

# The Yale Endowment 2020



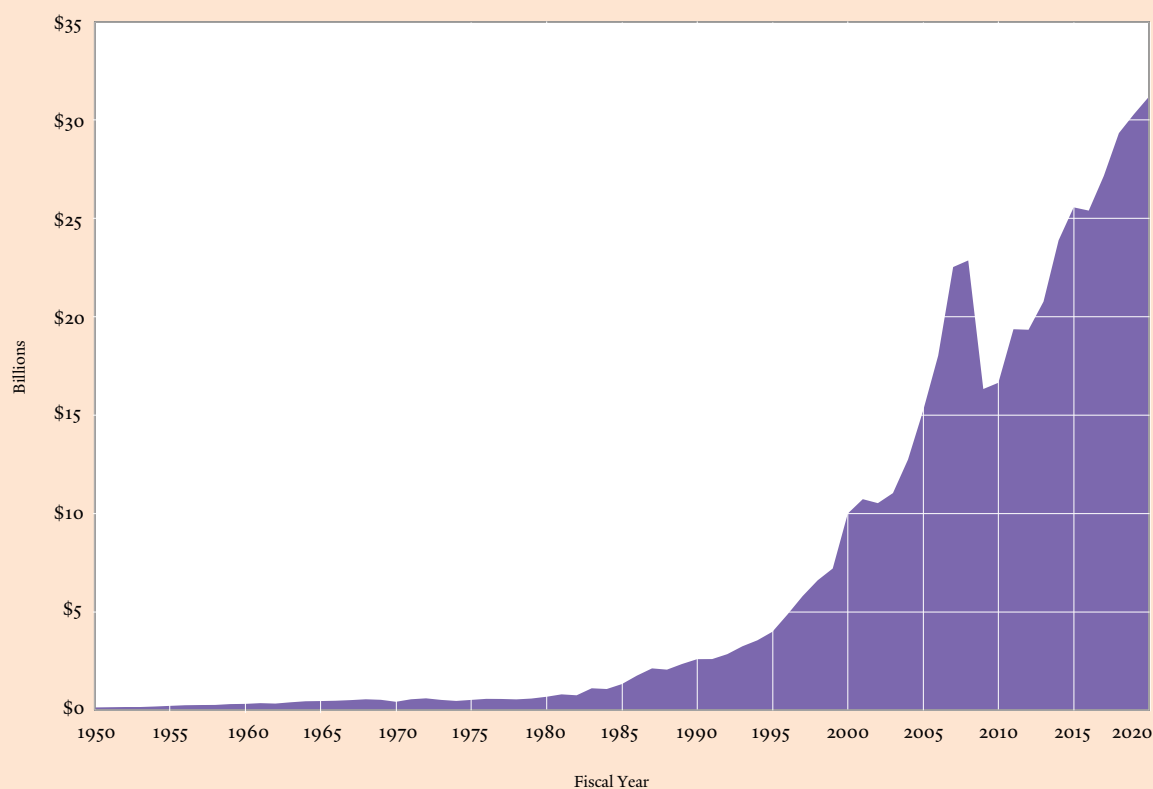
# Endowment Highlights

|  | Fiscal Year |            |            |            |            |
|--|-------------|------------|------------|------------|------------|
|  | 2020        | 2019       | 2018       | 2017       | 2016       |
| Market Value (in millions)                 | \$31,201.7  | \$30,314.8 | \$29,351.1 | \$27,176.1 | \$25,408.6 |
| Return                                     | 6.8%        | 5.7%       | 12.3%      | 11.3%      | 3.4%       |
| Spending (in millions)                     | \$ 1,437.3  | \$ 1,354.7 | \$ 1,281.0 | \$ 1,225.8 | \$ 1,152.8 |
| Operating Budget Revenues<br>(in millions) | \$ 4,273.2  | \$ 4,181.4 | \$ 3,874.9 | \$ 3,692.2 | \$ 3,472.4 |
| Endowment Percentage                       | 33.6%       | 32.4%      | 33.1%      | 33.2%      | 33.2%      |

## Asset Allocation (as of June 30)

|                     |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|
| Absolute Return     | 21.6% | 23.2% | 26.1% | 25.1% | 22.1% |
| Domestic Equity     | 2.3   | 2.7   | 3.5   | 3.9   | 4.0   |
| Foreign Equity      | 11.4  | 13.7  | 15.3  | 15.2  | 14.9  |
| Leveraged Buyouts   | 15.8  | 15.9  | 14.1  | 14.2  | 14.7  |
| Natural Resources   | 3.9   | 4.9   | 7.0   | 7.8   | 7.9   |
| Real Estate         | 8.6   | 10.1  | 10.3  | 10.9  | 13.0  |
| Venture Capital     | 22.6  | 21.1  | 19.0  | 17.1  | 16.2  |
| Cash & Fixed Income | 13.7  | 8.4   | 4.7   | 5.8   | 7.2   |

Endowment Market Value 1950–2020



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## The Humanities Quadrangle

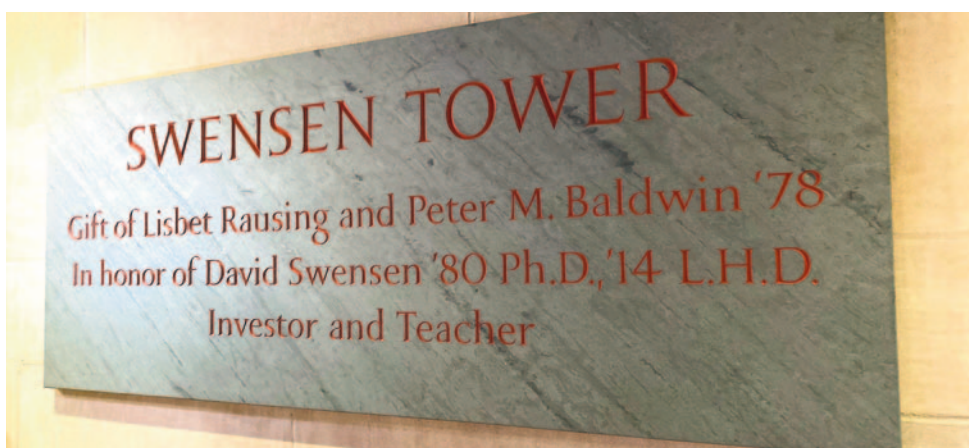
The Humanities Quadrangle at 320 York Street (shown on the front cover) opened recently after extensive rehabilitation, which will make the former Hall of Graduate Studies a focal point for study in the humanities. Faculty, staff and students connected to eighteen different humanities units, once located at diverse campus locations, have occupied new, improved quarters designed to enhance formal and informal interaction. Resident departments include Comparative Literature, Film and Media Studies, French, History, Judaic Studies, Spanish and Portuguese, in addition to such units as the Whitney Humanities Center.

“The renovation of this building and inclusive work of its planning represents a significant institutional and human investment in the humanities at Yale,” said



Kathryn Lofton, Faculty of Arts and Sciences dean of humanities. Professor Christophe Schuway of the French Department called the new facility a “major commitment toward the humanities,” which “will definitely foster conversation and collaboration” among departments and individuals. Doctoral candidates spoke enthusiastically of the “thoughtful” and “functional” nature of the design and layout as well as the equipping of spaces.

The Humanities Quadrangle offers expanded office facilities, social areas and classrooms, while the newly excavated level



below the concourse includes the state-of-the-art Alice Cinema and a Lecture Hall for guest speaker programs.

The tower, a distinctive feature of the Humanities Quadrangle since its original opening in 1932, is illustrated in the logo at top left, designed

by Kaleigh Kurpiewski. The tower has been reconditioned, thanks to a gift from Lisbet Rausing and Peter M. Baldwin '78, and renamed Swensen Tower in honor of David Swensen '80 PhD, '14 LHD, Yale's Chief Investment Officer since 1985 (in photo, far left). The commemorative plaque located near the base of the tower on the ground floor was designed and created by 2010 MacArthur Fellow Nick Benson, a stone carver from The John Stevens Shop whose work appears in other Yale locations. Shown at center is the interior ground-floor gateway, which dates to the original structure.

# Introduction

# 1



David F. Swensen '80 PhD, '14 LHD  
*Chief Investment Officer*

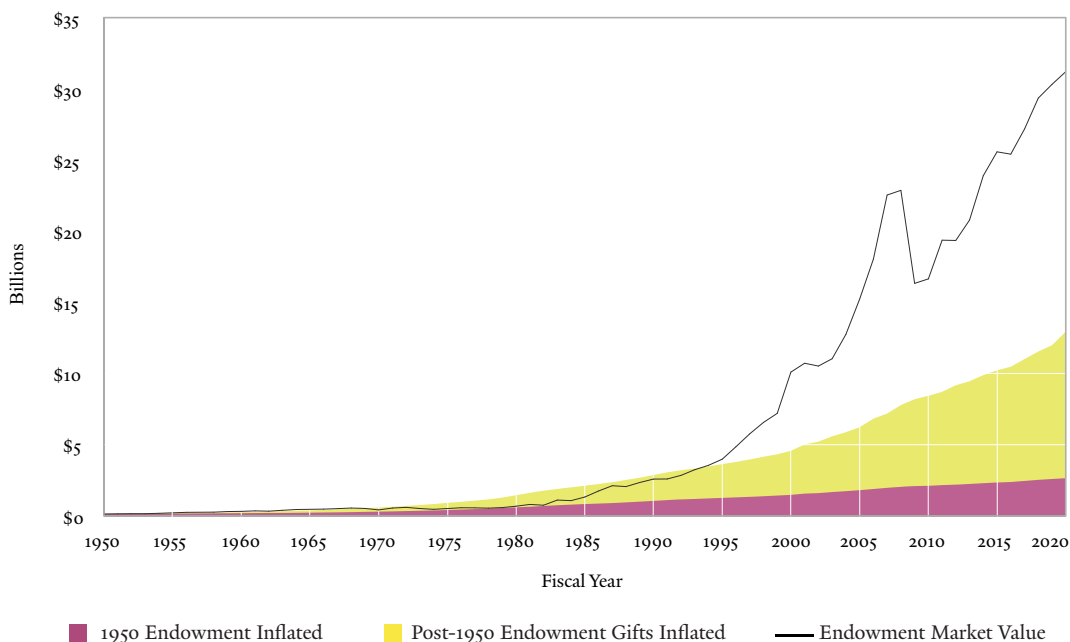


Carrie A. Abildgaard  
*Director*

Yale's Endowment generated a 6.8% return, net of fees, in fiscal 2020. Over the past ten years, the Endowment grew from \$16.7 billion to \$31.2 billion. With annual returns of 10.9% during the ten-year period, the Endowment's performance exceeded its benchmark and outpaced institutional fund indices. For three of the past ten years, Yale's ten-year record ranked first in the Cambridge Associates universe.

Spending from the Endowment grew during the last decade from \$1.1 billion to \$1.4 billion, an annual growth rate of 2.6%. Next year, spending will amount to \$1.5 billion, or 36% of projected revenues. Yale's spending and investment policies provide substantial levels of cash flow to the operating budget for current scholars, while preserving Endowment purchasing power for future generations.

## Endowment Growth Outpaces Inflation 1950–2020



# The Yale Endowment

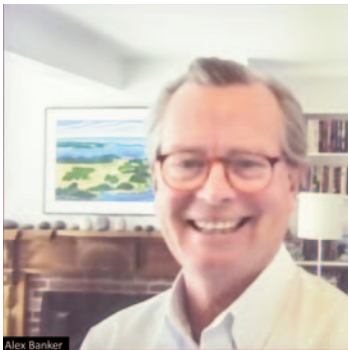
## 2

Totaling \$31.2 billion on June 30, 2020, the Yale Endowment contains thousands of funds with various purposes and restrictions. Approximately 82% of funds constitute true endowment, gifts restricted by donors to provide long-term funding for designated purposes. The remaining funds represent quasi-endowment, monies that the Yale Corporation chooses to invest and treat as Endowment.

Donors frequently specify a particular purpose for gifts, creating endowments to fund professorships, teaching and lectureships (24%), scholarships, fellowships and prizes (18%), maintenance (4%), books (3%) and miscellaneous specific purposes (27%). Twenty-four percent of funds are unrestricted. Eighteen percent of the Endowment benefits the overall university, with remaining funds focused on specific units, including the Faculty of Arts & Sciences (34%), the professional and arts schools (25%), the library (7%) and other entities (16%).

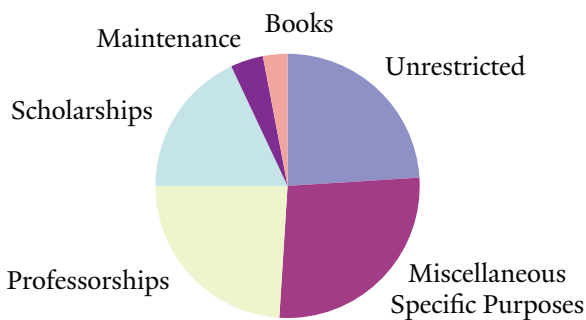
Although distinct in purpose or restriction, Endowment funds are commingled in an investment pool and tracked with unit accounting much like a large mutual fund. Endowment gifts of cash, securities or property are valued and exchanged for units that represent a claim on a portion of the total investment portfolio.

In fiscal 2020 the Endowment provided \$1.4 billion, or 34%, of the university's \$4.3 billion operating income. Other major sources of revenues were medical services of \$1.1 billion (27%), grants and contracts of \$837 million (20%), net tuition, room and board of \$388 million (9%), gifts of \$160 million (4%) and other income and transfers of \$318 million (7%).\*

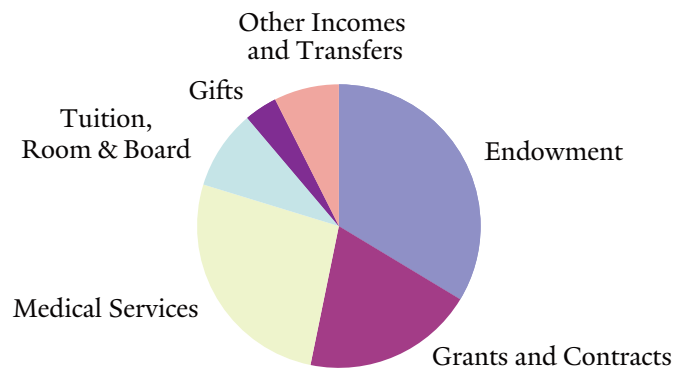


Alexander C. Banker  
Director

Endowment Fund Allocation  
Fiscal Year 2020



Operating Budget Revenue  
Fiscal Year 2020



\* Numbers do not sum to 100% due to rounding.

# Diversity and Inclusion

Even as the Yale Investments Office works to improve the diversity of its staff, the Office is asking its fund managers to address the lack of diversity in the asset management industry. As part of this effort, in October 2020 Chief Investment Officer David Swensen sent a letter to all of Yale's active U.S.-based investment managers, enlisting their help in improving diversity and asking managers to provide the Investments Office with data on diversity in their teams. In addition, Investments Office staff are engaged in ongoing discussions with fund managers to learn about the managers' approach to diversity, discuss best practices, share learnings and gather feedback.

## David Swensen's Letter

Over the years, my colleagues and I have had opportunities to discuss diversity and inclusion with you. From those conversations, I know you care about this topic. I write now to enlist your cooperation in taking a more systematic approach to the problem of the lack of women and minorities in the asset management industry.

Our goal is a level of diversity in investment management firms that reflects the diversity in the world in which we live. Genuine diversity remains elusive, giving investors like Yale and your firm an opportunity to drive change. Success will be measured by hiring, training, mentoring and retaining women and minorities for positions on the investment teams at Yale and in your firm.

As a starting point, I would like to emphasize the importance of entry-level positions. By and large, the number of experienced investment professionals is fixed. We do not solve the larger problem of underrepresentation by recruiting diverse candidates from other investment organizations. Such position shuffling is a zero-sum game, doing nothing to improve diversity of the overall industry. Yet, if we hire and train diverse individuals early in their careers, we can expand the numbers of talented, diverse investment management professionals.

Many of you report that the pools from which you recruit are not diverse. In response, I suggest a rethinking of how

you recruit and train your junior analysts. Why not hire directly from college campuses? Colleges and universities are richly diverse. Many students have little knowledge of career options outside of investment banking and consulting. You would be doing a great service by introducing them to the fascinating profession of investment management.

At first glance, it might appear difficult to train recent college graduates, instead of outsourcing the training to investment banks or consulting firms. Yet, since much of your work is specific to your firm's approach to managing assets, you are already doing much of the training for the individuals you hire.

One of the most effective ways to learn about investing is through an old-fashioned apprenticeship. Shadowing experienced colleagues and absorbing their approach to analyzing opportunities provide a solid foundation for a career in asset management. Close mentorship and training introduce junior analysts to the firm's ethos, a critical element in creating a cohesive firm. The hard skills and soft skills necessary to succeed are best transmitted by senior members of the firm to the new hires.

Hiring and training a more diverse group of analysts is only a starting point. Providing a clear career path with advancement opportunities increases retention rates and facilitates entry into the leadership ranks of the firm.

To monitor progress, I am asking all of our managers to complete the attached survey regarding diversity by October 31. We are interested in the numbers of diverse professionals on the investment team and in your support functions, at various levels of seniority. We will not share firm-specific data outside of Yale. I plan on asking you for annual updates. My colleague Lisa Howie will coordinate the survey. Please contact me or Lisa with any questions.

You will note that we are not asking about firm ownership as a factor in measuring diversity. Ownership per se does not necessarily relate to having a diverse investment team and does not directly measure progress toward the goal we hope to achieve, namely much larger numbers of diverse investment profes-

sionals in the Yale Investments Office, your firm and beyond.

I hope you will join me in making a serious effort to improve the diversity of the asset management industry.

Sincerely,  
David Swensen  
*Chief Investment Officer*

Fund manager response to Yale's letter was overwhelmingly positive, with many managers agreeing about the importance of diversity and applauding Yale's approach. Several partners shared specific initiatives that they pursue to improve diversity within their organizations. Some of Yale's private equity partners have dedicated senior resources to help accelerate diversity and inclusion initiatives within their firms and across their portfolio companies. Several managers, particularly smaller firms that lack the resources to hire stand-alone diversity-focused staff, highlighted the importance of strategic partnerships for recruiting purposes. A number of managers highlighted successes in attracting diverse candidates to their internship programs, with the expectation that those interns will return in analyst or associate roles in the future. One manager launched an internship program as a result of Yale's letter. Several firms have conducted workshops and programs around inclusion, anti-racism, implicit bias and ethics to promote ongoing education on these topics.

## Investment Policy

# 3



Amy M. Chivetta  
Director



Alan S. Forman  
Director



R. Alexander Hetherington '06  
Director

Yale's portfolio is structured using a combination of academic theory and informed market judgment. The theoretical framework relies on mean-variance analysis, an approach developed by Nobel laureates James Tobin and Harry Markowitz, both of whom conducted work on this important portfolio management tool at Yale's Cowles Foundation. Using statistical techniques to combine expected returns, variances and covariances of investment assets, Yale employs mean-variance analysis to estimate expected risk and return profiles of various asset allocation alternatives and to test sensitivity of results to changes in input assumptions.

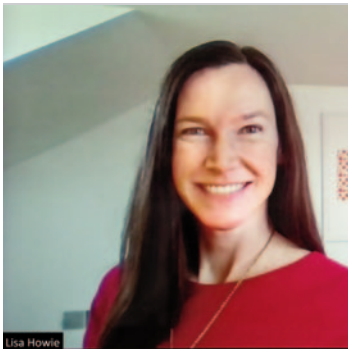
Because investment management involves as much art as science, qualitative considerations play an extremely important role in portfolio decisions. The definition of an asset class is subjective, requiring precise distinctions where none exist. Returns, risks and correlations are difficult to forecast. Historical data provide a guide, but must be modified to recognize structural changes and compensate for anomalous periods. Quantitative measures have difficulty incorporating factors such as market liquidity or the influence of significant, low-probability events. In spite of the operational challenges, the rigor required in conducting mean-variance analysis brings an important perspective to the asset allocation process.

The combination of quantitative analysis and market judgment employed by Yale produces the following portfolio:

| Asset Class         | June 2020<br>Actual | June 2020<br>Target |
|---------------------|---------------------|---------------------|
| Absolute Return     | 21.6 %              | 23.5 %              |
| Domestic Equity     | 2.3                 | 2.25                |
| Foreign Equity      | 11.4                | 11.75               |
| Leveraged Buyouts   | 15.8                | 17.5                |
| Natural Resources   | 3.9                 | 4.5                 |
| Real Estate         | 8.6                 | 9.5                 |
| Venture Capital     | 22.6                | 23.5                |
| Cash & Fixed Income | 13.7                | 7.5                 |

At its June 2020 meeting, Yale's Investment Committee adopted changes to the university's policy portfolio allocations. The Committee approved increases in the venture capital target from 21.5% to 23.5%, in the leveraged buyout target from 16.5% to 17.5%, in the absolute return target from 23% to 23.5% and in the cash and fixed income target from 7% to 7.5%. The Committee approved decreases in the foreign equity target from 13.75% to 11.75%, in the natural resources target from 5.5% to 4.5%, in the real estate target from 10% to 9.5% and in the domestic equity target from 2.75% to 2.25%. Over the longer term, Yale seeks to allocate approximately one-half of the portfolio to the illiquid asset classes of leveraged buyouts, venture capital, real estate and natural resources.

Providing resources for current operations and preserving purchasing power of assets dictate investing for high returns, causing the Endowment to be biased toward equity. The university's vulnerability to inflation further directs the Endowment away from fixed income and toward equity instruments. Hence, more than 90% of the Endowment is targeted for investment in assets expected to produce equity-like



Lisa M. Howie '00, '08 MBA  
Director

returns, through holdings of domestic and international equities, absolute return strategies, real estate, natural resources, leveraged buyouts and venture capital.

Over the past three decades, Yale dramatically reduced the Endowment's dependence on domestic marketable securities by reallocating assets to nontraditional asset classes. In 1990, 65% of the Endowment was targeted to U.S. stocks and bonds. Today, target allocations call for 9.75% in domestic marketable securities and cash, while the diversifying assets of foreign equity, absolute return, real estate, natural resources, leveraged buyouts and venture capital dominate the Endowment, representing 90.25% of the target portfolio.

The heavy allocation to nontraditional asset classes stems from their return potential and diversifying power. Today's actual and target portfolios have significantly higher expected returns than the 1990 portfolio with modestly higher volatility. Alternative assets, by their very nature, tend to be less efficiently priced than traditional marketable securities, providing an opportunity to exploit market inefficiencies through active management. The Endowment's long time horizon is well suited to exploit illiquid, less efficient markets.



An entrance to the Presidents' Room in the completely renovated Schwarzman Center.



# Yale Investments Office Staff

The Endowment is managed by a team of investment professionals at the Yale Investments Office. To keep pace with the increasing Endowment value, the investment team has grown over the past thirty years and today consists of thirty-two professionals, including a team of analysts and an experienced senior staff. Each year, the Office hires student interns, who rank among the most impressive Yale College students.

**Senior Staff** The senior staff at the Yale Investments Office drive the decisions and overall direction of the university's Endowment. Led by David Swensen, senior staff members focus their attention on key endowment management issues, including setting asset allocation, conducting deep portfolio reviews and investigating topics like liquidity analysis or technology exposure. In addition to leading broad portfolio projects, senior staff members serve as the crucial link between Yale and its external managers: they work on sourcing, evaluating, selecting and monitoring funds; they negotiate with managers on issues such as fund raising and fee structures; and they collaborate on discussions regarding organizational development.

Consistent with the Office's emphasis on teamwork and mentorship, senior staff members involve their junior colleagues in research, analysis and portfolio management. Such sharing breeds a culture of spirited, intellectual discussion and encourages analysts to engage in the decision-making process early in their careers. Early responsibility prepares junior staff to take on larger roles, enabling the Investments Office to promote from within. Six current directors joined the office directly from college, including one who has remained with the Office for nearly thirty-five years. (Two directors joined directly from business school.)

**Investment Analysts** Investment analysts perform much of the Endowment's essential analysis. Yale's analysts come from a variety of academic backgrounds, ranging from students who majored in history and biology to those with degrees in economics and comput-

er science. The common thread among all analysts is a devotion to higher education and to Yale, a curiosity about investing and the desire to explore those interests in an entrepreneurial, hands-on organization.

The Investments Office's analysts generally begin working for the Endowment with little or no portfolio management experience. Focused mentorship and extensive on-the-job training develop the analysts' investment abilities. The collaborative, flat structure of the Investments Office exposes analysts to the philosophy and thought process of Chief Investment Officer David Swensen and the rest of the team starting from day one. In their early years, analysts develop quantitative skills, qualitative skills and investment instincts. In addition, all analysts at the Investments Office prepare and sit for the Chartered Financial Analyst (CFA) examination.

As investment analysts develop financial literacy and analytical tools, they receive broad exposure to the investment process and various facets of Yale's portfolio. Analyst functions include assessing investment performance, examining the allocation of funds across different asset classes and

investment strategies, and building financial models. They assist in the screening, selection and monitoring of fund managers through background research, manager meetings and portfolio analysis. In line with Yale's belief in the centrality of external managers to the investment management process, analysts travel the world to meet managers in person to build and strengthen long-standing investment relationships.

**Interns** The Yale Investments Office hires student interns during the academic term and summer. Interns add horsepower to the Office's capacity and strengthen the connection between the Office staff and the university. At the Investments Office, interns rotate through all of the asset class teams, gaining exposure to a wide range of investment strategies and assisting in the screening and monitoring of funds through research, performance evaluation and participation in manager meetings. They work on a wide variety of strategic projects, such as analyzing manager performance, industry benchmarks and new investment opportunities.



Yale Health is housed in this building on Lock Street, which opened in 2010. The seven-foot-tall bronze statue near the building honors William "King" Lanson, a New Havener who helped build the modern city. Born into slavery in the 1770s, he was a local leader and businessman until his death in 1851.

## Asset Class Characteristics

Yale's eight asset classes are defined by differences in their expected response to economic conditions, such as economic growth, price inflation or changes in interest rates, with weights in the Endowment portfolio determined by risk-adjusted returns and correlations. The university combines the asset classes in such a way as to provide the highest expected return for a given level of risk, subject to fundamental diversification and liquidity constraints.

The capital markets assumptions detailed for each asset class below incorporate assumptions about the university's ability to add value through active management.

### *Absolute Return*



Matthew S.T. Mendelsohn '07  
Director

In July 1990, Yale became the first institutional investor to define absolute return strategies as a distinct asset class, beginning with a target allocation of 15.0%. Designed to provide significant diversification to the Endowment, absolute return investments are expected to generate high long-term real returns by exploiting market inefficiencies. The portfolio is invested in two broad categories: event-driven strategies and value-driven strategies. Event-driven strategies rely on a specific corporate event, such as a merger, spin-off or bankruptcy restructuring, to achieve a target price. Value-driven strategies involve hedged positions in assets or securities with prices that diverge from their underlying economic value. Today, the absolute return portfolio is targeted to be 23.5% of the Endowment, above the average educational institution's allocation of 20.0% to such strategies. Absolute return strategies are expected to generate a real return of 3.5% with risk of 7.0%. The Barclays 9 to 12 Month Treasury Index serves as the portfolio benchmark.

Absolute return investments have historically provided returns largely independent of overall market moves. Over the past twenty years, the portfolio exceeded expectations, returning 8.1% per year with low correlation to domestic stock and bond markets.

### *Domestic Equity*



John V. Ricotta '08  
Director

Equity owners reasonably expect to receive returns superior to those produced by less risky assets such as bonds and cash. The predominant asset class in most U.S. institutional portfolios, domestic equity represents a large, liquid and heavily researched market. While the average educational institution invests 21.7% of assets in domestic equities, Yale's target allocation to this asset class is only 2.25%. The domestic equity portfolio has an expected real return of 6.0% with a standard deviation of 17.0%. The Wilshire 5000 Index serves as the portfolio benchmark.

Despite recognizing that the U.S. equity market is highly efficient, Yale elects to pursue active management strategies, aspiring to outperform the market index by a few percentage points, net of fees, annually. Because superior stock selection provides the most consistent and reliable opportunity for generating attractive returns, the university favors managers with exceptional bottom-up, fundamental research capabilities. Yale's domestic equity portfolio has posted returns of 9.7% per year over the past twenty years.

## Foreign Equity



Timothy R. Sullivan '86  
Director

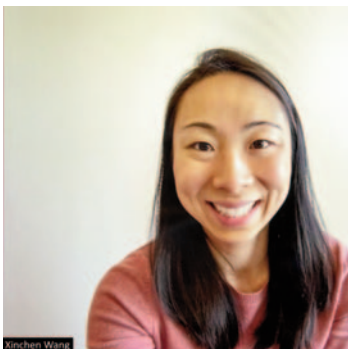
Foreign equity investments give the Endowment exposure to the global economy, providing diversification and the opportunity to earn outsized returns through active management. Yale allocates 5.25% of its portfolio to foreign developed markets and 6.5% to emerging markets. Yale's foreign equity target allocation of 11.75% stands below the average endowment's allocation of 19.8%. Expected real returns for emerging equities are 11.0% with a risk level of 23.0%, while developed equities are expected to return 8.0% with risk of 20.0%. The portfolio is benchmarked against a composite of developed markets, measured by the MSCI Europe, Australasia and Far East (EAFE) Investable Market Index, and emerging markets, measured by a blend of the MSCI Emerging Markets Investable Market Index and the MSCI China A Share Investable Market Index.

Yale's investment approach to foreign equities emphasizes active management designed to uncover attractive opportunities and exploit market inefficiencies. As in the domestic equity portfolio, Yale favors managers with strong fundamental research capabilities. Capital allocation to individual managers takes into consideration the country allocation of the foreign equity portfolio, the degree of confidence that Yale possesses in a manager and the appropriate size for a particular strategy. In addition, Yale attempts to exploit mispricings in countries, sectors and styles by allocating capital to the most compelling opportunities. Twenty-year returns for Yale's foreign equity portfolio stand at 14.8% per year.

## Leveraged Buyouts

Leveraged buyouts offer extremely attractive long-term risk-adjusted returns, stemming from the university's strong stable of managers that exploit market inefficiencies. The university's target allocation to leveraged buyouts of 17.5% far exceeds the 8.4% actual allocation of the average educational institution. The leveraged buyout portfolio is expected to generate real returns of 8.6% with risk of 21.1%.

Yale's leveraged buyout strategy emphasizes partnerships with firms that pursue a value-added approach to investing. Such firms work closely with portfolio companies to create fundamentally more valuable entities, relying only secondarily on financial engineering to generate returns. Investments are made with an eye toward long-term relation-



Xinchen Wang '09  
Director

In the nave of Sterling Memorial Library, temporary shelving holds the books requested for pick-up by students and faculty members during the partial closing of campus buildings in 2020.



ships – generally, a commitment is expected to be the first of several – and toward the close alignment of the interests of general and limited partners. Over the past twenty years, the leveraged buyout program has earned 11.2% per annum.

## *Natural Resources*

Equity investments in natural resources – oil and gas, timberland and agriculture – share common risk and return characteristics: protection against unanticipated inflation, high and visible current cash flow and opportunities to exploit inefficiencies. At the portfolio level, natural resource investments provide attractive return prospects and significant diversification. Yale has a 4.5% policy allocation to natural resources with expected real returns of 8.5% and risk of 24.0%. Yale’s policy allocation is below the 6.6% natural resources allocation of the average endowment.

Superior operators have demonstrated the ability to generate excess returns through market cycles. Over the past twenty years, Yale’s natural resources portfolio has generated an impressive 13.6% per annum.

## *Real Estate*

Investments in real estate provide material diversification to the Endowment. A steady flow of income with equity upside creates a natural hedge against unanticipated inflation without sacrificing expected return. Yale’s 9.5% policy allocation significantly exceeds the average endowment’s commitment of 3.6%. Expected real returns are 5.5% with risk of 16.0%.

While real estate markets sometimes produce dramatically cyclical returns, pricing inefficiencies in the asset class and opportunities to add value allow superior managers to generate excess returns over long time horizons. Twenty-year returns for the portfolio stand at 8.3% per annum.

## *Venture Capital*

Venture capital investments produce compelling option-like returns, as the university’s premier venture managers provide exposure to innovative start-up companies from an early stage. Yale’s target venture capital allo-



Daniel J. Otto '12  
Associate Director



A sign on York Street encouraging social distancing on campus.



John T. Ryan '14  
Associate Director

cation of 23.5% exceeds the 7.7% actual allocation of the average educational institution. The venture capital portfolio is expected to generate real returns of 12.3% with risk of 37.8%.

Yale's venture capital program, one of the first of its kind, is regarded as among the best in the institutional investment community; the university is frequently cited as a role model by other investors. Yale's venture capital managers field strong, cohesive and hungry teams with proven ability to identify opportunities and support talented entrepreneurs. The university's venture capital portfolio contains an unparalleled set of manager relationships, significant market knowledge and an extensive network. Over the past twenty years, the venture capital program has earned 11.6% per annum.

## Cash and Fixed Income



Celeste P. Benson  
Senior Portfolio Manager

Fixed income assets generate stable flows of income, providing more certain nominal cash flow than any other Endowment asset class. The fixed income portfolio exhibits a low covariance with other asset classes and serves as a hedge against financial crises. While the typical educational institution's allocation to fixed income and cash instruments is 12.2%, Yale's target allocation to fixed income and cash is 7.5%. Short-term bonds have an expected real return of 0.0% with risk of 3.0%. The Barclays Capital 6 to 12 Month U.S. Treasury Index serves as the portfolio benchmark.

Yale is not particularly attracted to fixed income assets, as they have the lowest expected returns of the eight asset classes that make up the Endowment. In addition, the government bond market is the most efficiently priced asset class, offering no opportunities to add significant value through active management. Based on skepticism of active fixed income strategies and belief in the efficacy of a highly structured approach to bond portfolio management, the Investments Office chooses to manage Endowment bonds internally. Over the past twenty years, the fixed income portfolio has generated returns of 3.7% per annum.

## Asset Allocations as of June 30, 2020

|                     | Yale<br>University | Educational<br>Institution Mean |
|---------------------|--------------------|---------------------------------|
| Absolute Return     | 21.6 %             | 20.0 %                          |
| Domestic Equity     | 2.3                | 21.7                            |
| Foreign Equity      | 11.4               | 19.8                            |
| Leveraged Buyouts   | 15.8               | 8.4                             |
| Natural Resources   | 3.9                | 6.6                             |
| Real Estate         | 8.6                | 3.6                             |
| Venture Capital     | 22.6               | 7.7                             |
| Cash & Fixed Income | 13.7               | 12.2                            |



Michael Knight  
Senior Business Associate

# Investments Office Alumni

While Yale Investments Office alumni have pursued careers in fields ranging from investment management to business to government to law, a significant number have gone on to serve in investment leadership positions at endowments or foundations. Fourteen Investments Office alumni currently hold or have held the title of chief investment officer in the nonprofit world.



**Seth D. Alexander, President, MIT Investment Management Company**

*"I cannot imagine a better place to have learned the investment business than the Yale Investments Office with its exceptional leadership, fabulous team and standard-setting investment thinking."*

Seth Alexander '95 is president of the MIT Investment Management Company (MITIMCo), a division of the Massachusetts Institute of Technology. MITIMCo manages the endowment, retirement plan, retiree welfare benefit plan and other financial assets of MIT. Prior to joining MIT, Seth was a director at the Yale Investments Office. At Yale, Seth was a management fellow at the Yale School of Management, co-teaching a class on endowment management. Seth co-authored a paper titled "Illiquid Alternative Asset Fund Modeling" that appeared in *The Journal of Portfolio Management* in 2002.

Seth is a member of the board of directors of the Whitehead Institute, a member of the Whitehead Investment Advisory Committee, an investment committee member of the Beth Israel Lahey Health Board of Managers and an investment committee member of CRICO, the risk management foundation of Harvard Medical Institutions.

Seth earned a BS in Biology from Yale University in 1995.



**Peter Ammon, Chief Investment Officer, University of Pennsylvania**

*"My memories of the Yale Investments Office inevitably begin with the people. The Office has always been an extraordinary group, and I feel incredibly fortunate to have been surrounded by colleagues who were not only friends and mentors, but people from whom I learned every day."*

Peter Ammon '05 MA, '05 MBA serves as Penn's chief investment officer. Prior to joining Penn in July 2013, he worked at the Yale Investments Office. At Yale, Peter was also a senior faculty fellow at the Yale School of Management, where he co-taught a class on endowment management. Prior to his time at Yale, Peter worked at the Princeton University Investment Company. Peter has served on a number of nonprofit investment committees, including most recently at The Philadelphia School.

Peter holds an AB in Politics from Princeton, an MA in International Relations from Yale University and an MBA from Yale University.



One of the new lounges located on the north side of the Schwarzman Center.



**Donna Dean, Former Chief Investment Officer, The Rockefeller Foundation**

*“Working in the Yale Investments Office and learning the craft of investing from David Swensen was the most formative experience of my career. Being at Yale made it clear to me that I wanted to invest on behalf of a nonprofit with a mission of making the world a better place.”*

Donna Dean joined the Rockefeller Foundation in 1995. She served as its chief investment officer from 2001 through 2019. Prior to joining the Rockefeller Foundation, Donna spent seven years at Yale University, where she served as director of investments, with responsibility for real estate as well as oversight of the New Haven Initiative community investment program. From 1984 to 1987, she worked for CIGNA Investments in Hartford, where she managed real estate portfolios in the southeastern United States. From 1978 to 1984, she was with International Paper Company in New York, where she served as manager of trust investments and oversaw the company’s pension and employee benefit funds.

Donna is an independent trustee of Harbor Funds and serves on the investment committee of Queens University of Charlotte.

Donna received a bachelor’s degree from Queens University in Charlotte, North Carolina, and an MBA from the University of North Carolina at Chapel Hill.



**Andrew K. Golden, President, Princeton University Investment Company**

*“I often describe my time at the YIO as being the equivalent of a medical internship and residency—it had that much impact on my professional and, indeed, intellectual development.”*

Andy Golden ’89 MPPM became the third president of the Princeton University Investment Company (Princo) in January 1995. He came to Princo from Duke Management Company, where he was an investment director. He previously worked as a senior associate in the Yale Investments Office. Before shifting his focus to investing, Andy was a professional photographer.

Andy earned the Chartered Financial Analyst designation and is a member of the New York Society of Security Analysts. He served as a founding member of the Investors’ Committee of the President’s Working Group on Financial Markets, and previously served as a member of the board of directors of the NAB Asset Corporation, a publicly traded commercial loan workout specialist. He is a trustee of the Princeton Area Community Foundation, Rita Allen Foundation and Rutgers Preparatory School.

Andy holds a BA in Philosophy from Duke University and an MPPM from the Yale School of Management.



**Randy Kim, Chief Investment Officer, Rainwater Charitable Foundation**

*“I will forever be grateful to David, Dean and the rest of my former YIO colleagues for ten years of invaluable investment training and personal mentorship. I am blessed for the opportunity to have made so many great friends, and I wish my colleagues at Yale every future success.”*

Randy Kim ’98 BA, ’04 MBA became the first chief investment officer of the \$1 billion Rainwater Charitable Foundation (RCF) in 2017. Established by legendary investor Richard Rainwater in 1991, RCF funds research to accelerate treatments in a class of neurodegenerative diseases called tauopathies. The foundation also supports a variety of children’s educational programs. Prior to joining RCF, Randy spent eight years as chief investment officer of the Conrad N. Hilton Foundation, which funds nonprofit organizations working to improve the lives of individuals living in poverty and experiencing disadvantage throughout the world. He previously worked for a decade at the Yale Investments Office, focusing primarily on the domestic equity, foreign equity, international private equity and absolute return portfolios.

Randy is the most devoted Notre Dame football fan in America, despite his lack of a Notre Dame degree.

Randy holds a BA from Yale University and an MBA from the Yale School of Management.



**Anne Martin, Chief Investment Officer, Wesleyan University**

*“I can’t imagine a better place than the Yale Investments Office to learn the art and science of investment management. I’ll always be thankful that David Swensen and Dean Takahashi took a leap of faith to bring me into the fold. It’s hard to imagine an environment that provides greater breadth in intellectual challenges, cutting-edge thinking and exposure to the smartest people in the investing world, a group that includes not only Yale’s investment managers, but my colleagues within the Yale Investments Office.”*

Anne Martin became Wesleyan University’s chief investment officer in 2010. She was previously a director at the Yale Investments Office, where she worked on the natural resources and private equity portfolios. Prior to joining Yale, Anne worked as a general partner of private equity firm Rosewood Capital in San Francisco, where she focused on Internet, software and business service investments. Prior to that, Anne was a managing director in the technology practice at Alex. Brown, where she worked on corporate finance and mergers and acquisitions in the information technology sector.

Anne was a co-founder, board member and board chair of the Packard Center for ALS Research at Johns Hopkins, an innovative nonprofit organization dedicated to finding therapies for amyotrophic lateral sclerosis. She was part of the national rowing team from 1985 to 1988 and has served as a director and co-chair of the National Rowing Foundation, a nonprofit organization devoted to preparing the next generation

of U.S. rowers for the highest levels of international competition. Anne serves on the investment committee for Smith College and is an advisor to the David & Lucile Packard Foundation investment committee.

Anne is a cum laude graduate of Smith College, Phi Beta Kappa, and holds an MBA from Stanford Business School.



**Mary McLean, Former Chief Investment Officer, Ewing Marion Kauffman Foundation**

*“I remember the Yale Investments Office as a place where ideas live free and extravagant lives, a source of wonder and delight for its human inhabitants. I am grateful for my time there.”*

Mary McLean ’88 MBA, ’94 PhD is the former chief investment officer of the Kauffman Foundation, which builds and supports programs that improve education, boost entrepreneurship and help its hometown of Kansas City thrive. Mary retired from this position in 2018. Prior to joining the Kauffman Foundation in 1996, Mary was a senior associate with the Yale Investments Office, where she was introduced to the opportunities and challenges of endowment management. She began her career at Morgan Stanley, primarily in technology roles, but eventually as a quantitative analyst.

Currently, Mary serves as an advisor to several investment funds and is engaged as a community volunteer in the areas of food security and COVID-19 prevention. She is a CFA charterholder.

Mary earned a bachelor’s degree in Math at Brown University, an MBA from the Yale School of Management and a

PhD from Yale’s Graduate School of Arts & Sciences.



**Lauren Meserve, Senior Vice President and Chief Investment Officer, The Metropolitan Museum of Art**

*“I view my time at the Yale Investments Office as a continuation of my undergraduate education. Working with David and Dean, I learned something new every day.”*

Lauren Meserve ’93 is the senior vice president and chief investment officer of The Metropolitan Museum of Art, where she oversees the management of the museum’s \$4.0 billion investment portfolio. Lauren joined the museum in 2002, was named chief investment officer in 2014, and became senior vice president and chief investment officer in 2017. Previously Lauren worked at the Andrew W. Mellon Foundation, where she assisted in the management of the foundation’s endowment, collaborated on *The Shape of the River: Long-Term Consequences of Considering Race in College and University Admissions* (Bowen and Bok) and *The Game of Life: College Sports and Educational Values* (Bowen and Shulman) and coordinated projects for Artstor. Lauren began her career at the Yale Investments Office.

Lauren serves on the boards of the Wenner-Gren Foundation for Anthropological Research and the American Friends of the National Gallery, London.

Lauren has a bachelor’s degree in Anthropology from Yale University and a master’s degree in Public Policy with a certificate in Demography from the Princeton School of Public and International Affairs.





**Kimberly Sargent, Chief Investment Officer, David & Lucile Packard Foundation**

*“It was a great honor to be a small part of a team of such talented investment professionals at the Yale Investments Office for three years. As a recent college graduate, I benefited from an intense lesson in all aspects of the world of investment management. As a lover of learning, I was in an environment in which intellectual honesty and rigor were applied toward the challenge of earning superior returns. And as someone who cared about doing good in the world, I was thrilled to see the results of our work go to benefit the university and the globe.”*

Kim Sargent ’00 is the chief investment officer at the David & Lucile Packard Foundation, responsible for investing the foundation’s \$8 billion portfolio across public and private equities, hedge funds, fixed income, real estate and natural resources. The foundation uses the proceeds from these investments to support programs that improve the lives of children, enable the creative pursuit of science, advance reproductive health, and

conserve and restore the earth’s natural systems. Kim joined the Packard Foundation in 2008 as the institution was building an investment team for the first time, after having held Hewlett-Packard stock historically; she helped to establish the institutional-quality portfolio and recruit the twelve-person team that exists today. Prior to joining the foundation, Kim was an associate at McKinsey & Company’s San Francisco office, where she served financial institutions on various projects, and prior to business school she was a senior analyst at the Yale Investments Office, where she specialized in international equities and served as research assistant to chief investment officer David Swensen for his second book, *Unconventional Success*.

Kim is a CFA charter holder and a fellow of the inaugural class of the Aspen Institute’s Finance Leaders Fellowship.

Kim graduated from Yale University with a BA in History, magna cum laude, and from Stanford’s Graduate School of Business with an MBA.



**D. Ellen Shuman, Co-Founder, Edgell Endowment Partners**

*“Working at the Yale Investments Office under David’s leadership grounded me in important first principles of investing and the confidence to think independently. Thirty-five years later it is incredibly special to share so many long-standing friendships with my fellow Yale colleagues!”*

D. Ellen Shuman ’84 MPPM has worked in the field of endowment management for over thirty years, serving institutions of higher education and philanthropy. More recently, in April 2020, she has embraced public service through her appointment by Governor Lamont to the State of Connecticut’s Investment Advisory Council (IAC), which advises the state treasurer on the investment of the state’s pension assets. In 2013, Ellen co-founded Edgell Endowment Partners, a firm that operates as a full-service investment office to steward the endowment assets of a limited number of mission-based institutions. Edgell manages approximately \$2 billion on behalf of four clients in global, diversified portfolios. In early 2020, she transitioned to a strategic role at Edgell. Ellen served as the chief investment offi-

cer of Carnegie Corporation of New York, a private foundation, from 1999 to 2011. As the foundation’s first chief investment officer, she built the investment office and implemented a set of strategies that dramatically diversified the portfolio – globally and by asset class. Prior to Carnegie Corporation, Ellen worked at the Yale Investments Office, focusing on real estate, energy and fixed-income asset classes, including the university’s debt issuance. She taught several courses at Yale College and the Yale School of Management on finance and real estate investing.

Ellen received the Institutional Investor Magazine Lifetime Achievement Award in 2014 and the Award for Excellence in Investment Management – Foundations – in 2006. She was appointed a member of the Investors’ Committee of the President’s Working Group on Financial Markets in 2008. Currently Ellen is on the board of JBG Smith, a REIT based in Washington, D.C.

Ellen received a BA, magna cum laude, from Bowdoin College; an MPPM from the Yale School of Management; and earned the CFA designation in 1992.



**Paula Volent, Chief Investment Officer and Senior Vice President, Bowdoin College**

*“My skills in endowment management and my passion for investing began at the Yale Investments Office and at the Yale School of Management. Under David Swensen’s leadership, I learned to be curious, to seek out market inefficiencies and to highly value the opportunity to support access to a high-quality education through growing endowment support of financial aid. At Bowdoin I have put what I learned at Yale to work, doubling the endowment’s percentage support of financial aid, allowing the college to continue to be need blind and no-loan.”*

Paula Volent ’98 MBA is chief investment officer and senior vice president at Bowdoin College, a private, residential college in Brunswick, Maine. At Bowdoin, Paula is responsible for the oversight and management of the college’s endowment. Prior to joining Bowdoin in July 2000, Paula was a senior associate at the Yale Investments Office. Prior to focusing on endowment management, Paula worked as a paper conservator at the New-York Historical Society, the San Francisco Palace of Fine Arts, the Los Angeles

County Museum of Art and the National Gallery of Art in Washington, D.C. She also ran a private paper conservation studio in Los Angeles.

Paula serves as a board member of MSCI. She serves on the board of advisors of the Yale School of Management, as a member of the investment committee of the Pritzker Family Foundation, as a member of the advisory board of Girls Who Invest, as an advisory board member of the University for Asian Women, as a trustee of the Skowhegan School of Art and Painting and as an investment committee member of the Rockefeller Foundation. She is also a member of the Milken Institute’s Global Markets Advisory Council and a member of the advisory board of the Private Capital Research Institute at Harvard University.

Paula has a BA from the University of New Hampshire; a master’s in Art History from the Institute of Fine Arts at New York University; a Certificate in Conservation from the Conservation Center at NYU, with a specialization in the conservation of works of art on paper; and an MBA from the Yale School of Management.



**Robert F. Wallace, Chief Executive Officer, Stanford Management Company**

*“The Yale Investments Office, like the university itself, is a place of light and truth. It was a privilege and an inspiration to have worked with David Swensen and Dean Takahashi early in my career and I consider myself fortunate to count as colleagues many of the other wonderful professionals who have been part of the Investments Office through the years.”*

Robert Wallace ’02 is the chief executive officer of Stanford Management Company, where he oversees Stanford University’s \$30 billion investment portfolio. Prior to joining Stanford in 2015, Rob was the chief executive officer of Alta Advisers, a London-based investment firm that pursues a global and diversified investment strategy on behalf of one of Europe’s most philanthropic families. Rob’s investment career began at the Yale Investments Office. Prior to his work in investment management, Rob was a classical ballet dancer. His six-

teen-year dance career began at the Washington Ballet, continued at American Ballet Theatre under the direction of Mikhail Baryshnikov and concluded at the Boston Ballet. Rob danced principal roles in substantially all of the great classical ballets. His repertoire in contemporary works included leading roles in ballets by Balanchine, Robbins, Tudor, De Mille, Tharp, Morris, York, Goh, Lubavitch and Taylor.

Rob is a member of the Council on Foreign Relations. He has previously served as trustee of the English National Ballet, the Royal Opera House, Covent Garden and the Royal Ballet School.

Rob received a degree in Economics from Yale University, graduating summa cum laude and Phi Beta Kappa.



**Casey D. Whalen, Chief Executive Officer and Chief Investment Officer, Truvvo Partners**

*“My years at the Yale Investments Office were extraordinarily impactful on my life. David Swensen’s guidance as a mentor, teacher and advocate laid the foundation for my career trajectory and, more importantly, for my business ethics, critical thinking skills and intellectually honest approach to investing. I am so grateful for David’s professional support and friendship all these years, as well as the close relationships from our tight-knit group.”*

Casey Whalen ’96 founded Truvvo Partners, where she serves as the chief executive officer and chief investment officer. She believes deeply in alignment with clients and investments, and in providing the benefits, resources and skill

sets from the institutional world to Truvvo’s clients. Prior to Truvvo, Casey was the chief investment officer of The New York Public Library. She joined the Library as the first chief investment officer with a mandate to create the office of investments. Her responsibilities included asset allocation, manager selection and overall management of the endowment, which is invested across various traditional and alternative asset classes. Before The New York Public Library, she was director of public investments for The Rockefeller University, focusing primarily on global equities, hedge funds and fixed income. She was heavily involved in asset allocation, overall portfolio management and the establishment of the university’s real estate allocation. Casey began her investment career at the Yale Investments Office working across various asset classes, including foreign equity, real estate and fixed income. She went on to work for one of Yale’s real estate investment managers.

Casey is a board member and treasurer of the Yale Swimming and Diving Association, having been a member of the Yale Varsity Women’s Swimming team. Casey is a CFA charterholder and member of the New York Society of Security Analysts. She serves on the investment committee of the Rockefeller Family Fund. Casey is a member and board member of the New York City chapter of GenNext.

Casey holds a BA from Yale University.



**Ana Yankova, Chief Investment Officer, Mount Holyoke College**

*“Deeply committed to the university’s mission, David and Dean led a team that showed up every day to deliver excellence. Our Monday morning team meetings provided me with a front row seat at a master class in investing. My biggest lesson from my time at Yale was that asking the right questions is as important as finding good answers.”*

In April 2020, Mount Holyoke College named Ana Yankova its inaugural chief investment officer. Before that, Ana was a partner at global investment firm Cambridge Associates. Previously, Ana was a senior financial analyst at the Yale Investments Office and an associate analyst at the National Economic Research Associates. She was born and raised in Bulgaria.

Ana graduated from Mount Holyoke College with a bachelor’s degree in Economics and earned an MBA from the MIT Sloan School of Management.



## 4

The spending rule is at the heart of fiscal discipline for an endowed institution. Spending policies define an institution's compromise between the conflicting goals of providing support for current operations and preserving purchasing power of Endowment assets. The spending rule must be clearly defined and consistently applied for the concept of budget balance to have meaning.

The Endowment spending policy, which allocates Endowment earnings to operations, balances the competing objectives of providing a stable flow of income to the operating budget and protecting the real value of the Endowment. The spending policy manages the trade-off between these two objectives by combining a long-term spending rate target with a smoothing rule, which adjusts spending in any given year gradually in response to changes in Endowment market value.

The target spending rate approved by the Yale Corporation currently stands at 5.25%. According to the smoothing rule, Endowment spending in a given year sums to 80% of the previous year's spending and 20% of the targeted long-term spending rate applied to the market value at the start of the prior year. The spending amount determined by the formula is adjusted for inflation and taxes, subject to the constraint that



A recent exhibition at the Beinecke Library highlighted photographs by Carl Van Vechten (1880-1964) of such figures as Billie Holiday, Paul Robeson and (at far right, a photograph dated 1940) author Zora Neale Hurston



Bertan Akin  
Senior Performance Manager



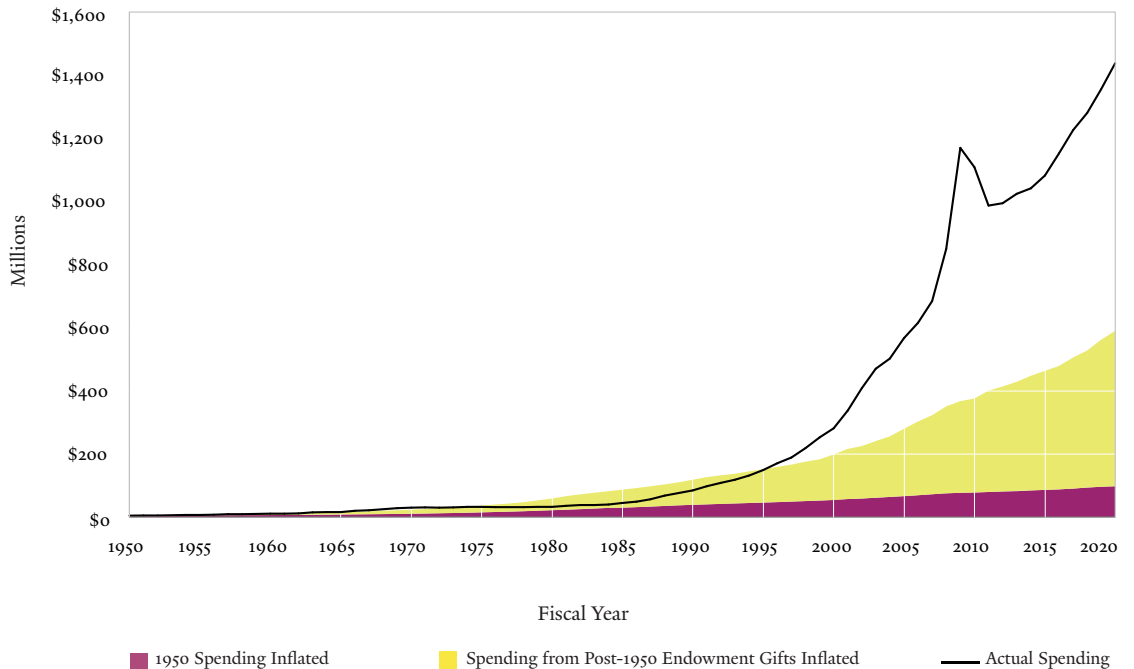
Ahmed L. Sarhan '16  
Senior Associate

the calculated rate is at least 4.0% and not more than 6.5% of the Endowment's inflation-adjusted market value at the start of the prior year. The smoothing rule and the diversified nature of the Endowment are designed to mitigate the impact of short-term market volatility on the flow of funds to support Yale's operations.

The spending rule has two implications. First, by incorporating the prior year's spending, the rule eliminates large fluctuations, enabling the university to plan for its operating budget needs. Over the last twenty years, the standard deviation of annual changes in actual spending has been approximately 85% of the standard deviation of Endowment returns. Second, by adjusting spending toward the long-term target spending level, the rule ensures that spending will be sensitive to fluctuating Endowment market values, providing stability in long-term purchasing power.

Distributions to the operating budget rose from \$1.1 billion in fiscal 2010 to \$1.4 billion in fiscal 2020. The university projects spending of \$1.5 billion from the Endowment in fiscal 2021, representing approximately 36% of revenues.

### Spending Growth Surpasses Inflation 1950–2020



## Investment Performance

# 5

### Performance by Asset Class



Ryan A. Healy  
Manager of Business Intelligence

Yale has produced excellent long-term investment returns. Over the ten-year period ending June 30, 2020, the Endowment earned an annualized 10.9% return, net of fees, placing Yale in the top 2% of colleges and universities. Over the same period, domestic stocks returned 13.7% and domestic bonds returned 3.8%. Endowment outperformance stems from sound asset allocation policy and superior active management.

Yale's long-term superior performance relative to its peers and benchmarks creates substantial wealth for the university. Over the ten years ending June 30, 2020, Yale added \$9.5 billion relative to the average return of a broad universe of college and university endowments and \$10.3 billion relative to its passive benchmark.

Yale's long-term asset class performance continues to be outstanding. In the past ten years, nearly every asset class posted superior returns, outperforming benchmark levels.

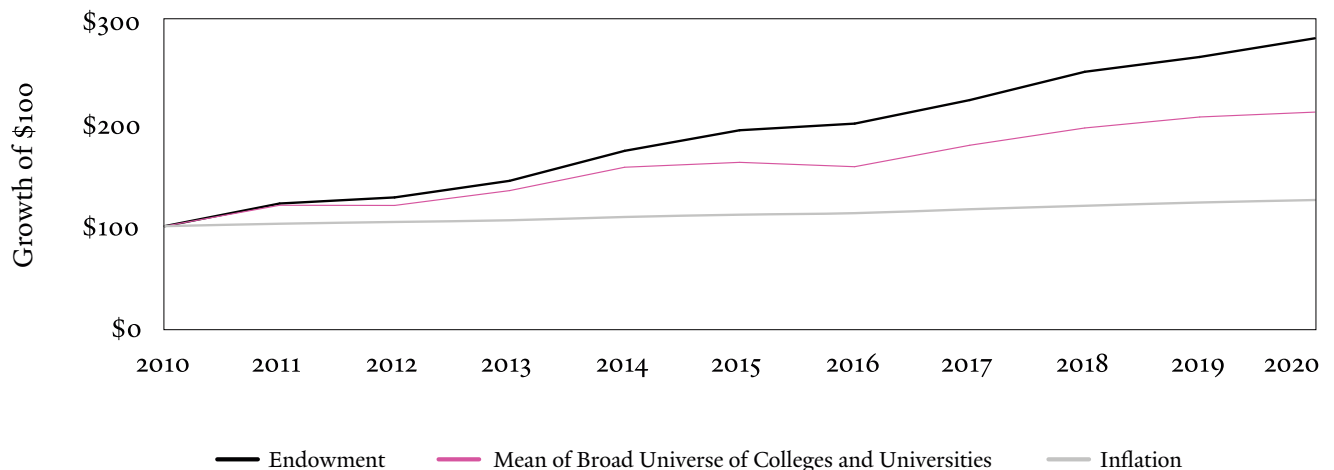
Over the past decade, the absolute return portfolio produced an annualized 5.3% return, exceeding the passive Barclays 9 to 12 Month U.S. Treasury Index by 4.4% per year and besting its active benchmark by 3.0% per year. For the ten-year period, absolute return results exhibited little correlation to traditional marketable securities.

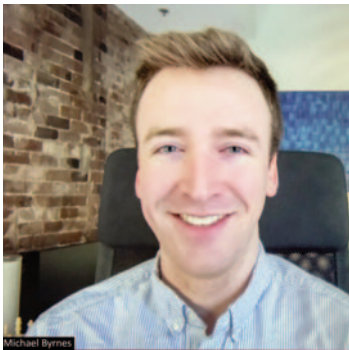
The domestic equity portfolio returned an annualized 12.8% for the ten years ending June 30, 2020, outperforming the BNY Median Manager return, net of estimated fees, by 0.1% per year but underperforming the Wilshire 5000 Index by 1.0% per year.

The foreign equity portfolio generated an annual return of 15.8% over the ten-year period, outperforming its composite passive benchmark by 10.7% per year and the BNY Median Manager return, net of estimated fees, by 10.8% per year. The portfolio's excess return is due to effective security selection by active managers and astute country allocation.

Leveraged buyouts generated an annualized 14.6% return over the decade, outperforming the composite passive benchmark by 4.9% per year and the pool of buyout managers compiled by Cambridge Associates by 0.4% per year.

Yale's Performance Exceeds Peer Results  
July 1, 2010 to June 30, 2020, 2010 = \$100

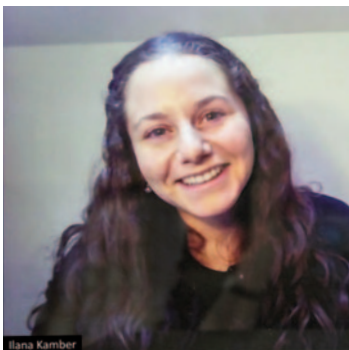




Michael J. Byrnes '18  
Senior Investment Analyst



Claire D. Goldsmith '18  
Senior Investment Analyst



Ilana M. Kamber '18  
Senior Investment Analyst



Jordi M. Bofill '19  
Investment Analyst

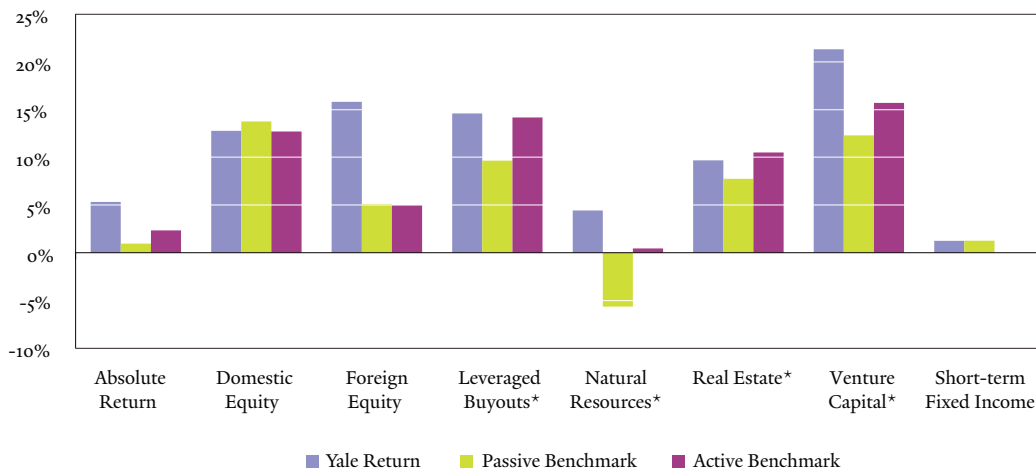
Yale's natural resources portfolio produced an annualized return of 4.4% over the past decade, surpassing its composite passive benchmark by 10.1% per year and outperforming the Cambridge Associates natural resources manager pool by 4.0% per year.

Real estate generated a 9.7% annualized return over the ten-year period, outperforming the MSCI U.S. REIT Index by 1.9% per year, but underperforming the pool of Cambridge Associates real estate managers by 0.8% per year.

The venture capital portfolio earned an annualized return of 21.3% for the ten years ending June 30, 2020, exceeding its composite passive benchmark by 9.0% per year and the Cambridge Associates venture capital and growth equity manager pool by 5.6% per year.

Yale's internally managed fixed income portfolio earned an annualized 1.2% over the past decade, in line with the passive index.

### Most Yale Asset Class Results Beat Benchmarks July 1, 2010 to June 30, 2020



\* Yale Returns and Active Benchmarks are dollar-weighted.

#### Passive Benchmarks

**Absolute Return:** Barclays 9-12 Month U.S. Treasury Index  
**Domestic Equity:** Wilshire 5000 Index  
**Foreign Equity:** Blend of MSCI EAFE Investable Market Index, MSCI Emerging Markets Investable Market Index, MSCI China A Share Investable Market Index  
**Leveraged Buyouts:** Blend of Russell 2000, MSCI World ex-U.S. Small-Cap Index, MSCI China All Shares Mid-Cap Index  
**Natural Resources:** Blend of Custom Timber REIT Basket, S&P O&G Exploration & Production Index, Custom Agriculture REIT Basket  
**Real Estate:** MSCI U.S. REIT Index  
**Venture Capital:** Blend of Russell 2000 Technology Index, NASDAQ Biotechnology Index, MSCI China Small-Cap Index, MSCI India Small-Cap Index  
**Fixed Income:** Barclays Capital 6-12 Month U.S. Treasury Index (Barclays 1-3 Year Treasury from October 2013 to June 2018, Barclays 1-5 Year Treasury from July 2010 to September 2013)

#### Active Benchmarks

**Absolute Return:** Credit Suisse and Inverse Wilshire 5000 Composite  
**Domestic Equity:** BNY Median Manager, U.S. Large-Cap Equity, with fee adjustment of 78 basis points per annum  
**Foreign Equity:** BNY Median Manager Composite, Foreign Equity, with fee adjustment of 81 basis points per annum for developed equity and 97 basis points per annum for emerging equity  
**Leveraged Buyouts:** Cambridge Associates Global Leveraged Buyouts  
**Natural Resources:** Cambridge Associates Natural Resources  
**Real Estate:** Cambridge Associates Real Estate  
**Venture Capital:** Blend of Cambridge Associates Global Venture Capital and Cambridge Associates Global Growth Equity

## Management and Oversight

# 6

### Investment Committee



Joseph T. Doran '20  
Investment Analyst



Yusuke Imamura '20  
Investment Analyst

Since 1975, the Yale Corporation Investment Committee has been responsible for oversight of the Endowment, incorporating senior-level investment experience into portfolio policy formulation. The Investment Committee consists of at least three Fellows of the Corporation and other persons who have particular investment expertise. The Committee meets quarterly, at which time members review asset allocation policies, Endowment performance and strategies proposed by Investments Office staff. The Committee approves guidelines for investment of the Endowment portfolio, specifying investment objectives, spending policy and approaches for the investment of each asset category.

Douglas A. Warner, III '68  
Chairman  
Former Chairman  
J.P. Morgan Chase & Co.

O. Francis Biondi, Jr. '87  
Founder and Former Managing Partner  
King Street Capital Management

Michael J. Cavanagh '88  
Senior Executive Vice President and CFO  
Comcast Corporation

Anne Glover '78 MPPM  
CEO and Co-Founder  
Amadeus Capital Partners

Charles W. Goodyear IV '80  
President  
Goodyear Investment Company

Ben Inker '92  
Partner  
GMO

Peter Salovey '86 PhD  
President  
Yale University

John Shrewsberry '92 MPPM  
Former CFO  
Wells Fargo & Company

Carter Simonds '99  
Former Managing Director  
Blue Ridge Capital

Josh L. Steiner '87  
Senior Advisor  
Bloomberg L.P.

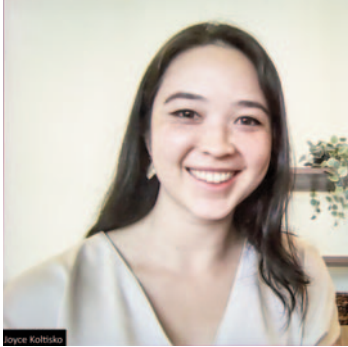


The recently inaugurated Tsai Center for Innovative Thinking, with Becton Engineering Center at the right, SSS Tower in the distance.



The Investments Office manages the Endowment and other university financial assets, and defines and implements the university's borrowing strategies. Headed by the Chief Investment Officer, the Office currently consists of thirty-two professionals.

## *Investments Office*



Joyce E. Koltisko '18  
*Investment Analyst*



Vishal V. Patel '20  
*Investment Analyst*



Cheryl M. Xiang '18  
*Investment Analyst*

David F. Swensen '80 PhD, '14 LHD  
*Chief Investment Officer*

Carrie A. Abildgaard  
*Director*

Alexander C. Banker  
*Director*

Amy M. Chivetta  
*Director*

Alan S. Forman  
*Director*

R. Alexander Hetherington '06  
*Director*

Lisa M. Howie '00, '08 MBA  
*Director*

Matthew S. T. Mendelsohn '07  
*Director*

John V. Ricotta '08  
*Director*

Timothy R. Sullivan '86  
*Director*

Xinchen Wang '09  
*Director*

Stephanie S. Chan '97  
*Senior Associate General Counsel*

Deborah S. Chung  
*Senior Associate General Counsel*

Lauren Caplan  
*Associate General Counsel*

Sohail S. Ramirez '10 JD  
*Associate General Counsel*

Peter N. Steinwachs  
*Associate General Counsel*

Daniel J. Otto '12  
*Associate Director*

John T. Ryan '14  
*Associate Director*

Celeste P. Benson  
*Senior Portfolio Manager*

Michael Knight  
*Senior Business Associate*

Bertan Akin  
*Senior Performance Manager*

Ahmed L. Sarhan '16  
*Senior Associate*

Ryan A. Healy  
*Manager of Business Intelligence*

Michael J. Byrnes '18  
*Senior Investment Analyst*

Claire D. Goldsmith '18  
*Senior Investment Analyst*

Ilana M. Kamber '18  
*Senior Investment Analyst*

Jordi M. Bofill '19  
*Investment Analyst*

Joseph T. Doran '20  
*Investment Analyst*

Yusuke Imamura '20  
*Investment Analyst*

Joyce E. Koltisko '18  
*Investment Analyst*

Vishal V. Patel '20  
*Investment Analyst*

Cheryl M. Xiang '18  
*Investment Analyst*

Sachem's Wood, the small park at the foot of Science Hill, is shown after its recent makeover, which includes new landscaping, plantings, paved pathways, and outdoor seating areas.





Alice Cinema, one of two auditoriums added on below-ground stories in the newly renovated Humanities Quadrangle.

*Sources*

**Financial and Investment Information**

Educational institution asset allocations and returns from Cambridge Associates. Much of the material in this publication is drawn from memoranda produced by the Investments Office for the Yale Corporation Investment Committee. Other material comes from Yale’s financial records, Reports of the Treasurer, and Reports of the President.

**Investments Office Alumni**

Biographical information provided by the subjects.

**Photo Sources**

Portraits of alumni were provided by the individuals shown. Yale Investments Office staff photos by Mara Lavitt. Page 1, Swensen Tower logo by Kaleigh Kurpiewski. Page 1, Swensen Tower plaque and gate photos by Taylor Yovino. Page 1, David Swensen photo by Michael Marsland, Office of Public Affairs and Communications. Inside back cover, bulldog photo by Dan Renzetti. Front and back covers and all other photos by Tom Strong.

**Design**

Strong Cohen, LLC / Margaret Watkins

*Front cover:*

Humanities Quadrangle, 320 York Street. See commentary, page 1.

*Back cover:*

Nine stained-glass windows, created in about 1930, selected from approximately fifty similar windows in the student lounge on the ground floor of the renovated Humanities Quadrangle.



Yale President Peter Salovey '86 PhD with young Kingman, who will reign as Handsome Dan XIX. He was named for Kingman Brewster, Jr., President of Yale University from 1963 to 1977, a historic period which included the change to coeducation and the introduction of need-blind admissions in Yale College.

