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UNIVERSITY ENDOWMENTS
A PRIMER

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A Primer

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CFA Institute
Research
Foundation

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Endowments have provided critical support to many not-for-profit institutions. Some have been in existence for an astonishingly long time. For example, Stift Klosterneuburg, a monastery near Vienna, was endowed by Markgraf (Count) Leopold III in 1114. The valuable assets given then included real estate and vineyards, which still support the monastery today (Cejnek, Franz, Randl, and Stoughton 2014).

When it comes to university endowments, US institutions have been the pioneers and role models. This distinction first stems from the fact that the private sector has a greater role in higher education in the United States than elsewhere. The second reason is the regulatory leniency given to endowments in the United States compared with many other countries. Third, the United States has a strong private philanthropic culture, whereas public spending on charitable causes is more common in continental Europe, especially since World War II.

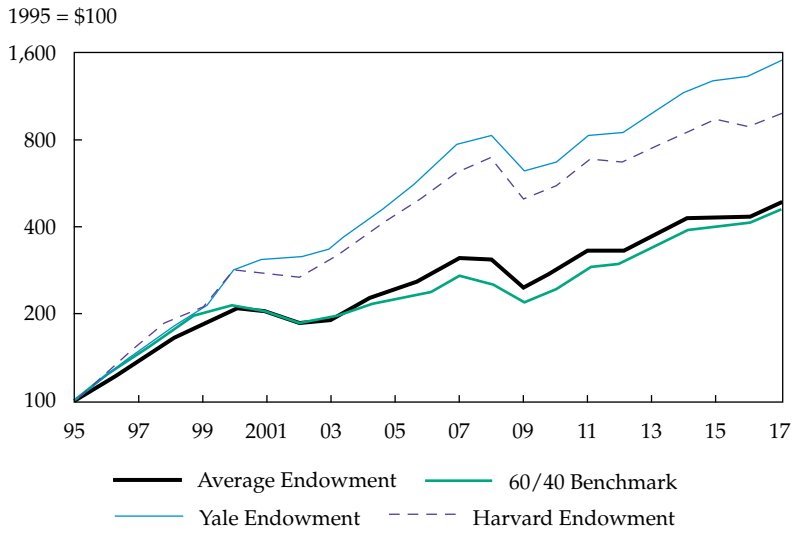
These structural advantages led to the buildup of large US university- and college-owned funds. In *Pioneering Portfolio Management: An Unconventional Approach to Institutional Investment*, David Swensen (2009) noted three advantages provided by the accumulation of money at these institutions: (1) institutional independence, (2) operational stability, and (3) the facilitation of educational excellence.

In a 2017 study, the National Association of College and University Business Officers (NACUBO) found that the assets under management of all 809 US college and university endowments surveyed added up to $566.8 billion as of June 2017.[1] The average endowment size was approximately $700 million (median $128 million). These facts underscore the importance of endowments as institutional investors. NACUBO (2017) also showed that cash flows from these endowments accounted for 7.9% of the operating budgets of universities on average (median 2.5%) in fiscal year 2017. This figure varies with respect to the size of the endowment. Although endowments with assets above $1 billion contributed 12.1% (median 4.4%) to the operating budget, small

[1]Most of the data were taken from the National Association of College and University Business Officers (NACUBO 2017). NACUBO covers the majority of US university and college endowments, with 809 participating institutions in fiscal year 2017. We also used the publicly available annual endowment reports of various institutions.

We appreciate the helpful comments and ideas of Engelbert Dockner and thank him for his inspiring discussions on this topic. We thank Georg Cejnek, Kenneth Redd, and Otto Randl for providing data and Laurence Siegel and Lukas Zahrer for their feedback.

FIGURE 1. PERFORMANCE OF LEADING AND AVERAGE US UNIVERSITY ENDOWMENTS COMPARED WITH BENCHMARK, JUNE 1995–JUNE 2017



Sources: We used NACUBO-Commonfund reports and the publicly available annual endowment reports of the respective institutions for the return data of the endowments. For the 60/40 benchmark, we used total return data from Bloomberg.

endowments with less than $25 million covered only 3.5% (median 0.3%) of their operating expenses, on average.

Nowadays, these endowments are highly diversified funds, with some of them implementing sophisticated strategies based on state-of-the-art financial concepts. This practice is reflected by the consistent outperformance of the leading endowments—for example, the endowments of Yale University and Harvard University, as shown in **Figure 1**. Their annual total returns from the end of June 1995 to the end of June 2017 were 13.1% and 11.0% for Yale and Harvard, respectively,[2] with Sharpe ratios of 0.76 and 0.58, respectively.[3] In comparison, the average endowment had an annual return of 7.4% and a Sharpe ratio of 0.41 over the same period, a result very similar to that of a standard 60/40 portfolio, which had an annual return of 7.2% and a Sharpe ratio of 0.40.[4]

Like other institutional investors, endowments can be roughly categorized as leaders and followers. Leading endowments try to implement

[2]The performance data were taken from the publicly available annual endowment reports of the respective institutions.

[3]Note that the returns and the Sharpe ratios were computed on the basis of annual data, which could result in an upward bias of the Sharpe ratios since the volatility might be underestimated. The 12-month US LIBOR was taken as a proxy for the risk-free rate.

[4]The 60/40 benchmark was constructed using the S&P 500 Index as a proxy for the US equity market and the Bloomberg Barclays US Treasury: 1–3 Year Total Return Index as a proxy for the US bond market. The weights are 60% equities and 40% bonds.

state-of-the-art financial concepts and explore new asset classes and strategies to excel over the long term, whereas followers adopt strategies that have been previously identified. This is a plausible reason why the Yale and Harvard endowments, both leaders, have outperformed the average (follower) endowment by roughly 3–5 percentage points per year.

Before taking a closer look at the investment styles that potentially account for the performance difference, we will focus on the special features of endowments and the constraints they face. We will also discuss in more detail the fundraising and spending strategies and reflect briefly on the governance structure of these institutions. This discussion will help show why some university endowments lead and others do not.

THE DISTINCTIVE FEATURES OF ENDOWMENTS

Endowments are usually intended to provide financial support to a university in perpetuity. The other type of institutional investor that is most similar to endowments in this regard is the family office, with the main difference being that its mission is not philanthropic.

The special characteristics of university endowments are (1) the permanent transfer of wealth from donors to the institution, (2) their perpetual time horizon, and (3) the special network a university enjoys through its stakeholders. It is worth looking more closely at these characteristics to better understand university endowments in general.

No Fund Withdrawals

Money given to the endowment will be withdrawn not by the donor but only by the university itself. This feature contrasts with investment funds, where money is usually transferred only temporarily, for fund management. The portfolio managers of endowments need not fear that investors will withdraw funds when markets are in a downturn.

However, when prices stumble badly, risk premiums soar. During such times, it may prove especially lucrative to invest if one has a long-term perspective. The only two obstacles are the liabilities of the endowments, which need to be met, and potentially difficult discussions with the trustees of the endowment. Commitments to make distributions to the university out of the endowment might mean that managers must sell at the worst time and that investment opportunities cannot be fully embraced. Trustees might impose myopic decisions on management in difficult market situations, if management has not panicked already.

Time Horizon

With a perpetual time horizon, an endowment can exploit opportunities many other investors cannot make use of, such as long-term investments. These cannot be sold (or bought back again) easily or without facing substantial transaction costs, and an endowment can earn an illiquidity premium on such investments. However, the existence of such a premium must be well understood by the stakeholders of the university and especially by the trustees of the endowment. Otherwise, there is (again) the risk of divestment exactly at the wrong time, which might result in high costs for the university.

Network

A university has a vast network of stakeholders associated with the institution. These include active and former students, active and former

faculty and staff and their contacts, and companies that engage with the university. This network can be exploited for fundraising and also for consulting purposes. Such a network can even provide contact with lesser-known investment boutiques and "outsourced chief investment officer" (OCIO) firms that would not be accessible otherwise.

It is important to note that these *potential* advantages will only become *actual* advantages if all (responsible) stakeholders of the endowment understand and implement them.

MASTERING THE MAGIC TRIANGLE

To maximize not only the short-term but also the long-term contributions to university budgets, endowments need to get three things right: (1) the fundraising strategy, (2) the spending strategy, and (3) the investment strategy. All of these must fit the goals of the university—enforced via the governance and management structure of the endowment, as depicted in **Figure 2**—and will constantly be monitored by the stakeholders of the institution, including students, professors, and alumni. Some trade-offs among fundraising, spending, and governance have a potentially large impact on the choice of investment strategy. These trade-offs will be discussed later.

Fundraising Strategy

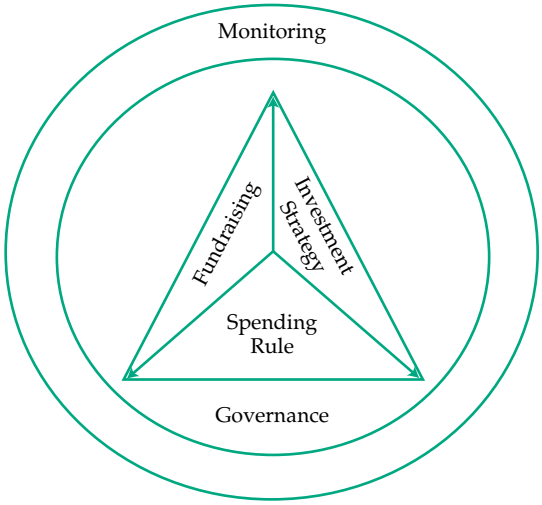
Here we want to highlight the importance of an adequate fundraising strategy. Contributions to the operating budget from an endowment and from fundraising combine to serve as the primary sources of inflows other than tuition fees, government support, and contracted research.

It is essential to build and maintain a well-functioning fundraising team and process that allows the institution to generate a steady inflow stream. Part of this inflow might be used directly for current expenses, whereas other inflows are specifically designated as endowment gifts and cannot be spent except over time. For example, in fiscal year 2017, 4.5% (median 2.1%) of the operating budget of the institutions studied by NACUBO (2017), on average, came directly from donations without passing through the permanent endowment.

Following Heinzel (2004) and Rogers and Strehle (2005), the key to successful fundraising is a good and long-term relationship with donors, transparency and communication with stakeholders, and preservation and adaptation of the fundraising infrastructure. One should not build a fundraising infrastructure before a fundraising campaign is scheduled to start, only to dismantle it thereafter. A rule of thumb is that it takes about five years from the first interaction with a potential donor until a large contribution is made to the university. Moreover, if a donor makes one contribution, it is likely that he or she will make additional ones. Without a well-functioning fundraising strategy, however, large donations are unlikely to occur.

When the donor decides to give money to the endowment, he or she usually intends the fruits of the donation to support, on an ongoing basis, the mission the money was given for. Examples of long-term support are the funding of professorships, institutes, and grants. To be able to support these long-term projects, the endowment must follow an investment strategy that earns enough return to cover not only distributions to the projects but also inflation, a risk buffer against market shocks, and the cost of managing the funds. The rate at which money is distributed to the projects is defined in the spending rule, which we discuss next.

FIGURE 2. THE ENDOWMENT MAGIC TRIANGLE



Spending Strategy

Donors want to be sure that their donations support the mission the donors gave the money for. How much an endowment distributes to the operating budget is determined in the spending rule. Coming up with a sustainable spending strategy is as important as thinking about the right investment strategy.

There is a potential conflict between the investment and spending strategies. For example, to maximize the long-term endowment value, it is best to spend little of the endowment when markets are stressed. That is usually the time when investment opportunities are best. But to fulfill the university's mission and the purpose the money was donated for, it is sometimes better to increase spending as a percentage of the endowment level, keeping the dollar value of the distributions more stable than they would ideally be from an investment perspective. During distressed market conditions, the endowment value will most likely have suffered a loss, reducing the absolute spending level if a strict percentage-of-market-value spending rule is followed.

This conflict is described in the paper "Why I Lost My Secretary," by Brown, Dimmock, Kang, and Weisbenner (2010). The authors discussed the reaction of leading university endowments to the global financial crisis in 2008 and the large loss in endowment values around that time. Applying a pre-determined spending rate on a reduced capital stock means less money available to the operating budget, which could lead to some projects being cancelled—or some "secretaries being fired." Increasing the spending rate as a percentage of market values might be worth considering during these times. However, if the investment strategy includes a lot of illiquid assets or assets believed to be liquid but that turn out to be illiquid during stressed times, the buffer offered by raising the spending rate (effectively substituting the university's accumulated endowment wealth for market returns) becomes more theoretical than practical.

TABLE 1. TYPES OF SPENDING RULES AND FREQUENCY OF USE

		Percentage of Institutions Following the Rule		
Rule	Description	Average	⟩ $1 bn	⟨ $1 bn
Decide each year	Spending decided each year	9%	6%	9%
Spend all current income	Current cash flows (e.g., dividends and interest)	3%	2%	3%
Inflation banded	Last year's spending plus inflation, with upper and lower bands depending on the endowment value	5%	12%	4%
Moving average	A pre-specified percentage of a moving average of the endowment's market value—usually based on the past three years	73%	48%	76%
Weighted average or hybrid method	Combination of, for example, 20% of the inflation rule and 80% of the moving average rule	9%	21%	7%
		Spending as a percentage of market value		
Average spending rate		4.4%	4.8%	4.4%

Source: Data are from NACUBO (2017).

The fact that it is not easy to determine the "correct" spending rate is reflected in the large variety of different spending rules. Using fiscal year 2017 data from NACUBO (2017), **Table 1** lists and describes the most important spending rules.[5]

Table 1 shows that 73% of the institutions used a simple moving average method to determine their spending rate, whereas only a small minority, 3%, spent their current income. This fact indicates the importance of a smooth spending rate in fulfilling an institution's long-term financial obligations. Institutions with larger endowments tended to use more-sophisticated spending methods. For example, 12% of institutions with endowments larger than $1 billion used a banded inflation rule and 21% used a hybrid rule. In comparison, only 4% of endowments smaller than $1 billion used the banded inflation rule and 7% used the hybrid method. On average, only 9% of all institutions decided on an appropriate spending amount each year. The average spending rate in fiscal year 2017 was around 4.4%, with a notable amount of dispersion depending on the endowment size. The largest endowments spent the most, 4.8%, whereas the spending rate for the smallest endowments (under $25 million)

[5]Note that multiple answers for each institution are possible; therefore, the percentage figures do not have to sum up to 100%.

was significantly lower—4.0%. During the last decade, the average effective spending rate was in a weak downward trend, declining from 4.6% on average in fiscal year 2007 to 4.4% in fiscal year 2017.

Governance Structure

The three key elements for successful endowments—fundraising, investment, and spending strategy—are embedded in the governance structure of the endowment. The structure varies among institutions but often consists of the following legal entities: the board of trustees of the endowment, the investment committee, and the endowment's operating investment management staff.

The board is the most important strategic body of the endowment, deciding who is on the investment committee and setting investment objectives and spending rules. The board will also be consulted when a major change in the endowment strategy is contemplated or a large fundraising campaign is launched. With a fundraising campaign, the trustees' network can be key.

For the strategic asset allocation and investment strategy decisions, the investment committee is the relevant body. The investment committee will also be responsible for choosing asset managers. This decision might be executed by either hiring in-house managers or giving investment mandates to external asset management firms or even to a single OCIO firm that uses subadvisers for the various asset classes. It is now very rare for fund management to be done in-house.

With respect to board composition, Brown, Dimmock, Kang, Richardson, and Weisbenner (2011) noted that, on average, two-thirds of board members serve as voting members of the investment committee. About 90% of the average investment committee are donors, most of whom have business experience. About half of the members are alumni of the university. Interestingly, the presence of university employees reduces the allocation to risky assets, and a higher fraction of donors translates into a lower exposure to alternative investments.

Especially for universities that have not yet set up an endowment or even a fundraising strategy, a transparent governance structure and an open communication policy might help overcome a lot of potential criticism. This is especially true in countries where an endowment culture is just about to emerge.

INVESTMENT STRATEGIES OF ENDOWMENTS

We now turn to the investment strategies of endowments, which are mainly influenced by the endowment's available resources and limitations. These resources can be broadly categorized as follows: (1) the size of the endowment, (2) the availability of know-how, and (3) the network of the institution. The availability and limitations of these will determine the choice of an institution's investment strategy.

Endowment Size

Not all asset classes and strategies are investable for endowments with small amounts of capital, nor will the full range of highly qualified investment managers and investment boutiques be accessible to them—at least not at reasonable costs.

Although the size of the endowment does not greatly influence the overall expense ratio, which averages around 125 bps across endowments, the composition of the costs varies greatly with respect to size. In short, the bigger

the endowment, the higher the proportion of management and incentive fees and the lower the operating costs (such as audit costs).

Know-How

Managing money is not a trivial task. It requires know-how in accessing prudent strategies that generate the returns necessary to fund spending, to cover inflation, and to earn some form of surplus or risk buffer for withstanding market shocks. This know-how either must be available in-house or be made accessible by hiring consultants, assigning investment mandates to a group of carefully selected external asset-class managers, or hiring an OCIO firm to take over the day-to-day management of the institution's whole portfolio, subject to periodic (usually quarterly) oversight by the trustees. Although external management of some kind simplifies the task facing the institution, hiring qualified consultants, a group of external managers, or an OCIO manager is also not free of pitfalls and requires specialized know-how.

Network

Some universities might find it helpful to activate their own networks to gain access to qualified asset managers or specific investment opportunities.

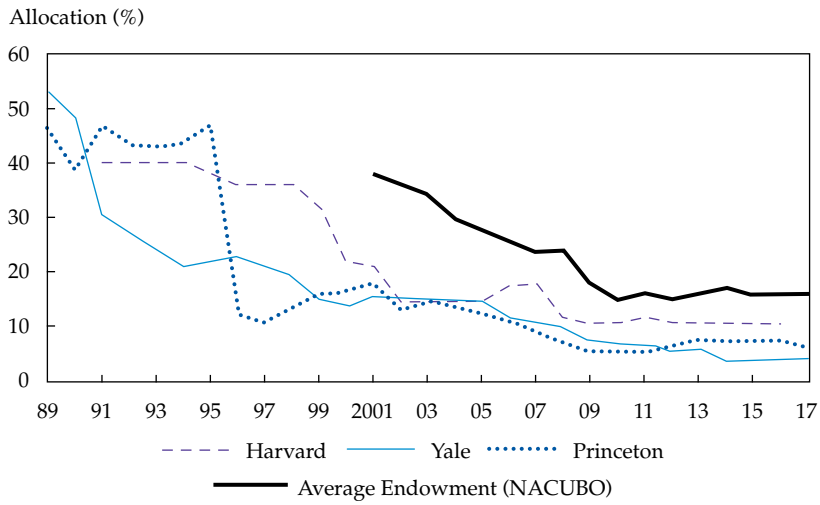
To understand what a university's network can add, consider the university's alumni. Over the years, some of them may have become very successful in the business world or may have earned leading positions in investment houses. If the university still enjoys a good relationship with these alumni, it could lead to interesting investment opportunities for the endowment. Another option is that such a network can open doors to specialized investment houses, investment managers, and funds that might not be investable to the endowment otherwise. Such a network can also help in identifying those funds that truly add value. One must be careful when pursuing this approach to avoid the appearance of self-dealing or favoritism that could negatively affect the image of the university.

Of course, this network effect is not limited to the university's alumni but is also supported by professors and other people associated with the university. These individuals could potentially also serve on the endowment's board or take on an active asset management function.

Trying to achieve anything beyond the endowment's intrinsic ability will most likely lead to underperformance relative to other institutions and relative to an appropriate benchmark. This underperformance will be caused by high costs, poor investment outcomes, or a combination of both. The consequence of such underperformance is smaller (absolute) distributions to the operating budget of the university, which could, in turn, cause the university to lose out in competition among its peers, both academically and financially.

The pressure to achieve above-average performance naturally translates into some type of trend following. This issue of peer pressure and tournament behavior is described widely in the literature (see, e.g., Brown, Harlow, and Starks 1996). A question that arises is why this behavior should be different for such institutional investors as endowments than for other investors. Since it is difficult to get the confidential data needed from endowments for such an analysis, Kranner, Stoughton, and Zechner (2019) used a partly controlled setting based on student-managed funds as a proxy for the incentive and organizational structure of endowments. They discovered the existence of a tournament effect, indicating that

FIGURE 3. DOMESTIC (US) EQUITY ALLOCATION OF LEADING AND AVERAGE US ENDOWMENTS, 1989–2017



Sources: We used data from NACUBO-Commonfund reports and the publicly available annual endowment reports of the respective institutions for the asset allocation of the endowments.

managers who are underperforming change their risks and trading strategies to try to improve their performance relative to other "peer" institutions.

Goetzmann and Oster (2012) documented the effect of trend following by showing that the Yale University endowment started to shift its assets away from domestic (i.e., US) equities toward alternatives in the early 1990s. This strategy was also followed by Princeton University in the mid-1990s and spread to Harvard University in the early 2000s.[6] The interesting point is that only thereafter did the average endowment follow by starting to adjust its asset allocation, as shown in **Figure 3**.[7] This is a good example of the follower–leader effect discussed earlier.

Following an already established investment trend is likely to create disappointment for an institution. First, the leader institutions will have already earned the easy-to-achieve returns, and the going-in prices of the assets will be high compared with the original situation that caused the leaders to invest. Second, any asset class or strategy requires resources: deployable funds, know-how, and (in some cases) a specific network. Think about private equity and other alternatives. These are popular among the leader endowments, such as Harvard, Yale, and Princeton, which had the resources needed to access nonstandard asset

[6]We used data based on the annual endowment reports for Harvard from 2005, for Yale from 1996, and for Princeton from 2004 onward. Because of data limitations, we used data from Goetzmann and Oster (2012) for the periods before the years mentioned.

[7]Starting with fiscal year 2017, Harvard Management Company stopped providing detailed information about its actual endowment asset allocation in its annual fiscal report.

classes and alternative investment strategies before they were popular.

However, just buying a fund labeled "private equity" or "alternative" without these resources or after the opportunity has been widely exploited does not guarantee good performance. It is well documented in the literature that the average fund manager does not positively contribute to performance—especially *after costs*—in either alternatives or conventional investments. For a discussion of this topic, see Berk and Green (2004), Chen, Jegadeesh, and Wermers (2000), and Daniel, Grinblatt, Titman, and Wermers (1997).

Investment Styles

Choosing an investment style relates only to the part of the portfolio that is freely investable. A large number of institutions own their student housing, libraries, and other real estate closely attached to the university, and these assets can theoretically be listed in the endowment allocation. It is very unlikely that the institution would sell these to take advantage of other investment opportunities. However, it is unusual, at least in the United States, to consider the physical plant of the university as part of the endowment. It cannot possibly be counted for the purpose of investment performance calculation and comparison.

Most endowments do not reveal or report their specific investment styles. However, based on interviews and from a normative point of view, three stylized investment approaches are available to endowments. Each approach requires a given amount of size, know-how, and network. These approaches may very well be mixed.

If all three resources are scarce, then minimizing costs and maximizing diversification are crucial to the success and stability of an endowment, which implies that an indexed or *passive market approach* should be chosen.[8] This advice is supported by Barber and Wang (2013), who performed a style attribution analysis of US endowments. They showed that the performance of asset-class benchmarks (passive investment indexes) explained up to 99% of the return variation of endowments, on average, with no significant alpha remaining.

As endowments grow in size, their investment opportunities also grow. For example, it might make sense for medium-sized and large endowments to use *systematic strategies* and diversify among them. A systematic strategy could be based on equity or fixed-income factors (say, value or momentum) or on macroeconomic trends. Since these strategies are not straightforward, a greater level of know-how is required to implement them. In addition, one must choose specialized fund managers to implement these systematic strategies—a task that itself requires expertise, time, and effort.

Adding alpha through *skillful selection of active managers* can be regarded as an investment style. Although the average manager will not consistently provide the endowment with excess returns after costs, the top managers will (by definition).[9] Such a strategy requires both (1) access to such investment boutiques, probably with the help of a good network, and (2) the knowledge of how to distinguish good managers from average or bad ones. One prominent example of an endowment following this approach is the Yale endowment, which generated annualized returns in excess of those of the average endowment of approximately 6% over the last 21 years (Figure 1).

[8]The "market" should be understood as all investable asset classes and not only stocks.

[9]See Malkiel (2005), who showed that the vast majority of fund managers underperform a passive market index, whereas only a few fund managers outperform the market over the long run.

TABLE 2. RESOURCES NEEDED TO USE EACH MAJOR INVESTMENT STYLE

	Passive Market	Strategy Investments	Manager Selection
Endowment size	$	$$/$$$	$/$$/$$$
Know-how	!	!!!	!!/!!!
Network	!	!/!!/!!!	!!!

Table 2 summarizes these three investment styles. A single dollar sign ($) in this table denotes very small endowments, $$ denotes medium-sized endowments, and $$$ denotes large endowments. Analogously, a single exclamation mark (!) denotes nonexistent or little know-how and a minimal network, and three exclamation marks denote a lot of know-how and a valuable network. This classification should be viewed in the context that—except in the United States and the United Kingdom—endowments at the level of a whole institution (rather than, say, a specific program) are rarely observed and are usually of small size.[10]

Besides the investment style, an endowment also needs to consider whether it wants to set up rules for socially responsible investing (SRI) or environmental, social, and governance (ESG) investments. In 2017, 16% of the covered institutions in NACUBO (2017) stated that they actively seek out socially responsible investments, and 23% reported that they screen investments and exclude those that are inconsistent with the institution's mission. SRI and ESG investing have become more important over the years to meet the needs and preferences of current and future university stakeholders, and we expect this trend to continue.

[10]For example, a number of foundations cater to education and science in Germany and Switzerland. However, they are not at the level of the institution—for example, the university—but are founded by companies or individuals from which universities request funds.

Whether a university's endowment participates passively in markets by indexing, advances to systematic investment strategies, or digs into manager selection, it is wise to remember that the strategic asset allocation explains approximately 75% of the returns for an average endowment *over time* (using a time-series approach). In contrast, only 15% of the returns can be attributed to tactical asset allocation (that is, changes in the allocation) and only 10% to active management, according to Brown, Tiu, and Garlappi (2007).

Despite the marginal effects of active management on returns over time, its importance in explaining the cross-sectional variation of returns among institutions needs to be highlighted. For a given year, active management might account for up to 75% of the return variation between endowments, whereas strategic and tactical asset allocation have only a minor impact on returns. Thus, the key driver of successful long-term performance is the strategic asset allocation. Active management is more powerful in explaining the competitive positions of university endowment returns within a given year, and this is where the tournament effect kicks in.

IMPLEMENTATION

Having discussed the possible investment styles in the context of an endowment's resources and limitations, we now address implementation. In general, the following three approaches are

available: (1) internal (in-house) management by employees of the university, an approach that is fading in popularity because of the increased complexity of endowment portfolios; (2) a portfolio of external managers selected by the endowment staff, often with the aid of outside consultants; and (3) the appointment of an OCIO organization by the institution. In the last case, the trustees and endowment staff (if any staff remain) are ultimately responsible for the portfolio's well-being and the quality of the OCIO's decisions, even though transactional authority has been delegated to the OCIO. The OCIO usually appoints a carefully selected group of subadvisers (independent investment management firms or banks) to manage the individual asset-class portfolios.

The institution needs to decide which implementation model to use. The most important factor in making this choice is the amount of internal know-how the institution has in choosing external managers (assuming the first model, in-house management, has been ruled out as impractical). If it lacks this know-how, the only feasible solution would be to engage an OCIO firm.

In addition, management costs play an essential role in the decision of whether to use internal, conventional external, or OCIO management. Although the costs of conventional or OCIO-style external management can be agreed on when the mandate is assigned, the costs of internal management are not so clear-cut at the beginning. Since in-house management requires extensive information technology and information infrastructure as well as in-house risk management, the entry costs might be even higher than originally estimated. This might be one of the main reasons why almost all small- and medium-sized endowments prefer external management mandates over costly, in-house management.

If opting for in-house management, the endowment is also in competition with outside investment firms that offer lucrative investment jobs to their managers. Working as an asset manager within an endowment will usually come with a discount on the salary compared with alternative jobs outside the endowment, which could make it difficult to keep top asset managers. High turnover in human capital was a reason that one of the most prominent proponents of in-house management, Harvard Management Company, largely externalized its asset management activities in 2017.[11]

Transparency is the last factor that needs to be considered. Although in-house management might be costly, it guarantees the endowment the highest possible level of transparency because the endowment owns the securities directly. This situation might be attractive to bigger and better-known institutions since they have to report to their stakeholders and appeal to their interests. This advantage, however, comes with the drawback that when markets or specific portfolios perform poorly, external managers cannot be blamed for the bad performance; instead, the university itself is fully responsible.

EMPIRICAL EVIDENCE

In fact, most universities use an external manager approach. Usually such an approach is facilitated by specialized consultants called "investment management consultants." On average, 83% of the institutions surveyed in the NACUBO (2017) study used consultants for some purpose in fiscal year 2017. This number also includes non-portfolio-related outsourced

[11]Harvard University, "Financial Report: Fiscal Year 2017" (2017). https://finance.harvard.edu/files/fad/files/final_harvard_university_financial_report_2017.pdf.

activity, such as portfolio evaluation or risk management. The extent to which consultants were used varies greatly with the size of the endowment. Only 47% and 41% of endowments with assets above $1 billion used consultants for asset allocation and external manager selection, respectively, but these numbers increased to 75% and 58% for endowments with assets below $25 million. For medium-sized endowments, these numbers were well above 80%.

In Europe, numerous management companies (mostly private banks) offer investment management services to endowments, and specialized management companies that provide tailor-made products specifically for university endowments also exist. The United States has a different structure: Independent investment management firms provide the lion's share of these services to both endowments and other asset pools, and bank-affiliated investment managers provide the rest.

Whatever the structure, it is challenging for endowments that use an external management solution to build a suitable portfolio of investment management firms. The reason is that although nearly all active managers claim the ability to beat "the market" or their specific benchmark, on average, they do not (and cannot) do so. Thus, indexing has become dramatically more popular in recent years. The task of assembling a suitable portfolio of managers is especially difficult when the endowment is fairly small and the trustees are inexperienced. These institutions often choose an OCIO firm instead, and the firm then appoints managers on behalf of the institution.

CONCLUSION

Endowments are a very substantial category of institutional investors, and they have existed for much longer than most other asset pools. These institutions enjoy advantages most other institutional investors lack. First, endowments do not need to fear fund withdrawals when other investors panic. Second, the investment horizon is not restricted, allowing endowments to take advantage of an illiquidity premium. Third, endowments are associated with universities, which themselves enjoy a potentially large and strong network among their stakeholders. This network can be used not only for fundraising but also for consulting purposes and for obtaining access to innovative fund managers.

The special characteristics of endowments must always be viewed in the context of the university environment itself. On the one hand, there is a continuous need to raise funds and to sustain a positive relationship with donors. On the other hand, spending out of the endowment must be arranged so as to provide planning reliability and long-run stability to the operating budget. Additionally, stakeholders (including, importantly, donors) may differ vocally in their views on investment strategy, posing an additional challenge to the officers and staff charged with managing a university endowment.

For centuries, some endowments have been on the forefront of moving into new asset classes and nonstandard strategies, serving as role models to many other institutions. This paid off substantially for those endowments that took the leading role and had the ability to do so effectively, leveraging their size, know-how, and network. Where there are leaders, however, there are also followers, and as in any situation, the majority will naturally be followers. This group may still achieve a decent return, because at the very minimum it can participate in the overall return of markets through indexing (passive investing). In cases where an endowment cannot fully exploit the opportunities available to it

because of the constraints it faces, it should follow the (boring) two main pieces of advice that financial theory provides: (1) Diversify among and within asset classes and risk factors, and (2) keep costs at a minimum. And if a particular university endowment has the combination of characteristics that allows it to take advantage of excellent active managers, then it can enjoy above-market returns.

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