

ENDOWMENT REPORT

2021



BROWN

Introduction

For the fiscal year ending June 30, 2021, the Brown University endowment and other managed assets generated investment returns of \$2.4 billion, an appreciation of 51.5%. After accounting for gifts to the endowment of \$120 million, and net of investment returns, expenses and a contribution of \$194 million to the University's operating budget, the endowment and other managed assets stood at \$6.9 billion. The endowment began the fiscal year with \$4.7 billion in assets. By any standard, this is an extraordinary single-year result for the endowment, and the growth will have a transformational impact on Brown's financial support for current and future scholars.

In percentage terms, the gains are exceptional in the context of the historic returns for the endowment's portfolio of investments. This report aims to illuminate the source of those returns and the unique circumstances of this year, while reflecting on the remote likelihood of such a return being repeated.

Before embarking on this examination, it is important to acknowledge that the human costs and devastation of the COVID-19 pandemic are ongoing. This gives rise to common questions of potential investment opportunism in the face of financial gains accruing during economic volatility tied to moments of national and international crisis. The Brown endowment's investment program is intentionally designed to both withstand and adapt to unforeseen circumstances, though responding opportunistically to financial asset volatility should not be confused with opportunism. While the positive investments in Brown's mission of scholarship and research that will ultimately result from the endowment's appreciation this year will make a significant and meaningful impact, it is clear that these contributions cannot align with the scale of the pandemic's devastation.

Fiscal Year 2021 was unique in many ways. However, what remains unchanged from year to year are the fundamental characteristics of the endowment's stewardship: partnerships with outstanding external investment managers; diversification across asset classes, geographies and industries; enthusiastic support from both the University and the broader Brown community; and prudent risk management executed by a committed team of investment professionals with oversight from an engaged Investment Committee.



Supporting the University

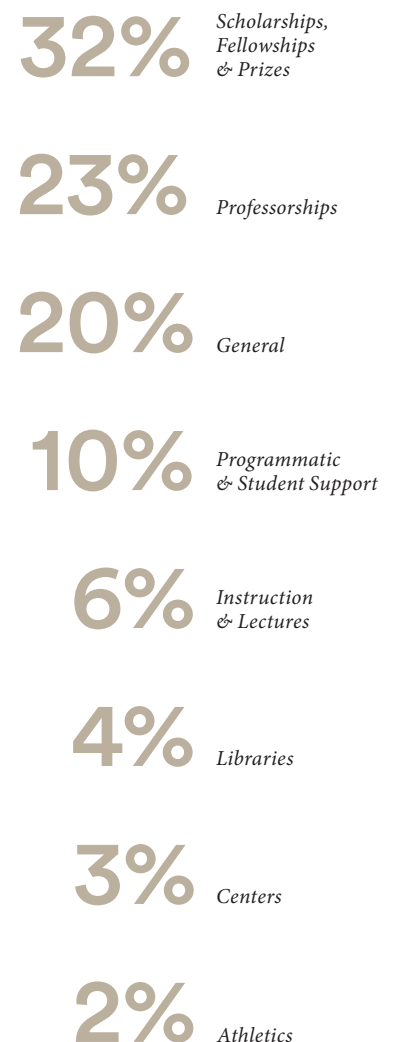
The endowment is a financial resource supporting the University's mission of scholarship and research. It is the product of thousands of individual gifts that not only support the University but also shape its character through the specific designations of purpose that accompany the large majority of endowed gifts. These designations are stipulations of legal contracts with donors of individual gifts. Examples of such designations are gifts specified to fund endowed professorships, libraries, lectures, athletics and research programs. The largest portion goes to one of the University's highest priorities, financial aid.

The endowment contributes between 4.5% and 5.5% of its value to the University each year. For FY20, spending totaled 4.9% of the endowment's value. The specific percentage is determined by Brown's governing body, the Corporation of Brown University, which temporarily increased the appropriation from the endowment in FY21 by 0.2% (a 13.5% increase in endowment spending) to mitigate budget impacts of the pandemic.

As a result of that decision, this year's annual contribution to the University of \$194 million represents 5% of the endowment as measured on a trailing 12-quarter basis. The endowment's contribution is calculated this way to provide University administrators with a more predictable stream of inflows than what can be reasonably expected from the changing prices of financial assets. As a result, the endowment's contribution will not suddenly grow substantially in the coming year; rather, it will steadily increase year by year, barring a significant market downturn.

The endowment's FY21 contribution represents 15% of the University operating budget. An alternative measure is \$19,000 per student, annually. Both of these metrics are now certain to increase steadily in coming years as well.

Endowment Income Distribution by Purpose



Performance

It would be easy to interpret FY21 as a superb year of investment performance. It is the largest gain in dollar terms in the history of the endowment, which is natural for a pool of capital that is managed to appreciate over time.

However, it also would have been entirely possible, in this unique year, to produce an outstanding result in absolute terms but still have fallen short in capturing the extraordinary investment opportunities that were afforded by the market volatility that accompanied the crisis precipitated by the worldwide COVID-19 pandemic. For this reason, the performance must be benchmarked in multiple ways. The highest priority is exceeding the rate of spending in real terms — that is, net of the impact of inflation. Secondary priorities include remaining competitive with market indices and comparisons with peer institutions. This section will examine each of these priorities in turn.

Two interrelated caveats merit discussion. The first is that FY21 — the year from July 1, 2020, to June 30, 2021 — coincides with strong appreciation in financial assets as measured by broad market indices. The S&P 500 gained

40.8% during this period. The initial, destructive reaction of markets to the shock of the pandemic belongs largely to the prior fiscal year. By July 1, 2020, markets were already recovering, helped by substantial fiscal and monetary stimulus conducted on a global scale. The fact that FY21 captures the recovery but not the shock is happenstance.

The second, related caveat is that a single year — even a remarkable one — is an inadequate time frame to evaluate an investment program that is designed to achieve its goals over multiple decades. When assessing investment results for Brown, the longer the time frame, the more informative the result.

Those considerations notwithstanding, the results are strong.

1. Spending: As previously noted, the paramount standard for the endowment's investment results is to exceed the rate of spending (5% this year), plus the rate of inflation relevant to Brown's costs as measured by the Higher Education Price Index, which has averaged 3% over the last 20 years. The endowment's FY21 results

FISCAL YEAR ANNUALIZED RETURNS

	ANNUALIZED RETURNS AS OF JUNE 30, 2021				
	FY 2021	3 Year	5 Year	10 Year	20 Year
Brown Endowment	51.5%	24.1%	19.6%	12.9%	10.3%
Aggregate Benchmark	43.1%	15.9%	13.8%	9.1%	7.1%
70-30 MSCI ACWI/Barclays Global Aggregate	27.4%	11.7%	11.0%	7.7%	6.8%
70-30 S&P 500/Barclays US Aggregate	27.3%	14.9%	13.3%	11.5%	7.7%
MSCI All-Country World (ACWI)	39.3%	14.6%	14.6%	9.9%	7.3%
MSCI All-Country World (ACWI) ex-U.S.	35.7%	9.4%	11.1%	5.4%	6.5%
S&P 500 Index	40.8%	18.7%	17.6%	14.8%	8.6%

FY 2021 aggregate benchmark is preliminary as of October 7, 2021.



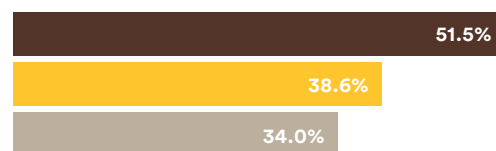
Performance *continued*

easily exceed this standard and have now done so for five consecutive years. The outcome is a rising overall contribution in both nominal and real terms to the University's operating budget.

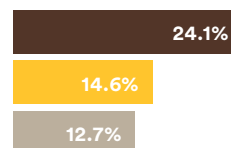
2. Benchmarks: No single market benchmark, examined over a single period of time, is sufficient to act as an appropriate yardstick for the endowment's portfolio. A comprehensive measurement can be achieved, however, by examining the endowment's performance against internally generated benchmarks, as well as market measures and combinations thereof.

The Aggregate Benchmark is a measurement maintained by the Brown Investment Office that combines the asset mix utilized by the endowment's portfolio with index returns. The resulting difference between the endowment's performance and the Aggregate Benchmark is an assessment of the incremental value contributed by Brown's investment managers, net of fees and expenses. In FY21, the endowment's portfolio gains (51.5%) outperformed the Aggregate Benchmark (43.1%) by over 800 basis points, indicating a strong contribution from Brown's investment partners. The endowment has now outperformed its Aggregate Benchmark over three-, five-, 10- and 20-year trailing periods.

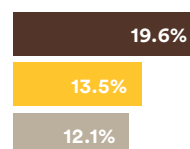
Brown Performance Versus Peers Through FY21*



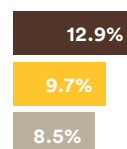
1 Year



3 Year



5 Year



10 Year

● Brown ● Peer Top Quartile ● Peer Median

*Cambridge Associates preliminary data as of October 8, 2021 with an estimated 85% of the overall universe reported.



Performance *continued*

The most appropriate external benchmark by which to measure Brown's results is a blend of global stock and bond market indices. Global indices reflect the palette of investment opportunities available to the endowment, and a blend of equity and fixed income investments reflects the reality that the volatility of a portfolio of strictly listed equities would be incompatible with the financial planning needs of University programs, some of which draw the entirety of their budgets from the endowment's annual contribution. Nonetheless, purely domestic and purely equity comparisons are included. Each represents an outcome that could be achieved through a passive, low-cost index strategy.

Brown's results compare favorably across the board. The endowment's Fiscal Year 2021 result nearly doubles the result of a global mix of 70% stocks and 30% bonds (27.4%) and has surpassed it in all measured trailing periods. The same is true for a U.S.-only 70/30 portfolio: Brown's results exceed the index in every trailing time period. Brown's investment model — and that of other peers — relies on a committed group of volunteers acting as an Investment Committee, a dedicated team of professionals operating at modest cost working to build partnerships with outstanding external investment

managers. Brown's returns, which are stated net of all external and internal management fees and expenses, have now outperformed a purely domestic passive model by over 600 basis points annually over a trailing five-year period. Finally, Brown's results have also exceeded the results of global stock markets as measured by the MSCI All-Country World Index, also in all trailing time periods.

Fund for the Education of the Children of Providence

As part of a pledge made after its groundbreaking 2006 report on the University's historic ties to the transatlantic slave trade, Brown has fully funded a commitment to establish \$10 million in endowed funds to support current and future generations of preschool through high school students in Providence. As one element in a wide-ranging partnership between the University and the **Providence Public School District**, the fund will advance initiatives to improve teaching and learning in local classrooms, ensure access to high-quality education for city students and support the district's Turnaround Action Plan.

3. Peers: A final measure of the success of Brown's investment program should involve a comparison to similar programs, with similar missions, similar constraints and similar resources. While the endowment's results have successfully exceeded the spending requirements, as well as surpassed the opportunities afforded to broad market participants, an assessment of the stewardship of the en-



Performance *continued*

dowment would be incomplete without favorable results in relation to peer institutions. According to data maintained by investment consultancy Cambridge Associates, Brown's investment returns rival the absolute best outcomes, ranking comfortably in the top 5% of college and university endowments over each of one-, three-, five- and 10-year periods. Brown's five-year returns of 19.6% surpass the threshold for the top 5% (returns of 16%) by a remarkable 360 basis points annually.

Center for Animal Alternatives in Testing

The best way to eliminate the use of animals in toxicity testing is to develop strategies for testing living human tissues. The Center for Animal Alternatives in Testing brings together a collaborative team of bioengineers, pathologists, toxicologists, cell biologists, electrophysiologists and mathematicians working with industry to develop new 3D microtissues that are more predictive of toxicity and drug efficacy.



\$2.4 BILLION

The largest gain in
dollar terms in the history
of the endowment



Liquidity Stress Test

The overwhelming majority of Brown's endowment portfolio is managed in partnership with external asset managers with both specific and superlative expertise. Through this model, the endowment can achieve targeted exposures to attractive investment opportunities while simultaneously realizing the risk-mitigating effects of diversification.

Some of Brown's partners invest in often-termed liquid asset classes — predominantly Public Equities and Absolute Return — in which the underlying securities have the attractive characteristic of relatively quick, seamless conversion into spendable cash without significant frictional costs. Other partners invest in so-called illiquid asset classes — predominantly represented by Private Equity — which are not easily convertible into spendable cash but instead bear different, attractive characteristics that are in part a product of this illiquidity: inefficient pricing and the ability to affect long-term change through control positions. The delineation between liquid and illiquid asset classes is growing increasingly blurred, but it remains a useful framework nonetheless.

Participating in a mix of partnerships with liquid and illiquid features ultimately results in a measure of portfolio-level liquidity. This is a profoundly important metric. For the endowment to fulfill its most basic function, it must have sufficient liquidity to send contributions to the

University on a quarterly basis, regardless of extenuating circumstances. However, in order to fulfill its mission to maintain and prudently grow the purchasing power of the endowment over time, the portfolio must be invested for high returns, thus accepting a degree of illiquidity.

The appropriate balance of liquidity, therefore, is of paramount importance, and the Brown Investment Office models and monitors it carefully. Further complexity is introduced by the reality that the availability of capital is inherently circumstantial. Included in this modeling, then, are stress tests projecting steep sell-offs in financial markets, reductions in dividends and distributions from cash-flowing investments, and accelerated claims on promised but not yet completed investments.

As the pandemic quickened in spring 2020, these stress tests became reality. The liquidity of the endowment's portfolio was impinged from all sides, while the University's costs swelled in response to necessary safety measures. The pandemic was the most severe test of the endowment's liquidity since 2008, and all stakeholders in the endowment — current as well as future students, faculty, alumni, staff and parents — should all take assurance that even in an unprecedented crisis, the endowment's liquidity remained strong and available.

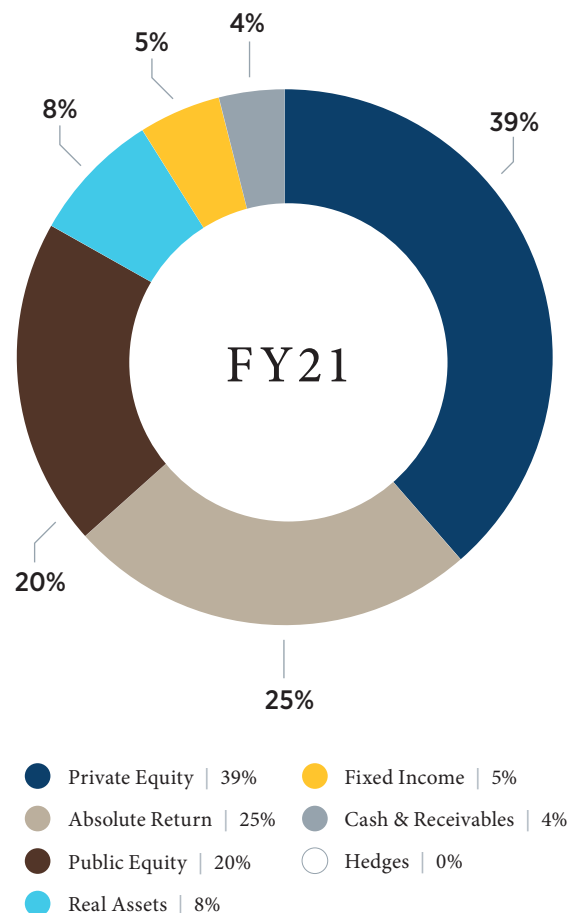


Asset Allocation

The value of traditional asset classes as an organizing principle continues to dwindle. Many equity investors on both sides of the traditional public/private divide have decided to discard any such distinction. The implication of this trend for Brown's investment program — aforementioned liquidity concerns notwithstanding — is not particularly significant. This is because Brown's Investment Committee has eschewed the practice of conforming to a policy portfolio based on asset class weights, and instead has set wide ranges for asset class exposures. In a changing environment, this approach allows the discussion of a potential investment to set aside questions of categorization in favor of the most critical elements. Namely, does this partner have demonstrated ability, a verifiable record of high integrity, and a competitive advantage in pursuit of investments that have the potential to deviate from their intrinsic value?

Nonetheless, despite the growing complexity, the portfolio can still be appropriately understood by categorizing investments into three large groups: Public Equity, Private Equity and Absolute Return, and two smaller groups: Real Assets and Fixed Income. Each generated a significant contribution during the fiscal year, resulting in a balanced overall performance.

Endowment Asset Allocation



Public Equity

Public Equity strategies represent 19.8% of the endowment, or \$1.4 billion. For FY21, Brown's Public Equity portfolio generated a 58.9% return. This result handily exceeded the 39% return of the broad, global equity markets as represented by the MSCI World Index. Consistent with a pattern that has held for most of the past decade, U.S. markets outperformed international and emerging markets, albeit narrowly. This trend has been supportive for Brown's Public Equity portfolio, which is weighted more heavily toward domestic exposure. Brown pursues predominantly actively managed strategies in Public Equities, despite an acknowledgment of the difficulty of consistently outperforming low-cost index funds by active managers. Fiscal Year 2021 afforded significant opportunities for active managers to add value for their partners, net of fees. When no inefficiencies exist to be capitalized upon by active managers, Brown seeks to supplement its Public Equity exposure with index funds at minimal cost.

Absolute Return

Brown's Absolute Return portfolio comprises a diverse set of strategies selected in part for characteristics that complement the overall portfolio. Considerations when compiling a portfolio of these strategies include but are not limited to: investing and research style, target geography, average market exposure, use of leverage, liquidity and turnover. The intended result is a collection of investments that is capable of generating equity-like returns over the long term, but with reduced volatility and correlation combined with acceptable overall liquidity, thus enabling re-allocation in the circumstance of a substantial price dislocation in an attractive market. Absolute Return is currently \$1.7 billion, 24.8% of the endowment.

Brown's Absolute Return portfolio has performed its task exceedingly well in recent years, and outperformed the S&P 500 in each of the two prior fiscal years. This is a performance in excess of expectations considering that a portion of the group — Market Neutral strategies — seeks to take no market risk at all. This streak was unlikely to continue, and it ended in FY21. Absolute Return collectively generated a 15.3% return, falling short of expectations.

The two predominant strategies represented in Brown's Absolute Return portfolio are Long/Short Equity and Market Neutral, and elemental to each is the ability to effectively sell stocks short. Short-selling, though commonly misunderstood, is the legitimate activity of borrowing stock from its owner in order to sell it, and subsequently buying it back in the future in order to return it. This year saw relatively unprecedented challenges to the practice of short-selling enabled by a confluence of emergent factors: the communal cooperation of small traders organized on the internet; easy access to derivatives by inexperienced participants; and a large number of workers idled by the pandemic experimenting with stock trading. Regulators took notice and short-sellers, in some cases, took losses.

U.S. Military Veterans at Brown

Thanks to a generous gift from Joseph P. Healey, Brown will create a permanent endowment for a scholarship for veterans, as well as establish a scholarship for students in Brown's Resumed Undergraduate Education program. The gift will be instrumental in supporting currently enrolled military veterans and inspiring others to pursue undergraduate degrees at Brown.

A lasting change in the effectiveness of short-selling would, in theory, impact the scale of the endowment's use of some of its Absolute Return strategies. The Investment



Asset Allocation Review *continued*

Office, having worked closely with Brown's investment partners on this topic, does not believe this to be the case. Brown's partners are selected in part for the dynamism of their organizations and strategies, and they have quickly adapted to these changing market conditions. In the long term, short-selling is an essential component of healthy securities markets, aids in price discovery and ultimately serves to help protect investors from bad actors.

Private Equity

Brown's Private Equity strategies employ \$2.7 billion of capital, or 39% of the endowment. In Brown's Private Equity portfolio, two models play leading roles: Buyouts and Venture Capital. Buyouts tend to be control investments in smaller companies with a focus on operational improvements and restructurings. Venture Capital investments are generally minority investments in immature, fast-growing companies. Both strategies are, for the most part, illiquid.

In the prior fiscal year, Private Equity generated strong returns and this report warned earnestly of the cyclical nature of Private Equity strategies. Brown's managers work for years identifying and nurturing their companies, helping them to find key employees, customers and sources of capital. Eventually, conditions must allow for value realization through a sale to a strategic buyer or a public offering of stock. Such investments can appear to have accrued only modest increases in value until such a sale, thus making returns from even a properly diversified portfolio of Private Equity investments somewhat inconsistent in nature, with several years of work concentrated into bursts of strong performance. By most indications, this was the case last year, leading to notes of caution in last year's Endowment Report.

This forecast proved incorrect. Brown's Private Equity portfolio generated a spectacular return of 87.2% in FY21.



Asset Allocation Review *continued*

Buyouts produced a 48% return, while Venture Capital produced a 114.1% return. Albeit with slightly weakened confidence, the assertion that this performance is not likely to be repeated is deserving of an echo.

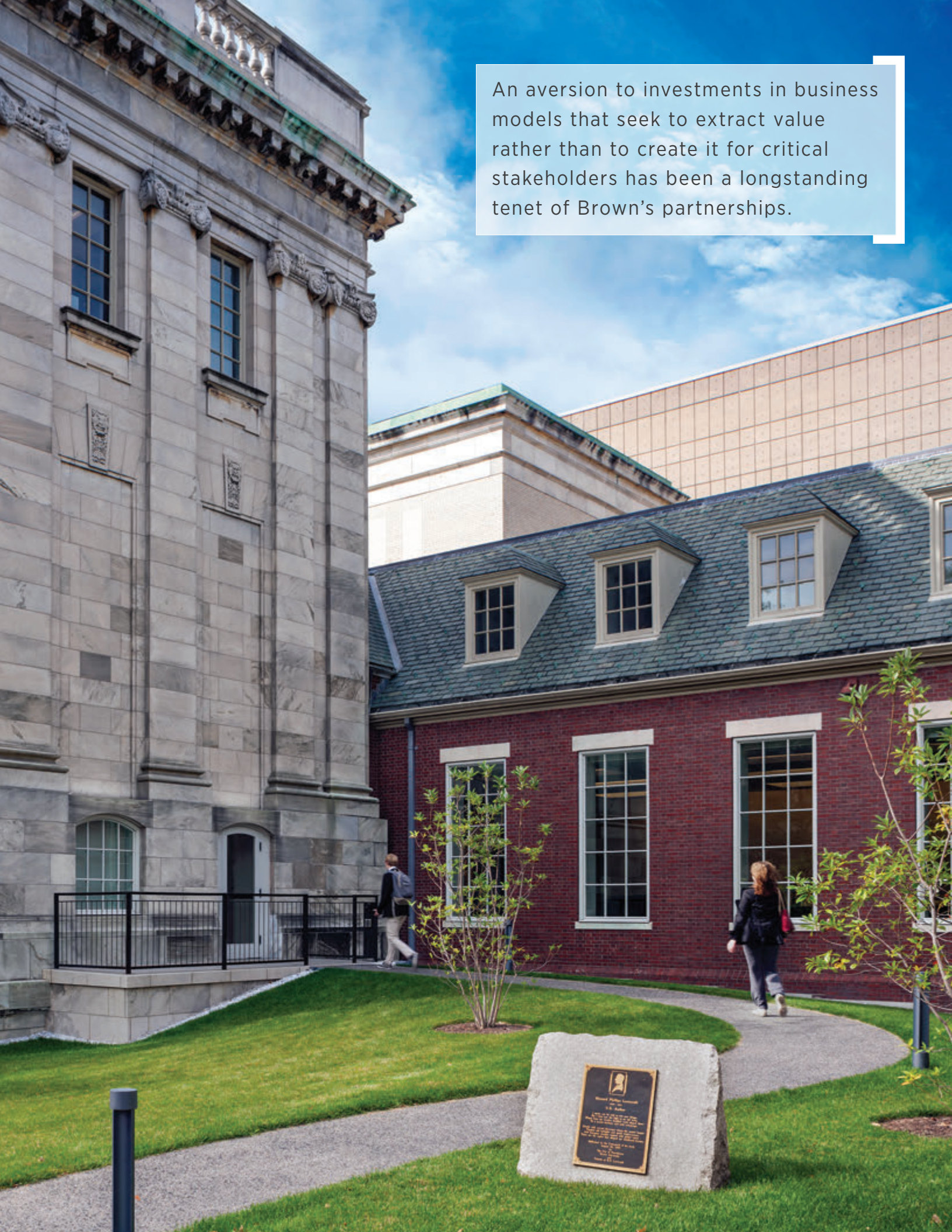
Venture Capital, in particular, is experiencing a set of virtually unmatched conditions. The disruption to consumer and business forums by digitally native solutions enabled by the combination of both mobile and cloud computing is an extraordinarily powerful trend. Public equity markets are greeting new issues — the exit path for the most successful venture investments — with exuberant valuations. The burden of high expectations accompanies those valuations, and only time will tell if years of profitable growth will reward today's buyers.

Competitive advantages in investments are precious and rare, but long-duration capital is one, and Brown's investment program is designed to maximize the advantage conferred by the permanence of the institution. Venture Capital requires a long time horizon — too long for many market participants — but offers the possibility of cumu-

latively exceptional returns. It therefore is well suited to remain a foundational pillar for the endowment, even if returns like those experienced this year are never repeated.

Real Assets and Fixed Income

Brown makes investments in real estate, infrastructure and commodities that are grouped together under the banner of Real Assets, which represents 7.6% of the endowment and generated a return of 93.8% for Fiscal Year 2021. In the case of Fixed Income, Brown uses a variety of approaches to access primarily corporate lending opportunities. These investments comprise 5.3% of the endowment and generated a return of 26.4%. Fixed Income and Real Assets each has been the focus of research, effort and new investment in recent years, and the results of FY21, though too brief to appropriately judge, are an encouraging data point and exceeded relevant asset class benchmarks. Fossil fuel-based energy investments, previously a component of the Real Assets category, are now a trivial amount of illiquid capital that represents exposure of effectively zero.



An aversion to investments in business models that seek to extract value rather than to create it for critical stakeholders has been a longstanding tenet of Brown's partnerships.



Brown's Investment Approach

Examining the investment returns for the endowment over the trailing 10-year period, the degree to which Fiscal Year 2021 stands out warrants comment. Is something different? Has some underlying characteristic of the endowment's investment program shifted to precipitate such a result?

The Investment Office at Brown constructs the portfolio meticulously. Critically, however, it does not do so with a view of what the future holds. Rather, a foundational premise is that future events are unknowable, and the emergence of the global pandemic offers an example without parallel of this unpredictability. The goal of the Brown Investment Office is to construct a balanced

portfolio that is capable of thriving in accommodative market environments and surviving in more difficult ones.

In this sense, the underlying characteristics of the endowment's approach remain unchanged. They include partnerships with outstanding investment managers, reflecting long-term cooperation for mutual benefit with trust and alignment as the foundation upon which they are built. They include an emphasis on competitive advantage, a reliance on the guidance and oversight of an engaged Investment Committee, and a commitment to thinking empirically from first principles. And they include a constant focus on risk and a willingness to be aggressive when it becomes mispriced.



The Social Impact of Brown's Investments

The importance of environmental, social and governance considerations in investments is steadily growing. The Brown endowment is playing a role, perhaps modest but important. Through dialogue with investment managers and other asset owners, as well as through formal statements of policy and intent, Brown's investments are accompanied by a clear set of expectations for tangible progress. An area of particular focus is diversity, equity and inclusion, and an important process of data collection and structuring will enable monitoring of improvements in the diversity of the staffs of our managers, as well as our own.

Some of these actions are relatively new and also overdue. However, an aversion to investments in business models that seek to extract value rather than to create it for

critical stakeholders has been a longstanding tenet of Brown's partnerships. Investment managers are selected on the basis of not only ability but also integrity, and that integrity implicitly extends to the business practices of the underlying investments. That implicit understanding is now increasingly being made explicit.

Center for Alzheimer's Disease Research

Alzheimer's research is largely focused on prevention, early diagnosis and treatment to slow its progression. Thanks to a number of scientific advances, many of them made at Brown, researchers can now detect changes in the brain years before memory loss occurs. These discoveries set the stage for even more impactful research at the Center for Alzheimer's Disease Research.

In Closing

The results of Fiscal Year 2021 do not indicate success in the management of the endowment's portfolio. Brown's investment program is predicated on executing a repeatable investment process rooted in prudent risk management. From this perspective, FY21's results are no more or less worthy of commendation than any other year in which this process was methodically executed.

The endowment's success, rather, is measured entirely through its role as a financial resource for Brown's mission of scholarship and research. The financial contribution of the endowment to Brown's highest priorities — most particularly financial aid — is now more certain to grow in the coming years. Success for the endowment is substantially defined by the path toward eliminating cost as a barrier to a given individual's ability to participate in Brown's mission. In that regard, this year was marked by significant progress.



BROWN

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