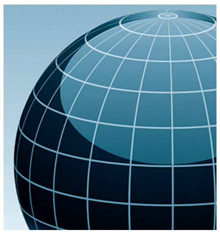
EVOLVING ENVIRONMENT CAUSES SUBTLE SHIFTS; BRINGS ILLIQUIDITY PREMIUM IN FOCUS

Strategic Asset Allocation in 2014



December 2013

Strategic asset allocation is a central element of a sound investment process. Careful consideration of investment objectives, the size of the investment pool, time horizon, distribution needs and sensitivity to short-term risk all play an important role in our strategic allocation recommendations. By its nature, strategic asset allocation takes a long-term view; but long-term does not mean static. We adjust our guidelines annually, building on our annual capital market assumptions process wherein we revisit our expected return and volatility by asset class, as well as expected correlations between asset classes.

We believe large foundations, endowments, charities, and family and private investment offices have similar investment objectives, extended time horizons, liquidity needs and views on investment risks. These similarities lead us to focus on a single set of strategic asset allocation guidelines for these investors. While these entities may not traditionally be considered collectively, when it comes to investing we believe the commonalities in their profiles far outweigh the differences. Our strategic asset allocation recommendations for this group reflect both the evolving market and economic conditions we expect in the coming years, as well as an awareness of the unique objectives these investors will be challenged to meet.

STRATEGIC ALLOCATIONS SPAN THE INVESTMENT SPECTRUM

While we tailor each investor's strategic asset allocation to meet specific needs and goals, our process begins with five strategic portfolio objectives designed to cover the risk/reward continuum. Each serves as a starting point for customization.

- **Low Volatility.** Accepts a lower absolute level of expected return in exchange for a focus on greater stability and lower risk of drawdown in the return stream.
- **Conservative.** Begins to step out on the frontier to achieve somewhat higher expected returns, with the attendant increase in expected volatility.
- **Diversified.** Seeks to balance achieving returns with managing risk.
- **Growth.** Tilts toward achieving higher expected returns by accepting greater expected volatility. We use the Growth objective as the starting point for charitable pools targeting a perpetual time horizon while supporting meaningful ongoing distributions (typically 4% to 5% annually).
- **Maximum Growth.** Seeks to maximize compounding and, in the process, assumes a high capacity for interim volatility.

STRATEGIC RECOMMENDATIONS FOR LARGE, LONG-TERM INVESTORS

The strategic asset allocations discussed in this paper have been developed for investors that have:

- Multi-generational to perpetual investment time horizons;
- The flexibility, size and sophistication to access a full range of global investment opportunities;
- High target investment returns; and
- An awareness of volatility's effects and the impact of drawdowns on compounding, particularly when a pool is supporting regular distributions.

Specifically, these recommendations have been created to help meet the needs and goals of foundations, endowments, charities, and large family and private investment offices.

EVOLVING ENVIRONMENT REQUIRES SUBTLE CHANGES

The changes to our strategic allocations are subtle this year, based on an ongoing evolution of the investment environment. Achieving high compounding levels while managing volatility continues to be a significant challenge. Yields and expected returns on investment-grade bonds remain at historically low levels. We saw some adjustment last year, with the benchmark U.S. 10-year Treasury rate increasing by approximately 100 basis points between August 2012 and August 2013. Our expected returns on investment-grade bonds have increased similarly at the margin and, as such, we have incorporated higher strategic allocations to the category for Conservative, Diversified and Growth objectives.

We still see the possibility of accelerating inflation and increasing interest rates over the intermediate horizon as potential headwinds for investment-grade bonds, which may mean increased volatility for them as well. A careful balance of exposures and thoughtful interim tactical positioning remains essential. Institutional investors are increasingly viewing tactical allocation as an important consideration in generating additional returns. Northern Trust's tactical allocation recommendations have a successful multi-year track record, and we are able to apply those general recommendations to portfolios with various allocations or asset class exposures.

INCLUDING HEDGE FUNDS CAN BENEFIT PORTFOLIOS

Given the potential headwinds facing the fixed income markets, many investors likely will be holding fewer traditional high-quality bonds in the next several years, leaving their portfolios short on volatility-dampening investments. Hedge funds can help fill the void, while also providing the potential for alpha, or manager value-add.

We have maintained relatively high weightings for hedge funds in our sample objectives because we believe they will benefit the portfolios of large, long-term investors. These investors can leverage the necessary resources to identify, perform due diligence, and construct and manage a portfolio of top hedge fund managers. Over the last 10 years, second-quartile hedge fund managers have generated an "alpha factor" of 3.6%. Using our capital market assumption methodology, this translates into an expected return of 6.8%, with an assumed volatility of returns of 7.7%. We have used these assumptions in calculating our allocation recommendations.

It is important to carefully define the investment objectives around a hedge fund allocation and to actively manage the portfolio, maintaining accountability relative to intentions. For any hedge fund investor, selecting, combining and actively managing a portfolio of managers will remain essential to realizing the potential of these investments.

EXPLORING THE POTENTIAL OF ILLIQUIDITY PREMIUMS

In the aftermath of the liquidity crunch in 2008 and 2009, many large investors reduced their exposures to illiquid investments, and many retain a preference for liquidity today. This presents an opportunity for investors able to embrace less liquid investments, which is why we significantly increased target allocations to private equity for the Diversified, Growth and Maximum Growth objectives this year.

We recommend that investors carefully analyze their liquidity needs and consider the potential benefits of increasing allocations to private equity or other illiquid investments. Private equity investments have historically generated a return premium in exchange for their lack of liquidity. For example, during the 20 years ending March 31, 2013, private equity outperformed U.S. equities by almost 3% annualized (11.3% returns vs. 8.5% for the S&P 500) and global equities by more than 4% annualized (11.3% vs. 6.8% for MSCI All Country World Index).[1] Looking forward, in our capital market assumptions, we expect private equity to generate better returns than public equity. Our expected return on private equity is 9.6% compared to 7.1% for U.S. equities.

1. Sources: Thompson Financial Venture Economics, All Private Equity Funds Index (pooled average) as of 3/31/13; Cambridge Associates, public market indexes as of 3/31/13. MSCI ACWI Index, is a broad based worldwide equity index consisting of the MSCI U.S., Canada, EAFE, and Emerging Markets indexes.

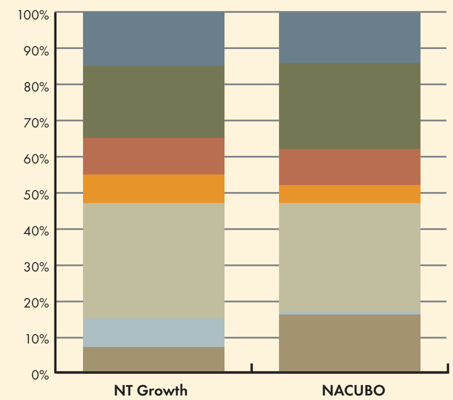
Note: Private Equity Index returns are net of underlying manager fees and carried interest. Past performance does not guarantee future results. Public market index returns are gross of all fees and expenses. It is not possible to invest directly in an index.

COMPARING GROWTH TO THE NACUBO AVERAGES

For a large, long-term investor needing to increase capital while maintaining significant disbursements, the annual National Association of College and University Business Officers (NACUBO) benchmarking study is a useful comparison. For this reason, we look at the positioning of our portfolio recommendations compared to the NACUBO average asset allocations.

EXHIBIT 1: NORTHERN TRUST GROWTH OBJECTIVE VS. NACUBO

	NT Growth	NACUBO
Private Equity	15%	14%
Hedge	20%	24%
Real Assets	10%	10%
Emerging Equity	8%	5%
Developed Equity	32%	30%
Spread Bonds	8%	1%
Cash and Investment Grade	7%	16%
Expected Volatility	11%	10%
Expected Return	8%	7%



Sources: Northern Trust, National Association of College and University Business Officers, and Commonfund Institute 2012 Study. Allocation averages for funds: $500 million to $1 billion.

As you can see in Exhibit 1, Northern Trust's Growth objective has total allocations to fixed income comparable to the NACUBO average for endowments between $500 million and $1 billion. However, the mix is different – Northern Trust's Growth model has lower target allocations to investment-grade bonds and higher allocations to spread bonds. Total allocations to developed and emerging equities and hedge funds pooled together are nearly identical for our Growth model and the NACUBO averages – the Northern Trust allocations to public equities are higher due to care we take to maintain liquidity. Investors that have carefully analyzed their liquidity needs and are comfortable with higher levels of illiquid exposure could benefit from higher allocations to alternatives.

Our allocation to emerging market equity (which comprises 20% of our total allocation to public equities) is higher than the NACUBO average (14%). For investors that understand and are comfortable with the near-term volatility implications, we believe the longer-term return premium and diversification benefits from a strategic overweight to emerging markets could be beneficial.

NACUBO's allocations for larger endowments (more than $1 billion in assets) and our Maximum Growth recommendations have similar allocations to private equity: 21% of total assets for NACUBO compared to 20% for Northern Trust's Maximum Growth. The NACUBO private equity allocations for this group are higher than those for endowments with assets between $500 million and $1 billion. This may be a result of larger endowments' greater experience and comfort with private investments, better access to top funds and offsetting liquidity considerations – including lower average payouts (below 5% annually) and ongoing inflows from regular new gifts to the pools.

In our view, equities (both private and public) are essential drivers for long-term compounding, but complementary exposures can be key to helping to manage interim volatility, liquidity and distribution requirements. It appears by the similarities between the allocations that many endowment managers share the same perspective. However, it is important to remember that averages are just that – made up of many individual portfolios, each customized to its unique circumstances.

LEARN MORE

If you would like to learn more about Northern Trust's investment process and how we develop and adjust our strategic asset allocation recommendations, please contact your relationship manager or visit us at northerntrust.com.

APPENDIX 1 — NORTHERN TRUST'S 2014 STRATEGIC ALLOCATIONS

	Low Volatility	Conservative	Diversified	Growth	Max Growth
Cash	2.0	2.0	2.0	2.0	2.0
Income					
Global Fixed Income	67.0	33.0	9.0	5.0	0.0
Global High Yield	0.0	3.0	3.0	3.0	0.0
Global Emerging Market Debt	0.0	6.0	11.0	5.0	0.0
Capital Growth					
Developed World Equity	0.0	12.0	18.0	32.0	46.0
Emerging Market Equity	0.0	3.0	5.0	8.0	12.0
Real Assets					
Global Inflation Linked	1.8	3.0	5.0	3.0	0.0
Global Public Real Estate	0.0	0.0	0.0	0.0	0.0
Direct Private Real Estate	2.4	4.0	6.8	4.0	0.0
Global Infrastructure	0.9	1.5	2.6	1.5	0.0
Global Upstream Natural Resources	0.9	1.5	2.6	1.5	0.0
Alternatives					
Hedge Funds	25.0	22.0	22.0	20.0	20.0
Private Equity	0.0	9.0	13.0	15.0	20.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Expected Return	3.9	6.0	7.3	7.7	8.3
Risk (Standard Deviation)	4.3	6.8	9.1	11.1	13.7
Sharpe Ratio	0.9	0.9	0.8	0.7	0.6

Source: Northern Trust

Northern Trust

Q 54784 (11/13)