ENDOWMENT PERFORMANCE
Bucknell University 2015 Endowment Report
I begin this letter with a sincere thank you to Chris Brown ’81, who is leaving Bucknell after eight years for an opportunity at an external endowment management firm. I deeply appreciate Chris' commitment to Bucknell, both as an alumnus and as our inaugural chief investment officer.

During Chris' tenure, the University endowment grew from $599 million to $789 million as of June 30, 2015. That growth can be attributed to the extreme generosity of our donors, and to the dedication and investment acumen of Chris, his team and the Investment Committee of the Board of Trustees. Chris' wise stewardship prudently guided the endowment through the 2008 financial crisis when, like other endowments, our investment values were reduced by nearly one-third.

Perhaps most important, during Chris’ eight-year career at Bucknell, the endowment generated more than $235 million in spendable income for the University. These gains expanded scholarship funding, strengthened the student experience and helped ensure that future generations of Bucknellians will enjoy an outstanding education.

True to Chris’ focus on excellence, he leaves behind an experienced investment team. Under the guidance of the Investment Committee, members of that team will continue to expertly manage our endowment assets. On behalf of the Bucknell community, I thank Chris for his great contributions to Bucknell, and I wish him well in his new career endeavor.

I also wish to thank all of the alumni, parents and friends who have made endowed gifts to Bucknell over the years — particularly since we launched the WE DO Campaign for Bucknell University. Endowed funding, our highest campaign priority, gives Bucknell the strength and flexibility needed to thrive in perpetuity. It is the best guarantee of our ability to support students and faculty across generations. We are grateful for those who are making the endowed gifts that will carry our legacy forward — in the form of scholarships, professorships and chairs, academic programs, facilities, coaching positions, student leadership and so much more. Your loyalty is truly shaping the next, best version of Bucknell.

With warm regards,

John C. Bravman
President
Endowment Activity

Bucknell University’s total endowment market value as of June 30, 2015, was $789 million, a $39 million increase in market value from a year ago. The increase consisted of $65 million from gifts and transfers into the endowment, a reduction of $37 million from distributions to the University, and $10 million of investment gains net of fees and expenses.

Total Endowment Activity
12 months ended June 30, 2015 (in millions)

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spending withdrawal</td>
<td>($37)</td>
</tr>
<tr>
<td>Gifts &amp; transfers</td>
<td>$65</td>
</tr>
<tr>
<td>Net investment return</td>
<td>$10</td>
</tr>
<tr>
<td>Total market value</td>
<td>$789</td>
</tr>
</tbody>
</table>

Endowment

The endowment fund employs a unitized structure, similar to a mutual fund, where new endowment contributions purchase units in a pool. As of June 30, 2015, there were approximately 1,000 separate donor-endowed funds in place at the University. Undergraduate scholarships constitute the largest number of these endowments, but it’s important to recognize that individual endowments support and drive all aspects of the University’s mission, from facilitating faculty and student research and supporting men’s and women’s athletic programs to maintaining the library. The experience of a Bucknell education would not be possible if not for the generous gifts from donors through time who have supported the many diverse programs and scholarships across campus.

Number of Endowments
as of June 30, 2015

- Scholarships: 671
- Instructional/Academic Programs: 141
- Library: 141
- Other - Buildings, Athletics, General Operations: 22
- Trusts and Investments Managed by Others: 9
The power of these endowments to continue to shape the University is also evident through time, as these funds have appreciated in value while annually providing support to their designated program, department or scholarship. As a hypothetical example:

- An endowment gift of $1,000,000 established on July 1, 2005, and invested in the pooled endowment fund would have generated more than $658,000 of investment gains over the past 10 years.
- Over the same 10 years, the gift would have distributed approximately $528,000 in spendable income to the University to support the scholarship, department or program to which it was designated.
- Thus, the net market value of the gift at June 30, 2015, would have grown to approximately $1,130,000.
- Importantly, the gift would also generate an increasing amount of annual support for the University — growing from approximately $46,000 in 2005 to $58,000 today.

Asset Allocation

The asset allocation of the endowment is structured to achieve a maximum rate of return for a prudent level of risk while balancing three competing objectives:

- To maintain sufficient near-term liquidity to meet our quarterly spending obligations
- To minimize the likelihood that a potential drawdown of the endowment exceeds the overall risk tolerance of the University
- To generate a return that will allow the endowment to grow in excess of the spending rate plus inflation over the long term

Thus, the asset allocation of the endowment is intimately linked to both the spending policy and return target. These competing objectives can be summarized in a single concept known as intergenerational equity, or the need to provide the same level of support to current and future generations of Bucknell constituents (adjusting for inflation). James Tobin, a Nobel Prize-winning economist at Yale University, said on the concept of intergenerational equity:

“The trustees of endowed institutions are the guardians of the future against the claims of the present. Their task is to preserve equity among generations.”

As codified by the Board of Trustees in our Investment Policy, distributions to the operating budget of the University are made quarterly at a spending policy rate of 4.5 percent of the 12-quarter moving average market value per unit of the pooled endowment fund. This spending policy rate is also subject to floor and ceiling bands to factor in inflation as well as to reduce the volatility to the annual operating budget.
We classify investment assets into four broad asset types:

- **Growth assets** are intended to produce higher long-term returns but will likely exhibit higher short- and intermediate-term volatility. These assets consist mainly of US and non-US public equities as well as 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. These investments are designed to protect capital in down markets, and in some cases they may have a high current income component as well. Hybrid investments consist of absolute return strategies and high-yield and other credit investments, as well as private debt origination strategies.

- **Real assets** are expected to produce growth-like returns but are also expected to perform better during periods of rising inflation. These investments consist of strategies related to 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 high-quality fixed-income securities. They are meant to provide liquidity and income to fund distributions to the University.

The Investment Committee of the Board of Trustees, in close consultation with the Investment Office, establishes the strategic asset allocation of the endowment. To achieve our long-term objectives, we have maintained a large allocation to growth and real assets, with a focus on equity or equity-like investments. These investments are balanced against portfolios of low-volatility and hybrid assets, which are selected to provide a cushion against drawdowns in equity markets and to provide liquidity in times of market stress. The endowment’s strategic policy for asset allocation has not changed significantly since 2009, reflecting the long-term perspective of the fund. However, while the long-term targets remain relatively static year over year, this stasis belies significant annual activity as we continuously pursue new investment opportunities and rebalance the portfolio in response to shifts in valuations and fundamentals of markets and across asset classes.

At June 30, 2015, the pooled endowment fund’s investments were allocated as follows:

### Current Asset Allocation Relative to Policy Benchmark

<table>
<thead>
<tr>
<th></th>
<th>Current Portfolio</th>
<th>2014 Asset Allocation</th>
<th>2010 Asset Allocation</th>
<th>Strategic Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth Assets</td>
<td>53%</td>
<td>54%</td>
<td>59%</td>
<td>55%</td>
</tr>
<tr>
<td>US Equities</td>
<td>21%</td>
<td>20%</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Non-US Equities</td>
<td>14%</td>
<td>17%</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>Private Equity</td>
<td>18%</td>
<td>18%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Hybrid Assets</td>
<td>20%</td>
<td>21%</td>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>Real Assets</td>
<td>14%</td>
<td>15%</td>
<td>11%</td>
<td>20%</td>
</tr>
<tr>
<td>Low Volatility Assets</td>
<td>14%</td>
<td>10%</td>
<td>10%</td>
<td>5%</td>
</tr>
</tbody>
</table>

May not sum due to rounding

### Investment Activity

Activity for the past fiscal year is summarized below:

- We began fiscal year 2015 fairly close to our long-term strategic policy targets. The exception is a 5 percent underweight to real assets paired with a 5 percent overweight to low-volatility assets. As inflation has remained subdued across the developed world, we have chosen to refrain from quickly increasing real assets.

- As of the end of fiscal year 2015, we are solidly into the sixth year of a bull market. As is often the case following such a robust and lengthy market expansion, asset class valuations have begun to feel a bit stretched. This is in large part why we have allowed the endowment’s allocation to low-volatility assets to expand to 14 percent. We have been participating in opportunities as they are identified and
thoroughly reviewed, but a healthy allocation to stability and patience feels prudent at this stage in the bull market. Specific opportunities for unique returns in which we have participated over the last year include:

- Ownership in European real estate, with a focus on upscale hotel properties poised to benefit from a recovering European economy and asset-specific improvements
- Increased allocation to hedged equity strategies, as increasing divergence in fundamentals and valuations should provide robust opportunities for skilled stock pickers
- Opportunistic investment in publicly traded closed-end mutual funds, trading at attractive discounts to value and high current yields
- At our annual strategic asset allocation review in April, we analyzed the outlook for expected returns and risk for each asset class across a series of macro-economic environments. We discussed macro-economic growth trends, current valuations and market fundamentals, as well as the overall risk tolerance of the endowment fund. Following this review, we reaffirmed our long-term strategic targets to each asset class with no changes to the four broad asset types.
  - Within growth assets, the endowment continues to favor US equities as the US continues to post some of the most attractive growth rates witnessed amongst major developed nations. Valuations of foreign developed and emerging market equities appear relatively attractive, though, so we have begun considering strategies to add to these markets.
  - Our allocation to hybrid assets, which are comprised mostly of hedge fund and credit-oriented strategies, is in line with our long-term strategic target. These strategies posted positive returns during fiscal year 2015, led by strong manager-specific hedge fund performance.
  - In the wake of OPEC’s Thanksgiving Day decision to produce at full capacity, effectively increasing the global supply of oil and depressing prices, commodity-related investments within the real asset category have faced significant selling pressure that has persisted into fiscal year 2016 — a theme that remains a source of volatility. We expect this volatility will, inevitably, present opportunities for a long-term investor such as Bucknell. However, the endowment’s allocation to energy-related partnerships and other commodity-sensitive investments have dragged on recent returns.
  - Our allocation to low-volatility assets is above our long-term strategic target as we patiently seek opportunities in an aging bull market. Much of the low-volatility sleeve of the portfolio is comprised of cash and high-quality, short-duration fixed income as we await the actions of a Federal Reserve poised to raise interest rates for the first time in nearly 10 years.

Performance

Over the one-, five- and 10-year periods ended June 30, 2015, Bucknell’s pooled endowment fund generated annualized returns of 1.4, 9.0 and 6.4 percent, respectively.

- The long-term investment objective of the endowment fund is to generate a 6 percent real return over rolling five-year periods. Over the past five years, we have exceeded this benchmark, as the fund benefitted from the bull market in equities that began in 2009.
- During the 10-year period that also factors in the drawdown from the global financial crisis, the endowment fund return of 6.4 percent was below our absolute return objective. On a relative basis, Bucknell’s endowment return over the past 10 years is modestly below its strategic policy index1, but it is above the estimated median return of other college and university endowments of 6.1 percent2.
- As of June 30, 2014, the endowment’s 10-year return had been ahead of the policy index. However, a challenging fiscal year 2015 has affected long-term results. We are confident that diligence and prudent investing will lead to long-term outperformance, and we look forward to reporting strong results in the years ahead.

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1 Blended benchmark based on the strategic asset allocation of the endowment. Consists of 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%.
2 Fiscal year 2015 estimated return based on preliminary results collected from public sources. Previous fiscal year returns based on the NACUBO-Commonfund Study of Endowments
More than 50 students have gained the opportunity to attend Bucknell thanks to the Sampson Family Scholarship endowment, which Sampson founded in 1992 with his late brother Myles Sampson ’67. Since establishing the scholarship, he has significantly increased its value and plans to quadruple its endowment with a bequest gift to Bucknell. “We chose to fund scholarships because they live on through people,” said Sampson, who serves as leader for the WE DO campaign in the Greater Pennsylvania region. “We felt strongly that this was the best investment we could make in Bucknell.”

Sampson’s dedication to students extends beyond financial support. He is passionate about the Bucknell Outdoor Education & Leadership program, which develops student leadership, group dynamics and environmental stewardship through problem-solving and team development. The program includes the outdoor pre-orientation program BuckWild, use of the CLIMBucknell Challenge Course at the Cowan Forrest Brown Conference Center, and Bucknell Landing on the University’s riverfront, which provides access to the Susquehanna River for classes, leadership programs and recreation for the campus community. The program shares Sampson’s commitment to developing and strengthening the student community while offering a conduit for students and faculty to connect in nearby natural areas.

“Outdoor leadership would not be anything without Ben’s help, his philanthropy and his moral support,” says Jim Hostetler, Bucknell’s longtime director of construction & design and former adviser for outdoor programming. “He’s been a great benefactor to the University and a good friend. Ben understands that a Bucknell education is holistic. The group dynamics, risk assessment and team-building skills we teach through the outdoor experience programs are life skills, whether you’re standing in front of a third-grade classroom or execs at Goldman Sachs. That is the beauty of Ben — he understands the virtue of the well-rounded student experience. Thanks to his generosity, we now have programs and teaching opportunities we never had before.”

Few people understand the power of connection like Ben Sampson. A third-generation developer, he built his commercial and residential real estate company, the Sampson Morris Group, into an award-winning organization with more than 50 years’ experience serving western Pennsylvania. Such success is built on knowing the importance of partnership and relationships, and it’s an understanding that Sampson has applied toward his own Bucknell giving.

Motivated by a desire to support, empower and enhance the lives of Bucknell students, especially those from his hometown of Pittsburgh, Sampson has a long history of providing them with mentoring and internships. In addition to working individually with the students, he connects his mentees with each other, strengthening their Bucknell ties and expanding their professional network.

Kylie Brandt ’10, a past recipient of the Sampson Family Scholarship, agrees. “Ben taught me the value of giving back to a community that has given me so much,” says Brandt. “I chose to take his attitude of active engagement, which helped me get the most out of my Bucknell experience.”

Sampson’s philanthropy is a family affair. In addition to the Sampson Family Scholarship, in 2006 he established both the Sampson Family Recruitment Annual Scholarship and the Sampson Family Annual Scholarship to help the University recruit and financially retain deserving and academically superior students. He remains the only individual Bucknell donor to fund both endowed and annual named scholarships.

In keeping with his philosophy of making meaningful connections count, Sampson has engaged the next generation of donors, enlisting his daughter Molly Sampson ’96 in the family tradition of giving back to Bucknell. As Molly prepares to eventually take over the scholarships, she understands the importance of cultivating relationships with student recipients, and how the family’s generosity continues to change lives.
One- and Five-Year Performance by Asset Class

With the exception of US equities, most asset classes struggled to produce positive returns over the past year. Five-year returns remain robust for most asset classes, with commodities deviating from the group and posting negative results. Asset class-specific discussion with respect to the endowment’s investments is below:

• The endowment’s growth asset portfolio provided positive returns, led by public US equities and private equity investments.
  • The US equity portfolio returned 6.5 percent, slightly below broad market indices. Over a longer five-year period, the US equity portfolio return has trailed the S&P 500 return by 1.5 percent, as hedged equity strategies in the portfolio have not kept up in a bull market. As the bull market ages, we anticipate that the flexibility and disciplined investment processes of our managers will lead to strong performance relative to their benchmarks.
  • Our foreign developed market equities struggled over the past year, losing 7.8 percent, and underperforming the relevant index by 3.6 percent. However, over longer time periods, this sleeve of the portfolio has been a source of robust absolute and relative performance (Bucknell’s non-US equities have outperformed their index by 1.6 percent annually over the past five years). Recent underperformance can be attributed primarily to a specific manager’s value investing style being out of favor, though long-term returns have been in line with the benchmark.
  • Emerging market equities also lost money in fiscal year 2015, with Bucknell’s emerging market equities falling 5.9 percent (0.8 percent below the benchmark). Like our foreign developed market equity portfolio, shorter-term underperformance can largely be attributed to a manager-specific tilt towards value-oriented equities, which have been out of favor. However, over the past five years, our managers have added returns above the benchmark of 1.1 percent annually.
  • Private equity strategies have earned 8.9 percent annually over the last five years, significantly underperforming our benchmark of public US equities plus 5 percent. We are focused on a variety of initiatives to improve performance of this portfolio moving forward.

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1 Blended benchmark based on the strategic asset allocation of the endowment. Consists of 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%.
2 Fiscal year 2015 estimated return based on preliminary results collected from public sources. Previous fiscal year returns based on the NACUBO-Commonfund Study of Endowments
• Hybrid assets produced positive returns during fiscal year 2015, earning 4.4 percent as compared to 4.0 percent for the benchmark. Over the past five years, this portion of the portfolio has earned 6.6 percent (2.5 percent above the benchmark annually).

• Hybrid assets include a diversified hedge fund portfolio, which has exhibited strong absolute and risk-adjusted performance relative to peers and indices.

• Over the past year, manager-specific outperformance from long/short equity trading and hedged emerging markets strategies has led returns.

• Real assets, in general, have provided mixed results over the past year, with real estate producing positive results and commodity-related investments turning sharply negative.

• Bucknell’s real asset portfolio represented a source of underperformance relative to our benchmark over the past year as our tilt towards energy-related investments negatively affected the portfolio. Many commodities and commodity-related investments have been sold in sympathy with the precipitous fall in oil prices. Over the last year, crude oil prices have dropped almost 50 percent, and the S&P/Goldman Sachs Commodity Total Return index, an index representing a broad basket of commodities, has lost 36.8 percent.

• However, over the last five years, Bucknell’s real asset portfolio has produced strong absolute returns (11.1 percent annually) as well as strong relative results (our portfolio has added 4.2 percent annually above the benchmark). Energy-related investments as well as real estate contributed to the outperformance.

• Traditional fixed income and cash investments faced low return prospects going into fiscal year 2015, and returns were in line with expectations. The Barclays Aggregate Bond index returned just 1.9 percent, and Bucknell’s portfolio returned 0.4 percent.

• Bucknell’s fixed-income portfolio did not fully participate in the fixed income market’s returns, as the low duration and credit positioning of the fixed income portfolio limited results.

• Looking over a longer five-year period, Bucknell’s fixed income portfolio has exceeded its benchmark by approximately 0.8 percent annually. The excess returns over the past five years were generated from dedicated allocations to investment-grade corporate credit — positions that have since been removed from the portfolio as their future return prospects diminished.

**One Year Returns by Asset Class**

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>One Year Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Equity</td>
<td>6.5%</td>
</tr>
<tr>
<td>Non-U.S. Equity</td>
<td>-7.8%</td>
</tr>
<tr>
<td>Developed Non-U.S.</td>
<td>-4.2%</td>
</tr>
<tr>
<td>Emerging Market Equity</td>
<td>-5.9%</td>
</tr>
<tr>
<td>Nifty 50</td>
<td>-5.1%</td>
</tr>
<tr>
<td>Fixed Income</td>
<td>0.4%</td>
</tr>
<tr>
<td>Barclays Aggregate</td>
<td>1.9%</td>
</tr>
<tr>
<td>Hybrid Assets</td>
<td>4.4%</td>
</tr>
<tr>
<td>HP Bond Total</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

**Outlook**

The sharp decline of energy prices, a key theme of fiscal year 2015, has persisted into the first three months of 2016. There are many unanswered questions regarding the future prospects of companies and nations dependent on revenues linked to energy. As a result, asset classes most related to energy prices, such as high-yield bonds, master limited partnerships, and emerging classes most related to energy declined markedly through the summer. From our perspective, some of this selling feels justified, given the potential for a new
energy price paradigm. However, some of the selling is also indiscriminate and technical, which we expect will produce opportunities for a patient, long-term investor such as Bucknell.

Fixed-income investors have been challenged by low absolute yields and the prospect of an increasing interest rate environment for several years. The Barclays Aggregate Bond index, a composite of high quality US fixed income, has returned just 1.8 percent annually over the last three years. The Federal Reserve has begun to contemplate increasing short-term borrowing rates and was thought to potentially begin the process as early as September 2015. September came and went, and now market participants have set their sights on December. While a single small interest rate increase like the one that market participants anticipate is not in itself cause for concern, the hype and speculation around this event could cause significant volatility when it finally does occur. Markets loathe uncertainty, and uncertainty with respect to the timing, magnitude and pace of interest rate increases remains. Our largest concern is not the timing of the first rate increase but the pace at which we are met with future rate increases, as these will be more indicative of the Fed’s economic outlook. Yields on high-quality fixed-income investments remain depressed, so we are comfortable with the opportunity cost of being underweight this asset class until we have more clarity regarding the expected future path of interest rates.

Central bank-led monetary stimulus is not just a US phenomenon — the Bank of Japan (BOJ) and the European Central Bank (ECB) have aggressively thrown their figurative hats in the quantitative easing ring. The implications of diverging monetary policies led by major contributors to global economics will have complex and resounding effects on US and foreign markets. Some foreign markets appear attractively priced and poised for growth, and we have begun to increase our exposure. However, other markets appear similarly attractively valued, but may not have the same fundamental and structural tailwinds. Discerning between true value and value traps will be important.

As the actions of the Federal Reserve have served to lower the risk-free rate and pushed investors to take more risk in search of their required returns, private equity and venture capital have increasingly gained interest. Industry studies have shown that private equity funds now hold enough dry powder to cover multiple years of potential investments. A situation like this may portend an environment of higher valuation and excessive risk-taking. Similarly, initial public offerings of many technology companies have been seen trading below their recent private valuations, a sign that venture capitalists may be willing to pay premiums as well. Dynamics such as these give us caution, and we have been identifying ways to gain private market exposure with less valuation risk.

As always, we remain committed to the dual mandate of the endowment fund: ensuring that the assets we manage, which have been generously built over decades of giving, are available to support the Bucknell of today as well as the Bucknell of the future. Thank you for your continued interest and support.