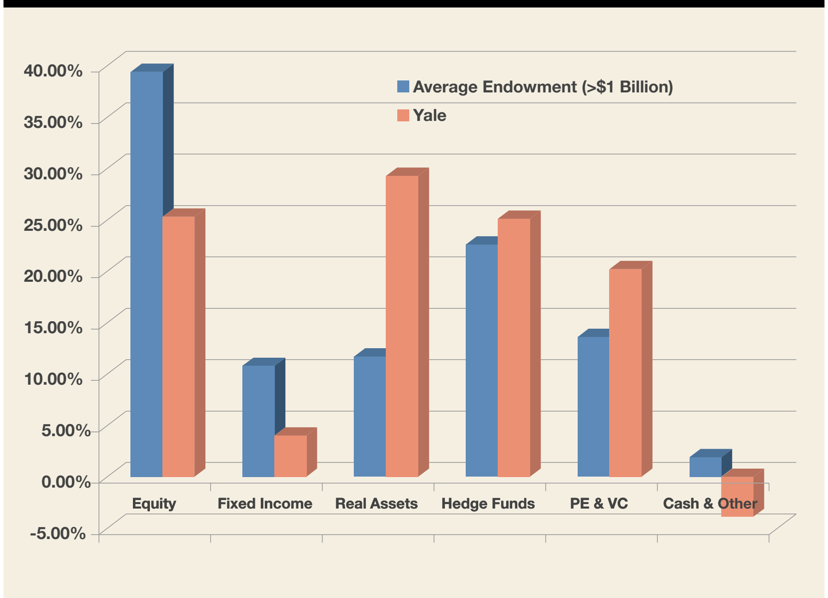
1. What were the root causes of the poor performances in 2008–2009?
2. How did the experiences of the large endowments compare with those of the average institutional and high-net-worth client?
3. How does the endowment model stack up if we analyze performance over longer periods?
4. What can we learn from what happened?

Root Causes of Poor Performances in 2008–2009

Figure 1 shows a comparison of the Yale portfolio with that of the average large endowment for fiscal year 2008.[4] The underlying cause of Yale's (and other, similarly invested investors') woes becomes clear:

- A very heavy allocation to truly illiquid investments, in particular private equity, venture capital, and real assets
- A relatively smaller allocation to more-liquid investments such as stocks and bonds

FIGURE 1: ASSET ALLOCATIONS OF YALE AND THE ENDOWMENTS



Endowments have essentially infinite time horizons and so can—and should—devote some portion of their portfolios to longer-time-horizon investments. They also have annual funding obligations, however, and part of appropriate portfolio management is to immunize against those known liabilities.

But in an extended market environment of positive performance, cheap liquidity, and stable markets, endowments gradually overallocated to longer-dated and illiquid assets, benefitting most of the time from the additional performance premium associated with illiquidity. The heavy allocations to private equity, venture capital, and real assets were, in fact, primary drivers of Yale's and others' remarkable historical track record.

When the credit and real estate markets imploded in the fall of 2008, however, followed quickly by the evaporation of market liquidity and the collapse of equity prices, the endowments found themselves in a vicious cycle. Forced by funding obligations to generate cash out of the portfolios, they had to sell liquid equity and fixed income investments into a collapsing market, further driving down values.

But they still had less than needed to meet cash needs, so they were forced sell illiquid assets at steep discounts (if they could find buyers at all). What started out as paper mark-to-market losses crystallized into real losses.

Many people might inappropriately lump hedge funds into the illiquid asset category; but most hedge funds are less liquid than stocks and bonds but far more liquid than private equity, venture capital, and most real assets. This is especially true for long-short equity managers and commodity trading advisors (CTAs), because they trade in highly liquid underlying securities.

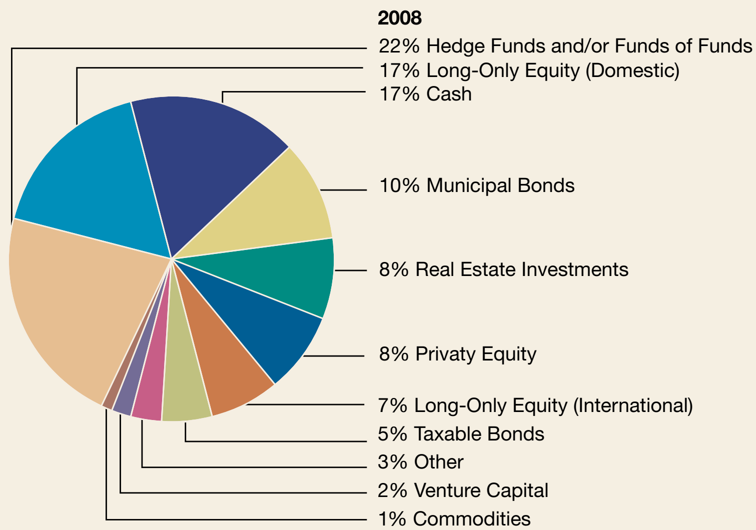
The exception in 2008 was the absolute return strategy. For years absolute return funds had delivered stable and consistently positive returns and significant diversification benefits. Many of the underlying strategies in these funds, however, employed leverage and had significant exposure to credit strategies, and they thus posted double-digit negative returns in 2008. Even worse, when investors sought to liquidate investments in these funds, many faced partial or "gated" redemptions that prevented them from getting their money. This compounded the liquidity problem as investors rushed to the exit.

The combination of forced selling of liquid and illiquid assets and the surprisingly bad performance of absolute return strategies presented endowments with a perfect storm of low probability but highly consequential events.

Large Endowments vs. Institutional and High-Net-Worth Investor Experience

How does the endowment experience compare with the average experience of smaller institutions and high-net-worth investors? The 2008 National Association of College and University Business Officers (NACUBO) report shows that endowments with assets of $25 million to $1 billion had much lower allocations to illiquid assets—averaging 10–20 percent in private equity, venture capital, and real assets and an additional average of 10–20 percent in hedge funds. Figure 2 highlights a comparable allocation breakdown for members of the Institute for Private Investors (IPI), a noncommercial educational organization for wealthy families.[5]

FIGURE 2: AVERAGE ASSET ALLOCATIONS OF IPI SURVEY RESPONDENTS



While smaller institutions and individual investors do invest in private equity, real estate, and other illiquid assets, not many have the time horizon or lack of liquidity constraints to invest as heavily into these asset classes as the larger endowments. As a result, relatively few suffered the combination of illiquidity and lack of performance endured by the larger endowments in 2008.

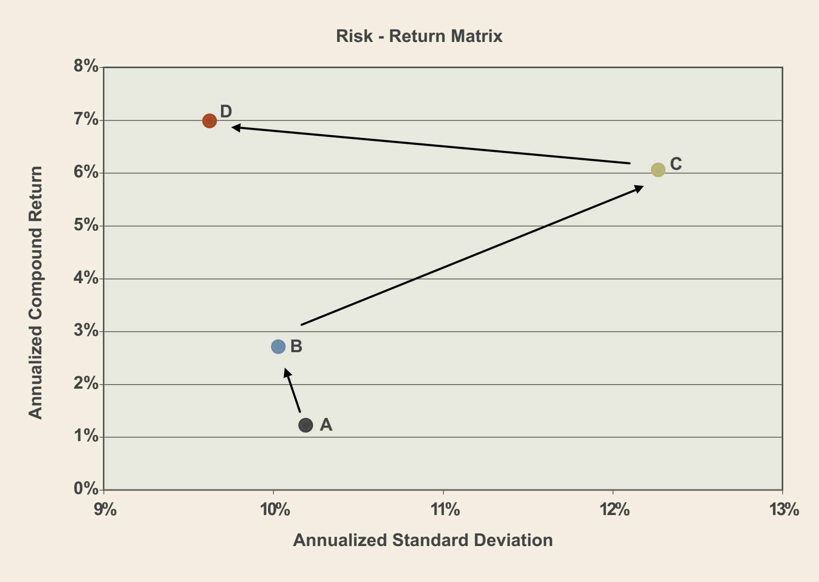
The market events of 2008–2009 resulted in many investment professionals questioning long-held beliefs, including the underlying tenets of modern portfolio theory itself. They tended to project current market conditions into perpetuity (the "now-is-forever" point of view).

During 2003–2008, investors had acted as if rising asset prices, plentiful liquidity, cheap credit, and low volatility would last forever, and the result was massive leverage at both the personal and institutional levels. Then the

TABLE 1: TRADITIONAL VS. "ENDOWMENT MODEL" PORTFOLIOS

Source of Value Add (Impact on Total Return)				
Value-Add	**Portfolio A**	**Portfolio B**	**Portfolio C**	**Portfolio D**
MSCI AC All World	12.3%	12.3%	12.3%	12.3%
Basic 60/40 Mix		16.7%	16.7%	16.7%
Equity Diversification			46.0%	46.0%
Alternative and Liquid Real Asset Investments				15.1%
Total Return	12.3%	28.9%	74.9%	90.0%
Annual Return	1.2%	2.7%	6.1%	7.0%
Standard Deviation (Risk)	10.2%	10.0%	12.3%	9.6%

FIGURE 3: A COMPARISON OF PORTFOLIO RISK AND RETURN PROFILES



Minsky Moment occurred and the market collapsed.[6] Folks started predicting that the market will be forever in a state of volatility, limited credit, uncertain liquidity, and pending doom.

Table 1 and figure 3 show how the risk-return profile of a portfolio changes as diversification and nontraditional assets increase (the time frame is the 10-year period ending December 31, 2009).

Portfolio A is the MSCI All-World Index (a cap-weighted index of global stocks and bonds).

Portfolio B is a traditional 60/40 mix of the S&P 500 Index and the BarCap Government/Credit Index.

Portfolio C is also a 60/40 portfolio, but with the 60-percent equity allocation diversified across multiple asset classes—large cap (growth, value, and core), small cap (growth, value, and core), U.S. micro-cap, developed international (growth and value), and emerging markets.

Portfolio D is a representative endowment-model portfolio that includes a 45-percent allocation to diversified traditional equity, a 20-percent allocation to traditional fixed income, and a 35-percent allocation to alternative investments (absolute return, hedged equity, CTAs, master limited partnerships, commodities, and real estate investment trusts).

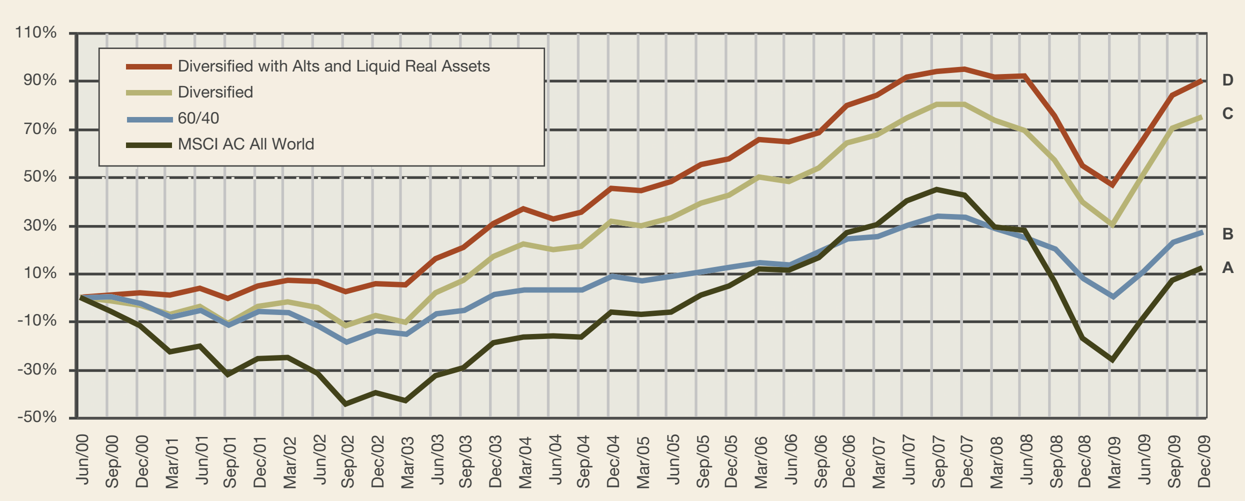
The nontraditional asset strategies employed in Portfolio D may be relatively less liquid than traditional equity and fixed income (if they are accessed via limited partnerships, that is, hedge funds), but it is worth noting that they are all available as well through mutual funds or registered products, which will have daily or quarterly liquidity.

The results of the increasing levels of diversification are striking. Most dramatic is the significant reduction in portfolio risk (as measured by standard deviation)—with a slight increase in return—that comes from including nontraditional assets.

Figure 4 illustrates the same point slightly differently, showing the total growth of the portfolio over a 10-year period.

While the inclusion of nontraditional assets hurt portfolio performance in 2008 (a year in which everything except managed futures and Treasuries dropped precipitously), the outperformance over a longer time horizon is significant.

FIGURE 4: COMPARING TOTAL PORTFOLIO GROWTH



If the now-is-forever point of view caused investors to be overly optimistic in the years leading up to 2008, that same point of view may be causing them now to throw the baby out with the bathwater with respect to the long-term benefits of nontraditional assets.

Endowment Model and High-Net-Worth Investors

So, where are we with respect to the endowment model, especially as it pertains to high-net-worth investors?

1. As an investment philosophy, the endowment model has not lost its overall appeal for many investors, and it remains a valid approach to long-term investing. These investors understand the long-term benefits of broad diversification and the inclusion of nontraditional assets, and they understand that what happened to the larger endowments was a function of exceptional market events and asset allocations that do not resemble the typical portfolio of smaller endowments and/or wealthy individuals.
2. That said, the events of 2008–2009 did change investor behavior and preferences in certain ways. Specifically, for most of 2009 many investors avoided limited partnerships (LPs)—the traditional access vehicle for nontraditional asset strategies—because of the Madoff scandal and gated redemptions. Demand for more transparency and better liquidity drove a flight to separately managed accounts (where available), as well as mutual funds and registered products. As 2009 ended, however, inflows to LPs increased as investors remembered that these investment vehicles remain a viable way to access high quality managers who are deploying into opportunistic market segments.
3. Many absolute-return funds of funds (FoF) also suffered a double whammy that they still are recovering from. First, they faced investor backlash from the mismatch of FoF liquidity terms and the actual liquidity of the underlying investments, which led to gated redemption. Second, in an attempt to improve liquidity and meet redemption demands, many managers rebalanced portfolios to heavier allocations of cash or more liquid investments, meaning they missed much of the remarkable market recovery in 2009. This, too, seems to have largely worked itself through and FoFs once again are seeing positive inflows.

While the larger endowments most affected by the events of 2008–2009 have moved to improve liquidity, they have by no means given up the endowment model. For example, in mid-March 2010, David Swensen announced that Yale's endowment had increased its allocations to private equity, real estate, and commodities.[7] Why? Because even though liquidity management is critical, the deeply discounted prices on these longer-term investments mean they are likely to prove successful. And the larger endowments cannot hope to meet current and future expected liabilities without outperforming traditional equity and fixed income portfolios over the next investment cycle.

Lessons Learned

The market events of 2008–2009 taught (or reminded us of) many valuable lessons, among them:

- Standard deviation is an important but incomplete measure of portfolio risk.
- Asset class correlations tend to increase dramatically during periods of market disruption; diversification mitigates but does not remove portfolio risk.
- Understand, evaluate, and plan for—but don't be overly influenced by—the risk of low probability but high consequence events.
- Comprehensive portfolio risk evaluation must include nonstatistical metrics such as liquidity, leverage, and counterparty risk.
- Incorporate liquidity constraints into portfolio construction considerations.
- Recognize that human behavioral tendencies make it difficult to maintain investment discipline during periods of stress.

The endowment model should not be discarded as a long-term investment philosophy. It is true, however, that the different time horizon, investment objectives, and liquidity profiles among large endowments and other investors should be understood and taken into consideration.

With these differences in mind, for most high-net-worth investors the endowment model should mean:

- Broad diversification
- Intelligent use of active vs. passive investment strategies (i.e., cost/benefit optimization of active management fees)
- A prudent use of alternative investments determined by personal liquidity constraints
- A long-term time horizon
- Investment discipline through full market cycles

Investors with these types of portfolios, including a reasonable allocation to alternative investments, may have seen their portfolios decline in 2008. But over a longer horizon, they have enjoyed improved returns, lower risk, and more consistent performance.

Despite the current anti-endowment model rhetoric, when this model is adjusted appropriately for the characteristics of individual investors it still represents the best way to build investment portfolios for long-term success. I&W

Acknowledgment

Wade Fowler contributed to the analysis in this article.

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Endnotes

1 According to The National Association of College and University Business Officers (NACUBO), Harvard and Yale posted portfolio performances for fiscal year 2009 of –29.8% and –28.6%, respectively. These were the two worst performances of any major endowment, versus the average endowment performance of –18.7%. See http://www.nacubo.org/Documents/research/2009_NCSE_Public_Tables_Endowment_Market_Values.pdf.

2 Many books have been written on the endowment model approach, but the best-known is *Pioneering Portfolio Management: An Unconventional Approach to Institutional Investing*, by David Swensen, New York, NY, The Free Press, 2000.

3 See, for example: John Hechinger and Craig Karman, Harvard Hit by Loss as Crisis Spreads to Colleges, *Wall Street Journal*, December 4, 2008; Claire Caine Miller and Geraldine Fabrika, Beyond the Ivied Halls, Endowments Suffer, *New York Times*, November 25, 2008; Tamar Lewin, Investment Losses Cause Steep Dip in University Endowments, Study Finds, *New York Times*, January 28, 2010.

4 Data sources: NACUBO and the Yale Endowment Annual Report. The NACUBO data for 2009 is available but is not granular in terms of specific allocations—all nontraditional investments are lumped together as "alternative strategies," so the 2008 data is used instead, to highlight specific allocations.

5 For more information on IPI, see http://www.memberlink.net. The chart in this article is from the 2008 Family Performance Tracking® Survey, used with permission from IPI.

6 Hyman Minsky was a late-20th century economist whose primary contribution to economic thought was his research into and explanation of financial crises, summarized in his working paper, "The Financial Instability Hypothesis" (http://www.levy.org/pubs/wp74.pdf). Minsky segmented borrowers into three categories:

1. Hedge borrowers, whose cash flow can cover both interest and principal on any debt incurred;
2. Speculative borrowers, whose cash flow can cover interest but not principal; and
3. Ponzi borrowers, whose cash flow can cover neither interest or principal and who must rely on rising asset prices and increased borrowing to survive.

Minsky's theory states that in strong economic times the risk of failure is "forgotten," leading to increased borrowing and a slow (but inevitable) "flow" from hedge borrowing through speculative borrowing and finally to Ponzi borrowing, at which point a market bubble has evolved that will inevitably pop. In other words, periods of market stability mask underlying high levels of market instability, until a "Minsky Moment" occurs—a tipping point when the credit bubble pops, the leveraged house of cards collapses, and financial markets crater. It would be hard to find a more elegant or accurate description of the events leading up to and through 2008 and early 2009. It also helps to explain why so many investors did not see—or chose to ignore—the warning signals that preceded the market collapse; as a collective body we forgot that failure was an option.

7 See, Yale upped allocation to private equity, commodities, Reuters, March 18, 2010, available at http://www.reuters.com/article/idUSN1823986720100318.

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