

INTRODUCTION

During the fiscal year from July 1, 2018, to June 30, 2019, Brown University's endowment and other managed assets generated \$467 million in investment gains, equating to a 12.4% return. The endowment's return was broad-based across all asset classes, the product of the efforts of a group of world-class external investment managers. Fiscal Year 2019 results are excellent by every measure: a strong return on both an absolute and a risk-adjusted basis and favorable when compared to the investment results of Brown's respected peers. After accounting for investment gains and gifts of \$98 million to the endowment, and after adjusting for spending and expenses, the endowment and other managed assets totaled \$4.2 billion. This represents an increase of 10.1% over the prior year and is an all-time high.





SUPPORTING THE UNIVERSITY

The endowment provided \$165 million to the University during the year, which represents 14% of the overall annual operating budget. More tangibly, this contribution is approximately \$16,000 per student in scholarships and prizes, endowed professorships, lectures, library resources, athletics facilities and more.

The annual contribution to the University represented 4.9% of the endowment. The level of spending is a product not only of the size of the combined pool of capital — the endowment is in fact comprised of thousands of individual endowments — but of a formula that effectively smooths the payout by appraising its value over the prior 12 quarters, rather than at a particular point in time.

The endowment's approach to asset class diversification has a similar stabilizing effect on distributions. By constructing a portfolio comprised of investments with limited correlation, the endowment also reduces volatility. While forward investment returns are unpredictable, the endowment's investment program and distributions policy are employed in part to create a more predictable stream of distributions to the University. These policies are consistent with the stated mandate of the Investment Office: to protect and prudently grow the financial resource the endowment provides.

Endowment Income Distribution by Purpose

32%

Scholarships, Fellowships & Prizes

21%

Professorships

21%

General

10%

Programmatic & Student Support

6%

Instruction & Lectures

4%

Libraries

2%

Athletics

PERFORMANCE

Prior to commencing any discussion of investment performance, it bears repeating that a single year is a woefully insufficient increment to evaluate the success of an investment program with the time horizon of the Brown endowment. It is common for the endowment to make investments with anticipated lives of a decade or longer. While a decade might be a more appropriate term to evaluate, there remains the accompanying challenge of holding the executors of such an investment program accountable for the achievement of the endowment's goals. A decade may be too short to determine success, but is also too long to pursue the wrong path. The Investment Office evaluates the performance annually, therefore, but with the caveat that any single year holds the possibility of being an outlier.

The primary expectation that all University stakeholders should have is that the endowment's investment return exceeds the sum of the spending rate (4.9%) and a measure of inflation relevant to the needs of the University, which in this case is the Higher Education Price Index (HEPI) maintained by Commonfund. For FY 2019, HEPI

totaled 2.7%. So in order to maintain both the size and purchasing power of the endowment, the return should top 7.6%. At 12.4%, this is the case for FY 2019, as well as for annualized results over 3-, 5-, 10- and 20-year periods.

Additionally, the investment return should keep pace with market benchmarks, a hurdle that could be practically achieved utilizing a mix of low-cost index funds. Although countless such benchmarks exist, the most appropriate is a blend of global stock and bond indexes weighted 70% towards stocks (MSCI All-Country World and Barclays Global Aggregate, respectively). The endowment's return in all time periods (1, 3, 5, 10 and 20 years) exceeds the return of a 70/30 portfolio, evidence that substantial value has been created and compounded through the model of utilizing a dedicated investment team overseen by an experienced Investment Committee.

A more demanding relative hurdle involves comparing the return of the endowment with pure equity indexes, such as the S&P 500 and the MSCI All-Country World (ACWI). These measures of the US and global stock

Fiscal Year Annualized Returns	FY 2019	Annualized Returns as of June 30, 2019			
	***	3 Year	5 Year	10 Year	20 Year
Brown Endowment	12.4%	13.0%	8.5%	10.0%	8.6%
Aggregate Benchmark	5.8%	9.0%	5.7%	7.7%	N/A
70/30 MSCI ACWI/Barclays Global Aggregate ¹	6.1%	8.7%	4.8%	8.1%	5.0%
70-30 S&P 500/Barclays US Aggregate	10.1%	10.7%	8.5%	11.6%	5.9%
MSCI All-Country World (ACWI)	5.7%	11.6%	6.2%	10.1%	4.9%
MSCI All-Country World (ACWI) ex-U.S.	1.3%	9.4%	2.2%	6.5%	4.3%
S&P 500 Index	10.4%	14.2%	10.7%	14.7%	5.9%

The Aggregate Benchmark performance is preliminary as of October 21, 2019.

The Cambridge Associates College & University Universe includes data from 153 endowments as of October 21, 2019.

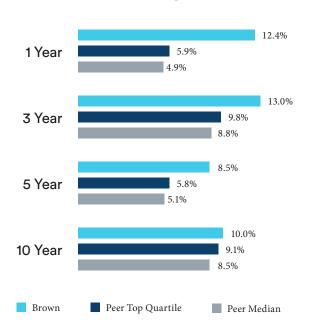


PERFORMANCE continued

markets tend to be higher, but with accompanying increased volatility. So while the endowment has a bias toward equity instruments, it is not commonplace to expect a portfolio diversified across asset classes to outperform stock markets — at least in a positive year for stocks. In Fiscal Year 2019, however, the endowment's return exceeded both the S&P 500's (10.4%) and ACWI's (5.7%) return. This is an outstanding result, though it is not likely to be repeated very often in future years.

Finally, Brown is fortunate to enjoy certain resources — such as its engaged alumni — and certain conditions — such as the favorable tax treatment afforded to non-profit institutions — that benefit the endowment in its pursuit of attractive risk-adjusted returns. Therefore, the endowment's return should be compared to the returns of pools of capital with comparable resources and conditions. To make this assessment, the Investment Office uses data compiled by Cambridge Associates of the returns generated by the endowments of colleges and universities. Brown's return at the end of the 2019 Fiscal Year ranks in the first quartile of available returns for each of the periods measured (1, 3, 5 and 10 years).

Brown Performance versus Cambridge Associates Peers through FY 2019*



*Cambridge Associates as of October 21, 2019





EMPLOYMENT OF RISK

Although the relationship between risk and return is not strictly deterministic, investment returns need to be evaluated in the context of the risk employed. When evaluating the returns generated by an investment manager, Brown's investment professionals assess the level of risk that was used in generating that result. The University's stakeholders, likewise, are entitled to understand the level of risk used in generating the endowment's return.

Brown's risk-adjusted return as measured by its Sharpe Ratio — which relies on volatility as an input — shows the endowment has not employed excessive risk in generating its returns. On a trailing 5-year basis, the endowment's risk-adjusted return ranks in the top 5% of the observable data.¹ By this measure, the endowment's return cannot be attributed to an excessive appetite for risk.

A more palpable indication — less exact but perhaps more descriptive — of the risk in the portfolio is the experience of the dramatic decline of the US stock market during the autumn of 2018. The S&P 500 fell 19% from apex to nadir before recovering, or 13.5% if measured on a monthly basis. During this period, Brown's marketable securities portfolio, which is effectively all of the assets on which a daily price is quoted, declined by approximately

half this amount. The endowment's outperformance during the year was achieved largely through protecting in the down months.

The formula for achieving this result is not complex. It relies on the careful evaluation and application of traditional risk mitigation techniques. The primary concern is diversification, which is balanced against the benefits of concentrating the endowment's capital in the most attractive investment opportunities. The second is careful attention to correlation; the benefits of diversification are achieved only when the investments that comprise a portfolio complement each other. The third is prudence and meticulousness in manager selection.

This is far from an exhaustive list. Rather these are a sampling of essential ingredients that all capital allocators apply in fundamental endowment management. Where Brown may be somewhat unique, however, is in the degree to which the leadership of the investment office has intentionally instilled a culture best characterized as an "investor mindset." The office is predominantly staffed by former practitioners of direct investing. As a result, the investment team approaches risk management as investors do: through diligence in underwriting, margins of safety in valuation, and appropriate levels of skepticism in the face of conventional wisdom.

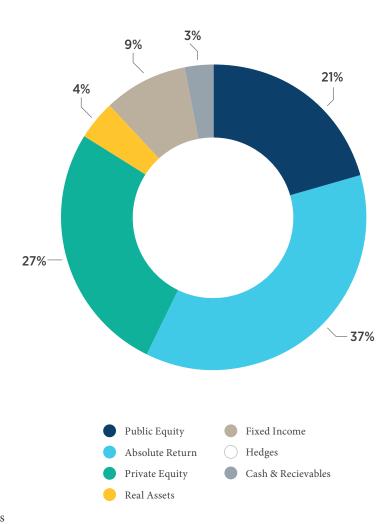


ASSET ALLOCATION

Today's practitioners of asset allocation may find themselves increasingly nostalgic for simpler times. The distinctions between asset classes continue to blur. Large investment firms are likely to be taking public firms private and taking private firms public simultaneously. Private equity firms have hedge fund offerings and hedge funds make private venture capital investments. It is not uncommon for absolute return managers to hold equity positions for the yield, and credit positions for the capital gains.

Many of Brown's investment managers no longer fit into a single asset class. This results not simply from the evolution of the investment business, but also from the qualities that the endowment emphasizes in the selection of investment partners. Brown seeks managers that combine a competitive advantage with a market that is less than perfectly efficient. Brown emphasizes qualities in people and organizations such as integrity and durability that may not appear to have much to do with returns but are, in fact, prerequisites. Finally the returns required to provide resources to the University and inoculate those resources from inflation necessitate investing for high returns, which results in a bias towards equity, whether public or private.

Endowment Asset Allocation 6/30/19





ASSET ALLOCATION REVIEW continued

In summary, the Brown endowment portfolio is constructed to be a collection of complementary investments that have a high probability of achieving the financial needs of the University, rather than an allocation of asset classes. It may seem too subtle a distinction, but the difference is this: It is the people, opportunity, risks, duration, liquidity and valuation that matter in an investment, the asset class to which it is allocated is ultimately just a label.

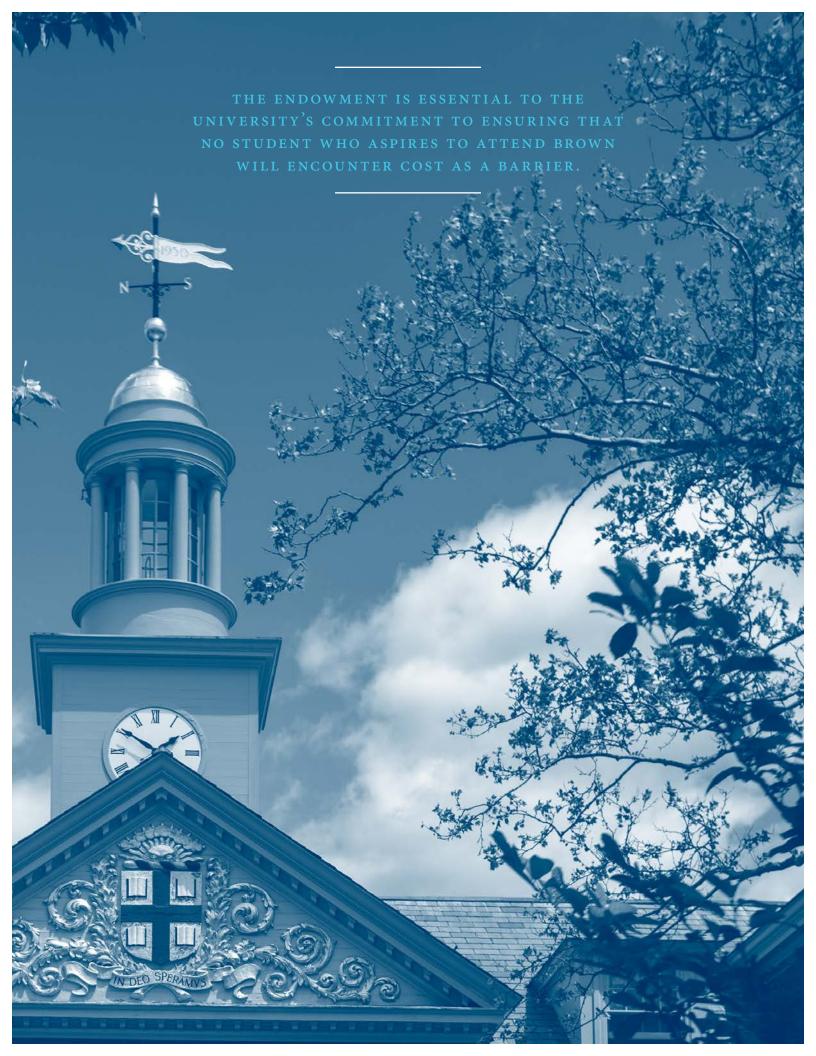
In Fiscal Year 2019, the endowment enjoyed a broad-based, positive return. The primary appeal of asset class diversification is that asset classes are not perfectly correlated, and are furthermore difficult to forecast, so they compensate for each other when particular asset classes, inevitably and unpredictably, struggle. In the pleasant circumstance of FY 2019, however, each of the endowment's three large exposures – public equities, private equity and absolute return – generated strong results.

Public Equities: Approximately one fifth of the endowment's capital is invested in public equities, predominantly with active managers. In each of the three substantial geographic categories — U.S., Global and Emerging Markets — Brown's managers exceeded the relevant benchmarks, net of all fees and expenses.

The S&P 500 returned 10.4% during Fiscal Year 2019, adding to a long stretch of productive returns from the index used most widely to represent the U.S. equity markets. The U.S. markets once again provided a higher return than international developed (+5.7%) and Emerging Markets (+1.2%) bourses.

It was not all smooth sailing, however, as the stock markets provided plenty of drama, including the aforementioned 19% peak-to-trough decline during the autumn of 2018. This volatility exemplifies the advantage that accrues to investors with a long time horizon. Brown provided several trusted investment managers with additional capital to invest in the midst of the decline.

Absolute Return: Absolute return strategies represent the largest allocation in Brown's portfolio at nearly 37%. This description, however, obscures significant heterogeneity among the strategies that the endowment's absolute return managers employ. The largest portion execute strategies with varying degrees of market exposure focused primarily on equities, but it is a big tent that includes exposures to financial assets all over the world including credit, interest rates, currencies, pre-IPO equity and more. Some of these managers conduct traditional, fundamental analysis while others employ systematic trading strategies enabled by computing power



ASSET ALLOCATION REVIEW continued

of significant scale. The unifying themes are that the managers are skilled, honest, have interests and incentives aligned with their investors, and have a demonstrable edge that increases the likelihood of earning excess returns in imperfectly efficient markets.

Absolute return strategies have become the focus of widespread criticism for the industry-wide combination of high fees and unremarkable performance. The Brown endowment's collection of managers, however, do not succumb to this depiction. The absolute return portfolio generated a return in excess of the S&P 500 for Fiscal Year 2019, a superb result considering that the aggregate net market exposure of the portfolio was approximately 50% lower than the market index. For this reason, it is relatively uncommon to compare the results of such a portfolio to the broader equity market, but in the endowment's case, the managers have exceeded even elevated expectations.

The composition of the absolute return portfolio further highlights the shifting nature of asset classes. In years prior, when fixed income instruments offered yields substantially higher for the underlying credit risk assumed, a robust allocation to fixed income was justified. Today, interest rates remain so low as to make large swathes of the fixed income universe essentially useless to a pool of capital with the return requirements of the endowment. To capture the erstwhile attractions of fixed income – chiefly safety, liquidity and predictability - the endowment today turns to market-neutral equity strategies. These are effectively arbitrage strategies: the managers endeavor to neutralize apparent risks by matching long and short exposures across similar companies, thereby isolating the risks the manager is willing to assume. This approach represents roughly one third of the absolute return portfolio, which, considering that market-neutral is intended to generate an approximately fixed return, makes

the overall performance of the asset class for Fiscal 2019 even more impressive.

Private Equity: Investments with managers that buy private companies make up the third broad category of Brown's asset allocation. This allocation comprises 27% of the endowment and is approximately equally weighted between venture investments, which are generally early-stage growth companies, and buyouts, which tend to be more mature businesses. The overall economic environment for private companies is precisely the same as that for public companies, so the correlation between the public equities asset class and the private equity asset class tends to be high. Evidence suggests, however, that the market for private companies is markedly less efficient than the public markets. This makes it an attractive asset class for Brown, as it has the potential for high returns, requires a long time horizon, and offers the possibility of outperformance – net of fees and expenses - by managers that meet Brown's core criteria of ability, integrity and alignment.

Both of the buyout and venture sub-asset classes generated strong returns during FY 2019, and in each case, Brown's portfolio outperformed the respective benchmarks, returning 18.2% in aggregate. Because of the aforementioned attributes of the private equity asset class, the endowment has increased its exposure in recent years. More critically, however, the endowment has simultaneously increased the quality of investment management partners in the portfolio. Indeed, the former increase would not have taken place in the absence of access to the latter. While a single year is an insufficient time period to measure returns in private equity in particular, the asset class contributed substantively to the portfolio return in FY 2019.



THE BROWN INVESTMENT PROGRAM

The investment program in place for Brown is rooted in common sense, applied consistently. Investment decisions must be supported by sufficient relevant evidence that the probability of a successful outcome is high. Financial markets, however, have a way of confounding the most firmly supported evidentiary arguments. Therefore, a willingness to entertain the possibility that widely held beliefs will be proven wrong is also essential.

To enable this balance, Brown's Investment Committee sets intentionally wide ranges for asset allocation guidelines. This allows a flexible approach to portfolio construction. Perhaps more importantly, it also reinforces a core underlying principle of the investment program: Each investment is underwritten on the basis of its own, unique fundamental merits and drawbacks. The

characteristics of an asset class — historical returns, for example, or incentive structures — do not automatically accrue to the investments that constitute that asset class. The characteristics of the asset class are the product of the investments that comprise it.

The Investment Office seeks to invest with managers that place a high value on the strategic component of partnering with Brown that goes beyond the provision of capital. A partnership with Brown brings a signaling effect, as it demonstrates at a bare minimum an ability to exceed the rigorous due diligence standards of the Investment Office. The Investment Office is also able to connect managers with best-in-class peers with disparate but complementary expertise.

IN CLOSING

Brown's investment program is implemented based on a sound, repeatable investment process. The essential features of that process at Brown are the following:

- 1. an unerring focus on Brown's competitive advantages, namely the permanent nature of the endowment's capital and the positive externality of an active and engaged Brown alumni and parent community;
- 2. the oversight provided by an empowered and informed Investment Committee;
- 3. the sustained efforts of a committed team of professionals utilizing an investor mindset; and
- 4. the expertise of investment partners selected on the basis of ability, integrity and alignment.

As long as those features are in place, critical outcomes will be certain: the endowment will be invested in a diversified portfolio of productive investments of suitable risk. The liquidity will be sufficiently balanced to enable both a long-term investment horizon and a readiness to meet the University's financial needs. And the resource the endowment constitutes will continue to play an essential role in supporting Brown's mission of education, scholarship and research.

