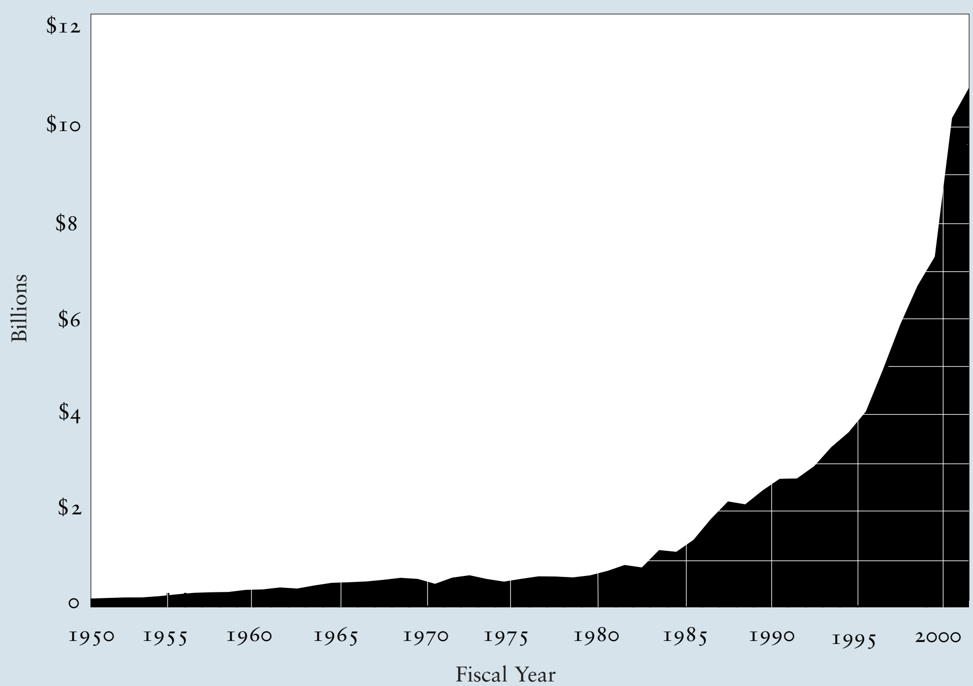
2001
The Yale Endowment

Endowment Highlights

	Fiscal Year				
	2001	2000	1999	1998	1997
Market Value (in millions)	$10,725.1	$10,084.9	$7,185.6	$6,597.9	$5,794.1
Return	9.2%	41.0%	12.2%	18.0%	21.8%
Spending (in millions)	$ 337.5	$ 280.8	$ 254.2	$ 218.9	$ 189.3
Operating Budget Revenues (in millions)	1,352.9	1,263.5	1,252.1	1,184.5	1,088.6
Endowment Percentage	24.9%	22.2%	20.3%	18.5%	17.4%
Asset Allocation (as of June 30)					
Domestic Equity	15.5%	14.2%	15.1%	19.2%	21.5%
Absolute Return	22.9	19.5	21.8	27.1	23.3
Foreign Equity	10.6	9.0	11.1	12.1	12.6
Private Equity	18.2	25.0	23.0	21.0	19.6
Real Assets*	16.8	14.9	17.9	13.0	11.6
Fixed Income	9.8	9.4	9.6	10.1	12.1
Cash	6.2	8.1	1.5	-2.5	-0.7

*Prior to 1999, Real Assets included only real estate. Oil and gas and timber were classified as Private Equity.

Endowment Market Value 1950–2001



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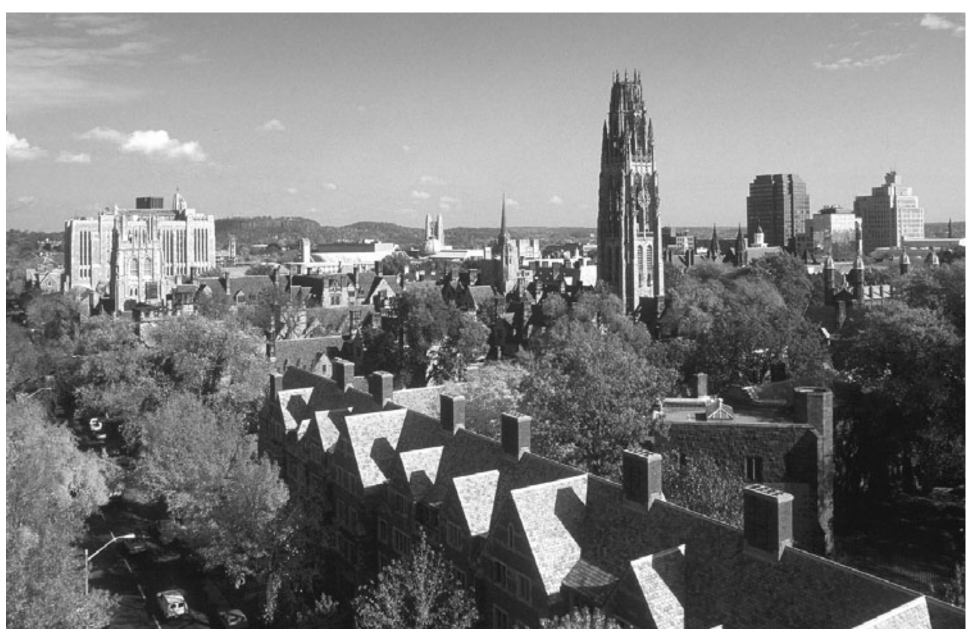


A view of Harkness Tower to the right and Sterling Memorial Library to the left.

Introduction

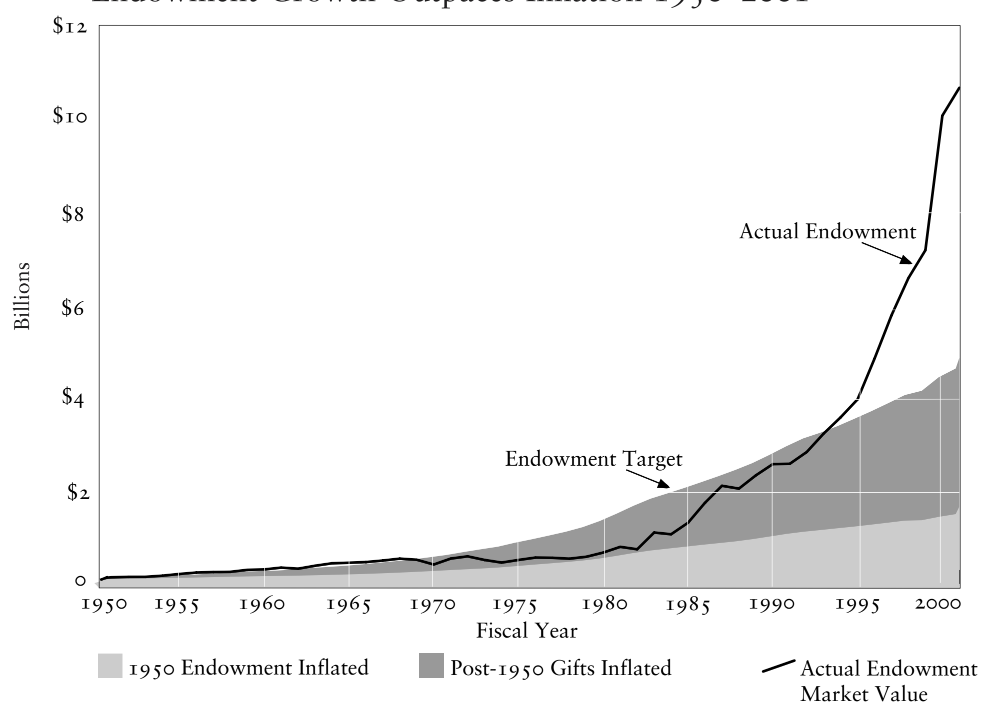
I

Following a number of years in which Yale posted excellent results in spite of its diversified portfolio, fiscal year 2001 marked a period in which diversification finally paid dividends. For the year ending June 30, 2001, the Yale Endowment enjoyed a return of 9.2 percent in an environment where the domestic stock market registered double-digit declines and most endowments suffered negative returns. Strong active management and a value orientation protected Yale from bearing the costs of the recent market downturn.

During the past ten years, the Endowment grew from $2.6 billion to $10.7 billion. With annual net investment returns of 18.3 percent, the Endowment's performance exceeded its benchmark and outpaced institutional fund indices. The performance stemmed from disciplined and diversified asset allocation policies, superior active management results, and strong capital market returns.

Spending from Endowment grew during the last decade from $95 million to $338 million, an annual growth rate of 13.5 percent. On a relative basis, Endowment contributions grew from 13 percent of total revenues in fiscal 1991 to 25 percent in fiscal 2001. Next year, spending will approach $405 million, or 28 percent of projected revenues. During the decade Yale's spending and investment policies provided handsome growth in cash flow to the operating budget for current scholars while preserving Endowment purchasing power for future generations.

Endowment Growth Outpaces Inflation 1950–2001



The Yale Endowment

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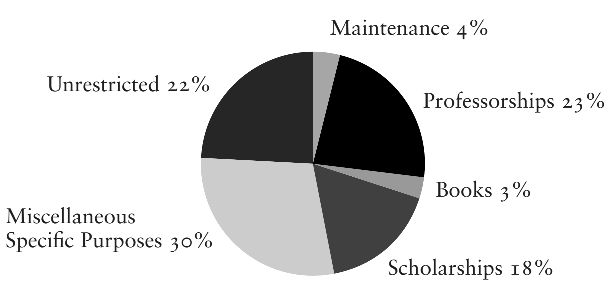
Totaling $10.7 billion on June 30, 2001, the Yale Endowment is an investment pool composed of thousands of funds with a variety of designated purposes and restrictions. Approximately 79 percent of funds are true endowment, gifts restricted by donors to provide long-term funding for designated purposes. The remaining 21 percent of funds are quasi-endowment, monies which 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 (23 percent), scholarships, fellowships, and prizes (18 percent), maintenance (4 percent), books (3 percent), and miscellaneous specific purposes (30 percent). The remaining funds (22 percent) are unrestricted. Thirty-four percent of the Endowment benefits the overall University, with the remaining funds focused on specific units including the Faculty of Arts and Sciences (31 percent), the Professional Schools (21 percent), the library (8 percent), and other entities (6 percent).

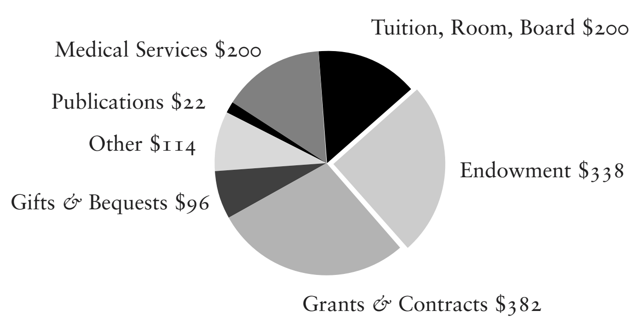
Although distinct in purpose or restriction, Endowment funds are commingled in an investment pool and tracked with unit accounting much like a large mutual fund. Endowment gifts of cash, securities, or property are valued and exchanged for units which represent a claim on a portion of the whole investment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

In fiscal 2001, the Endowment provided $338 million, or 25 percent, of the University's $1,353 million current fund income. Other major sources of revenues were grants and contracts of $382 million (28 percent), net tuition, room, and board of $200 million (15 percent), medical services of $200 million (15 percent), gifts and bequests of $96 million (7 percent), publications income of $22 million (2 percent), and other income of $114 million (8 percent).

Endowment Fund Allocation
Fiscal Year 2001



Operating Budget Revenue in Millions
Fiscal Year 2001



Yale's Athletics Endowments

Creating endowments to support Yale athletics represents an idea that took some time to catch on. While donors began endowing scholarships and professorships in the eighteenth century, not until 1923 did Yale receive its first athletics endowment: the Ledyard Mitchell Fund (named for a member of the Class of 1904) that provides an award to the winner of a punting competition among varsity football players. From that modest beginning until World War II, only eight endowments in support of athletics were established at Yale, consisting of modest-sized funds by today's standards, each generating a few hundred dollars a year to finance student prizes for prowess in football, golf, swimming, tennis, or track.

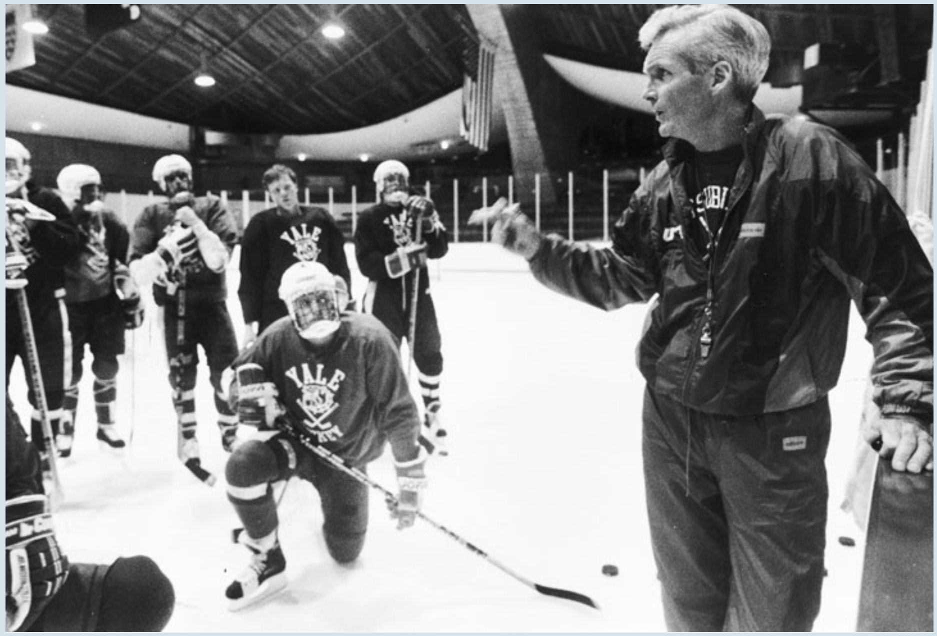
Since World War II, donors have endowed sixty-one funds for athletics—an average of about one per year. The most popular sports, as measured by the number and value of the endowments they inspired, are crew, football, golf, hockey, and swimming—with at least six funds apiece. Baseball and lacrosse claim three funds each, while basketball accounts for two, and soccer boasts only one endowed fund.

The best-endowed Yale sport is not the one that attracts the biggest crowds. The crew teams lead the pack with about a fifth of the total athletics endowment. Football ranks second, with about 16 percent of the total (counting a few funds that are split between football and another activity). None of the other sports is even close to those two; endowed funds for golf make up about 8 percent of the total, hockey about 5 percent, and all the others lag far behind.

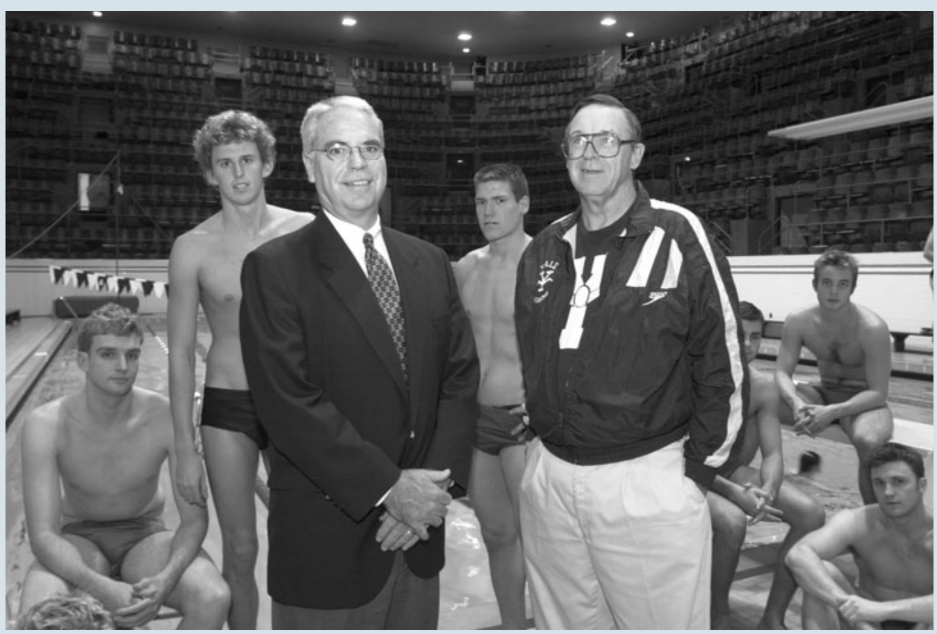
Endowments are not the only form that financial contributions can take, of course. In fact, Yale athletes have enjoyed generous assistance from numerous alumni "Y" Associations, each of which provides regular current use support for its favorite sport.

The nature of endowment gifts for Yale athletics has changed along with the evolving character of the University. Coeducation at Yale brought about one particularly noteworthy change. In 1984 a group of Yale alumni and friends created an endowment for women's crew. In 1989, G. Harold Welch, after sending four sons to Yale (Classes of 1950, 1953, 1958, and 1961), made an endowment gift to support athletic programs for women.

Many endowment gifts focus on central athletic needs, granting the University flexibility in the use of funds. The earliest of these, loosely worded for "encouraging the art of swimming," came about in 1924. Endowed support for the university crew activities took shape in 1958 using proceeds from the rent, sale, and Government takeover of the site of the original Adee Boathouse, which had been used for Yale crew. A more recent gift, in 1997, provides



Tim Taylor, the Malcolm G. Chace Head Coach of Men's Hockey, enters his 24th year at Yale with an impressive record, including six Ivy League championships. The position was endowed in 1997 by Malcolm G. Chace III '56 in honor of his grandfather, Class of 1896s, who captained the very first Yale ice hockey team.



Frank Keefe, head coach of men's swimming for the past nineteen years, shown with Yale Athletics Director Thomas Beckett. Mr. Keefe holds the position of Robert J. H. Kiphuth Director of Swimming, thanks to an endowment created by Gordon B. Hattersley '52 in 1997. The title honors Kiphuth, Yale's legendary swimming coach from 1918 to 1963.

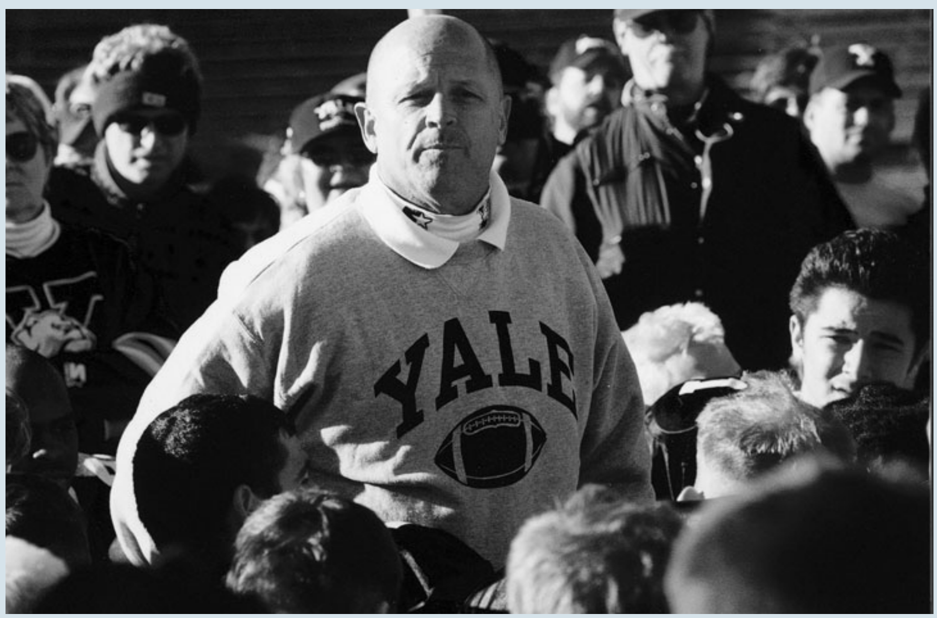
general support for Yale baseball. Some sports that do not currently benefit from Endowment support seek to join the club of those that do. Supporters of Yale squash recently initiated an effort to create an endowment for the general support of the squash program.

In recent years Yale inspired gifts for athletic endowments similar to those that support central academic activity. While Yale does not award financial aid on the basis of anything except need, it has always been possible for donors who endow undergraduate scholarships to request that awards from their endowments go to athletes when possible, sometimes even in a specific sport, provided always that the student selected meets the basic criterion of financial need. The University solicited and received endowments for the permanent upkeep of certain athletic facilities, including maintenance of the Gales Ferry Boathouse, the Ingalls Hockey Rink, and the Yale Golf Course.

Yale reached a milestone in 1988 when an alumnus followed the long-established model for endowing faculty chairs and created the first endowed head coach position at Yale: the Joel E. Smilow '54 Coach of Football, a position first filled by Carm Cozza and now by Jack Siedlecki. Similar gifts have led to the naming of Tim Taylor as the Malcolm G. Chace (1896S) Head Coach of Men's Hockey and Frank Keefe as the Robert J. H. Kiphuth Director of Swimming.

In 1996, when asked by a journalist how a university like Yale retains its top ranking, President Richard C. Levin pointed to several factors, including the independence that comes from a strong Endowment. Today, thanks to Yale's generous benefactors, athletic activities enjoy some of the same secure permanent funding as the University as a whole.

Women's crew today enjoys regular support from a general-purpose endowment fund established in 1984 with contributions from many Yale graduates and friends. The endowment helps support travel, general operations, and post-season rowing. Contributions were solicited in a 1981 letter from George Pew '58, which allowed for a five-year pledge period so that younger alumnae could maximize their gifts.



Jack Siedlecki, shown during one of his regular post-game talks with the Yale varsity football team, is the second Joel E. Smilow '54 Coach of Football. Created in 1988, the position was held until 1996 by coach Carm Cozza, whose long Yale career included ten Ivy championships. Yale quarterback Peter Lee '02 appears to the right of Coach Siedlecki.

Investment Policy

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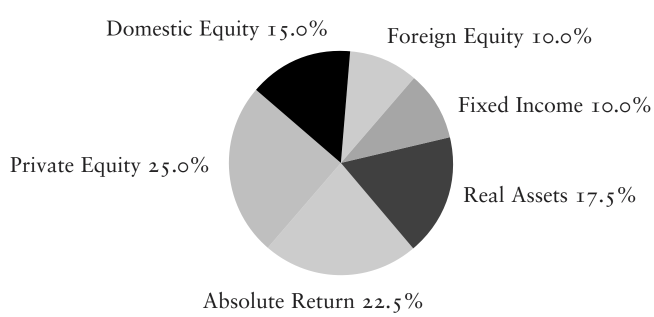
Yale's portfolio is structured using a combination of academic theory and informed market judgment. The theoretical framework relies on mean-variance analysis, an approach developed by Nobel laureate Harry Markowitz while he was at Yale's Cowles Foundation. Using statistical techniques to combine expected returns, variances, and correlations of investment assets, the analysis estimates expected risk and return profiles of various asset allocation alternatives and tests the sensitivity of the 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. Finally, quantitative measures have difficulty incorporating factors such as market liquidity or the influence of significant, low-probability events.

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

Asset Class	June 2001	Current Target
Domestic Equity	15.5%	15.0%
Fixed Income	9.8	10.0
Absolute Return	22.9	22.5
Foreign Equity	10.6	10.0
Private Equity	18.2	25.0
Real Assets	16.8	17.5
Cash	6.2	0.0

Yale Endowment Target Asset Allocation
June 30, 2001



The target mix of assets produces an expected real (after inflation) long-term growth rate of 6.8 percent with a risk (standard deviation of returns) of 11.9 percent. Primarily because of the temporary holdings in cash, the actual allocation produces a portfolio expected to grow at 6.1 percent with a risk of 10.8 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 percent.

The need to provide resources for current operations as well as preserve purchasing power of assets dictates investing for high returns, causing the Endowment to be biased toward equity. In addition, the University's vulnerability to inflation further directs the Endowment away from fixed income and toward equity instruments. Hence, 90 percent of the Endowment is targeted for investment in some form of equity, through holdings of domestic and international securities, real assets, and private equity.

Over the past fifteen years, Yale has reduced dramatically the Endowment's dependence on domestic marketable securities by reallocating assets to nontraditional asset classes. In 1986, approximately 65 percent of the Endowment was committed to U.S. stocks, bonds, and cash. Today, target allocations call for 25 percent in domestic marketable securities, while the diversifying assets of foreign equity, private equity, absolute return strategies, and real assets dominate the Endowment, representing 75 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 and lower volatility than the 1986 portfolio. 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 exploiting illiquid, less efficient markets such as venture capital, leveraged buyouts, oil and gas, timber, and real estate.

Asset Class Characteristics

Yale's six asset classes are defined by differences in their expected response to economic conditions, such as price inflation or changes in interest rates, and are weighted in the Endowment portfolio by considering risk-adjusted returns and correlations. The University combines these assets in such a way as to provide the highest expected return for a given level of risk.

Domestic Equity

Finance theory predicts that equity holdings will generate returns superior to those of less risky assets such as bonds and cash. The predominant asset class in most endowments and other U.S. institutional portfolios, domestic equities represent a large, liquid, and heavily researched market. While the average educational institution invests 43.3 percent of assets in domestic equities, Yale's target allocation to this asset class is only 15.0 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 market indices by a few percentage points annually. Because superior stock selection provides the most consistent and reliable opportunity for generating excess 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 current fundamental measures such as book value, earnings, or cash flow. Yale's managers tend to overweight small-capitalization stocks, as they are less efficiently priced and offer greater opportunities to add value through active management. Recognizing the difficulty of outperforming the market on a consistent basis, Yale searches for exceptional managers with high integrity, sound investment philosophies, strong track records, superior organizations, and sustainable competitive advantages.

Fixed Income

Fixed income assets generate stable flows of income, providing greater certainty of nominal cash flow than any other Endowment asset class. The bond portfolio creates substantial diversification for the Endowment, having a low correlation to other asset classes, and provides a hedge against financial accidents or periods of unanticipated deflation. While educational institutions maintain a substantial allocation to domestic bonds and cash, averaging 23.1 percent, Yale's target allocation to fixed income is a relatively low 10.0 percent of the Endowment. Bonds have an expected real return of 2.0 percent with risk of 10.0 percent. The Lehman Brothers Government Bond Index (LBGI) serves as the portfolio benchmark.

Yale is not particularly attracted to fixed income assets, as they have the lowest historical and expected returns of the six asset classes comprising 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

Active Management of Domestic Equities

In spite of a healthy respect for efficiency in the pricing of domestic equity securities, Yale attempts to add incremental returns by employing outstanding domestic equity managers across an array of market sectors and strategies. Over the past two fiscal years security selection generated extraordinary returns as the University outperformed the market by a cumulative 56 percentage points. The efforts of Yale's external active managers, aided by a tailwind favoring value-oriented and small-capitalization securities, led to this outstanding result.

As a consequence of the domestic equity portfolio's unconventional structure, Yale experienced significant underperformance preceding the recent success. From July 1, 1997 to June 30, 1999, a period when the market favored large-capitalization growth stocks, the University dropped 18 percentage points relative to the market. Only by sticking with an uncomfortable, contrarian position did the University ultimately manage to benefit from its unusual portfolio, with a cumulative outperformance of nearly 33 percentage points over the past four years.

In constructing the domestic equity portfolio, Yale pays little attention to sectoral allocations. In fact, the current portfolio consists of a variety of specialists seeking to apply in-depth knowledge to concentrated portfolios of securities. The aggregation of individual manager portfolios focused on energy, financials, biotechnology, real estate, and technology, along with a number of less-specialized managers, bears little resemblance to broad-based market indexes. While such a portfolio almost guarantees short term deviation from market returns, the focused application of deep knowledge to the security selection process sows the seeds for longer term investment success.

Yale's portfolio typically favors value and small-capitalization stocks. Value stocks, securities that are cheap in relation to fundamental measures such as book value, earnings, or cash flow, generally outperform the market over the long term, albeit with higher volatility of returns. Patient investors reap rewards for taking uncomfortable positions in out-of-favor sectors and securities.

Yale's overweighing of small-capitalization stocks stems from a belief that larger stocks tend to be better followed and more efficiently priced than small-capitalization stocks, which offer better opportunities for superior managers to generate excess returns. In addition, studies indicate that over the very long term small-capitalization stocks tend to generate slightly higher risk-adjusted returns than do large-capitalization stocks. Thus, small-capitalization stocks have a prevailing, somewhat unreliable, wind at their back.

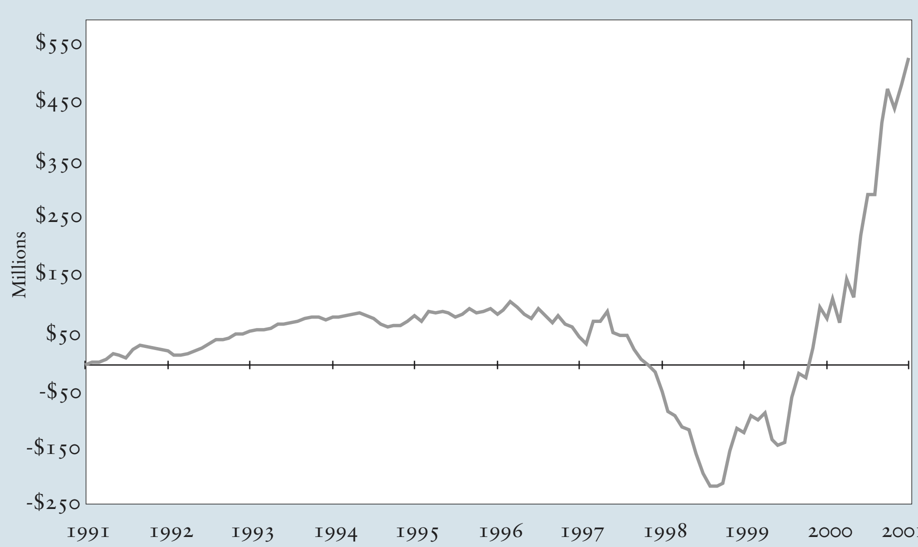
When engaging active managers, Yale structures relationships that align the University's interests with the manager's. Too many money managers profit by gathering assets at the expense of generating strong investment returns. High levels of side-by-side investment contribute to creating coincidence of interest, as does a manager's ethical desire to serve the client's interest.

Yale often develops new investment management relationships with promising "young and hungry" principals or with an experienced group working independently for the first time. Newer organizations typically have small amounts of assets under management and something to prove. As investment management organizations progress through their life cycle, Yale monitors relationships carefully to ensure that interests continue to coincide, that assets under management remain at reasonable levels, and that managers remain motivated and capable of earning substantial returns.

The Investments Office monitors the size of actively managed portfolios, shifting capital both to rebalance market sector exposure and to take advantage of tactical opportunities. Capital allocation to individual managers takes into consideration the sector exposures of the domestic equity portfolio, the degree of confidence Yale possesses in a manager, and the appropriate asset size for a particular strategy. When the University perceives compelling undervaluation in a sector of the market, Yale may allocate additional capital and, perhaps, hire new managers to take advantage of the opportunity.

Yale's domestic equity portfolio contains a group of intelligent and dedicated managers with high integrity, sound investment philosophies, strong track records, superior organizations, and competitive advantages. In spite of the difficulty of identifying mispriced securities, with a sufficiently long time horizon the University should benefit from the efforts of its domestic equity managers.

Cumulative Value Added by Yale Domestic Equity Managers 1991–2001



Relative to Wilshire 5000, net of fees.

and belief in the efficacy of a highly structured approach to bond portfolio management, the Investments Office chooses to manage Endowment bonds internally. In spite of an aversion to market timing strategies, credit risk, and call options, Yale manages to add value consistently in its management of the bond portfolio. Creative, patient portfolio management leads to superior investment results without impairing the portfolio protection characteristics of high-quality fixed income.

Foreign Equity

Investments in overseas markets provide diversification along with opportunities to earn above-market returns through active management. Foreign equity, with a 10.0 percent target allocation, gives the Endowment exposure to the global economy. Because Yale has significant commitments to nontraditional diversifying assets, the University's allocation to foreign equities is lower than the average educational institution's allocation of 12.4 percent. Emerging markets, with their rapidly growing economies, are particularly intriguing, causing Yale to target one-half of its foreign portfolio to developing countries. Expected real returns for emerging equities are 8.0 percent with a risk level of 30.0 percent, while developed equities are expected to return 6.0 percent with risk of 20.0 percent. The portfolio is evaluated relative to a composite benchmark of 50 percent developed markets, measured by the Morgan Stanley Capital International (MSCI) Europe, Australia, and Far East Index, and 50 percent emerging markets, measured by the MSCI Emerging Markets Free 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 impressive bottom-up fundamental research capabilities. Capital allocation to individual managers takes into consideration the country allocation of the foreign equity portfolio, the degree of confidence Yale possesses in a manager, and the appropriate asset size for a particular strategy. In addition, Yale attempts to exploit compelling undervaluations in countries, sectors, and styles by allocating additional capital and, perhaps, by hiring new managers to take advantage of the opportunities.

Absolute Return

In October 1989, Yale became the first institutional investor to define absolute return strategies as an asset class, beginning with an allocation of 4.5 percent. Designed to provide significant diversification to the Endowment, absolute return investments seek to generate high long-term real returns by exploiting market inefficiencies. Today, the portfolio is targeted to be 22.5 percent of the Endowment. In contrast, the average educational institution allocates only 9.1 percent to such strategies. Absolute return strategies are expected to generate real returns of 7.0 percent, representing a slight premium to those expected from domestic equities, notwithstanding a lower risk level of 15.0 percent.

Unlike traditional domestic and foreign equity investments, absolute return investments provide returns largely independent of overall market moves. Over the twelve-year life of the asset class, the portfolio exceeded expectations, returning 12.1 percent per year with low risk (5.7 percent standard deviation) and essentially no correlation to domestic stock and bond returns.

Yale's absolute return portfolio consists primarily of marketable securities hedged against broad market moves. Slightly less than half of the portfolio is dedicated to event-driven strategies, which rely on a very specific corporate event, such as a merger, spin-off, or bankruptcy restructuring to achieve a target price. The remaining portion of the portfolio encompasses value-driven and opportunistic strategies, which involve identifying an asset or security with a price that diverges from its underlying economic value.

Private Equity

Private equity offers extremely attractive long-term risk-adjusted return characteristics, stemming from the University's strong stable of value-added managers that exploit market inefficiencies. Yale's private equity investments include participation in venture capital and leveraged buyout partnerships. The University's allocation to private equity is 25.0 percent, far exceeding the 6.1 percent allocation of the average educational institution. In aggregate, the private equity portfolio is expected to generate real returns of 12.5 percent with risk of 25.0 percent.

Yale's private equity 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 pursuing this asset class. Since inception, private equity investments have generated a 32.9 percent annualized return to the University. The success of Yale's program led to a 1995 Harvard Business School case study, "Yale University Investments Office," by Professors Josh Lerner and Jay Light. The popular case study was updated in 1997 and 2000.

Yale's private equity assets concentrate on partnerships with firms that emphasize 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. Yale avoids funds sponsored by financial institutions because of the conflicts of interest and staff instability inherent in such situations.

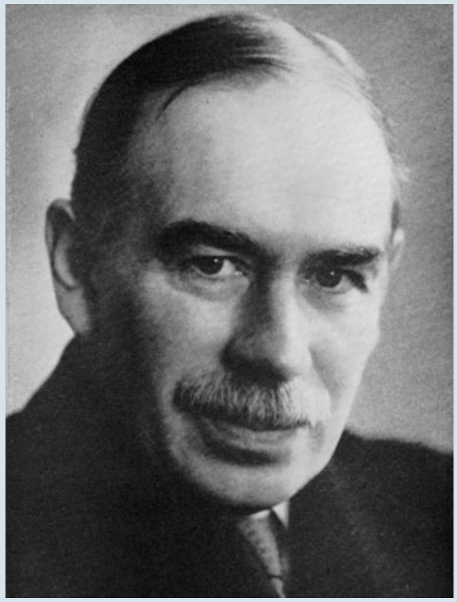
Liquidity

Many market participants place extraordinary value on liquidity. Players seek the ability to trade out of yesterday's loser and acquire today's hot prospect, to sell during a market panic and buy into a bull market. Managers responsible for large sums of money focus on heavily traded securities, allowing movement in and out of positions with minimal market impact. However, in pursuing more-liquid securities investors miss out on the opportunity to establish positions at meaningful discounts to fair value in less frequently traded assets.

Highly liquid large-capitalization stocks receive extensive coverage, generating enormous amounts of public data. The widespread availability of information contributes to an environment in which investors have difficulty obtaining an analytical edge. In contrast, less-liquid small-capitalization stocks have less available information, creating an opportunity to be rewarded for uncovering nuggets of data relevant to valuation. Rewarding investments tend to reside in dark corners, not in the glare of floodlights.

The liquidity so many investors seek tends to disappear when most needed. In the crash of October 1987, market makers possessed neither the resources nor the willingness to absorb the extraordinary volume of selling demand that materialized. The liquidity that investors paid dearly for evaporated in the panic selling on October 19, just when the ability to make an immediate sale might have had value.

J. M. Keynes argued in *The General Theory* that "of the maxims of orthodox finance none, surely, is more anti-social than the fetish of liquidity,



British Economist John Maynard Keynes (1883–1946), whose approach to managing economic cycles continues to influence governments today, warned against the "fetish of liquidity" in the realm of investment.

the doctrine that it is a positive virtue on the part of investment institutions to concentrate their resources upon the holding of 'liquid' securities. It forgets that there is no such thing as liquidity of investment for the community as a whole."

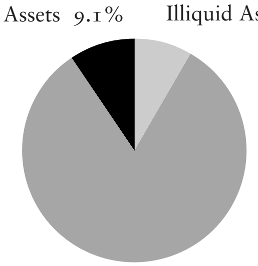
In fact, less frequently traded assets can provide good returns relative to liquid ones. PEFCO bonds, obligations of the Private Export Funding Corporation, enjoy the full faith and credit backing of the U.S. Government. Because PEFCO bonds are issued in smaller amounts and receive less attention than more liquid U.S. Treasury bonds, buyers can expect that they will be more difficult to trade. In return, owners receive higher returns. In July, the Investments Office bought PEFCO 5-5/8 bonds set to mature on March 15, 2006 at a yield of 5.18 percent. Compared to U.S. Treasuries maturing on the same date, the PEFCOs provided an incremental yield of 57 basis points. Earning a spread over U.S. Treasuries for U.S. Treasury equivalent credit makes sense.

Investments in companies backed by venture capital illustrate the rewards of accepting illiquidity. In December 1997, eToys, an online retailer, received its first round of private financing, valuing the company at $15 million. Obviously, as a privately held start-up, shares of the concern exhibited extreme illiquidity. When eToys went public on May 20, 1999, the price quadruped on the first day of trading, and the company's value skyrocketed to $7.8 billion, representing an extraordinary gain for the original private investors.

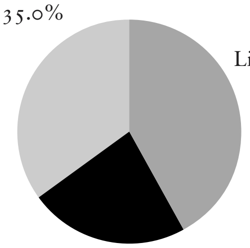
Liquidity of securities tends to increase and decrease as the popularity of the underlying assets waxes and wanes. On the day when eToys went public, approximately $1 billion worth of shares traded. Not even two years later, when eToys filed for bankruptcy, trading volume amounted to only around $100,000. Clearly, a mindset that avoids illiquid start-ups and prefers highly liquid IPOs represents a poor foundation for investment strategy.

Once illiquid private investments succeed, liquidity follows as investors clamor for shares of the hot initial public offering. In contrast, if public, liquid investments fail, liquidity dries up as a company falls from favor or declares bankruptcy. Managers should fear failure, not illiquidity.

Average Endowment Liquidity
June 30, 2001



Yale Endowment Liquidity
June 30, 2001



Liquid Assets—Marketable Equity, Bonds, and Cash
Quasi-Liquid Assets—Absolute Return
Illiquid Assets—Private Equity and Real Assets

Real Assets

Real estate, oil and gas, and timberland share common characteristics: sensitivity to inflationary forces, high and visible current cash flow, and opportunity to exploit inefficiencies. This group of real asset investments provides attractive return prospects, excellent portfolio diversification, and a hedge against unanticipated inflation. Yale's 17.5 percent long-term policy allocation significantly exceeds the average educational institution's commitment of 2.8 percent. Expected real returns are 5.5 percent with risk of 15.0 percent.

The real assets portfolio plays a meaningful role in the Endowment as a powerful diversifying asset and a generator of strong returns. Real assets provide relative stability to the Endowment during periods of public market turmoil, at the price of an inability to keep pace during bull markets. Pricing inefficiencies in the asset class and opportunities to add value allow superior managers to generate excess returns over a market cycle. Since its inception in 1978 the portfolio has returned 15.5 percent per annum.

The illiquid nature of real assets combined with the expensive and time-consuming process of completing transactions create a high hurdle for casual investors. Real assets provide talented investment groups with the opportunity to generate strong returns through savvy acquisitions and managerial expertise. A critical component of Yale's investment strategy is to create strong, long-term partnerships between the Investments Office and its investment managers. In the last decade Yale played a critical role in the development and growth of more than a dozen organizations involved in the management of real assets.

Asset Allocations

	Yale University	Educational Institution Mean
Domestic Equity	15.5%	43.3%
Fixed Income	9.8	23.1
Foreign Equity	10.6	12.4
Absolute Return	22.9	9.1
Private Equity	18.2	6.1
Real Assets	16.8	2.8
Cash	6.2	3.2

Data as of June 30, 2001.

Spending Policy

4

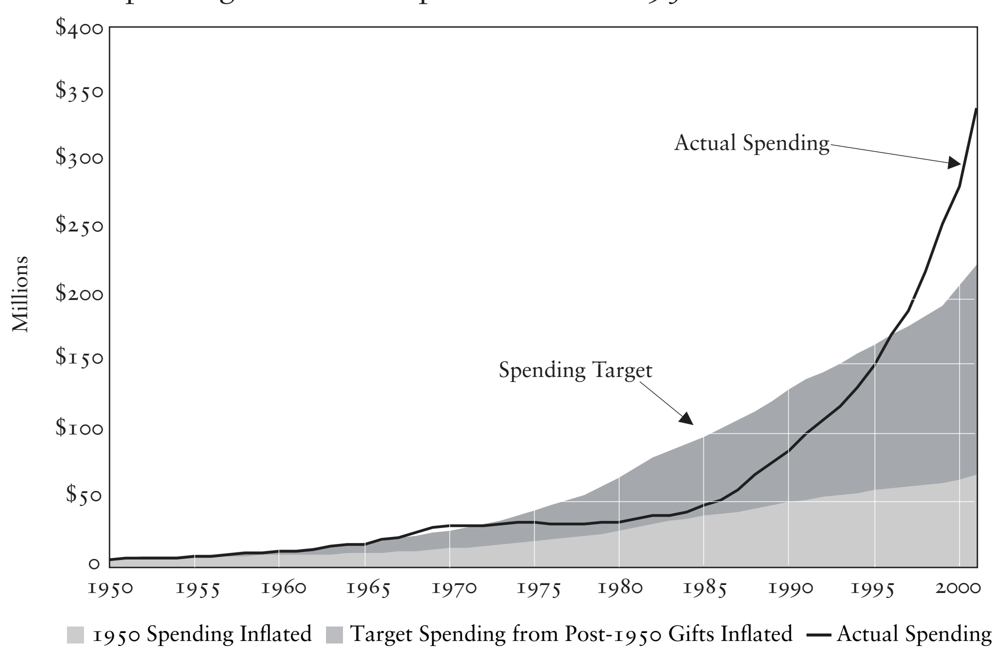
The spending rule is at the heart of fiscal discipline for an endowed institution. Spending policies define an institution's compromise between the conflicting goals of providing substantial, sustainable support for current operations and preserving purchasing power of Endowment assets. The spending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

Yale's policy is designed to meet two competing objectives. The first is to release substantial current income to the operating budget in a stable stream, since large fluctuations are difficult to accommodate through changes in University activities or programs. The second is to protect the value of Endowment assets against inflation, allowing programs to be supported at today's level far into the future.

Yale's spending rule attempts to achieve these two objectives by using a long-term spending rate of 5 percent combined with a smoothing rule which adjusts spending gradually to changes in Endowment market value. The amount released under the spending rule is based on a weighted average of prior spending adjusted for inflation (70 percent weight) and the amount which would have been spent using 5 percent of current Endowment market value (30 percent weight).

The spending rule has two implications. First, by incorporating the previous year's spending the rule eliminates large fluctuations, enabling the University to plan for its operating budget needs. Over the last fifty years, annual changes in spending have been only half as volatile as annual changes in Endowment value. Second, by adjusting spending toward the long-term rate of 5 percent of Endowment, the rule ensures that spending levels will be sensitive to fluctuating Endowment levels, providing stability in long-term purchasing power.

Spending Growth Outpaces Inflation 1950–2001



Spending from the Endowment increased at a hearty pace during the past decade despite the conservative nature of Yale's spending policy, with pay-out rising from $95 million in fiscal 1991 to $338 million in fiscal 2001. Consequently, Endowment spending plays an ever-greater role in the budget, having risen from 13 percent of expenditures in 1991 to 25 percent in 2001.

Endowment Spending and Investment Goals

Educational endowments seek to balance the long-term goal of preserving the purchasing power of assets and the intermediate-term goal of supporting academic activities through distributions to the operating budget. Weighing the preservation of purchasing power of assets too heavily penalizes current scholars; valuing too highly the stability of flows of income to the operating budget imposes costs on future generations.

Over the past fifteen years, Yale's dependence on Endowment support grew dramatically. During the fiscal year ending June 30, 2002, spending from the Endowment will total approximately $405 million, or 28 percent of the University budget. Budgetary projections show Endowment income amounting to 36 percent of the budget by fiscal 2009. In contrast, during the fiscal year ending June 30, 1987, spending from the Endowment was $57 million, representing only 11 percent of revenues.

To assess the effects of various investment and spending policies on the Endowment, the Investments Office employs simulations to evaluate a range of policy combinations. Using "Monte Carlo" techniques, random numbers are converted to portfolio return patterns that are consistent with assumed risk and return characteristics for the various classes. The two criteria used in the simulations to analyze the results of various policies are: (1) the likelihood of a significant, sustained drop in support for the operating budget; and (2) the likelihood of a dramatic reduction in Endowment purchasing power. For the first fifteen years of our analysis, a significant decline in support for the operating budget was defined as a real decrease of 25 percent over a five-year period and a dramatic decline in purchasing power was defined as a real decrease of 50 percent over a fifty-year period.

Because of the increased dependency of the operating budget on Endowment support, the University recently changed the definition of a significant decline in support for the operating budget from a real reduction of 25 percent over a five-year period to a real reduction of 10 percent over the same period. Fifteen years ago, a 25 percent reduction in Endowment support to the operating budget translated into approximately $14 million, or around 3 percent of the operating budget. Next year, because of the increased role of Endowment support, a 10 percent reduction in Endowment spending would translate to about $40 million, roughly equivalent to 3 percent of the operating budget.

Lowering the threshold in the definition of a significant decline in operating budget support biases Endowment portfolio choices and spending rule structure toward shorter-term stability. From an investment perspective, Yale will choose less volatile asset allocations, emphasizing the importance of diversification in portfolio construction. With regard to the spending rule, the University will examine the possibility of changing the weights that determine the tradeoff between spending stability and purchasing power preservation.

Of course, as long as investment returns remain strong, the stability of Endowment flows to the operating budget poses no problem. Only if the Endowment experiences negative returns do questions arise regarding the stability of support for operations. Fortunately, strong performance of Endowment investments and generous donations from our alumni have enabled the Yale Endowment to provide ever-increasing flows to the operating budget while maintaining purchasing power of assets for future generations.

Nearly one-fourth of the Yale Endowment supports teaching, sometimes through faculty chairs. Professor Steven B. Smith, the Alfred Cowles Professor of Political Science (and Master of Branford College), shown teaching a Yale College class, is the sixth incumbent of the chair endowed in 1927 "to advance the study of government" as practiced in the United States. The donors, Philip Battell Stewart and the Cowles family, intended their gift to serve as a memorial to Alfred Cowles, Sr. and, besides teaching, to provide for a book collection and a research center "at which communities and students may find wise direction in solving problems of practical government."

Investment Performance

5

Yale's investment performance has excelled in recent years. Over the ten-year period ending June 30, 2001, the Endowment earned an annualized 18.3 percent return, net of fees, placing it in the top one percent of large institutional investors. Endowment outperformance is attributable to sound asset allocation policy and superior active management.

Yale's long-term superior performance relative to its peers and benchmarks created substantial wealth for the University. Over the ten years ending June 30, 2001, Yale added $5.1 billion relative to its composite benchmark and an estimated $4.6 billion relative to a broad universe of college and university endowments.

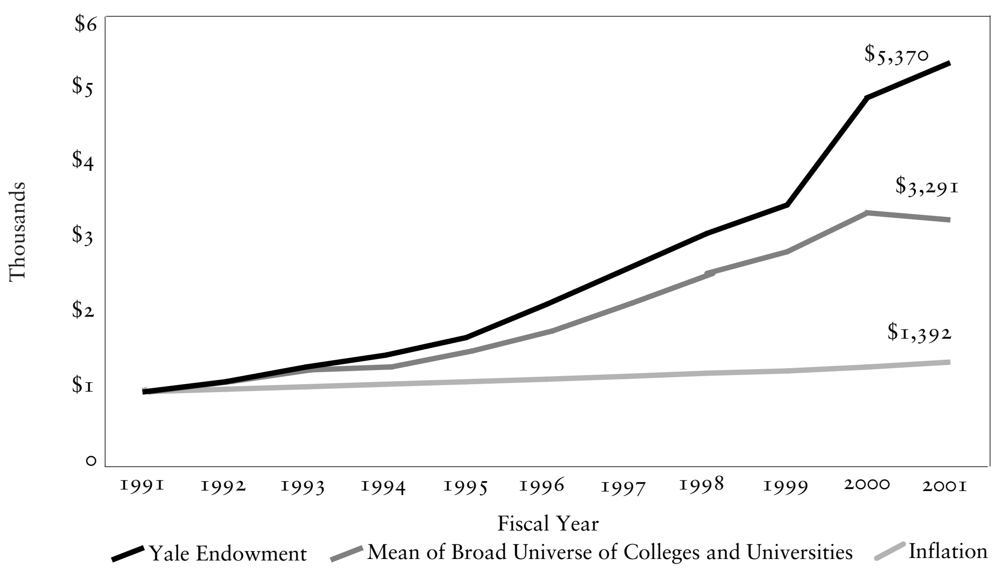
Performance by Asset Class

Yale's long-term asset class performance continues to be strong. In the past ten years every asset class outperformed benchmark levels.

For the decade ending June 30, 2001, the domestic equity portfolio returned an annualized 19.6 percent, outperforming the Wilshire 5000 Index by 5.0 percent per year. Active managers have added value to benchmark returns primarily through stock selection.

Yale's internally managed fixed income portfolio earned an annualized 8.9 percent over the past decade, outpacing the Lehman Brothers Government Bond Index by 1.1 percent per year. By making astute security selection decisions and accepting illiquidity, the Endowment benefited from excess returns without incurring material credit or option risk.

Relative Investment Performance of the Yale Endowment
Growth of $1,000 from 1991 to 2001



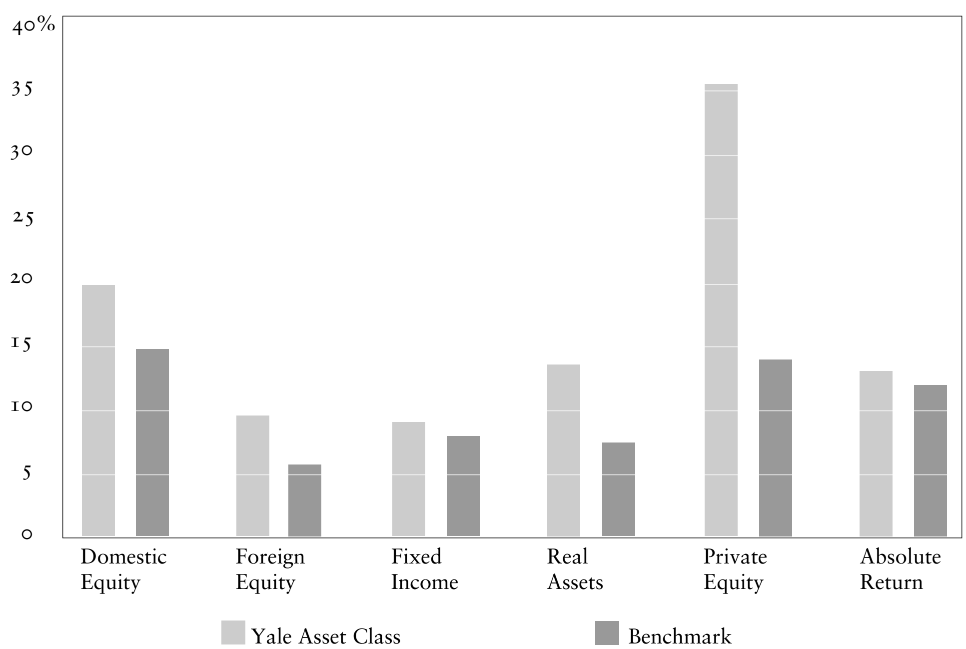
Over the past decade, the absolute return portfolio has produced an annualized 12.9 percent, exceeding its benchmark of University inflation plus 8.0 percent percent by 1.1 percent per year. Absolute return results exhibited essentially no correlation to traditional marketable securities.

The foreign equity portfolio generated an annual return of 9.4 percent over the ten-year period, outperforming its composite benchmark by 3.8 percent per year. The portfolio's excess return is due to effective security selection and country allocation by active managers.

Results from Yale's nonmarketable assets demonstrate the value of effective active management. Private equity returned 35.3 percent annually over the last ten years, surpassing its benchmark of University inflation plus 10 percent by 21.5 percent per year. Since inception in 1973, the private equity program has returned an astounding 32.9 percent per annum.

Real assets generated a 13.4 percent annualized return over the ten-year period, outperforming the benchmark of University inflation plus 6.0 percent by 6.1 percent per year. Yale's outperformance is due to the successful exploitation of market inefficiencies and timely pursuit of contrarian investment strategies.

Asset Class Returns Relative to Benchmarks
1991–2001



Annualized returns net of fees.
Real assets consists only of real estate prior to 1999.

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. Twelve individuals currently sit on the Committee.

Investment Committee

Charles D. Ellis '59, Chairman
Senior Adviser
Greenwich Associates

Herbert M. Allison, Jr. '65
President and CEO
Alliance for Lifelong Learning, Inc.

James Allwin '74
President
AETOS Capital

G. Leonard Baker '64
Managing Director
Sutter Hill Ventures

Joshua Bekenstein '80
Managing Director
Bain Capital

Robert L. Culver
Vice President for Finance and Administration
Yale University

Holcombe T. Green, Jr. '61
Principal
Green Capital Investors, L.P.

Richard C. Levin '74 PH.D.
President
Yale University

William I. Miller '78
Chairman
Irwin Financial Corporation

Theodore P. Shen '66
Former Chairman
DLJ Capital Markets

John L. Thornton '80 MPPM
President and Co-Chief Operating Officer
Goldman Sachs International

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

The Exhibition Corridor in Sterling Memorial Library.

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 fourteen professionals.

Investments Office

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

Dean J. Takahashi '80, '83 MMPM
Senior Director

Alexander C. Banker
Director

Alan S. Forman
Director

Timothy R. Sullivan '86
Director

Kenneth R. Miller '71
Associate General Counsel

Seth D. Alexander '95
Associate Director

Michael E. Finnerty
Senior Associate

Celeste P. Benson
Senior Portfolio Manager

Randy Kim '98
Senior Financial Analyst

Ana Yankova
Senior Financial Analyst

Kimberly B. Sargent '00
Financial Analyst

David B. Slifka '01
Financial Analyst

Alexander S. Taylor '00
Financial Analyst

A group from the Yale Investments Office relaxes after a whitewater rafting trip. From left to right: Randy Kim '98, Dean Takahashi '80, '83 MMPM, Griff Baker '02, David Swensen '80 PH.D., Seth Alexander '95, and Len Baker '64.

The Origins of the Yale Endowment

As Yale's tercentennial year draws to a close, the University celebrates a rich history of remarkable growth. Throughout the centuries, gifts from friends and graduates have played a critical role in supporting the institution. Even though some of the earliest gifts provided permanent funding, assessing the role of the Endowment in Yale's development represents a difficult task, exacerbated by the absence of printed treasurer's reports for the first 130 years of Yale's existence. Unlike the many early gifts given to satisfy current needs, endowment gifts come with the expectation that they will support a particular activity in perpetuity. Deciphering three-century-old financial statements and related documents to ascertain the intent of donors and the function of gifts poses a significant challenge.

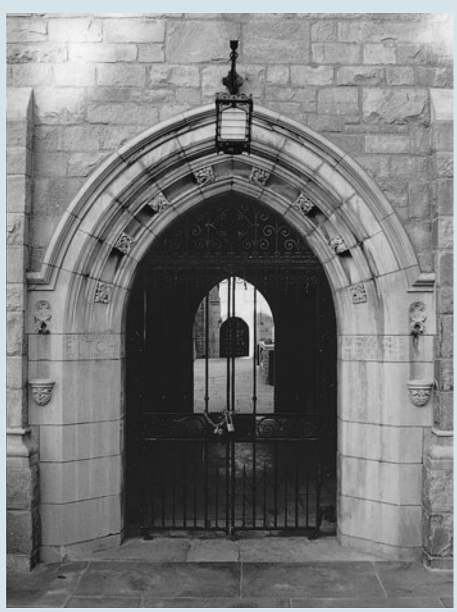
Yale's archives overflow with documents referring to early donations of all sorts. For the first half century of the College's existence, Yale received grants irregularly from the Connecticut Assembly. Individuals gave funds and gifts in kind to the University. A notable gift from Elihu Yale secured the College's name in 1718. The College received gifts of property and land, which Yale either occupied or rented out; books and materials, such as globes, microscopes, and portraits; and provisions, such as bales of corn and wheat. Many of these grants and donations addressed immediate needs —building a steeple for the chapel, repairing the rector's home, or paying the tutors' salaries.

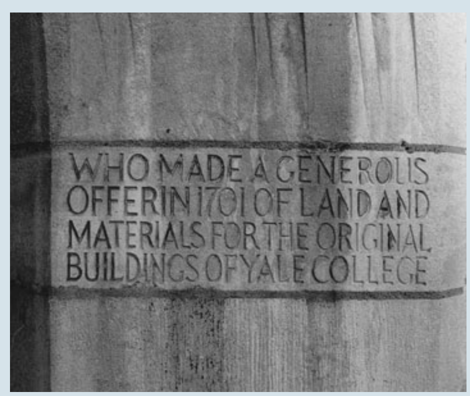
A number of donations of land, often in locations far away from New Haven, produced regular income for Yale, thereby functioning in a manner similar to today's Endowment. Indeed, Yale records identify an enormous gift of 637 acres of farmland from Major James Fitch in 1701, worth £150, as the origins of the Endowment. Fitch, born in Saybrook in 1649, was the son of Reverend James Fitch, one of the first settlers of Connecticut. The letter accompanying the Major's donation is one of only fifteen Yale documents surviving from 1701. In the transmittal document, Fitch revealed his hope that the gift would produce substantial annual income for Yale: "I will allsoe take some paines to put it in a way of yearely profit. 30£ charge I hope will bring 20£ per yeare in a little time." Indeed, his gift produced essential support for the fledgling College and provides support even today for the University's general purposes.

Donations of land established some of Yale's most long-standing endowments. In 1732 George Berkeley gave his 96-acre farm in Rhode Island to Yale to begin a program of post-graduate fellowships, which continues to support students to this day. Along with a gift of 300 acres of farmland from the Connecticut Assembly in the same year, land owned and rented out by Yale for income reached 2,243 acres.

A gift of £38 from Yale parent Philip Livingston in 1745 provided seed funding for the first endowed professorship. In 1756, upon completion of the fundraising, Naphtali Daggett was named the first Livingstonian Professor of Divinity. Endowing an eighteenth century professorship meant providing a fund that would not only cover the professor's salary, but also build his house. By the end of the eighteenth century, professors had been appointed in a number of other subjects, such as mathematics and natural philosophy, ecclesiastical history (the first history professor in the United States), Hebrew, and chemistry. Scholars disagree over whether these professorships were endowed. According to Yale historian Brooks Mather Kelly, it was not until 1822 that a second professorship was endowed: the Dwight Professorship of Didactic Theology. Though the Livingstonian Professorship was eliminated in 1861, the Dwight Professorship exists today.

The first general Endowment fundraising effort did not occur until 1831. Prompted by a disastrous investment in the Eagle Bank of New Haven that wiped out all but $1,800 of Yale's permanent funds in 1825, the alumni initiated a widespread campaign for donations to the College. The Centum Millia Fund raised over



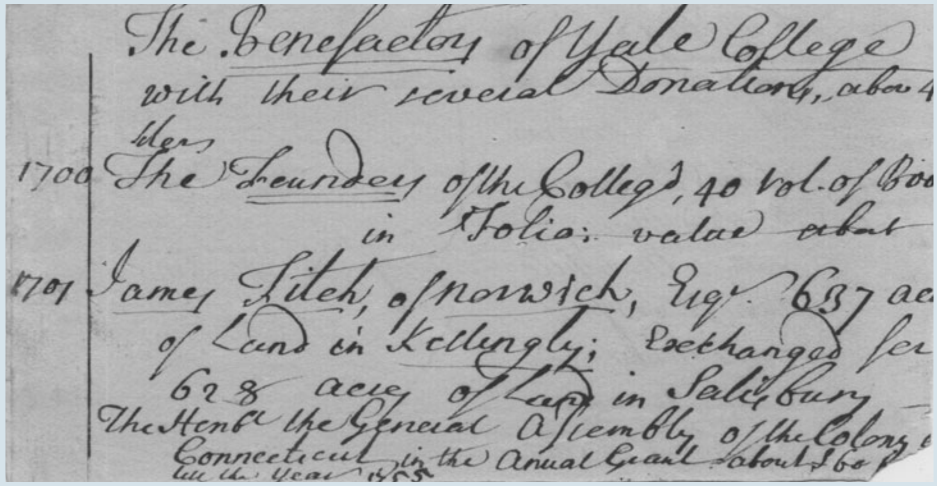


One of the University's very first donors, Major James Fitch is commemorated by Fitch Gateway in Branford College, which is inscribed with the texts shown here. His gift of land in 1701 was the first gift in Yale's history to become part of the permanent Endowment.

$100,000, mostly from Yale alumni and officers. Of the total, $83,000 functioned as permanent Endowment, producing a significant gain in permanent funds for the College. Throughout the nineteenth century Yale accumulated substantial general Endowment funds. In 1831 the departments that would become the Divinity School and Medical School had their own endowments, in 1848 the Law School, in 1861 the Sheffield Scientific School, in 1872 the Art and Architecture School, and in 1895 the Music School. Some of these, such as the Art and Architecture School, were founded because of special endowment gifts.

In the late nineteenth century Yale enjoyed a series of large gifts from alumni and nonalumni alike, facilitated by the accumulation of wealth in the rapidly industrializing United States. In 1864, major gifts came from Joseph Sheffield and Augustus Street, establishing the Sheffield Scientific School and the Art and Architecture School, respectively. Railroads played a significant role both as investment vehicles and as a source of gifts. The family of Henry Farnam (M.A. HON. 1871), a railroad magnate, contributed some $400,000 to the College in the late nineteenth century. By 1900, total University Endowment funds had reached $5.3 million, representing an impressive annual growth rate after the 1825 debacle of over 11 percent per annum.

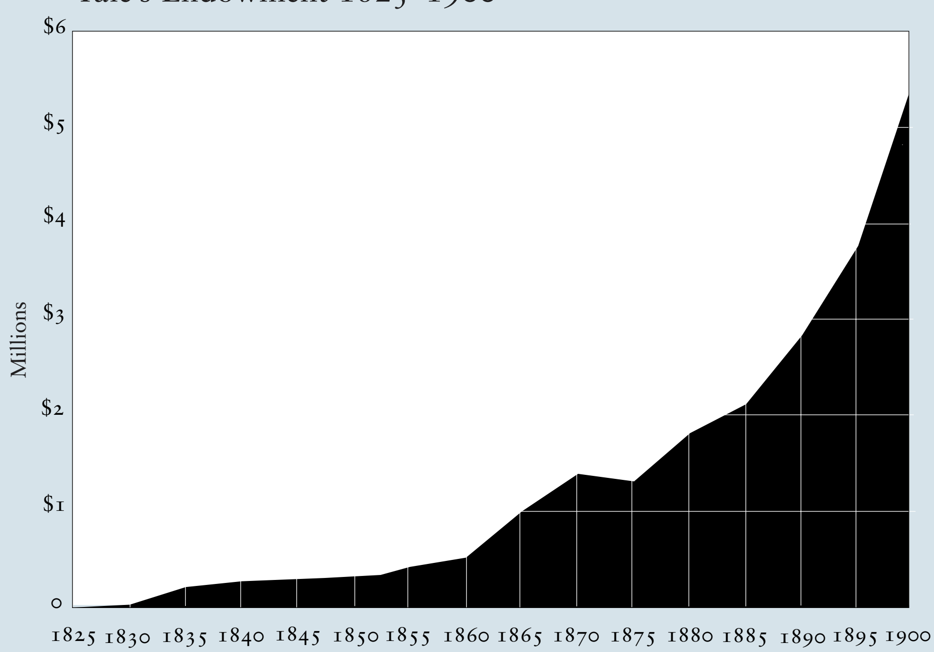
Asset allocation of the nineteenth century Endowment differs substantially from Yale's twenty-first century portfolio. For most of the 1800s the portfolio was heavily allocated toward bonds. In 1831, according to the Treasurer's Report, notes made up 64 percent of the Endowment, with Phoenix Bank Stock accounting for 29 percent and Endowment land 7 percent. In 1856, bonds made up approximately 71 percent of the portfolio, with real estate and stocks making up 16 percent and 13 percent, respectively. Interestingly, the Treasurer's Report identified "Bonds of Railroads,"which made up 25 percent of the portfolio, as an asset class distinct from "Bonds and Notes." By 1900, bonds still represented a majority of the portfolio at 64 percent, with real estate at 22 percent, and stocks at 13 percent.


The Benefactors of Yale College
with their several Donations,
1700 The Founders of the College, 40 vol. of
in Folio: value about
1701 James Fitch, of Norwich, Esq. 637
of Land in Killingly; Exchanged for
628 acres of Land in Salisbury
The Honble the General Assembly of the Colony
Connecticut in the Annual Grant about

Excerpt from the handwritten list of Yale donors by Thomas Clap, part of the original 1765 manuscript of his *Annals or History of Yale College* published in 1766. The second gift is listed as "1701, James Fitch of Norwich, Esq. 637 acres of land in Killingly; exchanged for 628 acres of land in Salisbury." The gift of land had a value of £150. Clap's 1766 *Annals* included a list of all donors to that time. Courtesy of Manuscripts and Archives, Yale Library.

Endowment funds played a critical role in Yale's financial development during the past three centuries. In the context of an early eighteenth century institution's struggle to survive day to day, the notion of providing permanent funds may have seemed a triumph of hope over experience. Still, it is clear that some of the College's earliest donors intended their gifts to sustain the institution in perpetuity. Their contributions provided the seeds for an Endowment that today totals over $10.7 billion and continues to serve as an essential source of support for Yale's operations.

Yale's Endowment 1825–1900



Some Yale Endowment Firsts

1701

First Endowment Fund
A gift of 637 acres of farmland valued at £150 from Major James Fitch provided annual income for the College. The fund, to which other funds were later added, is now valued in the millions and is used for the general purposes of the University.

1732

First Scholarship Fund
The George Berkeley Fund was established through a gift of farmland to support scholarships for post-graduate study, to be awarded every year on the basis of an examination in Latin and Greek. The current holders of the grant, six students from Yale College and the Graduate School, are using the funds for overseas research projects.

1756

First Professorship Fund
Funds originally donated by Philip Livingston, a Yale parent, were allocated by Yale President Thomas Clap to establish the Livingstonian Professorship of Divinity. Additional funding came from other donors, including Clap himself.

1763

First Library Fund
The Jared Eliot and Thomas Ruggles Fund, established with a gift of £10, continues to generate funds each year for book acquisition.

1814

First School of Medicine Fund
Anonymous donors formed an endowment for continuing general support of the Medical Institution of Yale College, founded in 1813, which became the School of Medicine in 1884.

1822

First Continuing Professorship Fund
A gift from Yale President Timothy Dwight (B.A. 1769) and others established the Timothy Dwight Professorship of Didactic Theology. The present incumbent of the renamed Dwight Professorship of Theology and Philosophy of Religion is Gene Outka of the Divinity School, appointed in 1981.

1823

First Undergraduate Scholarship Fund
David DeForest gave $5,000 to establish the David C. DeForest Scholarship and Prize Fund, still awarded to two Yale College students per year.

1901

First Building Maintenance Fund
Mrs. Thomas G. Bennet contributed $5,000 to establish a permanent endowment for maintaining the clinical facilities of the School of Medicine.

1923

First Athletics Fund
The Ledyard Mitchell Fund, named for a member of the Class of 1904, supports the award for a punting competition held each year among varsity football players.

1701 YALE UNIVERSITY TERCENTENNIAL 2001

Sources
Much of the material in this publication is drawn from memoranda produced by the Investments Office for the Corporation Investment Committee. Other information is drawn from Yale's financial records and Reports of the Treasurer. Additional material comes from David Swensen, *Pioneering Portfolio Management: An Unconventional Approach to Institutional Investment* (New York, Free Press, 2000).

Pages 8–13
Average educational institution asset allocations from the Cambridge Associates' *Preliminary Analysis of College and University Investment Pool Returns 2000–2001*.

Page 16
The Endowment's annual return for the ten years ending June 30, 2001 ranks in the top one percent of institutional funds as measured by the SEI Large Plan Universe.

Pages 20–21
Historical material is based on documents in the Manuscripts and Archives Collection, Sterling Memorial Library, and on George Wilson Pierson, *A Yale Book of Numbers* (New Haven, Yale University, 1983); Pierson, *The Founding of Yale: The Legend of the Forty Folios* (New Haven, Yale University Press, 1988); and Brooks Mather Kelley, *Yale: A History* (New Haven, Yale University Press, 1974).

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