ENDOWMENT PERFORMANCE
Bucknell University 2013 Endowment Report
Diworsification

When talking about the foundational principals of investing, mentioning diversification is like including Mom and apple pie. Whether investing for an enormous pension plan, a mid-sized endowment fund or your own retirement assets, a good starting point is to diversify your holdings across a variety of different asset classes. The drawback is that it is hard to know with certainty which categories of assets will be the best or worst performers over the coming years. While we may place higher probabilities on one investment outcome versus another, it is rare to be able to gain 100 percent conviction on both direction and timing.

The critics of diversification worry about achieving only average returns, rather than swinging for the fences (and potentially striking out!). This critique is countered with watchwords like prudence and risk management. While the siren song of the “long ball” is alluring, the Investment Committee of the Board of Trustees and the Investment Office remain disciplined in our overall approach to asset allocation.

Another criticism is that diversification forces a portfolio into asset classes that are expensive, and this is a legitimate concern. Adding assets to a portfolio without regard to valuation can lead to “diworsification,” the term coined by famed investor Peter Lynch. While he originally ascribed the term to businesses that acquire subsidiaries that degrade the overall enterprise, diworsification has also been applied to investment portfolios that hurt future returns by owning too many unattractively priced assets.

The best way to overcome that concern is by maintaining appropriate position sizes within a portfolio. Bucknell has a demonstrated history of increasing exposure to compellingly valued asset classes (emerging market equities, investment-grade credit and MLPs during the credit crisis), and reducing allocations to fully valued assets, like investment-grade corporate bonds today.

This past fiscal year highlighted the importance of portfolio diversification. In contrast to 2007 and 2008, 2013 was the year to own equities, especially in the US. While the endowment fund was able to achieve double-digit returns in multiple asset classes, like US and non-US equities, real assets and hedge funds, other categories struggled with low single-digit returns like emerging market equities and low-volatility assets.

Just as Bucknell will benefit from the most diverse incoming class in University history with the Class of 2017, the endowment fund will also continue to benefit from asset diversification in the years to come.

‘Ray Bucknell!

Christopher D. Brown ’81, P’12, CFA
Chief Investment Officer
Endowment Activity

Bucknell University’s total endowment market value at June 30, 2013 was $667 million, a $68 million increase from the market value a year ago. The net increase in market value since June 30, 2012 consisted of a $32 million reduction from distributions to the University, a $32 million increase from gifts and transfers into the endowment, and $68 million in net investment gains.

Total Endowment Activity
12 months ended June 30, 2013 (in millions)

<table>
<thead>
<tr>
<th>Spending withdrawal</th>
<th>Gifts &amp; transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td>($31.9)</td>
<td>$31.6</td>
</tr>
<tr>
<td>$599.2</td>
<td></td>
</tr>
<tr>
<td>$67.7</td>
<td></td>
</tr>
<tr>
<td>$666.6</td>
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</table>

Endowment

In the same way that the collective efforts of a diverse group of faculty, staff, students, alumni, parents and friends of the University work together to strengthen Bucknell, the endowment assets of the University are pooled and put to work together. The endowment fund employs a unitized structure, similar to a mutual fund, where new contributions to an endowment purchase units in the pool. As of June 30, 2013, there were 960 separate endowments in place at the University in this pool, providing essential resources to the University in undergraduate scholarships, academic departments, faculty and student research, athletics, the library and annual budget support for programs across campus. These funds have appreciated in value over time while annually providing income to the designated program, scholarship or purpose of the original gift. The University would not be what it is today without the generous gifts from those donors who have created and supported the many diverse endowments in place on campus.

As a hypothetical example, an endowment gift of $100,000 established on July 1, 2003 and invested in the pooled endowment fund would have generated over $86,000 of investment gains over the past 10 years. The gift would have distributed approximately $60,000 in spendable income to the University over the same period. Thus, the net market value of the gift at June 30, 2013 would have grown to approximately $126,000.
As stewards of Bucknell’s endowment funds, we seek to support Bucknell in perpetuity but are faced with managing the trade-offs between risk, return and liquidity. To ensure that the spending power of the assets is not eroded over time, the endowment funds need to be invested in assets that grow at a faster rate than inflation. However, the volatility and liquidity of the assets also needs to be managed in order to provide a consistent source of current income to Bucknell. Fortunately, our long-term focus allows us to set our investment strategy to maximize the potential return given a prudent amount of risk.

We classify the investment assets into four asset types: Growth, Hybrid, Inflation Protection and Low-Volatility assets, each one providing unique characteristics to the portfolio.

**Growth Assets** are intended to produce higher long-term returns but will likely exhibit higher short-term volatility. These assets consist mainly of US and non-US public equities, equity-like hedge funds and private equity investments such as buyout and venture capital funds.

**Hybrid Assets** should produce returns that are less correlated with Growth assets and are expected to exhibit lower volatility. While these may not experience as high of a level of asset growth, they are designed to protect assets in down markets. In some cases, they may have a higher current income component to returns. These investments consist of absolute return strategies, high yield and other credit investments and more recently, private debt origination strategies.

**Inflation Protection Assets** are expected to produce growth like returns but are also expected to perform better during periods of rising inflation. These investments consist mainly of real assets such as real estate, energy, commodities and infrastructure.

**Low-Volatility Assets** should produce modest returns in most environments and provide stability for the endowment. These investments consist mainly of cash and fixed-income securities.
Using the asset types discussed above, we have created a strategic allocation that tries to optimize the risk, return and liquidity trade-off over time. To achieve our long term objectives, we maintain a large allocation to Growth and Inflation Protection assets, with a focus on equity or equity-like investments. We balance this with allocations to Low-Volatility and Hybrid assets, which are selected to provide a cushion against negative drawdowns in equity markets and to provide liquidity in times of market stress. The current strategic asset allocation was last adjusted in July 2009 to increase Inflation Protection and decrease Growth assets, reflecting the positive outlook we maintain for investments in real assets. In addition to the strategic asset allocation which aims to balance return and risk over the long term, we more recently have created a tactical asset allocation framework that will seek to take advantage of market dislocations and pockets of attractive valuations that may arise over a shorter time frame.

We began fiscal year 2013 with a slight overweight allocation to Low-Volatility assets and underweight allocation to Inflation Protection assets relative to our strategic asset allocation. Growth assets were maintained at our target throughout the year, but we did benefit from a higher allocation to US relative to non-US equities as US equities rallied sharply. Also within our Growth assets allocation, as distributions from our private equity holdings were received they were reallocated to more liquid US and non-US equities, causing us to move closer to our longer-term strategic target to private equity of 15 percent. In our Hybrid assets allocation, we replaced an existing fund manager whose strategy was shifting to illiquid markets, adding a manager with expertise in event-driven strategies. We also continued to pursue opportunities across credit-related strategies including bank loans and private lending. Low-Volatility assets decreased over the year as we sold fixed-income investments to meet our liquidity obligations and fund new investments across other asset classes. We have also maintained a portion of these funds in cash above historical levels due to an asymmetrical risk/return tradeoff for many traditional fixed-income investments and also as valuations have increased across many other asset classes. Finally, Inflation Protection assets increased marginally as we continue to pursue attractive opportunities in real estate and energy-related investments. The overall net change to the asset allocation was minimal, as we ended the year with a similar asset allocation to where we began and were closely aligned to our target allocations.

At June 30, 2013, the pooled endowment fund’s investments were allocated as follows:

**Historical and Policy Portfolios**

<table>
<thead>
<tr>
<th></th>
<th>2009 Asset Allocation</th>
<th>2012 Asset Allocation</th>
<th>Current Portfolio</th>
<th>Strategic Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Growth Assets</strong></td>
<td>62%</td>
<td>54%</td>
<td>54%</td>
<td>55%</td>
</tr>
<tr>
<td><strong>US Equities</strong></td>
<td>25%</td>
<td>18%</td>
<td>19%</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Non-US Equities</strong></td>
<td>15%</td>
<td>14%</td>
<td>16%</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Private Equity</strong></td>
<td>20%</td>
<td>22%</td>
<td>19%</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td><strong>Hybrids</strong></td>
<td>22%</td>
<td>20%</td>
<td>22%</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Inflation Protection</strong></td>
<td>8%</td>
<td>14%</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Low Volatility</strong></td>
<td>8%</td>
<td>12%</td>
<td>9%</td>
<td>5%</td>
</tr>
</tbody>
</table>

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ENDOWMENT SPOTLIGHT:

The John Miller MG 101 Program Endowment

The John Miller MG 101 Program Endowment provides funds for Management 101 (MGMT101), Bucknell’s collaborative, experiential organization and management project course. The course offers students organizational and managerial experience as a basis for critical thinking about how the key institutions of society are organized and governed.

MGMT 101 has been widely recognized as an innovative model for active general education about how, when and why people work together to accomplish tasks. Bucknell students establish their own service missions and business objectives; design and staff their organizations; develop financial and operational control systems and procedures for organizational, group and individual performance evaluations; implement service and business projects; and provide a final public report at the end of the semester.

Funds from this endowment provide the start-up capital that enables students to purchase their products to sell on campus. Each company typically operates with a budget of $3,000 to $5,000 in order to deliver real services to clients and develop and sell real products and services to customers. As of May 2013, 263 MGMT 101 companies have provided services and donations valued in excess of $393,000 and have worked about 73,350 person-hours for their service client partners.

“This fund and other designated gifts support the course in so many ways,” says Tammy Hiller, Associate Professor of Management and MGMT 101 instructor. “It enables the orientation and development of undergraduate teaching assistants, training for newly elected student executives, company community-building events, guest lecturers and course administrative expenses.”

Retired professor John Miller created MGMT 101 in 1979. The publicity surrounding Bucknell’s popular experimental management project course led to invitations for Miller to design and offer the program at various universities in the United States and in Europe. Versions of MGMT 101 are now offered in more than 20 colleges and universities around the world. Professor Miller’s research has resulted in publications on organizational politics, managerial career development, leadership, organization design, team management and experiential learning, and led to a variety of accolades. Miller was awarded Bucknell’s Christian R. Lindback Chair in Management in 1997, the Class of ‘56 Lectureship for excellence in teaching in 1998 and was named The Bucknellian’s “Person of the Year” on the occasion of his retirement in 2005.

In 2011, a group of generous alumni who were former students of Professor Miller established The John Miller MG 101 Program Endowment in his honor.

“Management 101 is one of the hallmarks of a Bucknell education,” explains Michael Johnson-Cramer, associate professor of management and director of the School of Management. “It has shaped the lives of countless alumni and has helped to create the ‘We Do’ spirit so characteristic of Bucknellians.”
Performance

The University compares the performance of the endowment to both absolute and relative benchmarks, over both long and short time horizons. Over the 10-year period ended June 30, 2013, Bucknell’s pooled endowment fund has earned an annualized return of 7.6 percent. The fund fell short of the University’s long-term absolute return objective to produce a 6 percent real return (i.e. net of inflation), which will allow the endowment to meet its current spending requirements while also growing faster than inflation to maintain purchasing power for future students. On a relative basis, Bucknell’s endowment return over the past 10 years is slightly above a blended benchmark based on the strategic policy asset allocation of the endowment and also above the estimated median return of other college and university endowments of 7.0 percent.1

One-Year Performance by Asset Class

The pooled endowment fund generated a strong absolute return over the past fiscal year of 11.8 percent. On a relative basis, we trailed our policy index for the one-year period but anticipate this return will place Bucknell’s endowment well above the median one-year return of other endowments and foundations. In a reversal from 2012, our allocations to Growth assets provided the largest contribution to returns over the past fiscal year. The US equity portfolio returned 17.8 percent, trailing its benchmark of the S&P 500 total return of 20.6 percent. The majority of the endowment’s US equity managers performed well relative to their benchmarks, but the overall US equity portfolio return was negatively impacted by a large holding of Zynga shares (ticker: ZNGA) distributed by one of the University’s venture capital funds in late May 2012. The return of the US Equity portfolio was 21.8 percent, excluding those shares. The non-US equity portfolio returned 12.0 percent, also trailing its benchmark of MSCI ACWI ex US, which returned 13.6 percent. In this case, our overweight allocation to emerging markets equities relative to the benchmark detracted from returns, as the MSCI Emerging Markets index only returned 3 percent over the past year compared to the non-US developed market index return of approximately 19 percent.

1 Based on preliminary reports and estimates for fiscal year 2013. Prior year returns are from the NACUBO-Commonfund Study of Endowments and available at www.nacubo.org/Research/NACUBO-Commonfund_Study_of_Endowments.html.

2 Blended benchmark based on the strategic asset allocation of the endowment. Current composition: 20% Wilshire 5000, 20% MSCI ACWI ex US, 10% Barclay’s Aggregate Bond Index, 20% HFR Fund of Funds, 15% S&P500 +5% and 15% CPI + 5%.
It was generally a tough year for fixed-income markets, which ended the year with a slight loss of 0.7 percent as measured by the Barclays Aggregate bond index. Bucknell's fixed-income portfolio performed well on a relative basis with a positive return of 3.7 percent, as the portfolio continued to benefit from strong relative manager performance as well as our allocations to investment grade corporate credit. Hybrid assets produced a strong absolute return of 11.0 percent, well above the return of traditional fixed-income markets but trailing the strong equity market returns over the one-year period. The gains were driven by investments in distressed debt, mortgage-backed securities and private credit. On a relative basis, the Hybrid asset portfolio continues to do well compared to broad hedge fund benchmarks. More importantly, we continue to see equity diversification and absolute return benefits from the investments in this portion of the portfolio.
The largest detractor of performance to our policy benchmark over the past year was our private equity portfolio, which did not keep up with the strong returns from the public equity markets over the past year. We measure our private equity portfolio relative to the S&P 500 + 5 percent to assess whether we are being compensated for the additional risks and illiquidity of private equity strategies. Looking over a longer time period of five years, the private equity portfolio has also trailed the S&P 500 + 5 percent benchmark but was additive to the overall portfolio return. The Inflation Protection assets generated strong returns over the past one and five year periods, both additive to total portfolio returns and well ahead of its University inflation +6 percent benchmark. This portfolio has benefitted from a targeted allocation to energy markets, through public as well as private investments in traditional and renewable energy production, generation and infrastructure. Going forward, we continue to see attractive opportunities in certain real estate, infrastructure and energy strategies, and plan to continue to slowly increase our allocations to Inflation Protection assets toward our long-term target of 20 percent.

**Outlook**

As we go to press, global markets are being temporarily impacted by the gyrations of negotiations (or lack thereof) about the annual budget and debt ceiling in the US. The prospects for what some are speculating to be a globalized resynchronization of economic growth are being threatened by politics, but likely only for a short time. The hope is that Europe is emerging from its difficulties following the credit crisis, and that Japan can sustain the momentum begun under their new leadership. The sustainability of China’s growth rate, while still comparatively robust, remains an open question, and will have a material impact on emerging and frontier markets.

The endowment fund is positioned with world class investment managers across a diverse set of asset classes. While there may be short term volatility in the capital markets, we believe the strategic asset allocation in place can achieve our objectives over the long term.