ENDOWMENT REPORT | 2022

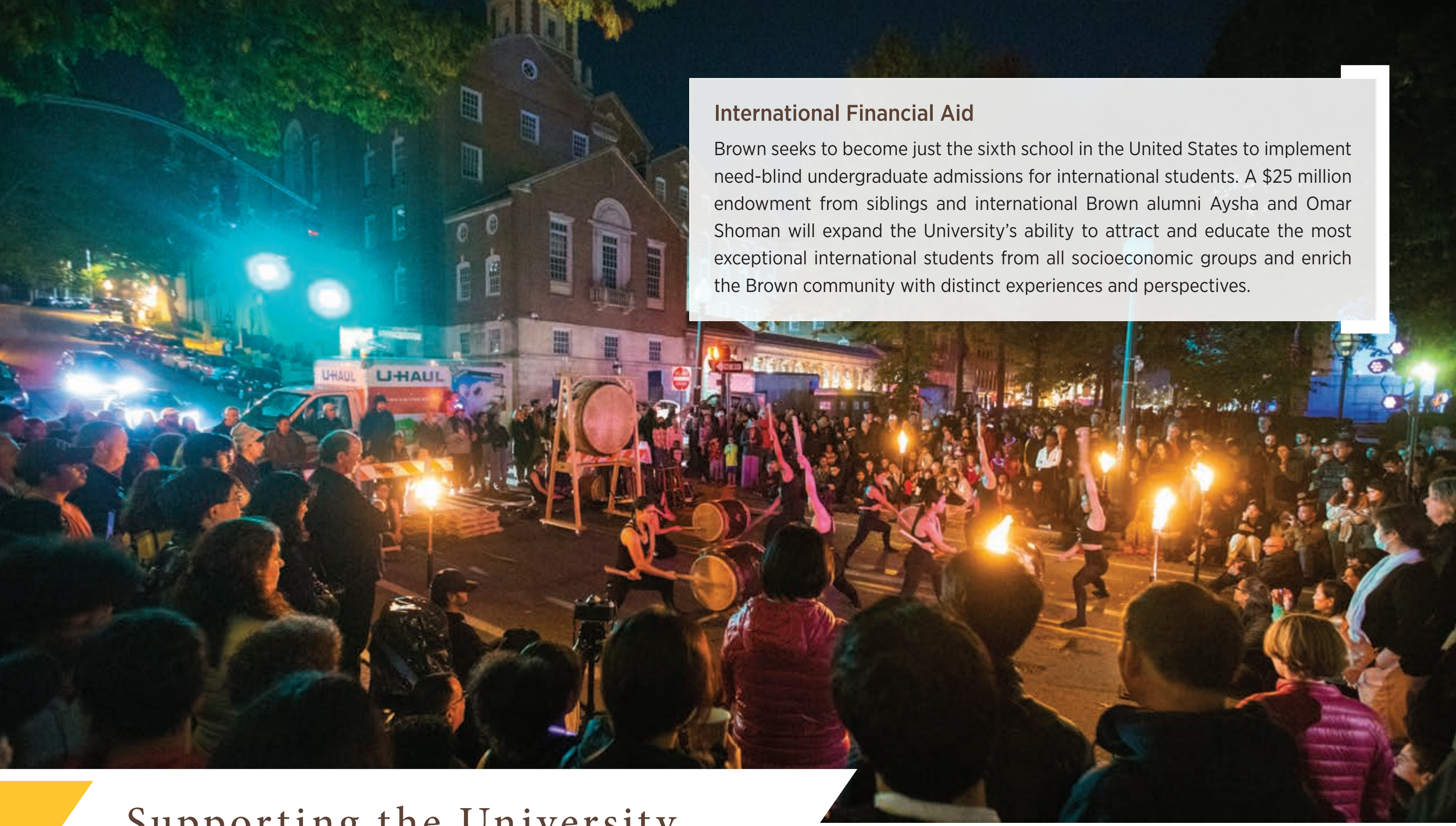
BROWN

Introduction

For the fiscal year ending June 30, 2022, the Brown University endowment and other managed assets declined in value by $315 million, an investment return of -4.6%. The endowment contributed $208 million to the University operating budget and benefited from gifts of $133 million. As a result, at the conclusion of Fiscal Year 2022, the endowment and other managed assets totaled $6.5 billion.

The mandate for the investment management of the endowment calls for the investment program to "protect and prudently grow" the size of the endowment. While recent years have proven rich with opportunities to grow the endowment, Fiscal Year 2022 proved to be a moment when the protection of the endowment was the paramount goal. This report will endeavor to explore whether those efforts were sufficient in light of treacherous dynamics in global financial markets. As an example of those dynamics, the first half of 2022 was the worst opening half of a calendar year for the U.S. stock market in over half a century.

The investment program pursued by the Investment Office, which benefits from guidance and oversight from the Investment Committee of the Corporation of Brown University, is designed to achieve strong risk-adjusted returns over decades, rather than over the course of a single year. A decade ago the endowment's value stood at $2.6 billion, and in the ensuing years it generated $4.8 billion in investment gains. Net of both inflows of $900 million in gifts and outflows of $1.8 billion in total contributions to the University, the endowment has substantially increased as a financial resource for Brown's mission of scholarship and research.



International Financial Aid

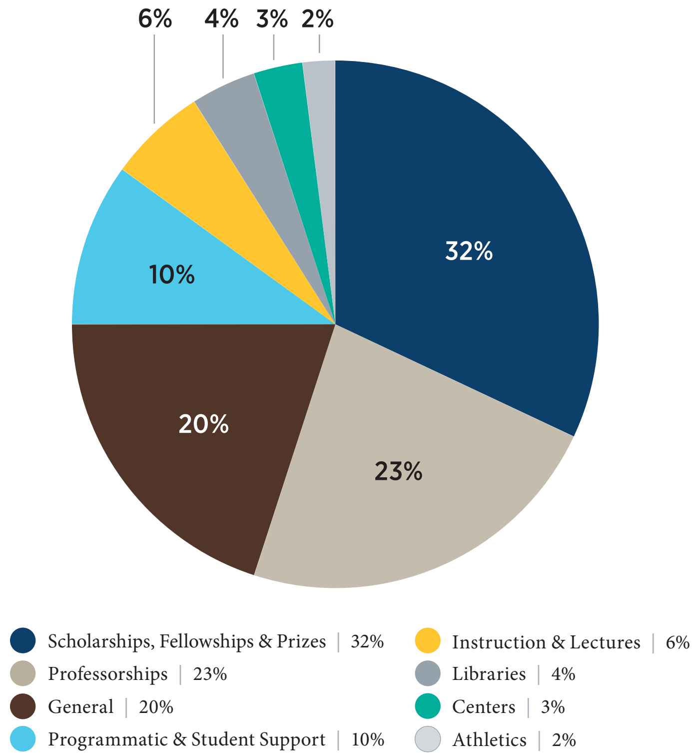
Brown seeks to become just the sixth school in the United States to implement need-blind undergraduate admissions for international students. A $25 million endowment from siblings and international Brown alumni Aysha and Omar Shoman will expand the University's ability to attract and educate the most exceptional international students from all socioeconomic groups and enrich the Brown community with distinct experiences and perspectives.

Supporting the University

The endowment contributes between 4.5% and 5.5% of its value to the University each year in support of endowed professorships, libraries, lectures, centers and financial aid for students. The specific size of the contribution each year is determined by the Corporation of Brown University. In Fiscal Year 2022 the contribution of $208 million represented 4.8% of the endowment on a trailing 12-quarter basis. As a result, 16% of the University's annual operating budget was supplied by the endowment.

The contribution is effectively smoothed over a 12-quarter basis precisely so that in a year like this one, when the value of the endowment's investments declined, the contribution itself does not mechanically decline alongside it. Indeed, because of the substantial growth of the endowment in the preceding years, the contribution to the University will actually increase, both in absolute dollars and as a percentage of the University's operating budget.

Endowment Distribution by Purpose



Performance

The primary driver of the prices of financial assets over the last three years has been the arrival of, and subsequent response to, the global COVID-19 pandemic. In addition to generating human suffering, the pandemic's spread proved destructive for financial assets as the global economy ceased to function. The enormous fiscal response from governments across the world proved to be an effective but blunt instrument: economies for the most part muddled through, but the availability of money combined with changes in behavior caused certain financial assets to soar in value.

Fiscal Year 2022 witnessed, mercifully, the receding of the worst of the pandemic. The recovery is far from complete, but during the year students returned to classrooms, workers to factories and offices, and shoppers to stores, and in general behaviors that characterized the pre-pandemic economy returned. Economic policymakers, company managements and financial market participants turned their attention to addressing the aftermath of the pandemic and concluded that there were causes for concern.

Geopolitical instability returned with the Russian invasion of Ukraine, accompanied by disastrous consequences for the availability of food and energy for reliant nations. Central bankers set about reducing the excesses of cheap liquidity and market participants re-assessed the rich valuations of technology businesses. Finally, the combination of low interest rates, supply chain disruptions, fiscal stimulus, war in Europe and resurgent demand from a recovering economy revealed the presence of a long-dormant economic foe: inflation.

Inflation is an imperative consideration because of the need to preserve the purchasing power of the endowment for future generations of Brown scholars. As a result, exceeding the rate of spending in real terms (net of the rate of inflation) is an important measure for evaluating the performance of the investment program. Other important measures include comparisons to the performance of market benchmarks as well as the performance of peer institutions. In each case, a single year is too short a period of time to effectively evaluate outcomes; the multi-year, compounded returns are the true yardstick.

Fiscal Year Annualized Returns

		ANNUALIZED RETURNS AS OF JUNE 30, 2022			
	FY 2022	**3 Year**	**5 Year**	**10 Year**	**20 Year**
Brown Endowment	**-4.6%**	**17.4%**	**15.5%**	**12.3%**	**10.0%**
Aggregate Benchmark	-2.4%	13.1%	10.9%	9.0%	7.8%
70/30 MSCI ACWI/Barclays Global Aggregate	-15.5%	3.6%	4.9%	6.3%	6.3%
70/30 S&P 500/Barclays US Aggregate	-10.3%	7.4%	8.4%	9.6%	7.7%
MSCI All-Country World (ACWI)	-15.8%	6.2%	7.0%	8.8%	7.2%
MSCI All-Country World (ACWI) ex-US	-19.4%	1.4%	2.5%	4.8%	5.8%
S&P 500 Index	-10.6%	10.6%	11.3%	13.0%	9.1%

Performance *continued*

Spending

The endowment's contribution to the University's operating budget is made each year without exception, so in a year of declines for the investment portfolio the endowment cannot have kept up with spending. The measure of inflation that is the most meaningful to Brown is the Higher Education Price Index (HEPI), which has averaged 3% over the prior 20 years. So while the single-year investment result falls short of the threshold for expanding the purchasing power of the endowment (approximately 5% payout + 3% inflation), the results exceed this hurdle in each of the three-, five-, 10- and 20-year periods. HEPI surged to 5.2% in Fiscal Year 2022, and the Investment Office is cognizant of the possibility of persistently higher inflation and is taking steps to prepare the endowment for a higher hurdle rate in future years.

Benchmarks

Comparisons with both internally generated and market benchmarks represent another way to evaluate the endowment's performance. No single benchmark accurately captures the endowment's potential outcomes, particularly over a single year, but by examining a combination of benchmarks over a multi-year period, a fuller picture of well-founded expectations emerges.

The endowment outperformed all market-based benchmarks, but slightly trailed the Aggregate Benchmark, which is internally maintained. The Aggregate Benchmark seeks to define a potential outcome for the endowment by combining the mix of assets owned by the endowment with returns from market indexes selected to mirror those asset exposures. In other words, the Aggregate Benchmark represents the returns from the endowment's asset allocation, but not the contributions from Brown's investment managers. Trailing the Aggregate Benchmark is quite obviously a disappointing result as it implies that Brown's external investment managers, measured as a group, actually subtracted value. Fortunately, this is an uncommon occurrence. The endowment has exceeded the Aggregate Benchmark in all other time periods, demonstrating the substantial value — net of all fees and expenses — that Brown's external managers have contributed over time.

Legoretta Cancer Center

In 2020 Brown launched a cancer center to harness the cancer research, translational science and clinical trials happening at the University and its affiliated hospitals, and to encourage new collaborations with potential to produce breakthroughs. Thanks to a $25 million endowment from Pablo and Almudena Legoretta the newly renamed center will achieve the rigorous standards required to become a world-class cancer center focused on developing new approaches to preventing, diagnosing and treating cancer, as well as developing novel insights on the types of cancer most prevalent in Rhode Island.

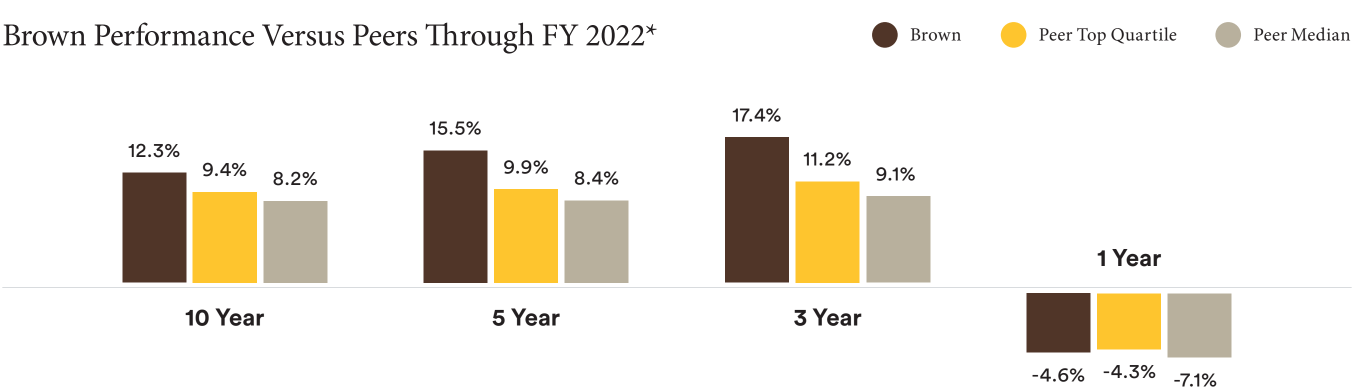
The results of the relevant market-based benchmarks demonstrate the challenging investment environment this year. The most germane are blended benchmarks of a mix of stocks and bonds in a proportion of 70% stocks and 30% bonds. This is a simple and popular format of asset allocation because of the strong historical tendency for stocks and bonds to deliver relatively low correlation to each other, resulting in stable compounding of capital aided by the ability to re-balance from stocks into bonds and vice versa based on price fluctuations. It is a useful benchmark for the endowment because it is a measure of a reasonable expectation of what could be delivered through an entirely passive approach, with no need for a team of professional investors or active external managers. Unfortunately for the practitioners of this widely employed model, both stocks and bonds delivered substantial losses during Fiscal Year 2022. A global 70/30 portfolio delivered losses of -15.5% while a U.S.-only 70/30 mix delivered losses of -10.3%. On an annualized basis, over the last five years, Brown's endowment has more than tripled the rate of return of a global 70/30 portfolio. This is a strong indication of the compounding value created by Brown's investment model of a dedicated team of professional investors working with external managers under the guidance of an engaged Investment Committee.

Peers

Brown's investment model has significant similarities to but also important distinctions from peer institutions that have a common mission of scholarship and research and have both resources and spending requirements akin to Brown's. The distinctions include Brown's utilization of broad asset class ranges rather than a policy portfolio to guide asset allocation, the utilization of co-investments and direct investments, and varying appetites for position concentration and strategy specialization. As a result, a comprehensive review of the endowment's performance should also seek to measure the value creation of these choices by comparing Brown's results to those of its comparable peers.

Based on data collected by investment consultancy Cambridge Associates, Brown's Fiscal Year 2022 result places it in the second quartile of College and University peers. Over longer time frames, Brown's results are exceptional, ranking in the top 5% of peers over three-, five- and 10-year periods.

Brown Performance Versus Peers Through FY 2022*



**Cambridge Associates preliminary data as of 10/26/2022. All peer quartiles calculated excluding those that use lagged reporting methodology in FY22. College & University n = 154 (all) / 135 (unlagged).*

Asset Allocation

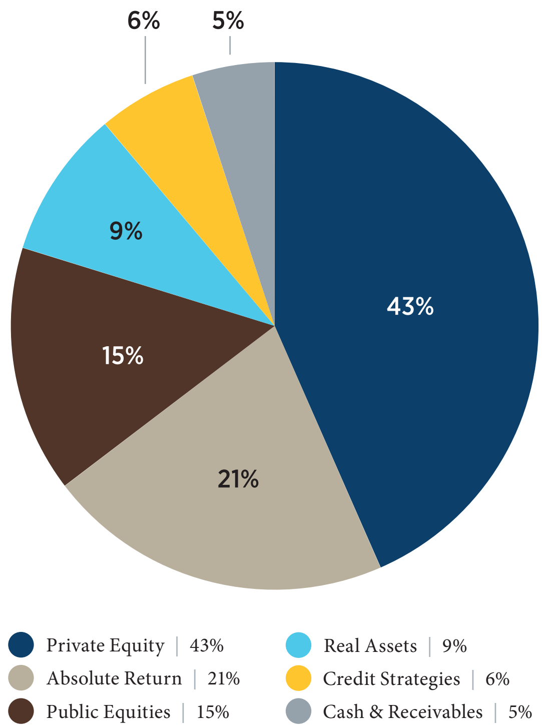
A core principle of risk management for the Brown endowment is diversification. The Investment Office pursues partnerships with external investment managers that employ a broad array of strategies, with the expectation that these strategies will have differing fundamental drivers and respond differently to changing macroeconomic dynamics. The portfolio is not constructed to thrive in a specific set of circumstances, but rather to show resilience under whatever outcomes may unfold.

With the emergence of the global pandemic, significant political uncertainty across the globe and even the emergence of active warfare, risk of all kinds has increased. Financial risk is notoriously resistant to both definition and measurement, but when equally plausible versions of the future look starkly different, financial risk is heightened. Diversification is an effective mitigant, but during Fiscal Year 2022 the endowment employed other methods to manage a state of increased risk, including at times holding a substantial cash balance. This is an expensive proposition in an inflationary environment, and it is not a long-term component of Brown's asset allocation strategy. But a cash position is effectively an investment in optionality, and circumstances led the endowment to hold as much as 7% in cash at times during the Fiscal Year.

The endowment's portfolio is best understood by organizing the investments into asset classes, allocations to which are governed by ranges approved by the Investment Committee.

The asset allocation comprises three large, equity-focused categories — Public Equities, Private Equity and Absolute Return — and two smaller ones that utilize a mix of investments in equity and debt: Real Assets and Credit Strategies. Not all of the strategies employed by Brown's investment managers fit neatly into these categories, but the asset classes remain a useful conceptual framework.

Endowment Asset Allocation as of June 30, 2022



Public Equities

Public Equity strategies make up 15% of the endowment portfolio, a proportion that has declined in recent years due to the strong performance of other asset classes relative to stocks. Brown's investments are split approximately evenly between U.S. markets and Developed International markets, with a modest allocation to Emerging Markets. Despite the decline in U.S. markets, they once again outperformed the rest of the world as China's pandemic policies and the Russian invasion of Ukraine weighed heavily on global stock markets. Brown's public equity portfolio narrowly underperformed its benchmark, declining 17.9% during the fiscal year, resulting in a loss of $181 million.

Absolute Return

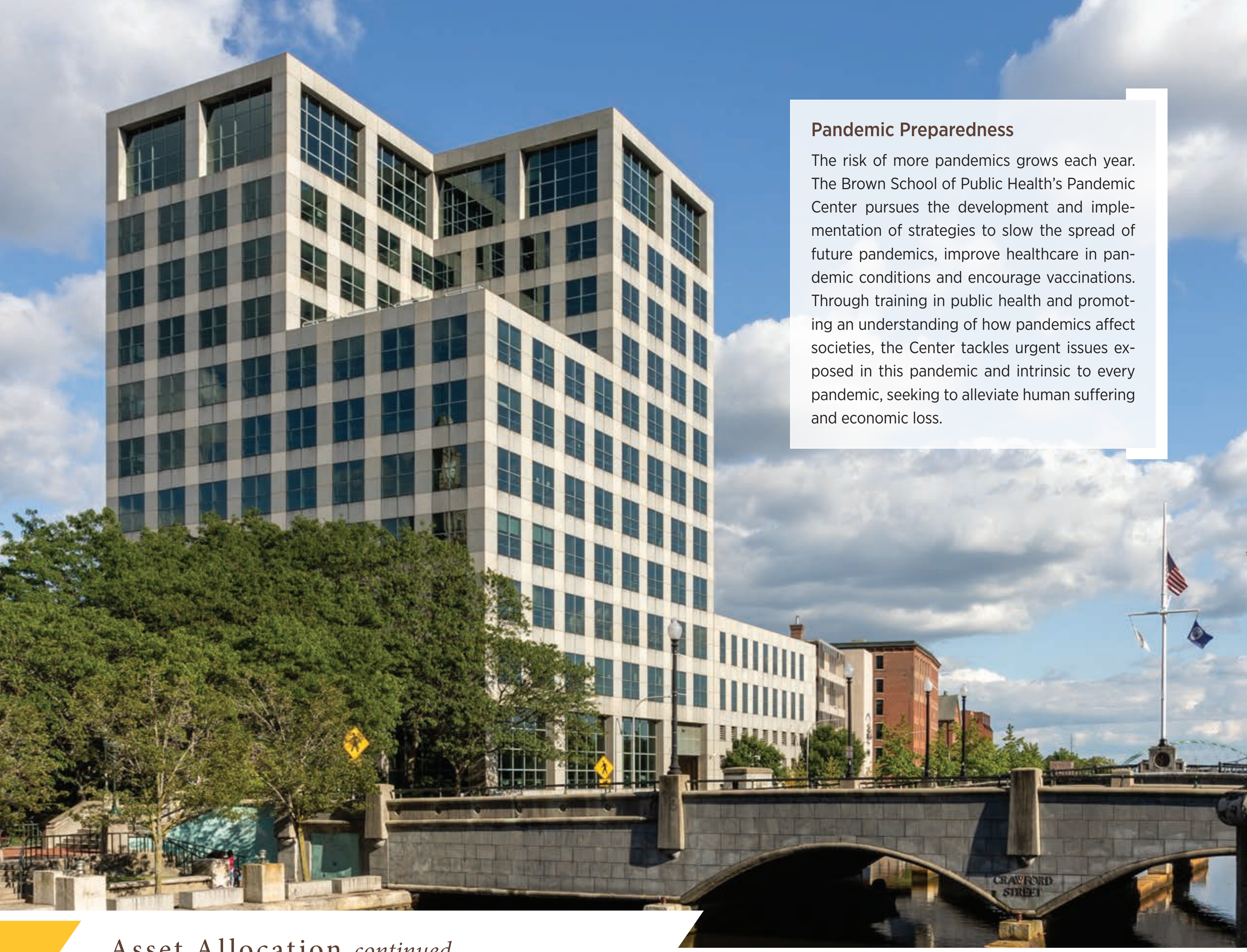
Absolute Return, which is 21% of the endowment's capital, is a broad category held together by a common thread: in addition to benefiting from the increase in value in the price of a given security, managers in these strategies also utilize tools that enable their portfolios to benefit from the decline in the price of a given security. The intended result is a portfolio that can generate profits over time but bears relatively low correlation to the typically more robust, but more volatile, returns from public equities. Regrettably, in Fiscal Year 2022, Brown's Absolute Return portfolio failed to deliver this foundational benefit of low correlation, resulting in losses of $220 million, or -12.2%. In particular, while some of Brown's investment managers delivered excellent results, others' portfolios grew over the course of the market cycle to bear excessive correlation not only to each other but also increasingly to Brown's Venture Capital portfolio. Brown's longer-term results from this portfolio of investments remains excellent; the asset class has approximately doubled the most relevant benchmark over five years. But without the successful achievement of lower correlation and lower volatility, the strategy is not serving its fundamental purpose. The effort necessary to repair the effectiveness of this portfolio is already well advanced.

Private Equity

After a strong run of performance for several preceding years by both of the core strategies of Private Equity — Buyouts and Venture Capital — the asset class has grown to 43% of the endowment. In aggregate, for Fiscal Year 2022, Private Equity strategies generated gains of 3.0%, or $78 million. The returns were led by the endowment's Buyouts portfolio, which is a collection of shares in smaller businesses with lower valuations in industries such as health care and industrials that have remained somewhat insulated from the speculative fervor that has characterized some corners of the financial markets. The Venture Capital portfolio generated modest losses in Fiscal Year 2022 after spectacular gains in the prior two years. The shares of businesses that Brown owns through Venture Capital strategies tend to be young, fast-growing technology companies that, admittedly, were at the nexus of the aforementioned speculation. Reductions in valuations for private technology-driven companies have not yet fully reflected the declines of publicly listed peers. Brown's investment managers, however, tend to use more conservative valuation methodologies than the industry overall. So while additional headwinds are likely, they will not be as severe as those observed in the most highly-valued public and private companies.

Firearm Injury Prevention

Each year, approximately 40,000 people die in the United States from firearms, but only 20% of healthcare professionals receive training in firearm injury prevention. Pediatricians counsel families on a range of safety issues related to diet, smoking, seat belts and pool safety, but research shows that clinicians more frequently refrain from addressing firearm safety. Educators at Brown are leading a nationwide initiative in establishing guidelines for teaching medical professionals how to identify gradations of firearm-injury risk and how to act appropriately to lower them.



Pandemic Preparedness

The risk of more pandemics grows each year. The Brown School of Public Health's Pandemic Center pursues the development and implementation of strategies to slow the spread of future pandemics, improve healthcare in pandemic conditions and encourage vaccinations. Through training in public health and promoting an understanding of how pandemics affect societies, the Center tackles urgent issues exposed in this pandemic and intrinsic to every pandemic, seeking to alleviate human suffering and economic loss.

Asset Allocation *continued*

Private Equity is inherently a cyclical business where investment returns that are the product of several years of work can be bunched into a single year. Successful execution of a Private Equity investment program requires not only diversification across geographies and industries but also diversification through time, often referred to as vintage diversification. To enable this risk-reducing dynamic, the endowment invests steadily through the cycle, focusing on identifying partners with integrity, ability and a demonstrable competitive advantage, rather than on the often futile pursuit of timing the investment and business cycle.

Real Assets

The Real Assets portfolio represents 9% of the endowment and encompasses strategies including real estate, commodities and infrastructure assets. Historically, dedicated fossil fuels investments would have been included in Real Assets but Brown's exposure in the space has been reduced to effectively zero. Real Assets provided diversification benefits during the fiscal year, generating profits of $27 million, or 6.9% gains.

Asset Allocation *continued*

Credit Strategies

In recent years, as the long decline in interest rates reached extreme levels, the Brown endowment largely ceased investing in traditional fixed income strategies. While bonds have historically served an important role as a liquid stabilizer for endowment portfolios, the trade-off between risk and return appeared starkly unequal when supposedly safe bond portfolios generated virtually no yield. In the absence of attractive investment opportunities in bonds, Brown's Investment Office sought out skilled managers capable of utilizing credit instruments to generate less correlated returns, both through private, direct lending to companies and in absolute return formats. Additionally, this group of managers was selected in part for an ability to take advantage of turmoil in the credit markets. At the end of Fiscal Year 2022 this group of strategies totaled 6% of the endowment. The feared turmoil arrived in Fiscal Year 2022 and delivered a bruising market for bonds. This painfully undermined investment portfolios that relied on bonds to generate steady — albeit low — returns to reduce the volatility of their stock holdings. Brown's managers in the credit space, however, generated $10 million of profits for the endowment, a gain of 2.5%. As interest rates rise and bond prices fall, the endowment is actively assessing the role that fixed income can play going forward.

In Closing

Investment results were exceedingly strong in the preceding fiscal year for virtually every educational endowment, and Brown's was no exception. As the global community slowly but steadily emerged from the most difficult days of the pandemic, economic conditions were unsustainably ideal for the value of financial assets. Fiscal Year 2022 witnessed an end to that environment, with a new set of conditions taking hold that includes inflation, higher interest rates and deepened geopolitical uncertainty post-pandemic.

The Brown endowment is not managed, however, to succeed in a certain set of conditions or to anticipate changes in them. The endowment's investment program instead is managed with a repeatable, long-term investment process rooted in risk management. It is conducted by a dedicated team of professional investors committed to Brown's mission of scholarship and research, and supported by an informed and equally committed Investment Committee of volunteers. The intended result is a portfolio that can, over decades, grow the purchasing power of the endowment to support all of Brown's scholars.

BROWN

Investment Office
Brown University
Box C
Providence, RI 02912
Phone: 401-867-3998

Produced by the Brown Investment Office with Brown's Office of University Communications

Office of University Communications | MP-3283INV22