

Endowment Spending: A Look Back

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Author

Fred Rogers
Vice President and Treasurer,
Carleton College

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Endowment Spending: A Look Back

The investment environment of the past 15 years has challenged endowed nonprofit institutions, which have struggled to balance the claims of current constituencies with the need to preserve their endowments' future purchasing power. In the fall of 2011, I undertook a survey of chief financial officers at about two dozen liberal arts colleges to ascertain how their spending policies and practices had been affected by the turbulent markets and to see whether any general observations might be derived from the group's experience. A short questionnaire was mailed to each CFO and the data collected and discussed at a meeting of the CFOs in November 2011. In this paper, I analyze the survey's findings and provide a brief primer on endowment spending, budgeting and accounting practices at institutions of higher education.¹

Introduction

Endowments provide budgetary support to many colleges and universities, ranging from a few percentage points of operating revenues to over half. The greater the reliance on endowment income, the more fluctuations in that income will affect the institution. If, for example, the two most commonly-endowed expenditures at a college or university are financial aid and faculty salaries, then it can be concluded that year-to-year variability would pose significant management challenges for these are important, ongoing expenses.

Endowment spending rules are designed to preserve the long-term value of the endowment by balancing spending and reinvestment while trying to make budget support predictable and stable. A conscious objective of these approaches is to separate changes in the annual spending from annual investment returns and to make future spending predictable and less susceptible to 'tinkering' in response to short term market results.

Spending Rules

The procedures for balancing endowment spending with reinvestment and for making endowment spending predictable are embodied in two basic methodologies - either time averaging of market values or inflationary adjustments of spendable income with limits. These are designed to respond

¹ A preliminary version of this paper was presented at Commonfund Forum in February 2012.

to the two competing pressures of endowment spending - restraining the percentage of market value spent and ensuring a predictable flow in income to the budget. The first approach is to determine a policy spending rate (usually between 4-5 percent) of an average of the endowment's market value over a set time period, typically three years (or 12 quarters) or five years (or 20 quarters). The other method involves making an inflation-based adjustment to the previous year's dollar spending, within upper and lower bounds that are typically based on a minimum and maximum of the endowment's asset value. The two rules pursue the same balance through different approaches. As a middle way, some institutions practice a hybrid method, using a weighted average of both approaches that seeks to balance the trade-off between stabilizing the rate of spending and stabilizing the rate of change. As noted previously, all of these methods are designed to bring predictability and stability to spending while preserving the value of the endowment over time. Their fundamental objective is to provide reliable income support to the budget, while ensuring that spending is maintained at a sustainable and appropriate level over the longer run.

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The investment environment of the last 15 years has severely tested many institutions, causing them to revisit their endowment spending practices. In the late 1990s, investment returns outpaced the 8-10 percent long-term return rate that many institutions assumed when determining their annual draw. The low effective spending rates² that resulted left endowments vulnerable to political attacks for perceived under-spending. Then in the early 2000s, falling markets reversed the equation, bringing higher effective spending rates and causing many to question endowments' sustainability. Sedlacek and Clarkⁱ review this phenomenon effectively in their two 2003 papers. Ironically, at some institutions the actual dollars paid out of the endowment changed hardly at all between these two situations. Lapovsky (2009)ⁱⁱ provides another excellent summary of endowment spending in this period, with data based on an analysis of 102 institutions' responses to a Congressional inquiry into whether institutions were spending 'enough'.

² The effective spending rate is the percentage derived by dividing the dollars spent in a given fiscal year by the dollar value of the endowment at the beginning of that fiscal year.

Endowment Spending and Intergenerational Equity

When asked about their endowment spending philosophy, essentially all of the schools in our survey indicate that their intention is to preserve "intergenerational equity" and to provide budget stability. The first term, developed by Yale economist James Tobin, posits that after accounting for inflation, present and future spending should be balanced. Thus, an institution seeking intergenerational equity would expect to preserve the "real value" of the endowment over an extended period of time with no loss or gain in real purchasing power. The practical difficulty is that since we cannot predict the future, we can only look at the past and the present to judge our actions against this goal, which is typically expressed as the following equation:

$$\text{Investment Return Objective} \approx \text{Spending} + \text{Fees} + \text{Inflation}$$

If the actual investment return is greater than the sum of spending, fees and inflation, then the endowment is a net saver in the long run and if it is less than the sum of those items, then it is a net spender. Because most trustees seem to feel that it is worse to be the latter than the former, this rule is typically practiced as:

$$\text{Net Investment Returns} \geq \text{Inflation} + \text{Spending}$$

(For purposes of simplification, from this point onward we will assume that investment fees are netted out of return and we will not identify them separately.)

In addition to the policy spending for operating costs, many institutions have a practice or history of using supplemental spending to support specific activities. The costs of expanding fund raising for a capital campaign and new debt service are the most frequent reasons. Other common uses are for deferred maintenance or major capital investments. Capital campaign costs are often difficult to fund in the normal operating budget and are intended to add new gifts to the endowment, which may more than make up for the extra expenditures. Funding for capital maintenance or debt service will not change the net balance sheet, as they represent a reduction in the endowment in exchange for an increase in physical assets or a decrease in liabilities.

During the 1990s many endowments' investment returns were much higher than their spending rates; as a result, their market values increased substantially. Market values also increase, as we have seen, due to gifts. Thus, the complete formula for the change in endowment market value is expressed as:

$$\text{Change in Market Value} = \text{Net Investment Return} \\ - (\text{Spending and Withdrawals}) + (\text{Gifts and Additions})$$

There is not always agreement as whether or how gifts should be included in the concept of intergenerational equity. It is sometimes assumed that they should be excluded because of the notion that today's endowment should be treated in a way that balances both the present and the future without reliance on future, uncertain gifts. Others argue, however, that the strength of the institution today is what will enable it to attract endowment gifts in the future, and thus those gifts are part of the "return" on current operations and, therefore, should be counted in balancing intergenerational equity. The second view is further complicated when new gifts are restricted to support new activity and thus do not support current, ongoing activities through what is known as "budget relief". Rarely do new initiatives supplant some more established prior activity.

Endowments and Budgeting

The overall institutional budget is designed to establish funding levels against which expenditure commitments can be made. Reducing uncertainty in these estimates is always an objective because many of the expenditures are difficult to vary in the short run. Because the institutional budget is determined before the beginning of the fiscal year, the endowment spending component must be estimated before the investment returns and fund-raising results of the immediately prior year are known. After the fact, the ratio of endowment spending to the current year's value is often reported and can be compared to intended policy ranges or objectives, but it is not possible to know this with certainty when making the budget.

An equally important issue for budgeting is matching the purposes of the endowment to the items in the budget. In an overgeneralization, endowments can be either restricted or unrestricted in their purpose. Restricted endowments are designated by their donors for a specific, intended purpose. Sometimes those purposes are broad – general financial aid, for example – or sometimes they are very specific, such as financial aid for a certain type of student or support for a faculty member teaching in a specific discipline or area of study. Thus, depending upon the expenses in the budget that qualify for restricted-purpose endowments, more or less of

these endowments might be spent in any given year. While accounting practice dictates that restricted dollars are to be spent first for qualifying restricted purposes—and unrestricted funds spent second—most institutions are unable to spend every last restricted dollar that is available in any given year. Thus, a total dollar distribution from the endowment will produce a somewhat lower outcome in terms of total budget support, to the extent that not all possible restricted purposes can be met.

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Unitization

The endowment of any institution is often described as if it were an entity - The Endowment - whereas in reality endowments are always a collection of individual funds, each reflecting the purposes, or other specific attributes, of the individual account. Because many endowment accounts are typically mingled in a common investment pool, institutions practice a "unitization" method of accounting for tracking their separate endowments. Unitization treats the pooled collection of endowments much like a group of account holders in a mutual fund. In this way, gifts received at different times over different years are consistently valued, and reinvested returns that are not distributed as spending are appropriately credited to the various separate endowment funds. The result of this is a 'per-unit value', analogous to the net asset value per share of a mutual fund that tracks the investment return and reinvestment on a unit basis.

There are two major methods for determining the spending from a unitized investment pool. Either the institution establishes a total dollar amount and derives a per-unit rate, or it establishes a per-unit rate and derives a total dollar amount. As noted above, there are a variety of algorithms and policies for determining the appropriate amounts under either approach. When budgeting for the upcoming year, an institution makes an estimate of the likely income that will be available for budget support and for the support of specific qualifying activities that may or may not be part of the general operating budget. Because institutions utilize a

common spending rule for all pooled, unitized investments, income is distributed for all endowment accounts in the common pool. Restricted endowment income not utilized is reserved in a separate retained income account that is outside the endowment. In this way, the reinvestment portion of the endowment itself is consistent across all endowments and the unitization method allows for a single, common share value and rate of return for all endowments—restricted or unrestricted—and other accounts in the common investment pool.

Sometimes institutions receive gifts that are not available to be invested in the common endowment investment pool. This can be because the gift is in a form that is not liquid—private stock or limited partnership interests, for example—or because donors wish to have their gift segregated, or perhaps invested in a specific way or by a specific third party. For such reasons, the entire endowment may not be included in the common pool. Additionally, the commingled investment pool might also include non-endowment assets, such as working capital assets, plant fund reserves or other balances of the institution. Their separate “ownership” and use are accounted for and earnings are allocated by the unitization method as well. Thus, the common investment pool is mostly – but not entirely – endowment and is most of but may not be all of the endowment.

Analysis of Survey Results

Much has been written about endowment spending and the practices of institutions. In their thorough analysis, Sedlacek and Jarvis (2010)ⁱⁱⁱ describe the various methods in use and how they relate to these objectives, and perceive a movement away from the use of moving-average rules toward inflation-based policies for spending. With a few more years of experience, we can inquire as to how well the endowment spending rules in place served their institutions in the years following the market downturn, and whether we can learn anything from what institutions did to adapt to these trying circumstances. We can also examine what the past decade may suggest for spending rules going forward.

I initiated a voluntary survey of 23 private liberal arts college CFOs to ascertain what their individual and collective experience might reveal. These institutions are all private colleges, with endowments ranging from \$75 million to \$1.8 billion and enrollments between 1,000 and 3,500. We collected basic institutional and investment-related data and asked a series of questions about changes in investment policy. While these institutions also participate in the

NACUBO-Commonfund Study of Endowments® (NCSE), our information request was somewhat more detailed and, to establish a longer-term framework, the survey requested data for the past 15 years. (Not all schools were able to provide all of the data requested.)

In the responses of the 23 institutions, we found a number of practices that were common and others on which there was wide variance. The following are a few of the significant practices and their different interpretations.

1. Unitization

All institutions unitize, covering 91-100 percent of the endowment.

2. Purpose

A typical purpose statement is as follows: “The endowment fund exists to provide a consistent and growing stream of financial support to the college’s annual budget in perpetuity.”

3. Budgeting

Institutions determine their spending amount for a given fiscal year prior to the beginning of that year and do not change it further; in particular, investment performance during the year in which the budget is implemented does not trigger a review of the current year spending decision.

4. Basis

Spending is expressed either as a rate per unit or as a total dollar figure. About 43 percent of the institutions surveyed determine the spending as a per-unit dividend and then derive the total dollar amount available by multiplying the dividend by the number of units outstanding. The remaining 57 percent first determine the total dollar amount available for spending using the applicable spending formula and then derive the unit rate by dividing that dollar amount by the number of units outstanding.

5. Method

As described above, the three basic methods in use are the moving average, inflation-based and hybrid formulas. About half (11/23) of the schools surveyed use a method based on increasing the prior year’s spending by a fixed amount or by inflation. About one-third (8/23) of schools use a method that involves applying the policy spending rate to an average of historic endowment market values (a typical example would be five percent of the prior 12 quarters’ average values). The remaining 17 percent (4/23) use a hybrid methodology employing a weighted average of these two methods, more heavily weighted toward the inflation-based component. Viewed by size, smaller endowments tend to use the moving average approach, while larger endowments use the inflation-based model and mid-sized endowments use the hybrid approach.

6. Spending Limits

Spending is generally expressed as a percentage of either current or average endowment market value. Typical ranges are 4.0-5.5 percent, but some are wider or narrower. Some institutions have only a maximum spending limit, while others also state a minimum. In some cases, limit ranges are expressed as a percentage of the prior year's value, while others are based on a historic average of multiple years.

7. Additional Spending

While spending policies dictate spending within prescribed limits, there are also exceptions to the rules. The following represent the other types of spending that are allowed over and above the regular amounts and the number of schools out of the 23 institutions surveyed that reported using them during the 15-year period surveyed (multiple responses were allowed):

| | |
|---------------------------------|----|
| Capital campaign expenses: | 10 |
| Debt service or debt repayment: | 10 |
| Capital expenditures: | 4 |
| Operating budget support: | 3 |

In most cases, these additional expenditures are taken from the endowment over multiple years. Whether they also have a fixed time limit, and whether or how these expenditures are taken into account when applying the

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spending limit policies, is unclear.

8. New Gifts

When new gifts are added to the endowment, they are typically invested in the following month or quarter. The timing of when the income from such new gifts is available for spending varies greatly, however, and seems to be correlated with whether the institution calculates endowment spending on a per-unit basis or in total dollar terms. Of the 10 schools budgeting on a per-unit basis, eight allow new gifts to begin to be credited and endowment income spent in the same fiscal year. Of the 13 schools that budget on a total-dollar basis, only one allows spending of income from new gifts in the current year while the rest wait until the following year

to utilize income from new gifts. Interestingly, over the past 10 years both reinvestment and gift additions have contributed to endowment growth in roughly equal measure, making the net growth in endowment equally dependent upon trends in both of these factors.

9. Changes in Policy

Finally, in order to capture policy changes resulting from the volatile market environment, we asked whether, during the decade of the 2000s, participating institutions had changed their investment and spending policies or deviated from them in important ways and, if so, what the motivating factors were.

The answers clustered into several areas:

- Institutions using a moving average spending methodology changed their policies to adjust the measurement period, making it longer in order to reduce the influence of the negative years or eliminating any forecasted years and using only history. (Several institutions using a 12-quarter average method were forecasting the "missing" quarters so that they could produce a calculation that represented the quarters between the date of the estimate and the beginning of the fiscal year being budgeted.) None of these institutions made significant reductions in the dollar amount of endowment spending outside those indicated by their spending policy during the past five years.
- Institutions using an inflation-based method generally reduced total dollar spending in 2009 and many held it constant for a year or two afterward to allow the spending percentage rate to return to an acceptable range. Two of these institutions, however, increased spending to fill the budgetary gap. These changes were typically outside of the strict policy guidelines as the actual or forecasted spending amounts were not above the pre-established guidelines as a percentage and the changes were not as contemplated by their inflationary model. Moreover, we observed that when the spending percentage reaches the upper or lower bound set in the rule, there is no clear agreement among institutions on what course of action to take -- to adjust so that it is just at the guideline level or to seek to adjust it sufficiently to place it back near the middle of the range.
- Two of the four institutions using a hybrid or weighted average spending model reduced spending, and two did not.

Conclusion

While institutions vary in their approach and practice, all are seeking essentially the same two objectives: long-term preservation of the purchasing power of the endowment and predictable budget support. A policy based on inflation adjustments would seem to favor predictability, while a policy based on an average of historic values would seem to emphasize sustainability, although each approach has embedded mechanisms to try to address both objectives. Over the past 15 years, it seems that neither approach was able to fully enable predictable spending, but comments from our survey suggest that the inflation-based models may have been subject to more intervention by investment committees and governing boards. The moving average models do dictate fluctuations in the dollars available for endowment spending over time, but these swings are generally not as large as the top-down policy adjustments that were made at the schools using the inflation-based models – increasing spending in 1998 and 1999, and cutting it in 2009 and 2010.

The reason for this disparity appears to lie in human nature rather than in the formulas themselves. It seems that a simple inflationary algorithm does not provide trustees with sufficient confidence that it will accurately and appropriately reflect market conditions over times of volatility -- either up or down. From casual conversation with a number of CFOs it seems that the spending rates with which trustees are actually comfortable may lie in a narrower range than those permitted by the rule. While the inflation-based models are intended to seek an average over time, they do allow the rate of spending to vary within upper and lower bands. If these bands are to be taken literally, then spending in the middle, top or bottom of the range is all acceptable, and adjustments should be made only when spending is estimated or experienced to fall outside the upper or lower boundary. Recent experience, however, seems to show that while policy ranges as broad as 3.5-6.0 percent of assets are set for the lower and upper bands, in practice investment committees are not comfortable with this approach and intervene to maintain effective ranges as narrow as 4.5-5.0 percent. A complicating factor is that in volatile

markets, forecasts may be more extreme, thus provoking earlier intervention or overreaction. Another issue is that inflation-based models do not have a mechanism for correcting for longer-term changes in the structure or level of market returns, whereas moving-average models inherently have this feature.

Another way to conceive of this dynamic might be that, despite the fact that projected spending over 20-40 years is essentially identical for the two types of rule, trustees perceive that long-term preservation of the endowment is more likely with the moving average rules. They therefore prefer these rules over the predictability in spending that comes with the inflation-based approach. Faculty and administration, on the other hand, tend to favor short-term stability and support over considerations of longer-term preservation of value. From the experience of this small set of schools, it seems that the moving-average endowment spending models were honored most consistently because they allowed all parties to feel comfortable with letting the policy play out rather than intervening. To the extent that this enhances both predictability and preservation of the endowment, it may be considered by some to be a preferable approach.

A final observation on the point of gifts relates to earlier work done on endowments and gifts by Rogers and Strehle (2005)^{iv}. Given that the average growth in endowments for these schools over the past decade is attributable in equal measure to reinvested income and new gifts, the use of additional endowment spending to obtain gifts may be justified. Would it be possible to model the cost of obtaining endowment gifts similarly to the way investment expenses are calculated, so that these costs are calculated as a percentage of their eventual return? A careful accounting of the value and benefit of fund-raising expenses incurred to generate new gifts to endowment could be illuminating for many administrators and boards. As it seems that markets may continue to be volatile for the foreseeable future, these questions seem to warrant additional work with the larger NCSE database to enable ongoing review and analysis of endowment spending experiences.

Endnotes

i Sedlacek & Clark (2003), Why Do We Feel So Poor? How the Overspending of the 90's Has Created a Crisis in Higher Education, Commonfund White Paper Series, April 2003.

See also, the follow-up version of the same paper Updated in December 2003 with the same title.

ii Lapovsky (2009), Endowment Spending: External Perceptions and Internal Practices, Commonfund White Paper Series, March 2009

iii Sedlacek & Jarvis (2010), Endowment Spending: Building a Stronger Policy Framework, Commonfund White Paper Series, October 2010

iv Rogers & Strehle, Sources of Endowment Growth at Colleges and Universities, Commonfund White Paper Series, April 2005

Commonfund White Papers are available at: <http://www.commonfund.org/InvestorResources/Publications/Pages/WhitePapers.aspx>

Please send comments on this paper to: Fred Rogers - email: frogers@carleton.edu

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