

# 2014

The Yale Endowment



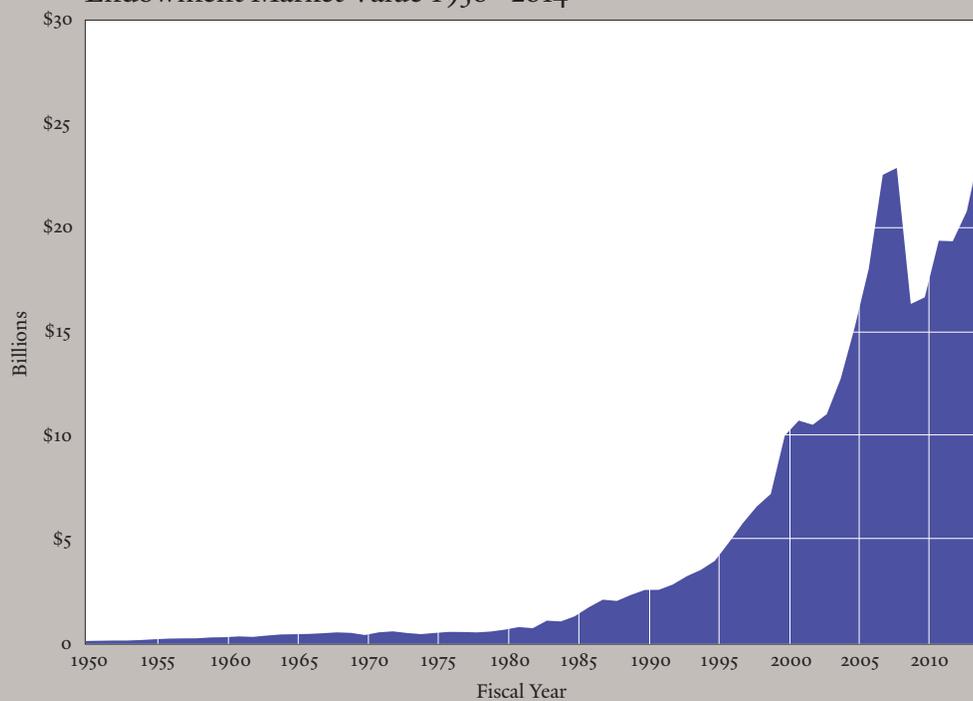
# Endowment Highlights

	Fiscal Year				
	2014	2013	2012	2011	2010
Market Value (in millions)	\$23,894.8	\$20,780.0	\$19,344.6	\$19,374.4	\$16,652.1
Return	20.2%	12.5%	4.7%	21.9%	8.9%
Spending (in millions)	\$1,041.5	\$1,024.0	\$994.2	\$986.8	\$1,108.4
Operating Budget Revenues (in millions)	\$3,116.1	\$2,968.6	\$2,851.7	\$2,734.2	\$2,681.3
Endowment Percentage	33.4%	34.5%	34.9%	36.1%	41.3%

## Asset Allocation (as of June 30)

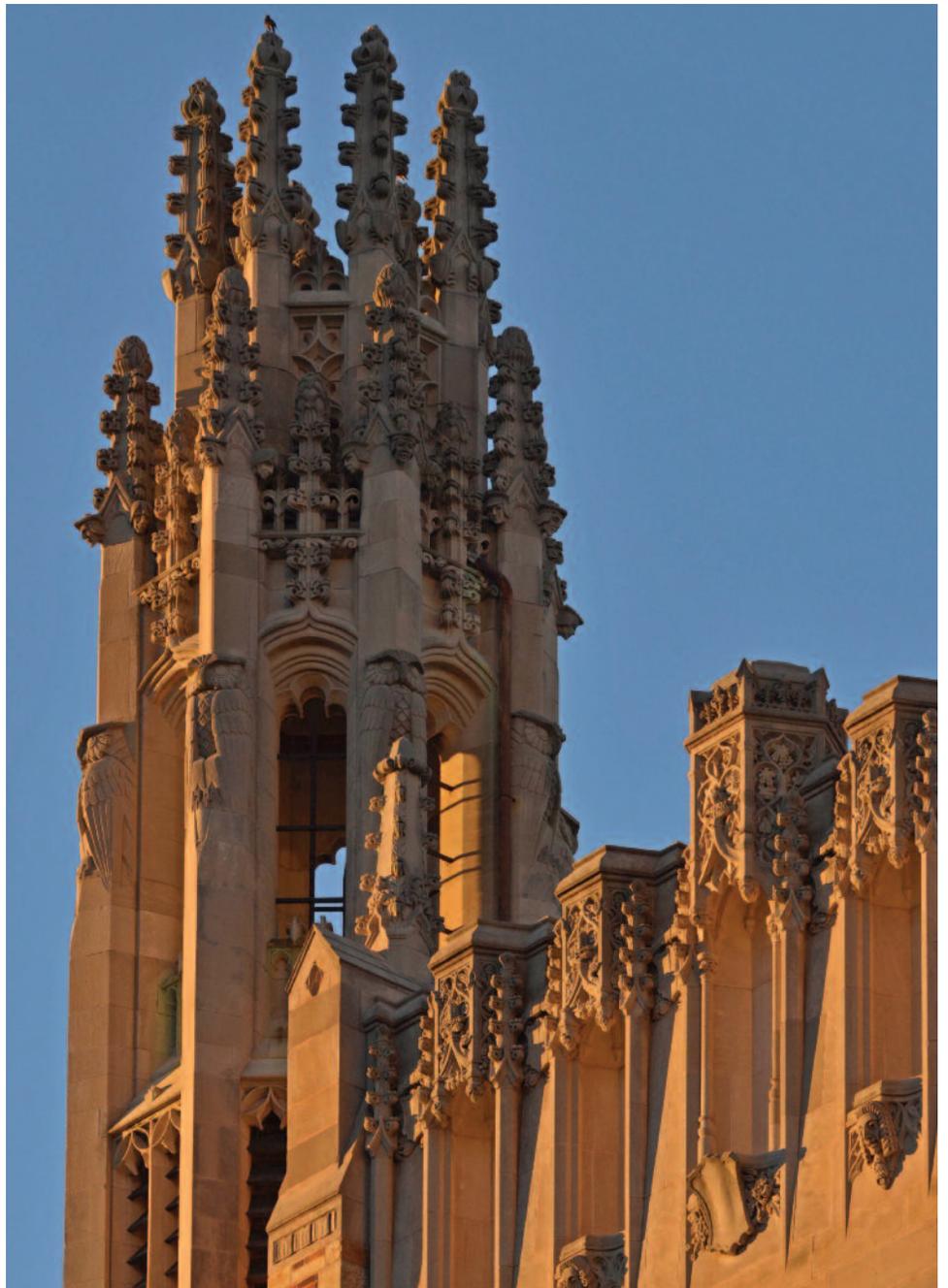
Absolute Return	17.4%	17.8%	14.5%	17.5%	21.0%
Domestic Equity	3.9	5.9	5.8	6.7	7.0
Fixed Income	4.9	4.9	3.9	3.9	4.0
Foreign Equity	11.5	9.8	7.8	9.0	9.9
Natural Resources	8.2	7.9	8.3	8.7	8.8
Private Equity	33.0	32.0	35.3	35.1	30.3
Real Estate	17.6	20.2	21.7	20.2	18.7
Cash	3.5	1.6	2.7	-1.1	0.4

Endowment Market Value 1950–2014



# Contents

1.	Introduction	2
2.	The Yale Endowment	3
3.	Investment Policy	4
4.	Spending Policy	17
5.	Investment Performance	20
6.	Management and Oversight	22



*Front cover:*  
Window of Sterling Memorial Library, east façade.

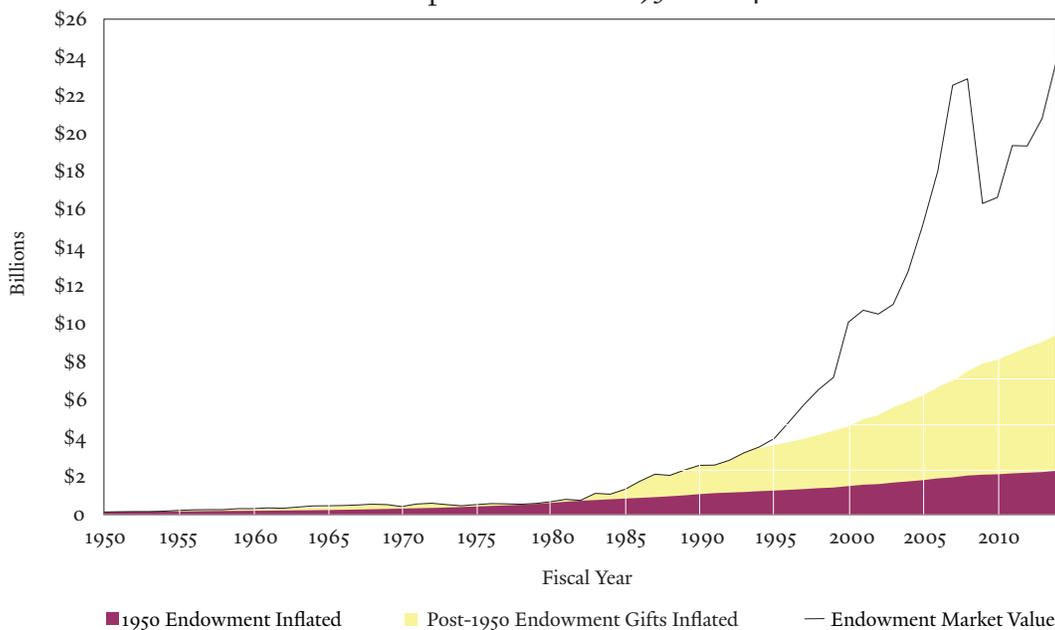
*Right:*  
View of Yale Law School rooftop.

# 1

Yale’s Endowment generated a 20.2 percent return in fiscal 2014, producing an investment gain of \$4.0 billion. Over the past ten years, the Endowment grew from \$12.7 billion to \$23.9 billion. With annual net ten-year investment returns of 11.0 percent, the Endowment’s performance exceeded its benchmark and outpaced institutional fund indices. For each of the past ten years, Yale’s ten-year record ranked first in the Cambridge Associates universe. The Yale Endowment’s twenty-year record of 13.9 percent per annum produced a 2014 Endowment value of nearly seven times the 1994 value. For each of the past ten years, Yale’s twenty-year record ranked first in the Cambridge Associates universe. Yale’s excellent long-term record stems from disciplined and diversified asset allocation policies and superior active management results.

Spending from the Endowment grew during the last decade from \$502 million to \$1.0 billion, an annual growth rate of approximately 8 percent. Next year, spending will amount to \$1.1 billion, or 34 percent 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 1950–2014



# 2

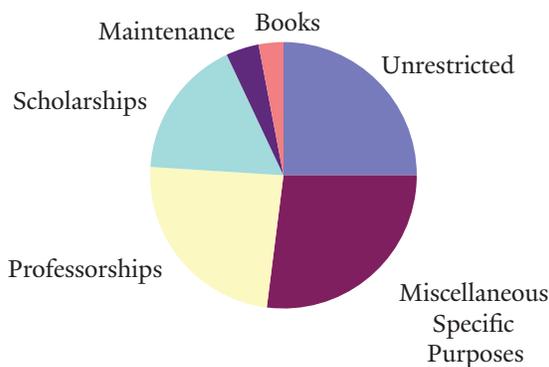
Totaling \$23.9 billion on June 30, 2014, the Yale Endowment contains thousands of funds with various purposes and restrictions. Approximately 84 percent of funds constitute true endowment, gifts restricted by donors to provide long-term funding for designated purposes. The remaining funds represent 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 percent); scholarships, fellowships, and prizes (17 percent); maintenance (4 percent); books (3 percent); and miscellaneous specific purposes (27 percent). Twenty-five percent of funds are unrestricted. Twenty-two percent of the Endowment benefits the overall University, with remaining funds focused on specific units, including the Faculty of Arts and Sciences (37 percent), the professional schools (26 percent), the library (7 percent), and other entities (7 percent).

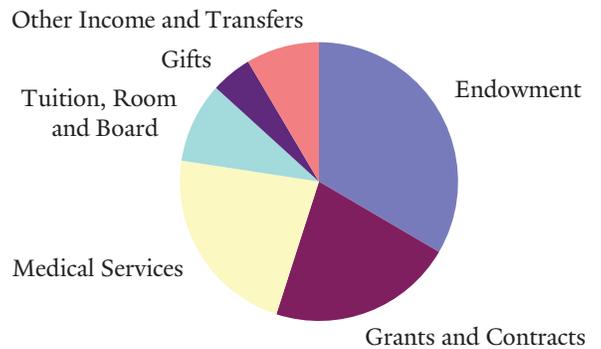
Although distinct in purpose or restriction, Endowment funds are commingled in an investment pool and tracked with unit accounting much like a large mutual fund. Endowment gifts of cash, securities, or property are valued and exchanged for units that represent a claim on a portion of the total investment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

In fiscal 2014 the Endowment provided \$1.0 billion, or 33 percent, of the University's \$3.1 billion operating income. Other major sources of revenues were medical services of \$700 million (22 percent); grants and contracts of \$671 million (22 percent); net tuition, room, and board of \$291 million (9 percent); gifts of \$148 million (5 percent); and other income and transfers of \$265 million (9 percent).

Endowment Fund Allocation  
Fiscal Year 2014



Operating Budget Revenue  
Fiscal Year 2014



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 quite 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 2014 Actual	June 2014 Target
Absolute Return	17.4%	20.0%
Domestic Equity	3.9	6.0
Fixed Income	4.9	5.0
Foreign Equity	11.5	13.0
Natural Resources	8.2	8.0
Private Equity	33.0	31.0
Real Estate	17.6	17.0
Cash	3.5	0.0

The target mix of assets produces an expected real (after inflation) long-term growth rate of 6.3 percent with risk (standard deviation of returns) of 15.0 percent. Because actual holdings differ from target levels, the actual allocation produces a portfolio expected to grow at 6.2 percent with risk of 14.8 percent. The University's measure of inflation is based on a basket of goods and services specific to higher education that tends to exceed the Consumer Price Index by approximately one percentage point.

At its June 2014 meeting, Yale's Investment Committee adopted changes to the University's policy portfolio allocations. The Committee approved an increase in the foreign equity target from 11 percent to 13 percent, funded by a 2 percentage point decrease in the real estate target.

Over the longer term, Yale seeks to allocate approximately one-half of the portfolio to the illiquid asset classes of private equity, real estate, and natural resources. The Endowment has made significant progress in reducing illiquidity over the past several years.

Providing resources for current operations and preserving the 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, 95 percent of the Endowment is targeted for investment in assets expected to produce equity-like returns, through holdings of domestic and international securities, absolute return strategies, real estate, natural resources, and private equity.

Over the past two decades, Yale dramatically reduced the Endowment's dependence on domestic marketable securities by reallocating assets to nontraditional asset classes. In 1994, 38 percent of the Endowment was committed to U.S. stocks and bonds. Today, target allocations call for 11 percent in domestic marketable securities, while the diversifying assets of foreign equity, natural resources, private equity, absolute return, and real estate dominate the Endowment, representing 89 percent 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 1994 portfolio with only modestly greater 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 such as venture capital, leveraged buyouts, oil and gas, timber, and real estate.



Sterling Memorial Library viewed from Cross Campus.

## Current Yale Leaders

### President

### Peter Salovey



On October 13, 2013, Yale formally installed the University's twenty-third President, Peter Salovey, who took office on July 1. President Salovey is the Chris Argyris Professor of Psychology and holds secondary faculty appointments in the schools of Management and Public Health, the Institution for Social and Policy Studies, and the Sociology department.

Prior to becoming President, Salovey served as the Provost of Yale University from 2008 to 2013. As Provost, Salovey facilitated strategic planning and advanced initiatives such as enhancing career development and mentoring opportunities for all Yale faculty members, promoting faculty diversity, creating the Office of Academic Integrity, establishing the University-wide Committee on Sexual Misconduct, developing the West Campus, and overseeing the University's budget during the global financial crisis.

Salovey's other leadership roles at Yale include chair of the Department of Psychology (2000 to 2003), Dean of the Graduate School of Arts and Sciences (2003 to 2004), and Dean of Yale College (2004 to 2008).

After receiving an A.B. (psychology) and A.M. (sociology) from Stanford University in 1980 with departmental honors and university distinction, Salovey earned a Ph.D. at Yale in psychology in 1986. Since joining the Yale faculty in 1986, he has studied the connection between human emotion and health behavior and played key roles in multiple Yale programs including the Health, Emotion, and Behavior Laboratory (now called the Center for Emotional Intelligence), the Center for Interdisciplinary Research on AIDS, and

the Cancer Prevention and Control Research Program. In addition to teaching and mentoring scores of graduate students, Salovey won both the William Clyde DeVane Medal for Distinguished Scholarship and Teaching in Yale College and the Lex Hixon '63 Prize for Teaching Excellence in the Social Sciences.

With John D. Mayer, Salovey developed the concept of "Emotional Intelligence," which posits that just as people differ considerably in intellectual abilities, they also have a wide range of measurable emotional skills that profoundly affect their thinking and action.

As President, Salovey is committed to making Yale more unified, more accessible, more innovative, and more excellent.

### Chris Argyris

*Chris Argyris, a renowned scholar of organizational behavior, joined the Yale faculty in 1951, serving as the Beach Professor of Administrative Sciences and as chair of the Administrative Sciences department. He was a member of the Yale faculty for twenty years and was instrumental in the creation of the Yale School of Management. In 2001, Argyris was honored with an endowed faculty position at Yale established in his name.*

Woodbridge Hall, Office of the President.



*Provost*  
**Benjamin Polak**



Benjamin Polak, the William C. Brainard Professor of Economics, was appointed Provost of Yale University in January 2013. He joined the Yale faculty in 1994 after receiving a B.A. from Cambridge University, an M.A. in history from Northwestern University, and a Ph.D. in economics from Harvard University. Prior to joining Yale, Polak was a junior fellow at the Harvard Society of Fellows and a visiting professor in the initial year of the New Economics School in Moscow. He holds a joint appointment in Yale's Department of Economics and at the Yale School of Management. He was chair of the Department of Economics from 2010 until he assumed his current role. Polak is an expert on decision theory, game theory, and economic history. He is the recipient of multiple graduate teaching and advising prizes, as well as the William Clyde DeVane Medal for Distinguished Scholarship and Teaching in Yale College and the Lex Hixon '63 Prize for Teaching Excellence in the Social Sciences.

After the President, the Provost is Yale's chief educational and administrative officer. The Office of the Provost oversees academic policies and activities university-wide and the Provost is an ex-officio member of every faculty and governing board and of all committees concerned with educational policy or faculty appointments. The Provost has direct oversight of all academic support

units, holds institutional responsibility for the allocation of resources, and chairs the University Budget Committee. In collaboration with the Vice President for Finance and Business Operations, the Provost presents the University's annual operating and capital budgets to the President and to the Yale Corporation.

*William C. Brainard*  
*In 2008 a professorship was established in honor of Yale economist and former provost William C. Brainard by his friends and colleagues. Brainard, the Arthur M. Okun Professor Emeritus of Economics, is a specialist in economic theory, macroeconomics, and monetary theory and has taught at the University since 1962. Brainard's seminal paper "Uncertainty and the Effectiveness of Monetary Policy" (1967), analyzing how the conduct of policy should be affected by uncertainty about its impact, is still widely cited by policy makers.*

Warner House, Office of the Provost.



*Dean of the Faculty of Arts  
and Sciences*  
**Tamar Szabó Gendler**



In May 2014, President Peter Salovey announced the creation of a Deanship to lead the Faculty of Arts and Sciences (FAS). On July 1, Tamar Szabó Gendler became the inaugural Dean of FAS, with responsibility for faculty recruitment, appointment, tenure, and promotion.

Gendler is the Vincent J. Scully Professor of Philosophy, Professor of Psychology and Cognitive Science, and Deputy Provost for Humanities and Initiatives. She received a B.A. in humanities, mathematics, and philosophy from Yale College in 1987 and a Ph.D. in philosophy from Harvard in 1996. After a decade teaching at Syracuse University and Cornell University, she returned to Yale as a Professor of Philosophy and as chair of the Cognitive Science Program. In 2010 she became chair of the Department of Philosophy. Gendler's work lies at the intersection of philosophy and psychology.

*Vincent J. Scully*

*Vincent J. Scully, Sterling Professor Emeritus of the History of Art, was born in New Haven and received his B.A. (1940), M.A. (1947), and Ph.D. (1949) from Yale. Scully began teaching at the University in 1947, becoming one of the nation's most recognized scholars in the history of art and architecture. Scully has argued fervently that the principles of modernism are incom-*

*patible with communal values. The Vincent J. Scully Professorship was established by Archimedes Associates from the Class of 1958, a group of Yale alumni who formed an innovative investment fund in 1968 with the goal of endowing a chair at their alma mater.*



Hall of Graduate Studies.

*Dean of the Graduate School  
of Arts and Sciences*  
**Lynn Cooley**



On July 1, 2014, Lynn Cooley was appointed as the Dean of the Graduate School of Arts and Sciences. The Dean of the Graduate School advances graduate student preparation for scholarly and other professions, as well as focusing on the campus experience for graduate students.

Lynn Cooley is the C.N.H. Long Professor of Genetics, Professor of Cell Biology, and Professor of Molecular, Cellular, and Developmental Biology. She has served as the director of the Combined Program in the Biological & Biomedical Sciences since 2001. Cooley received her B.A. from Connecticut College in 1976 and earned her Ph.D. from the University of Texas in 1984. She was a postdoctoral fellow at the Carnegie Institution of Science, where she established new methods using transposable elements for genetic and molecular analysis of genes in the fruit fly *Drosophila* model system.

*C.N.H. Long*  
Cyril Norman Hugh Long joined Yale in 1936 as a professor and chair of Physiological Chemistry and became a Sterling Professor in 1938. He simultaneously served as chairman of the Department of Pharmacology from 1939 through 1941. Long served as Dean of the Yale University School of Medicine from 1947 through 1952 and, upon stepping down, became chairman of the Department of Physiology. He became Sterling Professor Emeritus in 1969. Long's medical research was wide-ranging, with particular focus on endocrinology, metabolism, and diabetes. In the 1990s an anonymous donor created the C.N.H. Long professorships to honor Long's remarkable career and contributions to the field.

Hall of Graduate Studies courtyard.

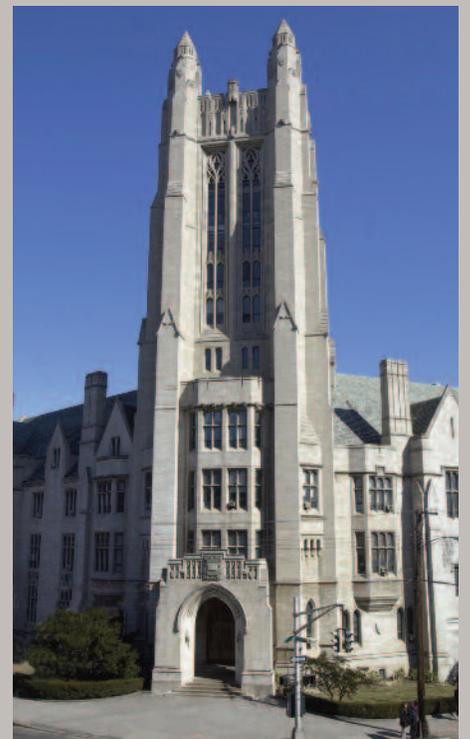


*Dean of Yale College*  
**Jonathan Holloway**



On July 1, 2014, Jonathan Holloway became the Dean of Yale College. He will have a key role in leading the expansion of Yale College and the formation of two new residential colleges.

Jonathan Holloway is Professor of History, American Studies, and African American Studies. Holloway's term as chair of the Department of African American Studies was abbreviated when he was named Dean of Yale College. Holloway received his A.B. from Stanford University in 1989 and his Ph.D. from Yale University in 1995. He served as Master of Calhoun College and chair of the Council of Masters. Holloway, a specialist in post-emancipation United States history with a focus on cultural and intellectual history, received the William Clyde DeVane Medal for Distinguished Scholarship and Teaching in Yale College in 2009.



Sheffield-Sterling-Strathcona Hall,  
site of the offices of the Yale College Dean.

## Asset Class Characteristics

Yale's seven asset classes are defined by differences in their expected response to economic conditions, such as economic growth, price inflation, or changes in interest rates, and are weighted in the Endowment portfolio by considering their 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.

### *Absolute Return*

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 percent. 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 very 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 20.0 percent of the Endowment, below the average educational institution's allocation of 23.3 percent to such strategies. Absolute return strategies are expected to generate a real return of 5.3 percent with risk of 12.9 percent. The Barclays 9 to 12 Month Treasury Index serves as the portfolio benchmark.

Unlike traditional marketable securities, absolute return investments have historically provided returns largely independent of overall market moves. Over the past twenty years, the portfolio exceeded expectations, returning 10.6 percent per year with low correlation to domestic stock and bond markets.

### *Domestic Equity*

Equity owners reasonably expect to receive returns superior to those produced by less risky assets such as bonds and cash. Domestic equity represents a large, liquid, and heavily researched market. While the average educational institution invests 19.3 percent of assets in domestic equities, Yale's target allocation to this asset class is only 6.0 percent. The domestic equity portfolio has an expected real return of 6.0 percent with a standard deviation of 20.0 percent. 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. Managers searching for out-of-favor securities often find stocks that are cheap in relation to fundamental measures such as asset value, future earnings, or cash flow. Over the past twenty years, Yale's domestic equity portfolio has posted returns of 14.5 percent per year.

## *Fixed Income*

Fixed income assets generate stable flows of income, providing more certain nominal cash flow than any other Endowment asset class. The bond portfolio exhibits a low covariance with other asset classes and serves as a hedge against financial accidents or periods of unanticipated deflation. While educational institutions typically maintain a substantial allocation to fixed income instruments, averaging 9.3 percent, Yale's target allocation to fixed income and cash is only 5.0 percent of the Endowment. Bonds have an expected real return of 2.0 percent with risk of 8.0 percent. The Barclays Capital 1 to 3 Year 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 seven asset classes that make up the Endowment. In addition, the government bond market is arguably the most efficiently priced asset class, offering few 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. Though averse to market timing strategies, credit risk, and call options, Yale manages to add value consistently in its management of the bond portfolio. Over the past twenty years, the fixed income portfolio has generated returns of 5.7 percent per annum.

## *Foreign Equity*

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 5.0 percent of its portfolio to foreign developed markets and 3.0 percent to emerging markets. In addition, Yale dedicates 5.0 percent of the portfolio to opportunistic foreign positions, with the expectation that holdings will be concentrated in markets that offer the most compelling long-term opportunities, particularly China, India, and Brazil. Yale's foreign equity target allocation of 13.0 percent stands below the average endowment's allocation of 22.0 percent. Expected real returns for emerging and opportunistic equities are 7.5 percent with a risk level of 22.5 percent, while developed equities are expected to return 6.0 percent with risk of 20.0 percent. The portfolio is measured against a composite benchmark of (a) developed markets, measured by the Morgan Stanley Capital International (MSCI) Europe, Australasia, and Far East (EAFE) Investable Market Index; (b) emerging markets, measured by a blend of the MSCI Emerging Markets Investable Market Index and the MSCI China A-Share Index; and (c) opportunistic investments, measured by a custom blended index.

Yale's investment approach to foreign equities emphasizes active management designed to uncover attractive opportunities and exploit market inefficiencies. As in domestic equity, 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. The twenty-year return of Yale's foreign equity portfolio is 14.0 percent per year.

## *Natural Resources*

Equity investments in natural resources – oil and gas, timberland, and metals and mining – share common investment characteristics: protection against unanticipated global 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 an 8.0 percent long-term policy allocation to natural resources with expected real returns of 6.3 percent and risk of 20.5 percent. Yale's current natural resources allocation is roughly in line with that of the average endowment.

Superior operators have demonstrated the ability to generate excess returns over a market cycle. Over the past twenty years, Yale's oil and gas, timber, and mining portfolio has generated an impressive 18.1 percent per annum.

## *Private Equity*

Private equity offers extremely attractive long-term risk-adjusted returns, stemming from the University's strong stable of value-adding managers that exploit market inefficiencies. Yale's private equity portfolio includes investments in venture capital and leveraged buyout partnerships. The University's target allocation to private equity of 31.0 percent far exceeds the 10.0 percent actual allocation of the average educational institution. In aggregate, the private equity portfolio is expected to generate real returns of 10.5 percent with risk of 26.8 percent.

Yale's private equity program, one of the first of its kind, is regarded as among the best in the institutional investment community and the University is frequently cited as a role model by other investors. Yale's private equity 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 relationships – 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 private equity program has earned 36.1 percent per annum.

## *Real Estate*

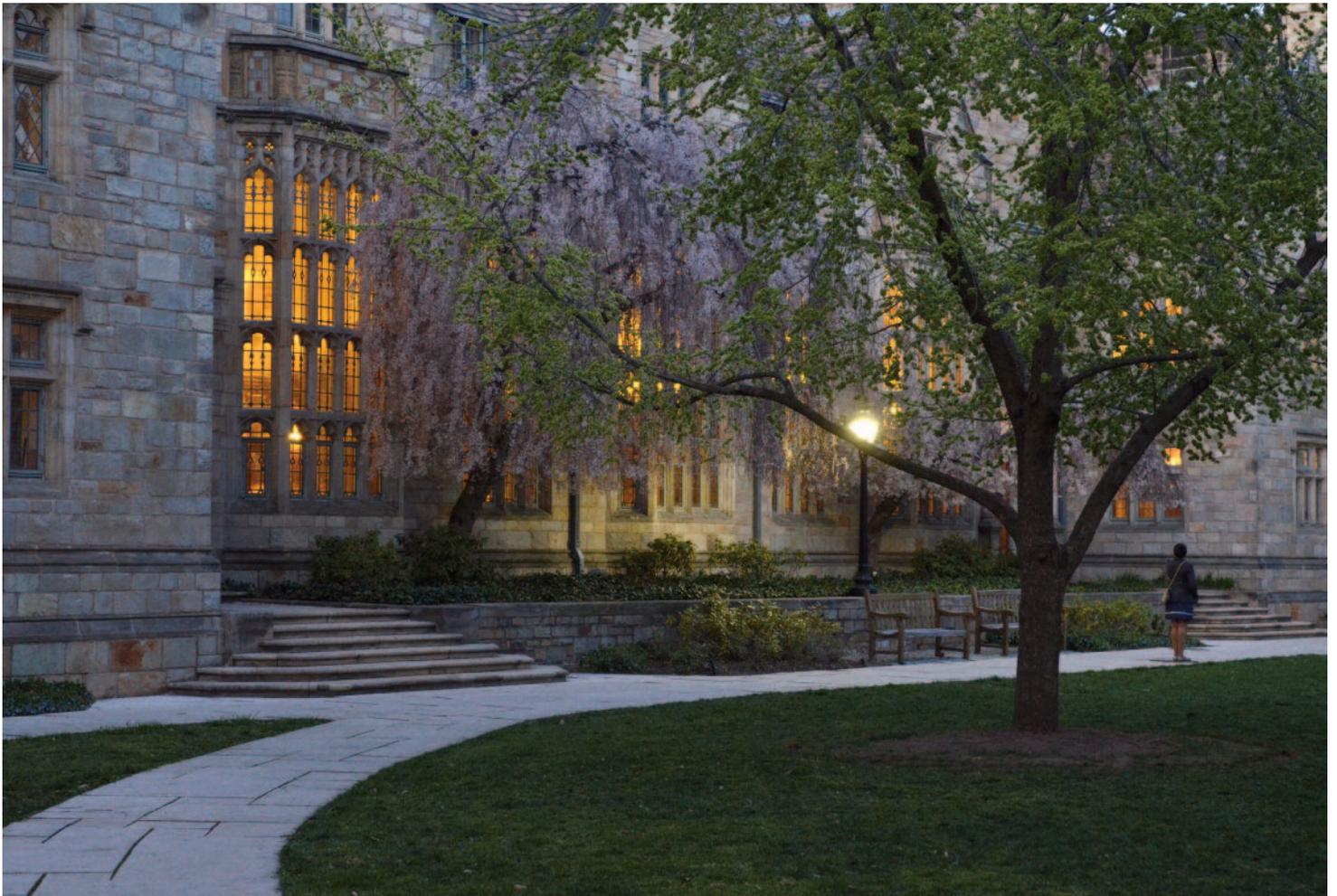
Investments in real estate provide meaningful diversification to the Endowment. A steady flow of income with equity upside creates a natural hedge against unanticipated inflation without sacrificing expected return. Yale's 17.0 percent policy allocation significantly exceeds the average endowment's commitment of 4.2 percent. Expected real returns are 6.0 percent with risk of 17.5 percent.

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. Over the past twenty years, the portfolio has returned 13.5 percent per annum.

## Asset Allocations

	Yale University	Educational Institution Mean
Absolute Return	17.4%	23.3%
Domestic Equity	3.9	19.3
Fixed Income	4.9	9.3
Foreign Equity	11.5	22.0
Natural Resources	8.2	8.5
Private Equity	33.0	10.0
Real Estate	17.6	4.2
Cash	3.5	3.5

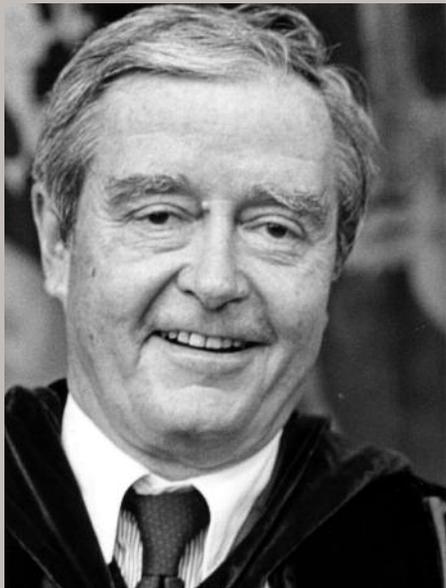
Data as of June 30, 2014



Saybrook Dining Hall, viewed from Branford Court.

## Recent Yale University Presidents

### Kingman Brewster 1963 - 1977



Kingman Brewster, Jr., was the seventeenth President of Yale University. Brewster earned his B.A. in history, arts, and letters from Yale University in 1941, and his LL.B. from Harvard Law School in 1948. After teaching at the Massachusetts Institute of Technology and Harvard Law School, Brewster became Yale University Provost-Designate for the academic year 1960-1961, and then Provost the following year.

As President, Brewster oversaw dramatic changes at Yale, including undergraduate coeducation, need-blind admissions policies, and faculty expansion. During his administration, the University formed Yale-New Haven Hospital and created the African American Studies, Computer Science, and college seminar programs. Brewster's tenure saw the construction of numerous buildings, including the Becton Engineering and Applied Science Center, the Child Study Center, Kline

Biology Tower, the Nuclear Structure Laboratory, and the Center for British Art. In addition, Brewster deftly navigated the social turbulence of the 1960s and 1970s, including student protest meetings against the Vietnam War and demonstrations surrounding the Black Panther trial in New Haven. Most of the Brewster administration's initiatives and philosophies have remained operationally active and influential to subsequent Yale presidencies.

In 1977 Brewster resigned the presidency of Yale to serve as Ambassador to the Court of St. James, a post he held through 1981. In 1986 he accepted the mastership of University College at Oxford University, where he remained until his death in 1988.



### Hanna Holborn Gray 1977 - 1978

Upon the resignation of Kingman Brewster, Provost Hanna Holborn Gray became Acting President of Yale, serving from May 1977 through June 1978. Gray received her B.A. from Bryn Mawr College in 1950 and her Ph.D. in history



Saybrook College courtyard.

from Harvard University in 1957. After teaching at Bryn Mawr, Harvard, and the University of Chicago, Gray was appointed Dean of the College of Arts and Sciences and Professor of History at Northwestern University in 1972. In 1974 she was elected Provost of Yale University with an appointment as Professor of History.

Gray left Yale to become President of the University of Chicago. She served in that role from 1978 through 1993 and is now President Emeritus and Harry Pratt Judson Distinguished Service Professor of History Emeritus.

## A. Bartlett Giamatti 1978 - 1986

A. Bartlett Giamatti became Yale's nineteenth President in 1978; at forty, he was the youngest person ever to assume the position. Giamatti, then Professor of English, had earned his B.A. and Ph.D. in English from Yale and, aside from a brief teaching appointment at Princeton, had spent his entire career at the University. In 1976 Giamatti became the Frederick Clifford Ford Professor of English and Comparative Literature, and in 1977 he accepted the John Hay Whitney Professorship of English and Comparative Literature.

Giamatti inherited a stalled capital fundraising campaign and budget deficits created by a declining national economy. Under his tenure the Endowment increased and within four years Yale balanced its budget. Giamatti addressed Yale's aging physical plant and gave so much attention to improving buildings and grounds that he once noted that he would be remembered as "Bart the Refurbisher." In 1985 Giamatti announced his intention to leave the presidency the following year, hoping to write a major book on the Renaissance, but instead accepted the presidency of



baseball's National League, an ironic position for a lifelong fan of the Boston Red Sox. He later became the Commissioner of Major League Baseball.

Giamatti is remembered for cultivating education at all levels and emphasizing the central role of education in society, as well as advancing the well-being and integrity of Yale and New Haven.

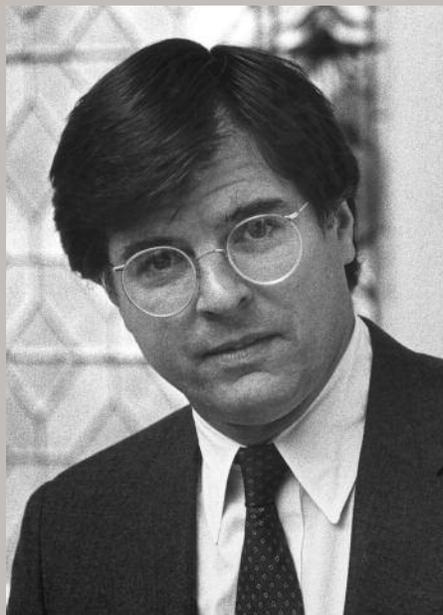
*Frederick Clifford Ford*  
The Frederick Clifford Ford fund was created by Walter B. Ford II and his wife, Josephine F. Ford, in honor of Mr. Ford's father, who graduated from Yale in 1907 and was an investment banker and partner of Watling, Lerchen and Company. Walter B. Ford II, Class of 1943, was an architect who served as Chairman and Chief Executive Officer of Ford & Earl Associates in Troy, Michigan. It was Ford's intention to create a professorship in the humanities.

*John Hay Whitney*  
On the fiftieth anniversary of John Hay "Jock" Whitney's 1926 graduation from Yale, his senior society, Scroll and Key, endowed a chair in his honor. Whitney, a Yale Corporation Fellow and Senior Fellow, made several major gifts to Yale including Payne Whitney Gymnasium, the land now occupied by Morse and Ezra Stiles colleges, the Whitney Humanities Center, and the renovation of Old Campus. Whitney founded J. H. Whitney & Co., the first venture capital firm; established the John Hay Whitney Foundation to address educational, social, and economic disparity; served as the Ambassador to the Court of St. James; and published the New York Herald Tribune.

## Benno C. Schmidt, Jr. 1986 - 1992

Benno C. Schmidt, Jr. was named Yale's twentieth President in 1986. Schmidt, a constitutional scholar, earned a B.A. from Yale in 1963 and a J.D. from Yale Law School in 1966. Schmidt joined the faculty of Columbia Law School in 1969 and at the time of his Presidential appointment was its Dean as well as the Harlan Fiske Stone Professor of Constitutional Law.

Schmidt pushed forward the development of new interdisciplinary programs in international studies, molecular biology, and environmental sciences, and raised over \$1 billion for the University. Facing a national recession and serious economic and social problems in New Haven, Schmidt focused on Yale's financial future and worked closely with New Haven's mayor to improve relations. In 1990 Yale agreed to pay fees for services provided by New Haven and the city closed portions of streets passing through campus. The historic agreement ushered in an era of innovative cooperation between Yale and New Haven.



Schmidt's presidency saw much faculty dissension because of attempts to restructure the Faculty of Arts and Sciences and balance the budget. Schmidt stepped down in 1992 to join the Edison Project, a private education initiative.



Harkness Tower.

## Howard R. Lamar 1992 - 1993

Howard R. Lamar, Sterling Professor of History (see “John W. Sterling’s Bequest,” page 19) and former Dean of Yale College and William Robertson Coe Professor of American History, was chosen to serve as Acting President when Benno Schmidt announced his resignation. Lamar’s title changed to President during the year he served. A historian of the American West, Lamar had a PH.D. in American history from Yale, had been a member of the faculty for forty-three years, and was one of the University’s most respected professors.

Lamar’s vision, generosity, spirit of intellectual adventure, and sense of humor inspired the Yale community. When Lamar retired as Sterling Professor and President of the University, alumni demonstrated their appreciation by founding the Howard R. Lamar Center



for the Study of Frontiers and Borders. Lamar has served as the Sterling Professor Emeritus of History since 1994.

*William Robertson Coe*  
William Robertson Coe was a businessman and collector of rare books, maps, manuscripts, and art relating to the Trans-Mississippi West. Coe donated his collection to the Yale University library in a series of annual installments beginning in 1942, creating the Yale Collection of Western Americana. Coe provided financial assistance enabling the library to catalogue all of its resources in the field of western history. He set up an endowment to staff the collection, to provide for future acquisitions, and to establish a chair in the field of American studies, ensuring a liaison between books and scholars.

## Richard C. Levin 1993 - 2013

Richard C. Levin, Frederick William Beinecke Professor of Economics and Dean of the Yale Graduate School, was chosen to lead Yale in 1993. He received his B.A. from Stanford University in 1968 and studied politics and philosophy at Oxford University, where he earned a B.Litt. degree. After completing his PH.D. in economics from Yale in 1974, he joined the Yale faculty. Before becoming President, he chaired the Economics department and taught economic analysis and regulation at the Yale School of Management.

During Levin’s tenure as President, Yale invested over \$5 billion in the renovation and construction of its facilities, advanced economic development and home ownership in New Haven, purchased and began to develop a 136-acre campus in nearby West Haven, strengthened Yale’s programs in science, engineering, and medicine, and established a goal of reducing campus greenhouse gas emissions by more than 40 percent. Levin undertook a major set of initiatives to internationalize the University – extending need-based financial aid to international students in Yale College, making international experiences the



norm for undergraduates, and planning and opening Yale-NUS College in Singapore as a model of liberal arts education for Asia.

After serving as Yale’s President for twenty years, Levin stepped down in 2013. In April 2014 Levin became the Chief Executive Officer of Coursera, a provider of open online courses.

*Frederick William Beinecke*  
Frederick William Beinecke earned a Bachelor of Philosophy from Yale, summa cum laude, in 1909. After holding a variety of positions, including as an inspector for the Bethlehem Steel Corporation, an engineer for the Red Hook Light and Power Company, and a World War I army captain, Beinecke became the President and Chairman of the Executive Committee of the Sperry and Hutchinson Company. The Beinecke Rare Book & Manuscript Library was given to Yale by Beinecke, with his brothers Edwin and Walter and their families. Beinecke established professorships to benefit faculty in the fields of economics, engineering, and the sciences. In 1971 the University received a bequest from Beinecke’s estate for the creation of a program in management. Two years later, Beinecke’s son and Yale Corporation member, William S. Beinecke, led the move to establish the Yale School of Organization and 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 over time. 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 percent. According to the smoothing rule, Endowment spending in a given year sums to 80 percent of the previous year's spending and 20 percent of the targeted long-term spending rate applied to the fiscal year-end market value two years prior. The spending amount determined by the formula is adjusted for inflation and constrained so that the calculated rate is at least 4.5 percent, and not more than 6.0 percent, of the Endowment's inflation-adjusted market value two years prior. 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.

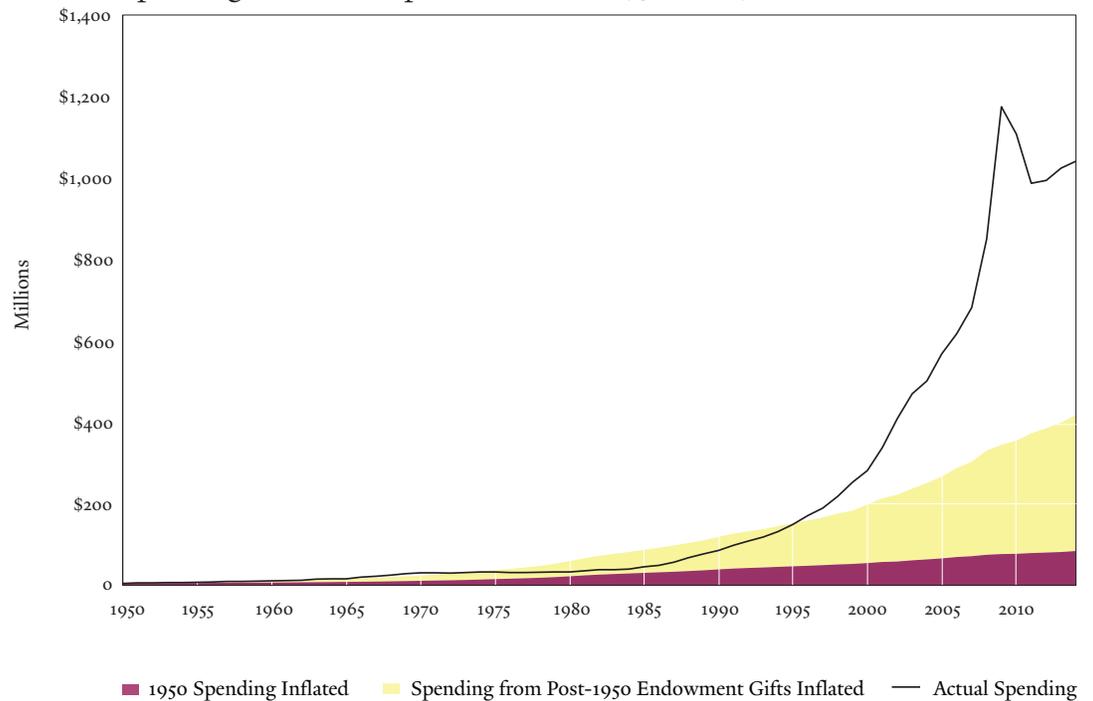


Swensen House, the Berkeley College Master's residence.

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 68 percent of the standard deviation of annual changes in Endowment value. 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 \$502 million in fiscal 2004 to \$1.0 billion in fiscal 2014. The University projects spending of \$1.1 billion from the Endowment in fiscal 2015, representing approximately 34 percent of revenues.

Spending Growth Surpasses Inflation 1950–2014

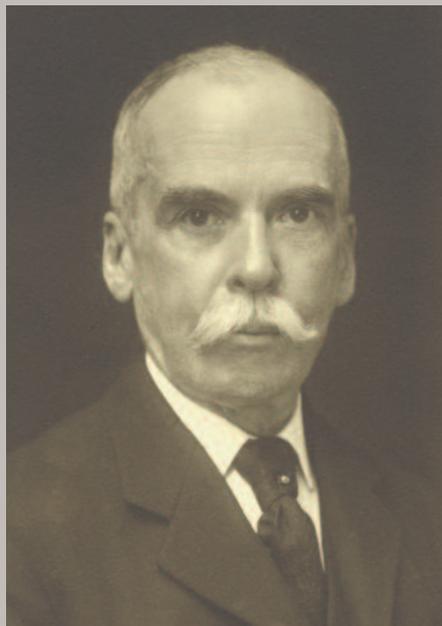


## John W. Sterling's Bequest

John W. Sterling, a New York attorney who graduated from Yale in 1864, left most of his estate to the University in 1918. At that time, the \$15 million bequest was the largest sum ever donated to an American university. The estate's trustees ultimately transmitted \$25 million to Yale. Sterling wished to have the money used to create "at least one enduring, useful and architecturally beautiful building" as well as "scholarships, fellowships, or lectureships; the endowment of new professorships, and the establishment of special funds for prizes."

Sterling's bequest transformed the University and helped fund landmark buildings including the Sterling Chemistry Laboratory, Sterling Hall of Medicine, Sterling Memorial Library, Sterling Law Buildings, Sterling Divinity Quadrangle, Sterling Tower, and the Hall of Graduate Studies.

A Sterling Professorship is the highest honor at Yale, bestowed upon the University's most distinguished scholars – those who are at the forefront of their field and are distinguished intellectual



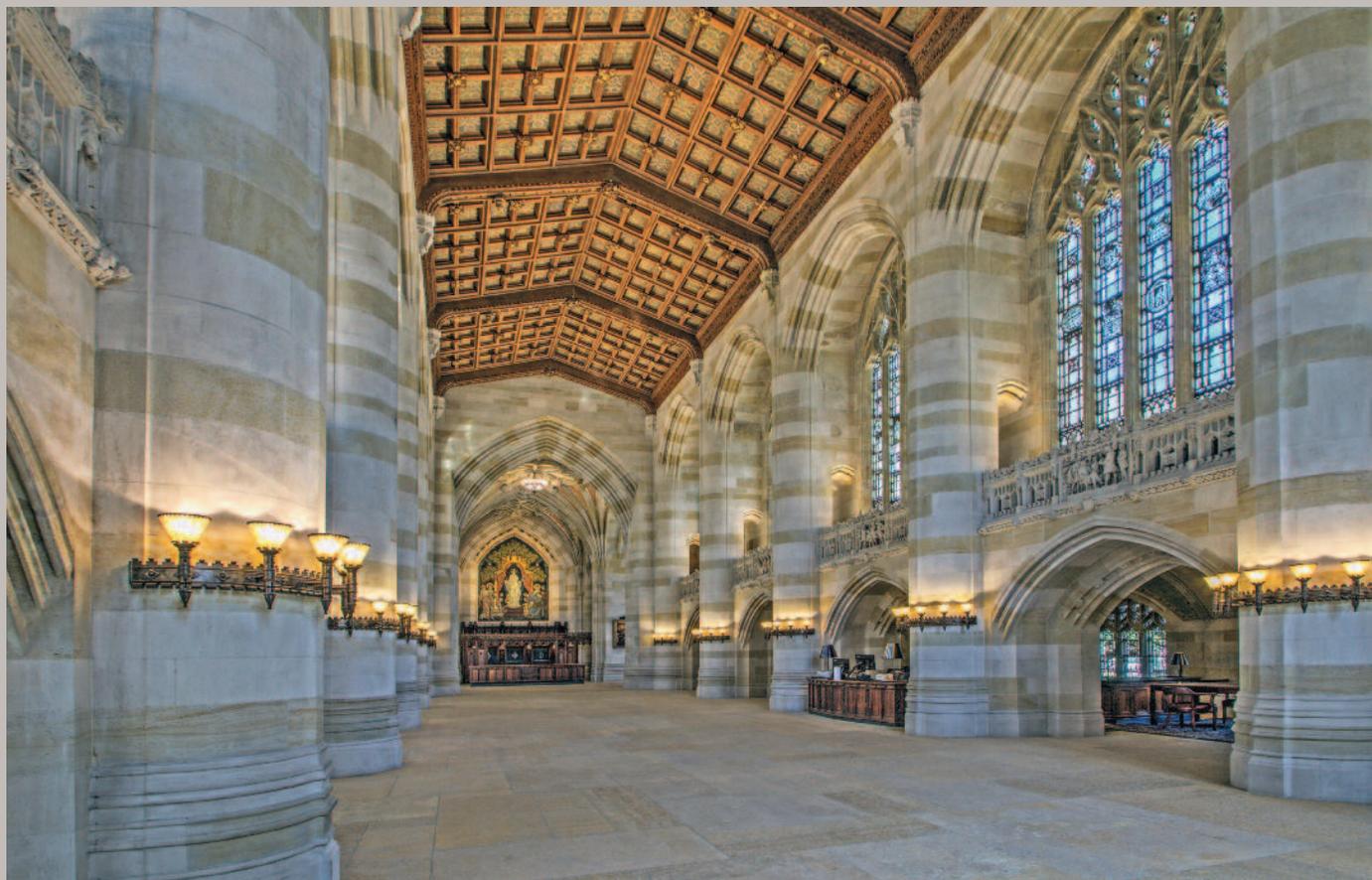
citizens of the Yale community. Appointments of Sterling Professors are made by the Yale President, in consultation with the Provost and the Deans of the University's graduate and professional schools, and voted upon by the Yale Corporation.

In 1920 President Arthur Twining Hadley appointed John Johnson, a chemist, as the first Sterling Professor.

Other notable scholars honored with the Sterling Professorship include Nobel Prize winners James Tobin, Sidney Altman, Thomas A. Steitz, and Robert J. Shiller; economist William Nordhaus; Supreme Court Justice William O. Douglas; art historian Vincent Scully; historian of ancient Greece Donald Kagan; art historian and former Dean Mary Miller; Chinese historian Jonathan Spence; legal scholar Roberta Romano; physician Harvey Cushing; and Shakespearean scholar Harold Bloom.

In 1958 the Yale Corporation voted to limit the number of Sterling Professors to a maximum of 27 at any one time, roughly the number of scholars that the Sterling endowment could support. With the growth of the Yale Endowment, the University expanded the number of authorized chairs to 36 in the 1990s, and to 40 in the 2000s. There are currently 39 holders of the Sterling Professorship.

Sterling's bequest provided \$13 million for the endowment of professorships. On June 30, 2014, the funds totaled \$372 million. Over the past 25 years, \$204 million was distributed to support Sterling Professors.



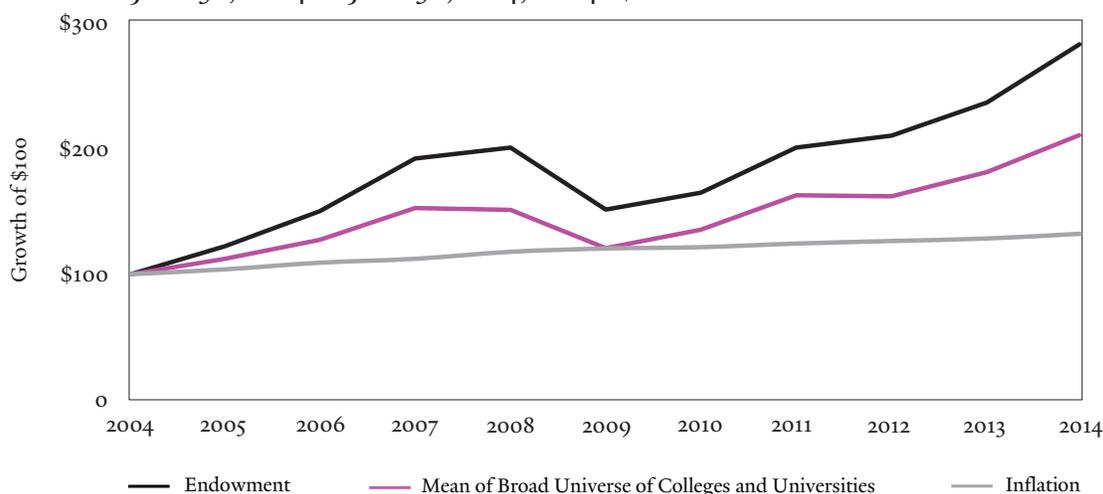
Sterling Memorial Library, after completion of the 2013-2014 renovation.

# 5

Yale has produced excellent long-term investment returns. Over the ten-year period ending June 30, 2014, the Endowment earned an annualized 11.0 percent return, net of fees, surpassing annual results for domestic stocks of 8.4 percent and domestic bonds of 4.9 percent, and placing it atop the ranks of colleges and universities. Endowment out-performance 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, 2014, Yale added \$8.4 billion relative to the average return of a broad universe of college and university endowments and \$6.8 billion relative to its passive benchmark.

Yale’s Performance Exceeds Peer Results  
June 30, 2004 to June 30, 2014, 2004=\$100



## Performance by Asset Class

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 9.0 percent return, exceeding the passive Barclays 9 to 12 Month Treasury Index by 6.9 percent per year and besting its active benchmark of hedge fund manager returns by 3.8 percent per year. For the ten-year period, absolute return results exhibited little correlation to traditional marketable securities.

The domestic equity portfolio returned an annualized 12.0 percent for the ten years ending June 30, 2014, outperforming the Wilshire 5000 by 3.5 percent per year and the Russell Median Manager return, net of estimated fees, by 4.0 percent per year. Yale’s active managers have added value to benchmark returns primarily through stock selection.

Yale’s internally managed fixed income portfolio earned an annualized 3.6 percent over the past decade, keeping pace with the passive index and exceeding the Russell Median Manager return by 0.2 percent per year. Because the fixed income portfolio serves as the University’s primary source of liquidity, the Endowment forgoes opportunities to generate excess returns.

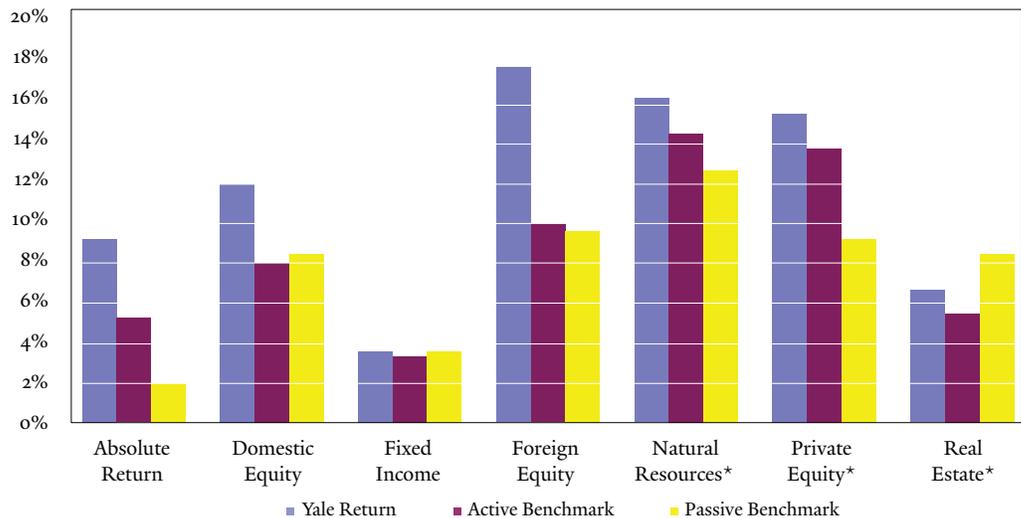
The foreign equity portfolio generated an annual return of 18.0 percent over the ten-year period, outperforming its composite benchmark by 8.4 percent per year and the Russell Median Manager return by 8.1 percent per year. The portfolio's excess return is due to astute country allocation and effective security selection by active managers.

Yale's natural resources portfolio produced an annualized return of 16.5 percent over the past decade, surpassing its composite passive benchmark by 3.7 percent per year and the Cambridge Associates natural resources manager pool by 1.9 percent per year. Yale's strong performance results from partnership with superior operators.

Private equity earned 15.4 percent annually over the last ten years, outperforming the composite passive benchmark by 6.3 percent per year and outperforming the return of a pool of private equity managers compiled by Cambridge Associates by 1.7 percent per year.

Real estate generated a 6.6 percent annualized return over the ten-year period, underperforming the MSCI U.S. REIT Index by 1.7 percent per year, but outperforming a pool of Cambridge Associates real estate managers by 1.2 percent per year.

### Yale Asset Class Results Beat Most Benchmarks June 30, 2004 to June 30, 2014



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

#### Active Benchmarks

*Absolute Return:* Dow Jones Credit Suisse Composite  
*Domestic Equity:* Frank Russell Median Manager, U.S. Equity, with fee adjustment of 78 basis points per annum  
*Fixed Income:* Frank Russell Median Manager, Fixed Income, with fee adjustment of 32 basis points per annum  
*Foreign Equity:* Frank Russell 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  
*Natural Resources:* Cambridge Associates Natural Resources  
*Private Equity:* Cambridge Associates Private Equity Composite  
*Real Estate:* Cambridge Associates Real Estate

#### Passive Benchmarks

*Absolute Return:* Barclays 9-12 Month Treasury  
*Domestic Equity:* Wilshire 5000  
*Fixed Income:* Barclays 1-3 Year Treasury (Barclays 1-5 Year Treasury from July 2008 to September 2013, LB Treasury Index from July 2004 to June 2008)  
*Foreign Equity:* Blend of MSCI EAFE Investable Market Index, MSCI Emerging Markets Investable Market Index + MSCI China A-Shares, Custom Opportunistic Blended Index  
*Natural Resources:* Blend of Custom Timber REIT Basket, S&P O&G Exploration & Production Index, Euromoney Global Mining Index  
*Private Equity:* Blend of Russell 2000, Russell 2000 Technology, MSCI ACWI ex-US Small-Cap Index  
*Real Estate:* MSCI U.S. REIT Index

## Management and Oversight

# 6

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.

### *Investment Committee*

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

G. Leonard Baker '64  
Managing Director  
*Sutter Hill Ventures*

Francis Biondi '87  
Managing Member  
*King Street Capital Management*

Ben Inker '92  
Partner  
*GMO*

Paul Joskow '72 PH.D.  
President  
*Alfred P. Sloan Foundation*

Stefan Kaluzny '88  
Managing Director  
*Sycamore Partners*

Kevin Ryan '85  
Founder and Chairman  
*Gilt*

Peter Salovey '86 PH.D.  
President  
*Yale University*

Carter Simonds '99  
Managing Director  
*Blue Ridge Capital*

Dinakar Singh '90  
CEO and Founding Partner  
*TPG-Axon Capital*



Pathway with view of Morse College.

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 twenty-eight professionals.

## *Investments Office*

David F. Swensen '80 PH.D.  
*Chief Investment Officer*

John V. Ricotta '08  
*Associate Director*

Dean J. Takahashi '80, '83 MPPM  
*Senior Director*

Cain P. Soltoff '08  
*Associate Director*

Carrie A. Abildgaard  
*Director*

Celeste P. Benson  
*Senior Portfolio Manager*

Alexander C. Banker  
*Director*

David S. Katzman '10  
*Senior Associate*

Alan S. Forman  
*Director*

Patrick K. Sherwood '13 M.B.A.  
*Senior Associate*

R. Alexander Hetherington '06  
*Director*

Xinchen Wang '09  
*Senior Associate*

Lisa M. Howie '00, '08 M.B.A.  
*Director*

Philip J. Bronstein '12  
*Senior Financial Analyst*

Timothy R. Sullivan '86  
*Director*

David Y. Zhang '12  
*Senior Financial Analyst*

Kenneth R. Miller '71  
*Senior Associate General Counsel*

Amy M. Chivetta  
*Financial Analyst*

Stephanie S. Chan '97  
*Associate General Counsel*

Timothy H. Hillas '13  
*Financial Analyst*

Deborah S. Chung  
*Associate General Counsel*

Sophia B. Jia '14  
*Financial Analyst*

J. Colin Sullivan  
*Associate General Counsel*

Daniel J. Otto '12  
*Financial Analyst*

Michael E. Finnerty  
*Associate Director*

John T. Ryan '14  
*Financial Analyst*

Matthew S. T. Mendelsohn '07  
*Associate Director*

E. Benjamin VanGelder '13  
*Financial Analyst*



View of the top floor of Kroon Hall, School of Forestry & Environmental Studies, "Yale's greenest building," which won LEED certification in 2010.



Silliman College courtyard.

## 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.

### Texts on Yale Leaders and Sterling Bequest (pages 6–9, 14–16, 19)

Yale University Library  
 Yale University Office of Development  
 Yale University Office of Public Affairs & Communications  
 Yale University Office of the President  
 Yale University Office of the Provost  
 Yale School of Management

*Inaugural Addresses*. Ed. Josephine Broude. New Haven: Yale Tercentennial Office, 2001.

Bondy, Philip K. Letter. *Yale Journal of Biology and Medicine* 41 (1968): 95–98.

Burrow, Gerard N. *A History of Yale's School of Medicine: Passing Torches to Others*. New Haven: Yale University Press, 2002.

Carlson, Raymond. "Ten Presidents and 130 Years at the University." *Yale Daily News*, 28 January 2008.

Dockendorf, Jay. "The Sterling Professors of Yale: Evolution of a Species." *Yale Daily News*, 21 January 2011.

Fellman, Bruce. "How Sterling Professors Get That Way." *Yale Alumni Magazine*, February 1999.

Ford, Walter B. Letter. *Life*, 9 February 1953: 7.

"John Sterling's Golden Bequest to Yale." *Philanthropy Roundtable*. Web. 26 January 2015.

Kaylin, Jennifer. "Fixing Up the Neighborhood." *Yale Alumni Magazine*, November 1993.

Lee, Shinzong. "Sterling Professorships Distinguish Yale's Top Scholars." *Yale Daily News*, 26 February 2002.

Moncreiff, Robert P. *Bart Giamatti: A Profile*. New Haven: Yale University Press, 2007.

"Our History." *The Beinecke Scholarship*. Web. 26 January 2015.

Schiff, Judith Ann. "John Hay Whitney." *Yale Alumni Magazine*, April 2002.

Smith, O.L.K., and J.D. Hardy. *Cyril Norman Hugh Long*. Washington, D.C.: National Academy of Sciences, 1975.

Walker, Donna. "Walter B. Ford II Left Legacy of Art, Education, and Charity." *Grosse Pointe News*, 31 October 1991: 24A.

### Photo Credits

Front cover: Steve Dunwell Photography, Inc., Boston.

Back cover and page 19 below: Patrick Lynch, Yale Office of Public Affairs and Communications.

Page 6 below, 7 below, 8 below, 15 below right, 17, and 24: Tom Strong.

Page 19 above: Manuscripts and Archives, Yale University.

Additional photographs: Michael Marsland, Yale Office of Public Affairs and Communications.

### Design

Strong Cohen/L. Feher

*Back cover photo:*

Mural and main desk of Sterling Memorial Library, after 2013–2014 renovation.

