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Evaluation of The Yale Endowment From 2001 to 2017

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Abstract

As one of the most successful institutional investors in the world, the investment strategy and operating model of the Yale Endowment has been concerned and even followed by numerous institutional and individual investors. We will describe the development of Yale Endowment and its contributions to the development of Yale University, explain the trend of asset allocation in absolute return, domestic equity, fixed income, foreign equity, private equity, real assets and cash, and then reveal the possible reasons for the long-term stable growth of the Yale Endowment.

Keywords

Yale Endowment; Investment Strategy; Asset Allocation; Portfolio.

1. Introduction

In 1890, the Yale University Foundation was established, with an investment of $11,000 that year. Since then, donations have gradually increased. In 1985, the Yale endowment was $1.3 billion. David Swenson subsequently served as the endowment's chief investment officer. Swenson pioneered a new endowment investment model known in the industry as the "Yale Model." Yale's endowment was $25.4 billion in 2016, a nearly 20-fold increase in 30 years and a 12.9 percent annualized net return.

David Swensen, the chief investment officer of the Yale University Endowment Fund, and his team, as a leader in asset allocation, broke the traditional allocation of mainly stocks and bonds and a small amount of alternative assets. Yale Endowment innovates to place alternative investment in the important allocation of asset allocation. This investment philosophy has allowed the university to outperform market benchmarks over the past 20 years, giving rise to what is known as The Yale Model.

Before Mr Swensen took over Yale's endowment, the fund was allocated to traditional investment markets, with 60% in stocks and 40% in bonds. The annualized return is also very modest, around 6%. Under the leadership of Swensen's team, Yale Endowment has achieved a brilliant performance of over 15% annualized income for 20 consecutive years.

In the early days of Yale, Connecticut was a major supporter of university funding, and government funding was not free. In 1755, in retaliation for Yale's president's opposing position on the role of religion in the university, the government vetoed the grant on the excuse of wartime spending. Therefore, strong financial support from university endowments can make the academic atmosphere develop more freely. Secondly, the huge financial support provided by endowment fund can enable schools to provide better teaching environment and resources, which have a decisive impact on the cultivation of talents and the progress of society. As a special institutional investor, the university endowment fund, whether it can provide sufficient financial support for the educational mission of Yale University is the most important index to measure its success. In 1985, when David Swensen arrived at Yale, the endowment gave Yale $45 million, or 10 percent of the university's income, the lowest level in a century. In 2010, the endowment spent $1.108 billion, or 41.3 percent of the university's revenue. This is largely due to the excellent investment returns of the endowment fund's high-quality asset

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allocation strategies. During the 16 years from 1996 to 2011, the proportion of endowment funds to university expenditures increased year by year, and reached a high proportion of 45.9% in 2009. Although the proportion declined in the following two years, it still exceeded one third. It can be seen that for Yale University, endowment fund has become a very important source of income, so how to better invest and manage the endowment fund is also crucial to the financial support and long-term development of the whole university.

2. Previous Research

Eisner and Robert (1974) studied the endowment goals based on the expenditure policies of specific endowment funds and believed that endowment provided a predictable and sustainable income level to universities.

Tobin, Litvack, J., B.Malkiel and R.Quandt (1974) argue that the goal of university endowments is to provide a fixed level of expected real returns, and that the appropriate expenditure of university endowments should be regarded as the research focus.

Ennis, Richard and J.eter Williamson (1976) studied the expenditure pattern, development process and interaction with investment strategy of different university endowments.

Peter Mladina and Jeffery Coyle (2010) compared the asset allocation ratio and return rate of Yale University during the 20 years from 1988 to 2007 and concluded that the success of Yale University endowment fund was attributed to diversified diversified investment and active management and rich experience of fund managers.

2.1. General Performance of the Yale Endowment

At early stages, the majority of the Yale Endowment were used for bond investments so that it developed very slowly. In the middle of the 20th century, with the influence of Markowitz's Modern Portfolio Theory, Yale University reformed the management of the Endowment, but it still cannot reach the expected goals of supporting Yale University's budget. In 1985, Yale University hired David F. Swensen as the chief investment officer of the Endowment. Since then the Yale Endowment has opened a new chapter. Swensen's unique investment philosophy, bold investment decision-making style, great leadership make Yale Endowment's performance far ahead of other universities' endowment funds.

Since 2001, according to the Yale Endowment reports, the Endowment has generally performed forward the direction of expectations with an increasing of its market value from $10,725.1 million to $27,176.1 million (see Figure 1). In other words, the Yale Endowment has experienced an excellent growth by 5.98% annually on average for the period from 2001 to 2017 or the net daily growth of 2,800,000 dollars approximately.

For the late 17 years, the average of the Endowment's annual return is 10.92% and always created positive returns except in 2009. Considering the context of the severe global economic crisis in 2008, however, the Endowment suffering a 24.60% loss in 2009 is understandable. The Endowment then experienced a relatively steady growth over the next 4 years and bounced back to the pre-crisis level in 2014. Hence, the market volatility should not be considered as a risk for the long-term investments like the Yale Endowment since it cannot result in an actual loss unless the investments are disposed. The real risk actually comes from the permanent devaluation of the invested assets or the actual loss due to frequently short-term transactions.

Compared with the performance of the Yale Endowment, S&P 500 Index has increased by4.36% annually on average for the period from June 30, 2001 to June 30, 2017, with a change from 1,224.38 to 2,423.41 (see Figure 2). The average of the S&P 500's annual return is 4.38%from 2001 to 2017, which illustrates that the Yale Endowment generally performed better than the S&P 500 Index over the late 17 years, even if it did not always beat the S&P 500 for some years including the year 2010, 2011, 2013, 2014, and 2017.

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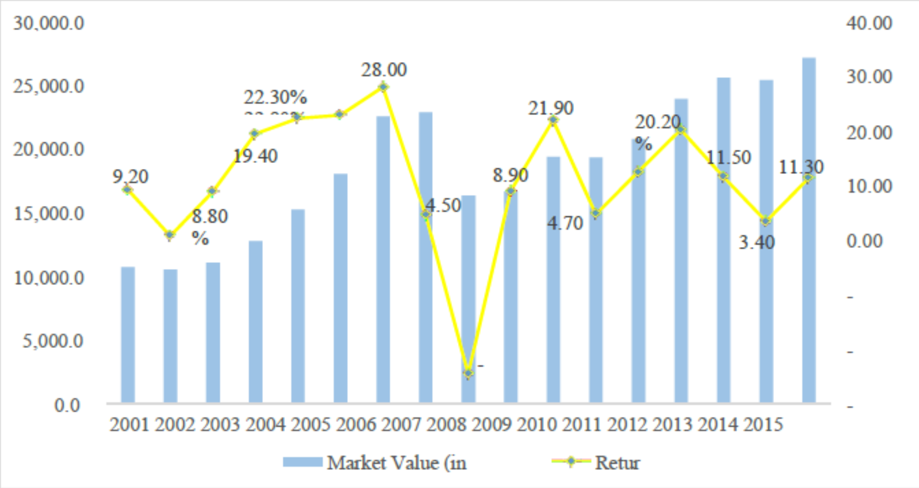

Figure 1. The Yale Endowment's market values and annual returns from 2001 to 2017

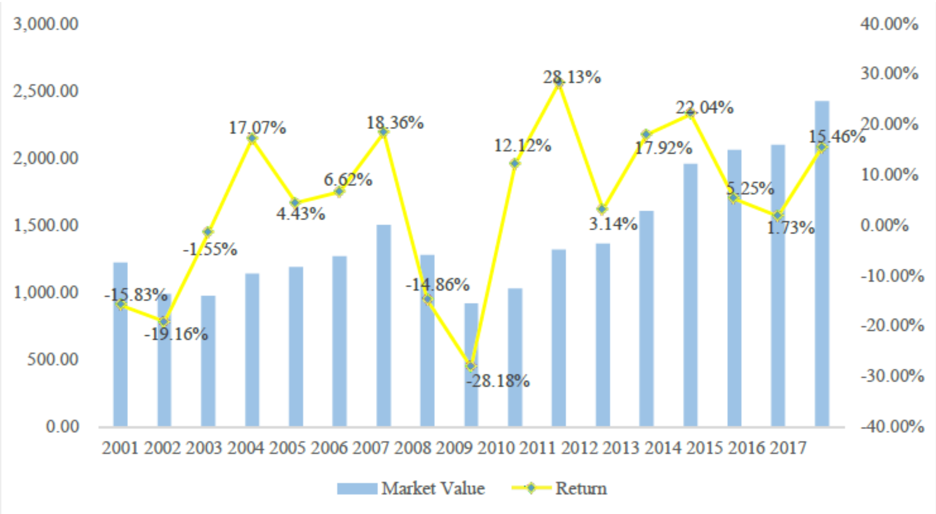

Figure 2. S&P 500 Index and its annual returns from 2001 to 2017

In 1985 when David F. Swensen first arrived at Yale, only $45 million of Yale's operatingbudget revenues came from the Endowment, which accounted for only 10% of the total budget revenues of Yale University in the same year.

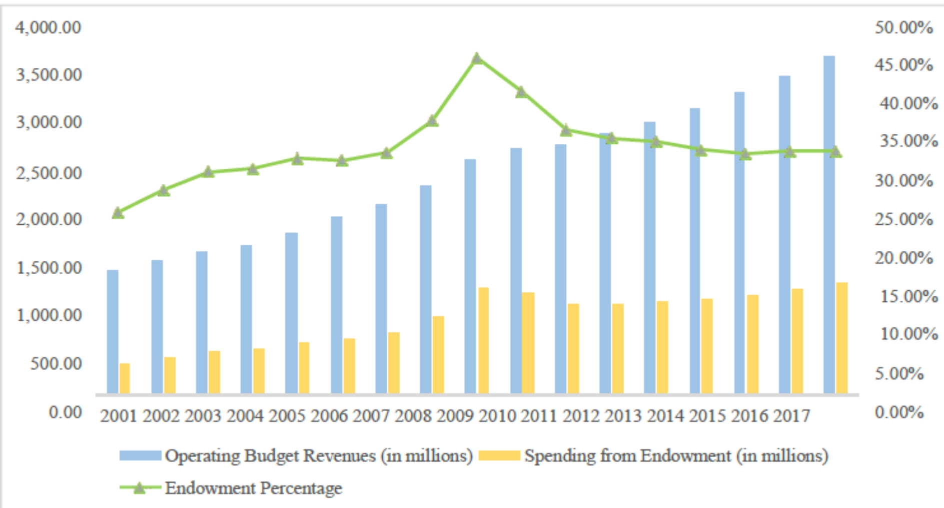

Figure 3. Support of the Endowment to Yale's budget revenues from 2001 to 2017

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In the 2017 fiscal year, there were $1,225.80 million dollars of the operating budget revenues from the Endowment, which accounted for 34% of the total budget revenues that year.Especially in 2009, as shown in Figure 3, although the market value of the Endowment itself was greatly reduced due to the global financial crisis, it did not affect the financial support of the Endowment to Yale University. The Endowment even accounted for 46% of the total budget revenues of the university.

As Charles D. Ellis said, therefore, the Endowment’s long-term return remains stable at a high level, which is always attributed to the Endowment’s asset allocation strategy.

3. Asset Allocation Strategy

3.1. Asset Allocation Strategy of the Yale Endowment

Swensen (2009) states that the asset allocation needs to combine the artistic judgments with the scientific quantitative methods, that is, a combination of qualitative and quantitative analysis. Investments based on the traditional asset allocation will not be controversial, but it may not be able to meet the specific purposes for Yale’s development. The Yale Endowment has been observed the outstanding performance over past years, which provides significant evidence to prove that the Yale Endowment’s uncommon way to investment is totally correct.

Swensen's investment model is mainly based on Markowitz's Portfolio Theory, of which the essence is not to put all the eggs in a basket. Different from the traditional investment strategy which tended to conservatively invest in U.S. equity (especially large blue-chip stocks)and U.S. bonds (especially U.S. government bonds), Swensen decided to adopt a new strategy to greatly improving Yale Endowment's earnings and shifted the focus to the alternative asset classes, like absolute return, real assets and private equity. Swensen was convinced that alternative asset classes can add more diversifying power since the various assets in the portfolio are less unrelated to each other. When the market goes down, the effect on various assets varies.

The invested assets in the Yale Endowment were initially divided into seven categories in 2001, consisting of absolute return, domestic equity, fixed income, foreign equity, private equity,real assets and cash. In 2011, the natural resources asset class was created and then the real assets class was divided into two parts and displayed under natural resources and real estate respectively. Since 2015, to be disclosed more detailed, the private equity class has been split into the leveraged buyouts class and the venture capital class. According to the 2017 report, absolute return takes up one fourth of the total invested assets, followed by venture capital, foreign equity, leveraged buyouts, real estate, and natural resources with the proportion of 17.1%, 15.2%, 14.2%, 10.9% and 7.8% respectively. Fixed income and domestic equity only occupy 4.6% and 3.9% respectively (see Figure 4).

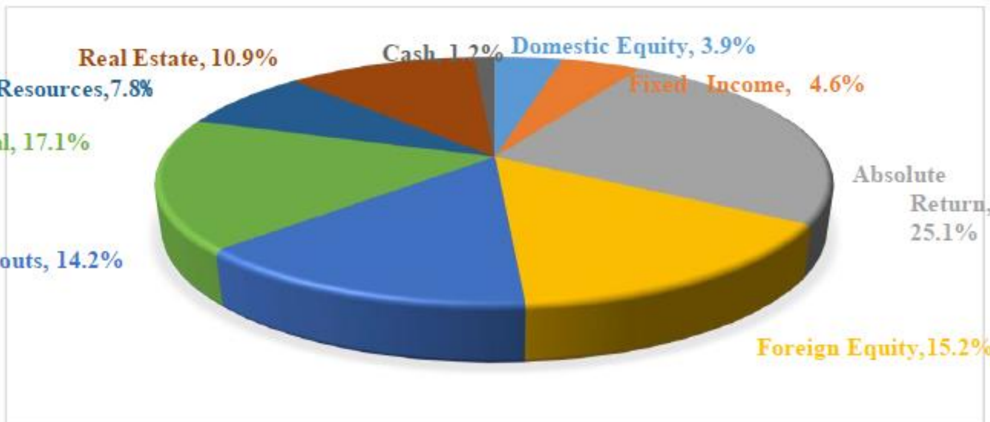

Figure 4. Actual asset allocation of the Yale Endowment in 2017

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Each year, the Endowment managers reassessed the expected return and risk of various asset classes based on the historical data and the actual economic conditions and made the target allocation for each asset class. Over the late 17 years, asset allocation structure of the Yale Endowment changed a lot (see Changes in actual asset allocation and target asset allocation of the Yale Endowment from 2001 to 2017 and Figure 6). The actual proportion of fixed income and domestic equity has significantly declined for 17 years, from 9.8% to 4.6% and 15.5% to 3.9% respectively. Both absolute return and foreign equity have gone up firstly and then gone down since 2001. Interestingly, the actual proportion of real assets has oppositely reduced and increased over the same period. Obviously, the actual proportion of private equity has extended from 18.2% to 31.3%. Otherwise, the actual proportion of cash was negative in 2008, 2009 and 2011. Cash is generally regarded as the risk-free asset and the Yale Endowment can enjoy the convenience of loans for educational institutions. Therefore, the Yale Endowment can borrow cash to increase the allocation of other assets, which explains why cash was negative for some time. No matter how the asset allocation structure has changed, it is obvious that more than 70% of the Endowment has been invested in the alternative assets.

3.2. Asset Allocation Strategy Compared with Peers

According to the Yale Endowment report, Yale's asset allocation strategy is much differentwith that of other educational institutions. On average, other educational institutions prefer allocating the investments to traditional assets including fixed income, domestic equity and foreign equity. (see Figure 5) Over the past 17 years, however, the proportion of domestic equity has declined from 43.3% to 20.7% while the investments in foreign equity has nearly doubled from 12.3% to 23.6%. In addition, the proportion of fixed income has dramatically dropped from 23.1% to 8.7%. It illustrates that other educational institutions are likely to follow Yale's strategy and gradually reduce the emphasis on fixed income and domestic equity.

In addition, other educational institutions have paid more and more attention to absolute return over the 17 years, with the proportion increasing from 9.1% to 21.8%. Private equity and real assets have also been more concerned over the same period, with the proportion increasing from 6.1% to 10.4% and 2.8% to 11.0% respectively. However, other educational institutions still allocate too few investments to these two asset classes on average compared with the Yale Endowment.

Therefore, the uniqueness of its investment asset allocation strategy is considered as one important reason why the Yale Endowment succeeds in the long term. Furthermore, the success of the Endowment fund is also due to the active management strategies for each invested asset class to a large degree.

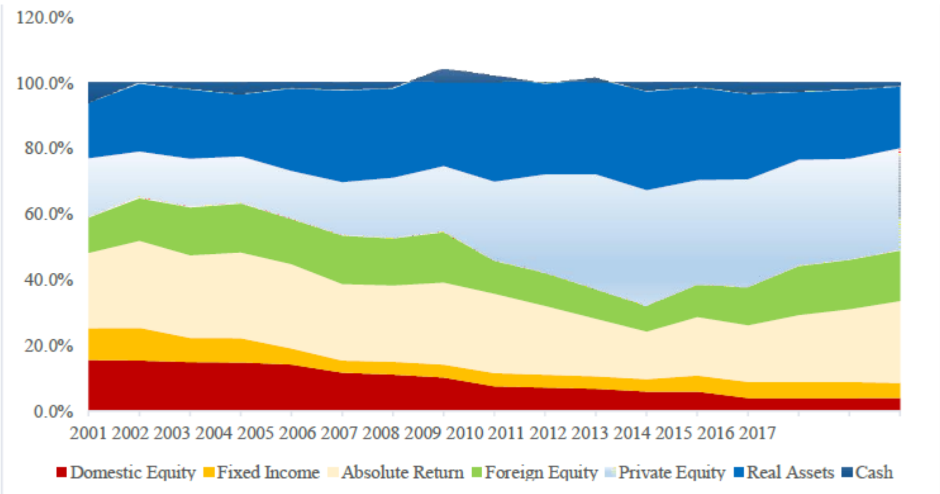

Figure 5. Changes in asset allocation of the educational institution mean from 2001 to 2017

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4. Performance for Each Invested Asset Class in the Yale Endowment

4.1. Domestic equity

Before 1990, U.S. domestic stocks accounted for more than 50% of the Yale Endowment.This kind of traditional asset allocation slowly changed after David F. Swensen took office, applying the unique diversified portfolios and active investment management to meet the specific purpose of the Endowment. As can be seen from Figure 6, compared with the passive benchmark Wilshire 5000 and the active benchmark Russell Median Manager Return, the long-term returns of Yale's domestic equity are more smooth and stable, which provides a stable financial support for Yale University's long-term development.

From Figure 6, the long-term return of Yale's domestic equity investment reached a peakin 2001. Over the late 17 years, the long-term return has been decreasing despite of the slightly increasing to 10.9% after the financial crisis in 2008, but it still cannot reach the previous level close to 20%.

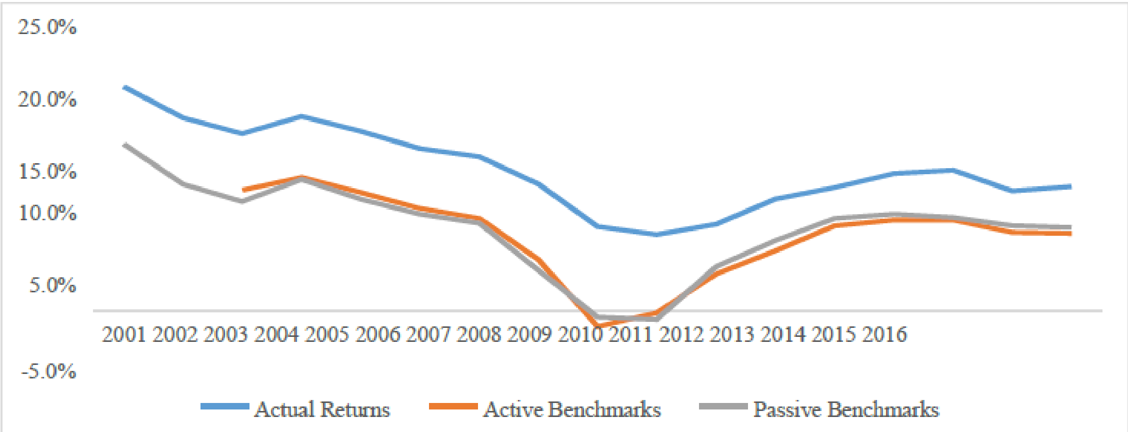

Figure 6. 10-year annualised returns for domestic equity from 2001 to 2017

According to the reports, Yale's expected return of domestic equity has been stable at 6%with the risk from 20% to 18% (see Figure 7). The actual return has declined over the time from 2001 to 2010 and reached the lowest point at 6.7% then, higher than the Yale's expected return. At the same time, the actual return of both active and passive benchmarks was negative.As Swensen mentions in his book, the return of traditional assets comes from the market naturally. Therefore, the outperformance provides convincing evidence that the active management of Yale Endowment manager is successful.

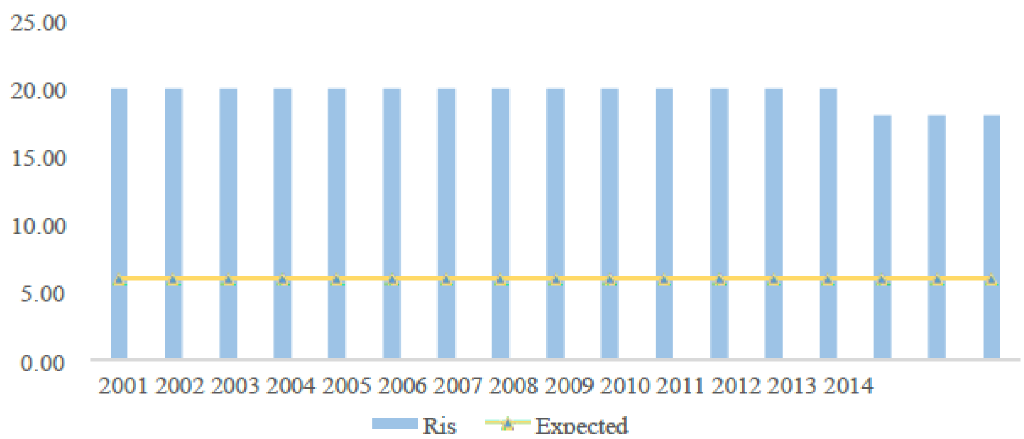

Figure 7. Yale's expected return and risk for domestic equity from 2001 to 2017

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It also illustrates that the U.S. domestic stock market developed slowly, which is the precursor to the gradual reduction of high-yield opportunity and the decreasing of the long-term investment returns in the current equity market. Therefore, it is necessary to devote more attention to the other developed or emerging countries. As a result, the proportion of domestic equity in the Yale Endowment has declined for years.

4.2. Absolute Return

Absolute Return is defined as an investment portfolio generated by fund managers using event driven-strategy and value-driven strategies. The event-driven strategy is mainly used in merging company, purchasing company, bankruptcy reorganizations, and company derivatives; the value-driven strategies are mainly used in hedging assets and securities investments.

Since 1991, absolute return has appeared in the asset allocation of Yale Endowment as a separate asset class, it was designed for diversifying the portfolio and generating high long-term returns. The proportion of absolute return had a relatively stable change from 2001, except a considerable recession in 2012. The proportion was adjusted to 26.5% in 2002, which is the highest percentage during 17 years, and was pulled down to 14.5% in 2012, which is the lowest during 17 years. On average, through the 17 years, absolute return accounted for nearly one-fifth of all assets. Absolute return is considered as an investment asset class with relatively high return and low risk. The Yale's expected return has decreased from 7.0% to 4.8% with risk down to 8.6% over the 17 years (see Figure 8).

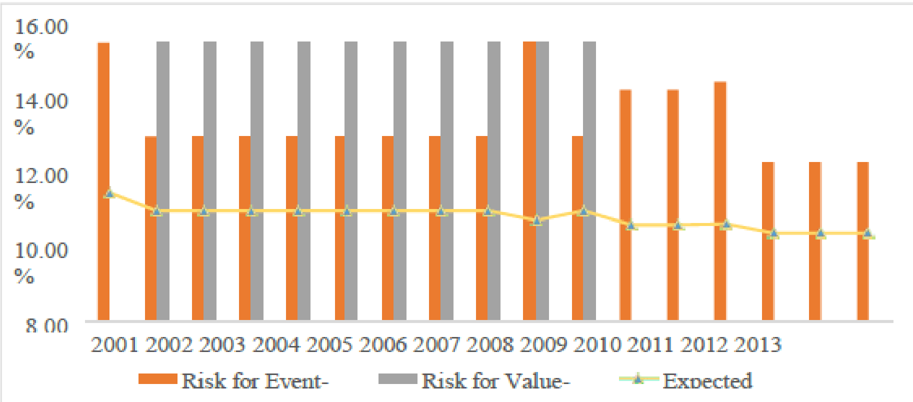

Figure 8. Yale's expected return and risk for absolute return from 2001 to 2017

For the late 17 years, the long-term return of absolute return investment has been higher than the expected return and market benchmarks due to the amazing active management even though it has decreased from 12.9% to 4.8%.

To eliminate the influence of market co-movements and create stable return with relative low risk, the Yale Endowment still chooses to put a relative large proportion of funds into absolute return.

4.3. Fixed Income

Fixed income assets of the Yale Endowment are mainly bonds. As the name implies, fixedincome provides stable return and greater certainty than any other asset classes. As a part of fixed income, the bonds diversify the portfolio, and help the portfolio to hedge against financialcrisis potentially due to the bonds has a low correlation to other assets.

Prior to 2002, fixed income assets accounted for approximately 10% of the fund. For the period from 2001 to 2017, as the proportion of alternative assets has increased, the investment of fixed income has a downward trend from 9.8% to 4.6% with the lowest point of 3.8% in 2006. The reason is that the long-term return of fixed income has been decreasing over the sameperiod. In

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addition, since the Yale's expected return for fixed income has declined to 0.5% with the risk of 3% in 2017, the fixed income investment is considered to be safe but less attractive.

4.4. Foreign Equity

For past 17 years, the Yale Endowment have maintained a proportion of about 10-15% in foreign equity investment, including in emerging markets and other developed countries. Because of the less high-yield opportunity in developed markets, the Yale Endowment has increased investment in emerging markets for recent years. The 2017 Yale's announcement shows that, the investment in emerging stock markets weighed 8.5% of the total portfolio, with the expected return of 7.5% and the risk of 23.0%, while the equity investment in developed markets took up 7.0% with the expected yield of 6% and the risk of 18%. Swensen clearly knows that finding investment in emerging markets is an important step in asset allocation since emerging markets mean more opportunities and higher yields than developed ones.

For the period from 2001 to 2008, the long-term return of foreign equity has gradually increased from 9.4% to 17.3%, significantly outperformed than the benchmarks. It illustrates that the Yale's active management strategy is much more effective than others.With a slight decline after the economic crisis, generally, the long-term return has remained in relative high level. However, both the long-term return and the proportion of foreign equity in asset allocation have experienced much volatility over the late 17 years. Thus, the Yale Endowment manager should continuously reassess the return and risk and take active management carefully especially when investing in emerging markets.

4.5. Private Equity

The Yale Endowment's private equity investment mainly includes venture capital and leveraged buyouts. Before 1992, the proportion of the private equity investment in the Endowment was less than 10%. Now it has become the asset class with the highest proportion of the Endowment. Private equity investment can significantly increase the portfolio returns but also the risks, with little impact on diversifying. According to the reports, recently the Yale's expected return for private equity is 10.5% with the risk at the level of 26.8% (see Figure 9). To be specific, the expected returns for leveraged buyouts and venture capital are 10% and 16%, with the risk of 23.6% and 37.8% respectively. Therefore, successful private equity investments need carefully active management.

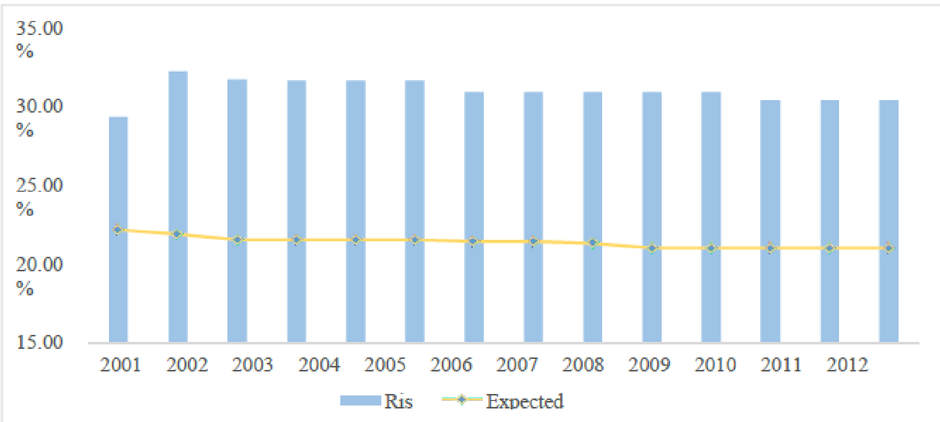

Figure 9. Yale's expected return and risk for private equity from 2001 to 2014

Since 2010, the long-term performance of private equity has went down sharply, slightly outperforming the benchmarks or even underperforming the passive benchmark in 2010 (see Figure 10). It is similar to the long-term performance of leveraged buyouts and venture capital recently (see Figure 11).

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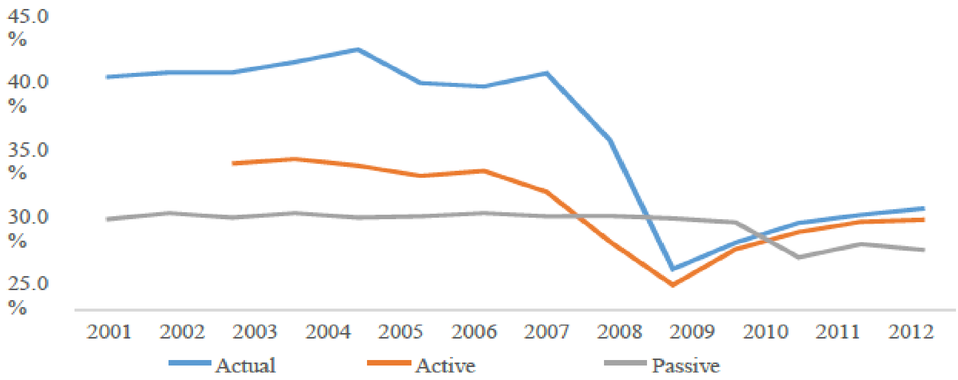

Figure 10. 10-year annualised returns for private equity from 2001 to 2014

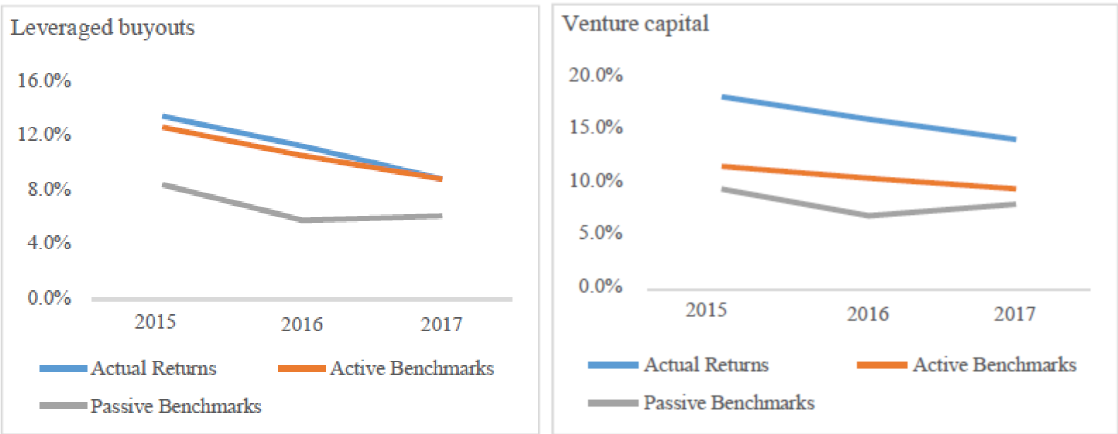

Figure 11. 10-year annualised returns for LBO and VC from 2015 to 2017

It seems that private equity now is much worse to invest than what Swensen writes in hisbook. Considering that private equity still accounts for a large proportion in the Endowment, whether it is still a good and correct choice need time to test.

4.6. Real Assets

The Yale Endowment's real assets investment mainly includes real estate and natural resources such as oil, gas and timberland. Real estate investment combines the characteristics of equity and fixed income since the value-added features are similar to stocks and the rental returns are similar to the fixed income. In addition, real assets have the characteristics of anti- inflation, high visibility and large cash flow but can also reduce the portfolio returns. Accordingto the 2017 report, the expected returns for real estate and natural resources are 5.5% and 6.5%, with the risk of 15% and 24.5% respectively.

From 2001 to 2011, the long-term return of Yale's real assets investment kept above 10% annually and outperformed the benchmarks all the time. Since 2012, the long- term performance of Yale's natural resources investment has declined from 16.2% to 5.8%, even blow its expected return. The long-term return of Yale's real estate investment has significantly underperformed the benchmarks since 2012. That explains the decreasing proportion of real assets in the recent asset allocation strategy of the Yale Endowment.

5. Has the Endowment Performed in Accordance with Yale's Goals?

5.1. Goals of Yale Endowment

Preserving purchasing power of endowments assets and providing substantial operating support are two goals of endowment funds.

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Purchasing power preservation represents the benefits of all generations. Effectivelymanaged endowments are able to provide sustainable support to institutions. Endowments are required to perform better than market because of regular outflows to institutions. Therefore, endowments need to invest in assets with high return. They also need to accept the accompanying high risk and associated high volatility.

Providing stable operating support reflects the demands of short-term budget of institutions. Institutional projects usually require regular supports. So, endowments are requiredto reduce the volatility of assets, suggesting lower risk and lower returns. External sources of income for universities and colleges usually come with explicit and implicit conditions to influence institutional behaviors. The higher the degrees to which endowment funds provide support for operations, the greater the ability of an institution to pursue its own goals. Endowment provides institutions with stable streams of money so that institutions can maintain independence from external pressures. Stable streams also lead to the financial stability of educational institutions. Under normal situation, high levels of endowment can enhance the quality of institutional revenue. If there is abnormal financial distress, endowment assets can play a role as a cushion. Endowment can support institutions either by borrowing externally or increasing rate of paying out. Sustainable endowments can help institutions improve ability to deal with unusual financial circumstances.

5.2. Spending Policy of Yale

The two goals come into conflict with each other. The spending policy of Yale plays a significant role regarding the trade-off between preservation of purchasing power and stabilityof flows to institutional operations. It adjusts spending in any given year gradually in responseto changes in the market value of endowment. The target rate for spending approved by the Yale Corporation currently stands at 5.25%. According to the smoothing rule, Endowment spending in a given year sums to 80% of the previous year's spending and 20% of the targeted long-term spending rate applied to the fiscal year-end market value two years prior. (Yale Endowment Report 2016) The market value of Yale endowment decreased 24.6 percent in 2009 due to financial crisis in 2008. At the same time, the spending from endowment increased 38.3 percent where Yale's spending policy acted as a cushion. Yale endowment enables administrators of Yale university to smooth the influence of financial shocks. Therefore, Yale University can be independent from external forces.

5.3. Performance of Yale endowment to reach the goals

Yale's Endowment generated an 11.3 percent return for the year ending June 30, 2017. Over the past twenty years, the Endowment grew from $5.8 billion to $27.2 billion. Yale's endowment returned 12.1percent annually over the 20 years ending June 30, 2017. Its performance exceeded its benchmark and outpaced institutional fund indices. Purchasing power of Yale endowment has been maintained well. The market value of Yale Endowment has dramatically increased at speed much faster than inflation. (Yale News, 2017)

In terms of providing sustainable supports, the spending from the endowment is the largest source of revenue for the Yale. In 2018, the amount is projected to be $1.3 billion, representing nearly 34 percent of the University's net revenues. The spending from endowment has dramatically increased over past 20 years, from nearly 200 million to 1.2 billion dollars. The spending deceased to 1108.4 million and 986.8 million in 2010 and 2011 respectively. However, endowment distributions to the operating budget have increased at an annualized rate of 9.2 percent over the past 20 years. (Yale News, 2017)

Good performance of Yale endowment helps university maintain a high educational quality, supporting faculty salaries and student scholarships. Yale endowment successfully provides the Yale University with stable operating support, allowing Yale University to resist

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unreasonable government and donor requirements. More available sources are available to Yale University. Better environment provides advanced facilities and attracts outstanding scholars. This leads to superior circumstance that contributes to the educational excellence of Yale University.

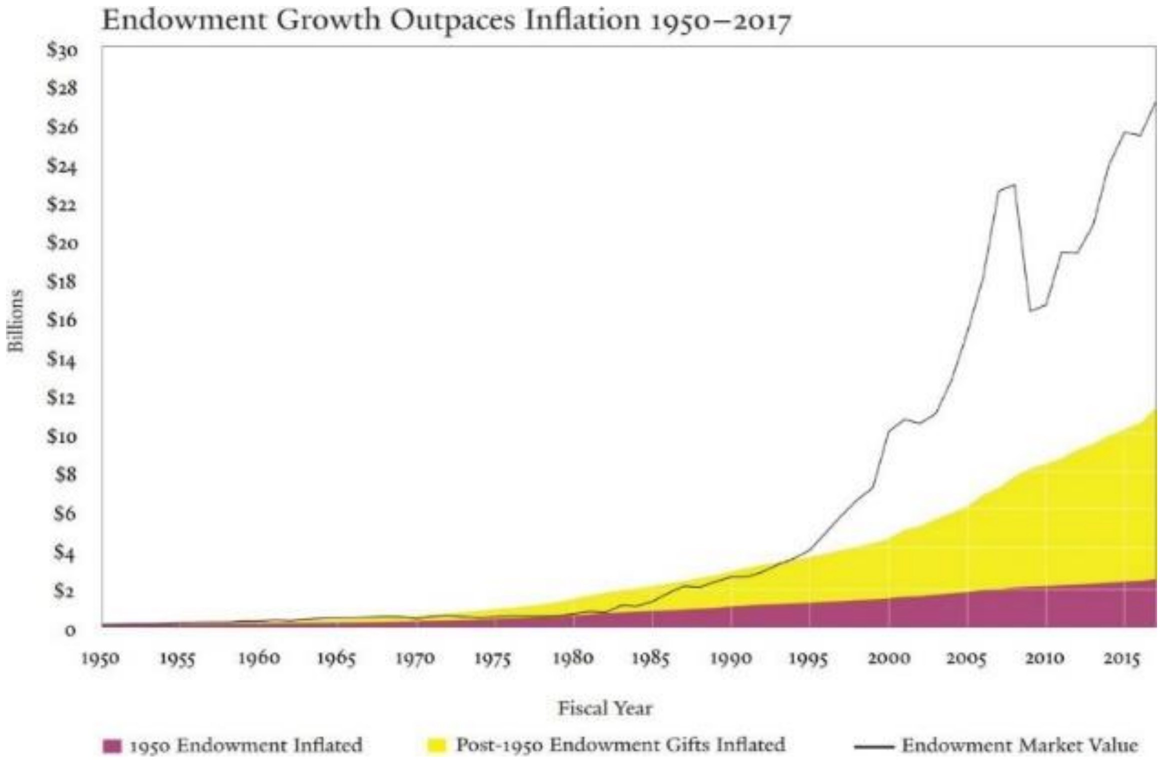

Figure 12. Endowment growth outpaces inflation

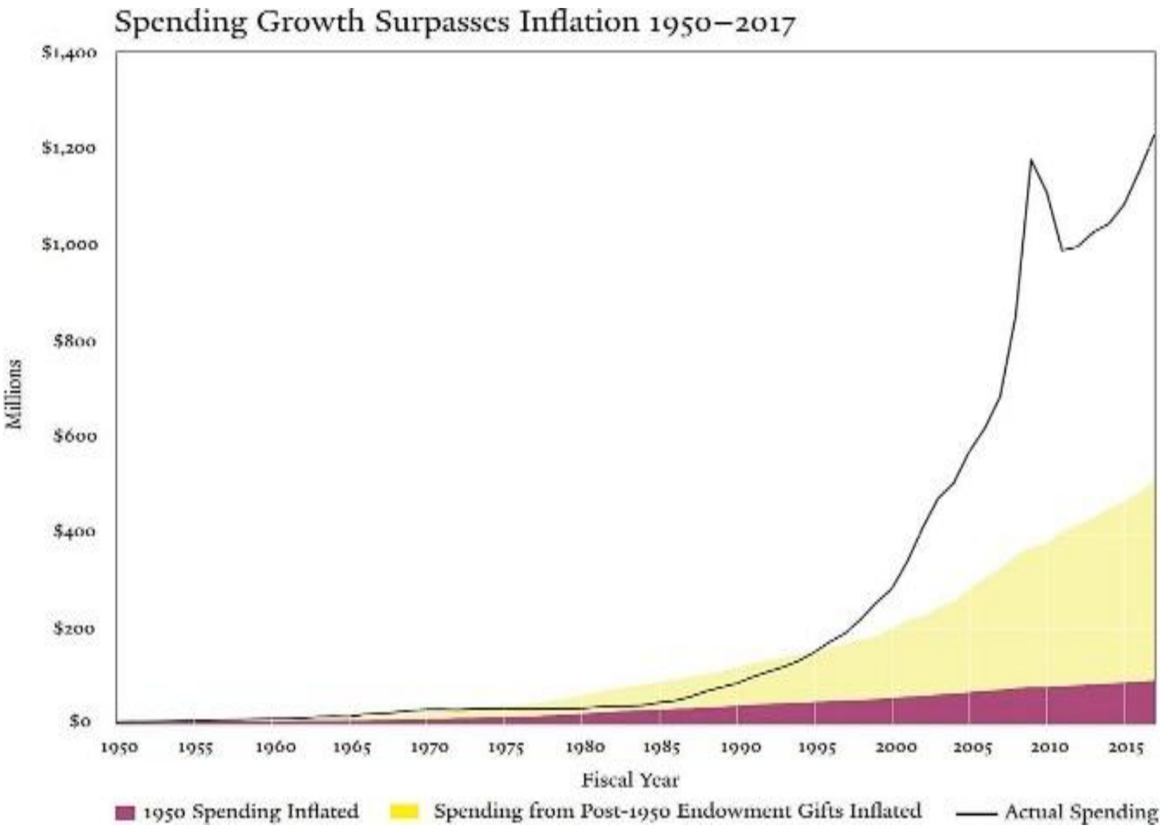

Figure 13. Spending growth surpasses inflation 1950—2017

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Endowment funds should provide institutions with great independence, increased financial stability, and the means to create a margin of excellence. Yale Endowment has performed pretty well in accordance with the goals of preserving purchasing power and providing stable operating support through its effective and flexible spending policy.

5.4. Non-Financial Information of the Yale Endowment Report

In addition to the financial performance of the Endowment, investment policy and spending policy, there exists significant information about the application of the Endowment, management information, and additional information about Yale's achievement. It is important to provide report users or readers with information about whether the investment strategy and application Endowment is effective and efficient for Yale's long-term development.

With the disclosure of Yale Endowment's application, the report illustrates how Endowment funds have been spent for a particular purpose. From 2001 to 2017, the proportionsof each purpose are nearly unchanged (see Figure 14), and professorships, scholarships and miscellaneous specific purposes occupy a large proportion. The significant support for professorships, teaching, and lectureships shows that Yale Endowment attaches great importance on teaching quality. As well, Yale Endowment proposes a significant amount of funds for scholarships to provide financial aids for student. All of them will have important impact on Yale's future development.

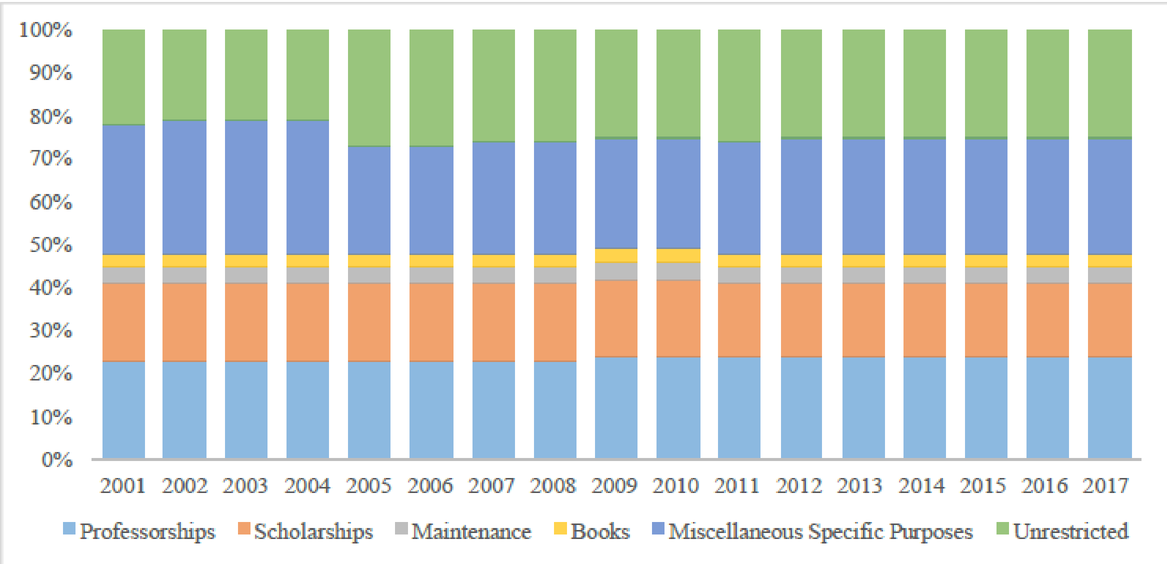

Figure 14. Application of the Yale Endowment from 2012 to 2017

Moreover, the reports provide additional information about Yale's achievement supportedby the Yale Endowment (see Appendix 1). This information indirectly verifies the successful of the Endowment, providing convincing and useful evidence about the great benefits from the Endowment.

6. Conclusion

The success of Yale Endowment is not an accidental phenomenon, and the investment experience of Yale Endowment is well summarized in "The Innovation Road of Institutional Investors".

In investment managers selecting, Yale university endowment funds have been putting the character of the fund managers as the first standard of choosing them in principle. Swensen's emphasis on the basic idea is the pursuit of a long-term, sustainable investment risk adjusted

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return, asset allocation drive investment returns, strict assets rebalancing strategy and avoiding to choose operation. On the other side the Yale Endowment encourages contrarian thinking, attaches importance to investment in alternative assets, and favors the selection of external fund managers who are innovative, specialized and contrarian.

The successful experience of Yale endowment fund in asset allocation not only provides a reference for the development of endowment fund, but also a reference for the general institutional investors in asset allocation.

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Appendix 1. Additional information from the Yale Endowment Report

2001	**1. Yale's Athletics Endowments** **2. Active Management of Domestic Equities** **3. Liquidity** **4. Endowment Spending and Investment Goals** **5. The Origins of the Yale Endowment** **6. Some Yale Endowment Firsts**
2002	1. Policy Asset Allocation Targets 2. James Tobin, 1918–2002 3. Foreign Equity 4. Science and Technology at Yale 5. Some Important Yale Endowments in the Sciences and Engineering
2003	1. Yale's Endowment and the University's Debt 2. Real Assets 3. The Global University: Endowment Support for International Programs 4. The Yale University Art and Library Collections
2004	1. History of Yale's Spending Policy 2. 2004 Change in Spending Policy 3. Yale Corporation Investment Committee 4. Endowed Funds for Prizes
2005	1. Gifts and Endowment 2. Student Activities 3. Policy Asset Allocation Targets 4. Liquidity 5. Yale's Schools for the Arts 6. History of Yale's Spending Policy 7. Degree of Investment Opportunity
2006	1. Utility of Diversification 2. Futility of Diversification 3. Unusual Gifts 4. Endowed Funding for Building Maintenance 5. The Capital Replacement Charge 6. Yale Law School and the Endowment
2007	1. Yung Wing and the Chinese Educational Mission 2. The Yale-China Association 3. Endowed Support for Yale-China Exchanges 4. Chinese Art at Yale 5. President Hu Jintao and the Yale 100 Delegation 6. The Qualified Foreign Institutional Investor Program 7. Yale and China Joint Programs
2008	1. Calendar-Year 2008 Update on Endowment Performance 2. Yale's Residential Colleges—A Timeline 3. Endowed Funding for Residential Colleges
	4. Leading the Colleges 5. Residential College Eponyms 6. The Berkeley College Endowed Mastership 7. Other Support for Berkeley
2009	1. Fiscal 2009 Performance 2. Sustainability at Yale 3. Endowed Support for Environmental Studies 4. Green Ventures 5. Green Investments in Emerging Markets 6. Timber Investments 7. Yale's Recycling Programs
2010	1. Gifts and Endowment 2. Policy Asset Allocation Targets

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	3. Diversification and Its Long-Term Benefits 4. Liquidity 5. History of Yale's Spending Policy 6. Degree of Investment Opportunity 7. Illiquid Asset Valuation
2011	1. Separation of Real Assets into Natural Resources and Real Estate 2. Philanthropists among Our Managers 3. Manager Characteristics 4. Investments Office Alumni 5. Yale Investments Office Staff 6. Office Culture 7. David Swensen and President's Economic Recovery Advisory Board 8. Investment Committee
2012	1. Disciplined Long-Term Investing 2. Asset Allocation and Active Management 3. Opportunity for Active Management 4. Active Management and Career Risk 5. Manager Attributes
2013	1. The Yale Model 2. Liquidity 3. The Death of Alpha? 4. Lessons from the Crisis 5. Institutions versus Individuals 6. Nobel Prize Winners at Yale 7. Yale Rallies Behind Its Financial Steward
2014	1. Current Yale Leaders 2. Recent Yale University Presidents 3. John W. Sterling's Bequest
2015	1. Thirty-Year Performance 2. Entrepreneurship, Technology, and Yale 3. Yale Alumni Venture Capitalists
	4. Yale Alumni Entrepreneurs 5. Entrepreneurial Organizations 6. Yale Programs
2016	1. Financial Aid at Yale 2. Beyond Financial Aid 3. Net Performance Matters 4. Yale Fee Structures
2017	1. Endowed Funding for Residential Colleges 2. Yale's New Residential Colleges 3. Financial Aid 4. Active Management of Endowment Assets 5. Manager Sourcing