commonfund
INSTITUTE

Principles of Endowment Management

The seven key issues facing trustees and financial officers

PRINCIPLES OF ENDOWMENT MANAGEMENT
A publication of Commonfund Institute

For the Nonprofit Community

Commonfund Institute is dedicated to the advancement of investment knowledge in the nonprofit community and the promotion of best financial-management practices among nonprofit organizations.

The Institute's programs and services are designed to serve financial practitioners, fiduciaries, and scholars. Its programs include seminars and roundtables on such topics as endowment and treasury management, proprietary and third-party research, publications, and special events such as the annual Commonfund Forum and the Commonfund Prize for the best contribution to endowment investment research.

The Institute was established by Commonfund in 2000 to serve as the center for its research and education initiatives with John S. Griswold Jr., Executive Director and Senior Vice President of Commonfund Group, as its head.

"The trustees of an endowment institution are the guardians of the future against the claims of the present. Their task is to preserve equity among generations."

— JAMES TOBIN, *1981 Nobel laureate, Sterling Professor of Economics, Yale University*

The responsibility of managing an educational endowment differs fundamentally from the responsibilities of most other investment fiduciaries. The difference arises from the nature of the beneficiaries.

In most asset management practices, the beneficiaries, or clients, can speak for themselves. In the case of an endowment, however, most of the beneficiaries have not yet been born. Future generations of students have as much entitlement to the benefits of the endowment as those currently enrolled, and their rights must be protected.

That differential in time horizon–between life span and perpetuity–creates important differences in management perspective. The distinction may elude the experienced investor, because the issues and terms appear the same in all cases. But for anyone sharing responsibility for an endowment, the term "capital preservation" takes on incomparable gravity; it means preservation *forever.*

For that reason, we at Commonfund have created this publication. In the following pages we endeavor to set down a simple perspective on endowment management that all concerned can share, both the financial professionals and the admitted amateurs, both the trustees, who establish policy, and the officers, who execute it.

After defining basic terms, we focus on each of seven key issues in endowment management, the issues that you must take into consideration in making your decisions.

To simplify our presentation, we will suggest one essential principle for each issue. And to enrich the discussion, we will present a few expert points of view on a number of these issues.

In a brief brochure, we cannot presume to provide a thorough education. For further information and guidance, a bibliography is included in the back. We also invite you to take advantage of the decades of experience accumulated by Commonfund in the course of advising educational institutions of many kinds and sizes. Our phone numbers and addresses are shown on the back cover for your convenience.

Contents

Basics

The very existence of an endowment poses a number of difficult questions that the institution's policy makers must continually reconsider.

To start, we will define a few basic terms and describe basic connections.

An endowment can be defined as a portfolio of assets donated to a non-profit institution to aid in its support. In their medieval origins, endowments consisted of farmland donated to churches, which would earn rental income from the land's tenant farmers.

In modern times, endowment assets are held in financial instruments, which may include real estate investments too. In an invested portfolio, the modern endowment can realize capital appreciation as well as current income.

In the U.S., investment of endowment funds is generally governed by the Uniform Management of Institutional Funds Act ("UMIFA"), first introduced in 1972 and now enacted in most states.

What benefit does the endowment bring to the institution? In the short term, a portion of its annual return on investment can be transferred to the school's operating budget.

Over the long term, an endowment can provide a financial cushion to support the institution through changing times; with this added stability comes a greater degree of independence and enhanced ability to achieve academic goals.

Many institutions can achieve a competitive difference in the quality of their programs and students only because of endowment income.

Institutions may periodically run capital campaigns to attract new contributions to their endowments. Depending on the wishes of the donors, gifts may include restricted as well as unrestricted funds, the former limited to such purposes as faculty compensation, scholarships, research, athletics, arts, or expansion of plant.

Inherent in this brief description you can sense a number of difficult questions that the trustees, as the policy makers for the institution, must continually face, particularly these:

What is the real objective of the endowment? How should it relate to the school's academic mission? How much should it contribute to the operating budget? How can endowment value be preserved for the future? How to invest for maximum return? How to control the risks inherent in investing? Who should make the investment decisions? Who should assume which responsibilities in managing the investments?

The following pages offer a way to approach the answers.

PRINCIPLE 1

The Board, in consultation with the institution's administration, should determine the objectives of the endowment and the policies that will guide its management, explain them in a written statement, and periodically review and update the statement.

Members of the governing board who came of age in the private sector may tend to think of ultimate objectives in terms of net profit, return on investment, and shareowner value, all of which are measurable. In their institutional roles, however, they have to cope with more subjective goals.

The terms may resemble those used in business; profit and growth certainly have relevance to the management of an endowment. But in a not-for-profit environment, success has very different implications.

It must be understood first in terms of the social and intellectual utility of the institution, however intangible that may seem. And it must be viewed in a time frame that is incomparably more extended than those normally considered in business.

The trustees, in planning endowment policy, must therefore start with an understanding of the institution's charter and its mission as enunciated by its president or headmaster and publicized in its literature. And against that background they must proceed to review the condition of the institution and its needs, short-term and long.

These deliberations are best carried out in a formal legislative manner, with the resulting policy expressed in a written statement. An informal or hurried approach risks confusion, misunderstanding, second guessing, and delay. The members of the Board, after all, represent various backgrounds, points of view, and priorities. As in any such deliberative body, conclusions inevitably depend on compromise.

The written statement brings the tensions of the varied perspectives to a resolution, opening the way for action – at least until the next round.

The Board's policy statement sets the course for endowment management. Before assets are allocated or investments selected, the trustees, through their policy making, will have made the most significant contribution to the achievement of their objectives.

Here, then, are the key issues that the policy statement should resolve:

- The role of the endowment in supporting the institution's mission
- The role of the endowment in maintaining a healthy balance sheet
- How much of the endowment's return should be spent, and how much reinvested
- How much of expendable gifts should be channeled to the endowment as opposed to current spending
- The extent to which the operating budget should be supported by the endowment
- Overall investment strategy, particularly asset allocation
- Who should have responsibility for investment decisions
- Which investment decisions, if any, should be delegated to outside consultants, advisors, or investment managers.

PRINCIPLE 2

In deciding the amount to be transferred from the endowment to the operating budget each year, the Board, working with the administration, must carefully balance two opposing claims: the current needs of the institution and its constituencies *vs.* the obligation to preserve the endowment for future generations.

And so, recognizing the primary purpose of the endowment – to augment the year's operating budget – you turn to that most challenging question: How much can the endowment afford to contribute?

In times gone by, this question could be answered by another question: How much is needed? Or another: How much did the endowment earn?

But in modern times, the issue has become more complicated.

Perceived need provides questionable guidance. For instance, an accumulation of favorite programs and causes could induce excessive withdrawal from the endowment, reducing its value for the future.

While making your spending decision, you certainly must concern yourself about the health of your institution's balance sheet. Should you direct any of this year's spending to debt reduction?

On the other hand, gifts could enlarge the endowment's capital, increasing the potential dollar return of future investing. What results can you expect from pending fundraising campaigns?

A few institutions commit themselves to transfer a steadily increasing amount to their budgets year over year. The annual increases are intended to compensate for inflation, or for the growth of total expense. This approach, however, risks a sharp decline in endowment value in the event of a sharp market decline, a trauma from which it could take a long time to recover.

The endowment's income, defined as dividends and interest, also falls short as a spending criterion, because for quite some time income-oriented investments have failed to keep pace with economic growth.

If you invest the endowment primarily to maximize income, you risk eroding its capital value in the not very long term. If, on the other hand, still using income yield as your spending guide, you nevertheless invest only part of the portfolio for income, you risk depriving the operating budget of added funds it really could use and should have.

Since the introduction of the Uniform Management of Institutional Funds Act ("UMIFA") in 1972, endowment decision makers have generally been subject to the so-called "prudent investor rule," which permits them to consider the expected total return (i.e., capital appreciation as well as income) of the institution's investments.

They could then calculate the payout rate as a percentage of the endowment's total net asset value. Most colleges and universities now use that approach.

The UMIFA, of course, does not specify what the payout percentage should be; the school's governing Board still bears the burden of that decision. Certain rules of thumb, however, have become apparent from surveys of general practice.

Withdrawals from endowments, on average, have tended to converge at 5.5% of the net asset value of the endowment. Institutions with smaller endowments tend to take a somewhat higher percentage. Those with the largest endowments take a much smaller percentage.

On the other side of the ledger, you find endowments contributing around 10% of the annual operating budget.

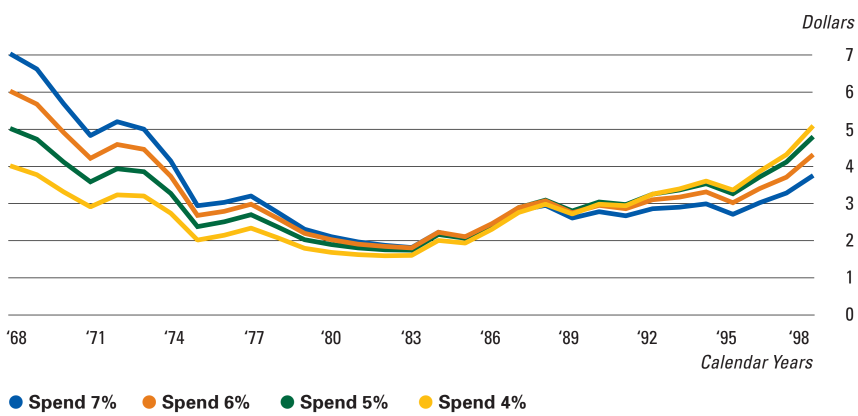
Like most averages, these figures leave a lot of variables to worry about. Such as inflation. Whether it's currently running at a high rate or low, inflation will inevitably erode some of your total return. And the cost of managing the endowment will consume another small piece. What's left – the real return – may or may not prove adequate to match the growth of your institution's budget.

On the question of payout rates, it has been demonstrated that less ultimately becomes more. Comparing spending rates of 4%-7%, for instance, it's been demonstrated that, after about 20 years, the lower rate, having allowed greater capital accumulation in the endowment, will result in a higher absolute dollar level of payout, paradoxical as that may seem.

Many schools, colleges and universities establish a payout formula that they commit to maintain unchanged

Effect of Various Payout Rates Over 30-year Period

The higher the rate of spending, the lower the real dollar spending after 20 years.



Source: Cambridge Associates

year after year. But others prefer to re-examine the question each year and reset their spending at a rate that responds to current conditions.

To smooth out the effects of year-by-year variations, some institutions base their calculations on a moving average rather than just the last year. For instance, they might set the spending rate as a percentage of the average value of the portfolio over the past five years.

In endowment management, as in business, you often have to run faster just to stay abreast. The needs of the institution inexorably keep growing – now and in the future. But even as the pressure mounts to spend more this year, it becomes imperative to save more, to help grow the endowment at least as fast as inflation, to strengthen its ability to fund the greater needs of future generations.

While confronting these pressures on the spending side, the decision maker must also pay attention to the inflow side – the return on the endowment's investments. The condition of the markets will, of course, impact investment results. But no one can predict market changes reliably, and attempts to time the market ultimately fail.

In the long run, it is the way you balance the assets in your portfolio that will have the greatest effect on investment results. And that takes us to our third principle of endowment management – asset allocation.

PRINCIPLE 3

In seeking the return you need to support your payout policy – at an acceptable level of investment risk – you start with your most crucial decision, the balance of the endowment portfolio among the asset classes, a decision that the Investment Committee should review each year and maintain through rebalancing at least annually.

Historically, the legal responsibility that trustees bore for endowment management fostered a highly conservative investment bias. By court ruling, common stock was deemed "per se imprudent." The experience of the 1930s, however, proved that bonds could be risky, too. The century-old legal principle, "the prudent man rule," then became the pervasive guide for trustees, giving them greater discretion in selecting investments.

The introduction of UMIFA in 1972, discussed earlier in this publication, broadened the "prudent man rule" into a "prudent investor rule" that permitted endowment fiduciaries to take into account many of the new developments that have changed the landscape of the investment world during the past half century.

These changes include new financial management technologies and new or improved products, such as options and futures, venture capital, private placement, easy access to international markets, mutual funds, and various real estate vehicles. Another relevant development was the rise of a new generation of investment management professionals, and another was the advent of new theoretical thinking about portfolio management.

The new thinking, under the heading "modern portfolio theory," involves much complex work by a number of Nobel laureates in economics. The aim was a better understanding of the relationship between investment risk and return. A simplified summary of these complex ideas might go as follows:

The degree of risk entailed in a particular investment can be expressed as its volatility, which can be calibrated statistically. This statistic, called a "standard deviation," indicates in percentage terms the degree to which an investment has varied in the course of arriving at its mean return over a given time period. In general, investments with the greatest volatility – with the highest standard deviation – have been shown to produce the greatest gains over the long term. To get the most out of your investments, you must therefore include some that have a relatively high degree of risk. But you can offset their volatility by including other types of investments that perform differently, whose performance has a low degree of correlation.

Correlations Among Asset Classes and Inflation

Perfect correlation is indicated by 1.00. Lower numbers indicate a lower degree of correlation. Negative numbers indicate reverse correlation – when one class goes up, the other goes down.

	SP500	SmCap	PrivCap	IntEq	RealEst	Tr-1	Tr-5	Tr-20	HiGrC	HiYdC	IntBnd	Infln
S&P 500	**1.00**											
US Small Cap	**0.70**	**1.00**										
Private Cap	**0.40**	**0.26**	**1.00**									
Intl. Equity	**0.46**	**0.33**	**0.18**	**1.00**								
Real Estate	**0.18**	**0.12**	**0.11**	**0.11**	**1.00**							
1yr US Treasy	**-0.09**	**-0.09**	**0.06**	**-0.02**	**0.38**	**1.00**						
5yr US Treasy	**0.32**	**0.22**	**0.13**	**0.13**	**-0.08**	**-0.06**	**1.00**					
20yr US Treasy	**0.43**	**0.31**	**0.16**	**0.18**	**-0.15**	**-0.29**	**0.90**	**1.00**				
HiGrade Corp	**0.42**	**0.30**	**0.15**	**0.18**	**-0.15**	**-0.29**	**0.88**	**0.97**	**1.00**			
HiYield Corp	**0.36**	**0.25**	**0.13**	**0.16**	**-0.13**	**-0.24**	**-0.76**	**0.84**	**0.89**	**1.00**		
Intl. Bonds	**0.15**	**0.10**	**0.05**	**0.56**	**-0.03**	**-0.04**	**0.41**	**0.37**	**0.36**	**0.31**	**1.00**	
Inflation	**-0.31**	**-0.25**	**-0.05**	**-0.13**	**0.24**	**0.75**	**0.02**	**-0.15**	**-0.14**	**-0.11**	**-0.01**	**1.00**

Source: Commonfund's Endowment Planning Model

The new thinking shifted the main focus of investors from the selection of securities to the design of their overall portfolio. More important than picking the right stocks was found to be the proportion of equity to fixed income to cash. In fact, the allocation of the portfolio among the asset classes proved to be the most important determinant of investment success.

Increasing diversification within asset classes can help reduce volatility still further. A balanced portfolio may include small-capitalization stocks as well as large-cap stocks, international stocks as well as domestic stocks, corporate bonds as well as governments, long- and intermediate-term as well as short-term fixed-income.

A huge accumulation of data on investment performance and the development of sophisticated software have made it convenient to forecast how different asset allocations are likely to perform long term and the degree of volatility they are likely to experience. These computations can take into account the way the volatility of one type of asset may diminish or cancel the effect that the volatility of another will have. They can also quickly show you the effect of your payout rate on net portfolio value over time.

Asset allocation software can prove not only useful but also intriguing. As you input changes to your asset mix, the data on the screen quickly show you the resulting changes in projected return and standard deviation.

These models are particularly useful in giving relative behaviors of different asset mixes. But they should not be relied on to forecast specific returns or volatilities; the future may differ significantly from historical experience reflected in the models.

Though enormously helpful, the computer cannot, of course, make this important decision for you.

Asset allocation is the cornerstone of your endowment's investment policy and a key responsibility of the governing Board. Your strategic asset allocation policy should set the course for endowment investing for many years to come. It involves more than numbers.

Endowment Asset Mix

	Endowment Size			
Type of Investment	**Over $1 Billion**	**$501-1,000 Million**	**$251-500 Million**	**$100-250 Million**
Active common stocks	33.2%	36.6%	47.2%	49.5%
Passive common stocks	7.5	9.6	5.6	7.0
Total domestic stocks	40.7%	46.2%	52.8%	56.5%
Active international stocks	10.9%	12.0%	9.1%	9.6%
Passive international stocks	1.1	1.8	1.8	1.7
International bonds	1.9	1.6	0.8	0.5
Total international	13.9%	15.4%	11.7%	11.8%
Active bonds	22.8%	17.7%	16.2%	17.3%
Passive bonds	1.0	3.5	3.6	1.8
Total domestic bonds	23.8%	21.3%	19.8%	19.1%
Equity real estate	3.7%	2.0%	1.7%	1.8%
Real estate mortgages	0.1	0.2	0.4	0.4
Private equity	11.6	7.5	8.2	4.6
Short-term securities/cash	2.5	2.0	2.6	2.3
Other	3.7	5.5	2.8	3.5
Total	100.0%	100.0%	100.0%	100.0%

Note: Dollar weighted and projected to the Greenwich Associates universe
Source: Greenwich Associates–IMF 2000

The planning and decision process is best carried out in a systematic, disciplined manner. Indeed, the Investment Committee should agree on the planning agenda first, making sure it gives each trustee the opportunity to express his or her vision and concerns.

What are the expectations of each trustee for total return? What time horizons or milestones does each one see in the period ahead? Let each one describe the level of risk or volatility he or she considers tolerable.

What types of assets or investment vehicles should the portfolio include? The trustees must discuss the pros and cons of each and decide on a list of candidates. The discussion can help promote better understanding between the investment professionals on the Board and the rest of the trustees.

The decisions of the Investment Committee should be written down in a formal policy statement that should include the Committee's rationale for each of its decisions. The clarity of the statement can make a vital difference in the months and years ahead. It becomes the guide for implementation of the investment strategy.

And it maintains continuity as times change and the membership of the Committee changes.

To implement the asset allocation policy, the Committee employs professional investment managers, which is the subject of the next principle. The Committee, in exercising its responsibility, maintains oversight.

Inevitably, the de facto asset allocation will stray from policy as the movements of the various markets take effect. The theory behind asset allocation strategy prescribes periodic rebalancing to bring the allocation back to the proportions that were chosen in establishing policy. This means selling appreciated assets and reinvesting the proceeds in cheaper ones.

Rebalancing has its difficulties, especially in volatile markets. For some, it may prove emotionally difficult to sell winners to buy losers. But, looked at another way, this is forcing participation in the very essence of successful investing – to buy cheap and sell dear.

Rebalancing requires a discipline, which ought to be defined in the policy statement. In future years, trustees may too quickly become nervous about market behavior. Rebalancing, if carried out too often can raise the cost of investing, or if done irregularly can vitiate the benefits of your asset allocation strategy.

Manager Selection

PRINCIPLE 4

Investment managers must be studied in depth, not just for past performance, and selected to effect a diversification that will optimize return while limiting overall portfolio risk.

The new thinking in this era of modern portfolio theory has made diversification the first commandment of investment prudence. In essence it is only common sense, as in the ancient aphorism, "Never put all your eggs in one basket." In its fullest realization, diversification applies not only to the contents of the portfolio but also to its management.

As obvious as this idea may seem, it was not always observed. In the past, trustees often did the investing themselves, or they assigned the entire endowment to one or two all-purpose managers. Large endowments may have their own staff of investment managers in house, which they might supplement with outside firms to manage specific parts of the portfolio.

In general, endowments now tend to split their portfolios among a variety of specialized investment managers with demonstrable talent for exceeding their benchmarks. Obviously, the selection and oversight of a varied roster of investment managers requires organization.

The institution's business or financial staff handles most of the work, but the Investment Committee retains responsibility. It can initiate the process on a rational note by analyzing its asset allocation policy and identifying the segments of the portfolio to be assigned. First the asset classes are selected (e.g., stocks, bonds, cash), then specific styles and subsets are chosen within each class (e.g., growth, value, large cap, small cap). Taking this a step further, the Investment Committee could specify the qualifications it will require of the managers in each segment.

The responsibility for selecting, monitoring, and balancing investment managers can weigh more heavily on the Investment Committee and business staff than they consider comfortable. The processes involved are not only specialized but quite sensitive: if you manage it all yourself, how do you explain results that miss your objectives?

For that reason, many educational institutions decide to outsource this function. It is essentially the same decision that increasing numbers of business enterprises have been making: to concentrate on their core competencies and outsource the rest of the work to specialized services.

In the interest of full disclosure, we must point out that managing investment managers constitutes the chief occupation of Commonfund. We manage managers for many hundreds of educational institutions and other nonprofits. The following discussion summarizes what we believe to be the basic principles of selecting investment managers and is not intended to promote our own capabilities.

Selecting investment specialists has itself become a specialized skill, because there are thousands to choose from, and the well-known stars do not always represent the best choice. Candidates must be investigated in depth. Performance data alone can prove misleading, especially if they cover only a short term – less than five years. Performance in less than one market cycle could tell more about the firm's luck than skill. And past performance alone has never provided a reliable prediction of future success.

In each segment or specialization, the manager-selection process must include several necessary steps:

- Compiling a list of candidates
- Gathering basic information about them
- Narrowing the list
- Conducting preliminary due diligence
- Selecting the finalists
- Completing due diligence
- Hearing presentations of the finalists
- Making final selection
- Conducting negotiations

Starting with your first list of candidates for a particular segment of the portfolio, what do you need to know? A lot. What is the firm's investment style? Its philosophy? What evidence is there of its commitment to that philosophy? How does the firm's decision making process work? What kinds of internal controls does it use? What about its reporting system, its quality and timeliness?

Considering its investment approach, how will it complement the other investment managers in your roster?

What is the firm's ownership structure? What is the quality of its senior management? What are the qualifications of its professionals? How stable has been its professional staff?

How large is the firm in terms of assets under management? How has it grown? How has it changed? Is it too large? What are its fees?

And, finally, does the firm have any connection to any member of the Board? And, further, what is the Board's position with respect to conflict of interest?

Completion of the selection does not end the process. Regular monitoring must include not only performance review against relevant benchmarks but also vigilance for any fundamental changes in the firm, which may be reason to start the selection process for that segment all over again.

A key resource of the manager of managers is its base of information on the expanding world of investment managers. The information collected about any one manager under consideration will cover every aspect of that manager's business.

The breadth and accuracy of the collected information is, of course, crucial. In our manager-information template, the questions alone take up 23 pages.

The professional staff of the manager of managers sifts and sorts this information to help its client institutions optimize portfolio building. By experience and education, these professionals must be capable of making the same kinds of investment decisions as the managers themselves have to make, because the manager of managers must evaluate performance and everything else about the chosen managers before any shortcomings become significant.

To facilitate portfolio building, the manager of managers packages groups of managers into asset-type-specific funds. For instance, a small-cap value fund, or an international bond fund, or a real estate fund. It will offer a variety of funds, of varying breadth and specificity.

Generally, the more funds it offers, the more useful it can be to its clients. It may package offerings that represent a single strategy, or even a single manager, using its group buying power to make particular investment managers more readily available to more investors. It can offer funds in all asset categories including private capital, hedge funds and other alternative investments.

The manager of managers works with the trustees' Investment Committee and its consultants on the make-up and care of the endowment's portfolio, advising them on the selections from its array of funds that, in combination, best serve the endowment's objectives.

On this foundation of capabilities, the manager of managers structures related supports and services that can strengthen the institution's investment experience; the firm can provide integrated reporting and analysis, investment education, risk management, and legal oversight.

At its best, the manager of managers operates as a skilled partner of the Investment Committee and business staff in the management of the institution's endowment.

PRINCIPLE 5

Think of risk as the possibility of failing to meet the Board's objectives, and make sure every facet of your endowment management system, internal and external, has built-in disciplines to recognize the risks and promptly neutralize them.

If you look it up, you find risk defined as the possibility of loss. In investment management, it is generally stated in terms of price volatility. But these definitions fall short in the endowment world with its super-long-term outlook and seemingly impersonal consequences.

In endowment management, we should define risk as the *possibility of failing to meet objectives* – any of the objectives agreed upon by the Board and Investment Committee.

Your attention is likely to turn first to the risk of suffering a major loss, the risk of falling short of your total-return target, the risk of not earning sufficient income to transfer to the operating budget.

But the risks do not stop there. Failures can occur in any part of the endowment management process, internal or external – in operations, in the safekeeping and accounting of assets, in legal or regulatory issues, in outright fraud. Any such failure could reverberate through succeeding generations.

The challenge becomes even more complicated when you mix in the expectations of the various principal players. Whereas objectives are agreed upon and written down in advance, expectations are subjective, varied, and sometimes not revealed until they've turned into disappointments.

Your investment target might be stated as a total return of 8% per annum, but meanwhile, in an atmosphere of irrational exuberance, expectations could be pushing 25% – and then you begin making decisions as if 20% was indeed your objective. Unrealistic expectations can distort objectives and undermine strategies.

The response to this challenge – risk management – should not be looked at as a specific function but rather as a discipline that must pervade every facet of endowment management. You weave it into every job description, internal and external.

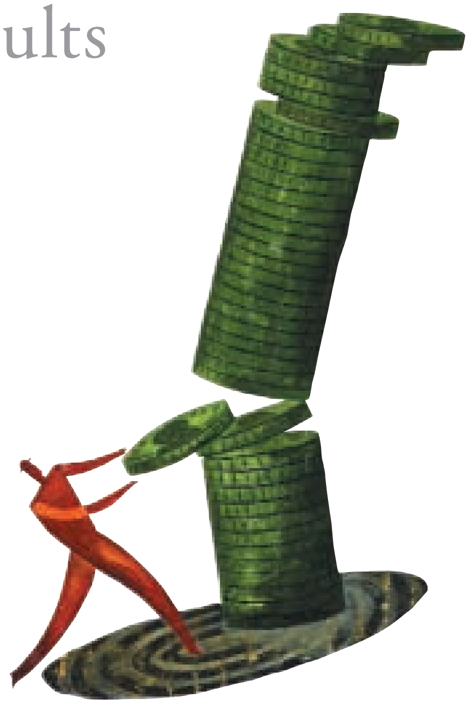
The trustees cannot implement such practices themselves, but they can raise awareness of the issue. They start by becoming sensitive to the "galaxy of risks" that their decisions and expectations might entail.

It's a matter of taking a skeptical attitude and asking difficult questions. Such as: Is our portfolio strategy truly consistent with our stated objectives? Is each segment of the portfolio fulfilling the role assigned to it? In whose name are the assets in our portfolio being held? Where are they held? Is the valuation accurate? Are we applying the resources actually needed to manage effectively? Or should we outsource? What are the laws and regulations with which we need to be in compliance? Who is responsible for compliance? Do our investment managers and other outside providers have the compliance capability they need? What makes us sure we can trust them?

The specific questions will vary with the situation, but asking uncomfortable questions should be considered essential. If the Board or staff does not seem to have the wherewithal for an integrated risk management program, you may need consultative support to get you started.

PRINCIPLE 6

The costs of your investment program can quietly undercut returns; make sure you keep those costs down. Keep asking, "Can we get the same results at lower cost?"



All too often an Investment Committee discovers that its investment costs have soared. What happened? Frequently, the Committee has failed to exercise any cost controls worth mentioning.

The investment management function requires a deliberate commitment to cost management.

Cost control essentially involves three types of activity: One, diligent investigation of alternative candidates. Two, tough negotiation of fees. Three, efficient management of the firms managing investments for you.

Cost management also means avoiding needless transactions, because every trading decision has a cost.

And keep in mind that cost reduction itself can have its costs. You don't want to compromise the effectiveness of your risk management for the sake of cutting cost. Keep the balance.

PRINCIPLE 7

To promote harmonious effectiveness of your investment program, define the roles of the trustees, the business or investment officer and staff, and your consultants, in writing, and make sure each understands and agrees.

The Board defines the responsibilities of all major participants in the endowment management process, starting with its own.

As stated on the first page of this document, the Board's most basic responsibility is to preserve the endowment in perpetuity. That, of course, refers not to current valuation numbers but to its real value, in terms of purchasing power.

The Board must ensure that future students will be able to obtain the same level of benefits from the endowment as current students do, not counting the effect of gifts. Which means the endowment must currently earn a total return at least equal to the spending rate, plus inflation, plus the cost of managing the endowment's funds.

In exercising their responsibilities, the trustees perform a policy making role. They assign the tasks required for implementation to staff and outside experts. But still, the buck stops with the Board.

Upholding the Board's basic responsibility can prove daunting. The institution's constituencies are not likely to show much enthusiasm for preserving endowment assets for future generations. Their own needs are clear, present and possibly urgent. The needs of future generations are not even vague, they are invisible. Perpetuity seems too far away to count.

The Board may create an Investment Committee to exercise responsibility for spending and investment policies. The Committee is likely to attract those trustees who have relevant experience, who can bring a measure of expertise to these issues and a sharper focus.

The Board should take care that it achieves a balance in the composition of the Committee; its membership ideally will include trustees with various backgrounds in business and finance and also, if available, in education or other nonprofit institutions. But committee members must beware of getting too close to home; they must avoid conflicts of interest or even the impression that they might exist.

Aside from its policy setting role, the Investment Committee educates the rest of the Board on all endowment management issues and the reasons behind its policy decisions. The Committee also serves as the Board's liaison with the institution's Finance Committee and business staff.

The institution's business manager, or investment officer, leads the business staff in implementing the Investment Committee's policies and decisions.

Key tasks that the staff will have in endowment management include identifying eligible funds and investment managers and preparing that information for the Investment Committee, tracking investment results and cash flows, preparing performance reports, and upholding restrictions that policy or donors have placed on the use of endowment funds.

As the point person for the administration, the business manager acts as the Investment Committee's liaison with the Finance Committee, providing the Board with an analysis of the operating budget and any imminent cash needs. More than that, the business manager acts as advocate for the budget, informing the Board about the school's operations, arguing for the importance of continually investing in faculty and programs, and pointing up the need to spend for preventive maintenance and plant replacement.

That, in broad terms, describes the breakdown of responsibilities in a typical institutional setting. In each institution, the particulars will vary greatly. To avoid misunderstandings amid the turnovers in staff and Board, someone involved should write down the particulars in a memorandum, distribute it to all the players, and keep it current.

Even with the clearest of understanding and most serious commitment from all the players, the responsibilities are heavy and the stakes are high. For information, guidance, or just help, the Board and staff have a community of outside experts they can turn to, in particular a number of highly qualified consultants in the domain of endowment management.

Viewpoints

Now let's dig a little deeper. To create a more advanced course, we spoke with a number of recognized experts in the field and asked them to give us their viewpoints on aspects of the subject particularly important to them.

The results are presented on the following pages, three of them in the form of interviews and the rest as articles.

The issues they've taken up, as you'll see, range widely: asset allocation, risk, payout policy, Investment Committee responsibilities, development, and cost. All of these experts speak from strength, based on their long experience in finance, academe – large and small schools, graduate level to prep – or both.

Contents

The opinions expressed by these experts are their own and do not necessarily represent the position of Commonfund or Commonfund Institute.

Cost Matters: The Bogle Battle Cry

An interview with John C. Bogle

John C. Bogle has been a staunch crusader for investment-cost containment for half a century; he first tackled this subject in his senior thesis at Princeton in 1949. In founding The Vanguard Group in 1974, he made use of his own research on mutual fund returns during the previous 25 years. During the next 25 years, he built Vanguard into the second largest mutual fund company, the one dedicated to cost containment. In the endowment arena, he has served as director of the Princeton University Investment Company and as chairman of the Board of Trustees of Blair Academy.

We talked with him about the costs of endowment management. Here are the highlights:

Commonfund What are the most important costs that trustees should worry about?

Bogle The costs they should be concerned about are almost innumerable. I'll mention just the major ones. First of all, they might be using consultants to help them through the thicket; that's going to cost money. Then, they may decide to use a number of different advisors to manage the portfolio, and they're going to need help selecting them. So they're going to spend money on that. And then, each advisor is going to charge a fee. That's a very significant portion of the total.

Commonfund Is that the biggest cost?

Bogle No, probably not. The biggest is unseen, and that is the cost those managers will incur in turning over the portfolio. Some of those turnover rates are rather high. If you turn over the portfolio 50% a year, for example – and in this day and age that's not a high turnover rate; it's probably more or less average – that can easily cost a half a percent to one percent a year. In a lot of cases those underlying transaction costs can be larger than the advisory fee.

Commonfund Any other important costs?

Bogle Another important one that people ignore is what I call opportunity cost. Very few equity managers are fully invested. If they're invested 95% in stocks, you pay an opportunity cost so long as the long-term return on stocks exceeds the long-term return on cash.

If stocks return, say, 12% and cash yields 5%, that's a difference of seven percentage points. And if you've got 10% of your portfolio not invested in stocks, that's 70 basis points a year that you're losing on that part of your portfolio. That's a very large loss.

Commonfund What do you think this all adds up to?

Bogle Well, if you put your arms around all of these costs, you're probably talking about 2% a year. Now what

"All investors in aggregate fall short of the market's return by the precise amount of their costs."

this means is if the market had a 10% return over a long period of time, and you had costs of 2% year after year, you would eventually have a return of 8% unless your managers could beat the market.

In other words, you're getting 80% of the market's annual return. If you compound that over time – just take 8% and 10% on a 25-year table; it's easily calculable – you probably end up with barely 60% of the final value of someone who earned the full 10%. That's how much that 2% cost you.

Commonfund Then how can an endowment beat that cost trap?

Bogle Well, let's compare that with an indexing strategy. An all-market index fund will virtually guarantee you 98% or 99% of the market's annual return, depending on the cost structure of the fund. By contrast, you're very close to guaranteed that a random selection of managers would produce 80% of the market's return. Why, then, would you take that long shot, trying to get more than 100% of the market's return?

In fact, if you put all the managers together, you can generalize that all investors are by definition going to get the market return before costs. And after costs they're going to fall short of the market's return by the precise amount of their costs. There is no argument about this thesis. Gross return minus cost equals net return.

In this sense a very important fact emerges: in the long run investment success is determined by the division of market return between the intermediaries and the investors themselves. There is no way around it.

There may be a way around it for A, but if A can beat the market by 1% after costs of 2%, then B or C is going to lose by 3% plus costs, or 5%. Plus 1% for manager A; minus 5% for manager B. It's asymmetrical, and there's just no way around it. All investors can't possibly outperform the market.

Commonfund In the face of these facts, what mistakes do trustees make, generally speaking?

Bogle First of all, they pay far too much attention to past performance. Good performance rarely perpetuates itself. If you're investing for a lifetime, managers are going to come and go. Use a strategy that's good forever, not just a manager that's been good in a given past period.

Second, I think they spend too much time on manager picking, looking over people who are, of course, all smart, attractive, articulate and well-dressed, the kind of people, as Warren Buffett says, you would love to have as your sons-in-law.

"Have the core of your portfolio indexed, and then see if the managers can beat it."

But the fact of the matter is that it is very difficult for anybody to get a sustained edge; securities markets are highly efficient. I do want to add, however, that market efficiency is not required for the system I've described to work – only that investors as a group must fall well short of the market's return.

Some sectors of the market – say, small caps, or international – appear to be less efficient than large domestic stocks. But in any of those markets, efficient or inefficient, all investors, in aggregate, still get the market return minus costs. There is simply no way around it. And the evidence is powerful. Very few investors can beat the market. It's said that 40% of investors do it. In the long run, it's probably more like 5 or 10%.

Commonfund So, I take it that your basic recommendation to trustees is to index, if you want to contain those costs.

Bogle That's right, using a broad market index. But, you know, I'm a realist. Everybody says indexing is boring; it's like watching paint dry. If you maintain a belief in active managers, I say go ahead and use some, but have the core of your portfolio indexed. And then see if the managers can beat it. We often give managers credit for achieving high returns without ever asking ourselves whether the returns are higher than we could have gotten by just owning the market.

Then, we hear a lot of questions about which index to use. But it's a non-issue. The main body of the portfolio should be in the entire U.S. stock market, including large cap stocks, and mid cap stocks, and small cap stocks – the whole gamut.

Now, is the Standard & Poor's 500, which contains only large cap stocks, a bad substitute for that? No, it's a good substitute, because in the long run the S&P will mirror the returns of the total stock market. So I wouldn't advise anybody that's happy with the S&P 500 to abandon it for total-stock-market indexing. But I think the truth of the theory is that owning a total stock market is the way to go.

Commonfund What about international?

Bogle I happen to believe it's unnecessary to own international stocks. Many respected people disagree with me; in some cases, they disagree violently. My advice happens to have been the best advice during the past decade. But international did much better in the decade before that, when Japan was in its heyday. In the long run – and that's what's important to an endowment fund – I don't believe international will add value.

"After cost, beating the stock market, like a casino, is a loser's game."

International creates a certain kind of risk without a demonstrable ability to enhance the end return. So I don't think you need it. I also rely on the fact that U.S. stocks get about 25% of their profits from abroad. U.S. companies are, by and large, global companies, particularly the large ones that dominate the index.

If you want to use international, consider international index funds. They offer even greater advantages than a domestic index offers relative to U.S. managers, because fees for running money abroad tend to be higher, and transaction costs tend to be much higher. If you want to put some of the portfolio into international, I recommend no more than 20% of equities.

Commonfund How does the average trustee at a midsize school get a handle on this? There are trustees who are not financially sophisticated.

Bogle I would say, make sure that your Investment Committee has a reasonable level of financial sophistication. Recruiting such trustees from your alumni body is an important part of this.

Also, there are some good consultants out there that academic institutions use. The problem is that consultants generally don't agree with the indexing theory. Consultants that recommend indexing would have a very short-term job.

And the consultants themselves are a cost. If the educational institution has, let's say, a $50 million portfolio, $200,000 a year is about what it's going to generate in a combined portfolio of stocks and bonds. And a $10,000 fee is going to be a big hunk of that. All these fees add up.

Charlie Munger, Warren Buffett's partner, once gave a very persuasive speech to endowment officers, in which he said just what I'm saying to you – that the croupiers take too much out of the system.

Beating the stock market is clearly a zero-sum game before costs. Every purchase that you make is a sale for someone else. After cost, the stock market, like the gambling casino, is a loser's game. When you talk about croupiers and financial intermediaries alike, you're talking about costs. Cost matters!

The Lean Take-Charge Committee

By Patricia S. Callan

A roaring bull market, which glamorizes the investment process, can make a seat on a school's Investment Committee look like a coveted prize. And that creates a problem. The Committee could find itself attracting trustees who lack investment expertise and, moreover, take only their own agendas to heart. So you have to screen prospective members carefully.

What else makes for an effective Investment Committee? Let's review the key issues.

A small Committee is preferable. It allows more active discussion and enables the chair to solicit opinions and reach a consensus rapidly.

Holding meetings infrequently discourages the tendency to behave like a portfolio manager. Four to five meetings a year should prove sufficient to review the performance of your managers and discuss strategic issues.

To make sure the Committee maintains a long-term focus, it should spell out a set of investment guidelines. This document should outline strategy, lay out allocation targets and ranges, and explain the rationale for each asset class. It should state the kinds of investments allowed or prohibited; the degree to which managers may employ hedging strategies, hold cash, or use leverage; and it should establish benchmarks for manager performance.

At Scripps, we needed a full year of meetings before our guidelines were clean and clear enough to be presented to the Board of Trustees. The process started with a long philosophical discussion of objectives. We then moved on to discuss investment risks, liquidity needs, diversification, market volatility, and expected returns.

The document was drafted and critiqued by the Investment Committee itself, our consultants, and our current money managers. It has been revised, clarified, and refined as new questions have come up or needs have changed.

As a result, we now have a clear, logical document that provides a basis for all investment decisions. We believe it is so specific and clear that a stranger could come in, read it and begin managing the endowment properly.

Every member of the Committee understands the rationale for each asset class, the kind of portfolio risk the Committee deems appropriate, and what we will do to meet spending needs should we enter an extended bear market.

Several members of our Committee have spent a great deal of time studying top performing endowments, trying to determine how we could replicate their success.

We came to the realization that what every successful Investment Committee does is to dare to be different. Too many Investment Committees lack the courage of their own convictions. They fall into the trap of letting outside experts dominate their decision making and determine their policies.

"Too many Investment Committees let outside experts dominate their decision making."

To be truly effective, an Investment Committee must consider when and how to use outside consultants. In our case, we decided to have our consultants play only a minor role. The Committee must make its expectations clear and let it be known who is responsible for which functions. This process can become a valuable self-evaluation of the Committee's strengths and weaknesses.

We have become much more focused in our communications. We let it be known that we were comfortable with our asset allocation and our capabilities for hiring managers but that we needed more timely performance reporting and more input about opportunities in alternative investments.

As in any decision-making body, the chair sets the direction of meetings and the tone they take and makes sure decisions are made in a timely manner.

The inability of a group to come to a consensus can be costly (in a way, immediately measurable in dollars and cents). When disagreements emerge, a "motion to table" can be expensive. If a decision seems to be out of reach, the best course is to call a special meeting or refer the decision to a subcommittee.

Subcommittees can be given the power to conduct further research and act on their findings. Small subcommittees often do a better job of dissecting complex or technical issues. Phone conferences and e-mail can facilitate communications and decision making.

When the Committee is considering a change in strategy, you ought to make your investment managers aware of this; their insights can be valuable. Let them know what information the Committee considers important, what presentation formats are preferred, and how to allocate presentation time. Each manager should be given the opportunity to shine.

Occasionally, we have requested presentations of special research on such subjects as making technology investment decisions; what kinds of technology exposure would best position our endowment for the next decade? Such presentations always provoke lively discussions and often result in refinements in asset allocation. It is the job of the chair to stage these discussions and keep relevant issues in front of the Committee.

Stability is crucial. Low turnover, continuity in the shaping of your investment philosophy, a consistent Committee culture – these help to achieve good long-term results.

Patricia S. Callan chairs the Investment Committee at Scripps College in Claremont, Calif., and is on the Investment Committee of the City of Hope National Medical Center and Beckman Research Institute. The above was excerpted from an article in "Trusteeship" co-authored by James Manifold, treasurer of Scripps College.

A Message from the Development Side: Please Communicate

An interview with Charles W. Collier

As senior philanthropic adviser for Harvard University and gift-acquisition consultant for a number of other schools, Charles W. Collier looks at endowment management from the other side of the divide. Speaking of the relationship between the investment people and the development people, he says he often sees a "healthy tension." Though they speak different languages, they can and must collaborate to achieve their institution's goals.

We spoke with Mr. Collier about building rapport between investment and development. Excerpts follow:

Commonfund Almost every year, it seems, Harvard raises the most money of any educational institution in America. How big a figure are we talking about?

Collier Annual gift income is now about $500 million.

Commonfund Is that steady, year to year?

Collier It moved up substantially during the 1990s. It's more than tripled in 10 years.

Commonfund How do you account for that? Do you see a change in the donors?

Collier Yes, for one thing, they're wealthier. In fact, they're wealthier today than they were just five years ago. Second, they are now much more concerned with making a difference, and therefore with accountability. They want to know where the money is going, how it's going to be used, how they can evaluate – even on a very informal basis – whether or not their gift is being productive and whether it's achieving results.

Their concern with accountability goes directly to how the institution is managed. They want to know if it is well run and how the endowment is doing.

This emphasis on accountability is a substantial change.

Commonfund What do you think has brought about this change?

Collier It's a result of a variety of trends. Over the last five plus years, philanthropy has become a hot topic, and that is due to staggering wealth accumulation, increased adviser awareness, and better nonprofit communication.

Harvard may have been in the game early, as were others, but now all the state universities, the museums, and hospitals are very sophisticated in their approach to fundraising. I think the adviser community and the private banks are now very much attuned to this new reality. They're working hard to serve their clients in the whole area of individual and family philanthropy.

"Donors are now much more concerned with making a difference, and therefore with accountability."

Commonfund Is there growing competition for the philanthropic dollar?

Collier Yes, but unlike giving from corporations, there's enormous elasticity in the private sector. Despite the competition, the wealthy in America have not been giving away their last dollar. In fact, there's enormous room for increased giving. While the wealthy tend to give from their surplus capital, most Americans give out of their income, typically 1% to 2% of their income. Now, many institutions are helping donors see that they're actually in a position to give out of their capital, too.

Commonfund There seems to be increasing use of planned giving programs.

Collier Correct. The wide variety of giving vehicles being used is clearly helping the nonprofit community. We have a portfolio – within our $19 billion endowment – of various charitable trusts and annuities that comes to over $1 billion.

Commonfund Do planned gifts often require special management on the part of the investment group?

Collier Yes, sometimes we receive unusual gift assets, like real estate, that have to be managed, or restricted stock that can't be sold. We've received private corporations that had to be liquidated, 100-year water rights, and an S corporation that owned a ski area. We've had all sorts of assets that demand a high level of specialization in their acceptance, management, and disposition.

Commonfund Does this complicate the life of the Investment Committee?

Collier It can, but if your institution is willing to take on what I call "unusual gift assets," it will also raise more money. I think Investment Committees see the merit in this, that it's going to produce significant gift flows over time. It takes a commitment of staff time and money, and not every institution will make a decision to go after a wide variety of gift assets.

Commonfund So they would have to turn away opportunities, wouldn't they?

Collier Sure. We still turn away opportunities that we think are not in our best interest or not cost-effective to administer during the management and disposition phase.

Commonfund How can the investment committee and the investment group be more helpful to the development staff?

Collier That's a great question. I think that the investment committee should have a direct line of communication with the development group. I've seen many cases in which donors – especially when dealing with unusual

"The wide variety of giving vehicles now being used is clearly helping the nonprofit community."

assets like real estate or restricted stock – strike up a relationship with the investment folks. The investment team needs to keep the development staff informed of such contacts.

Also, I think the investment group needs to do some proactive education. They should educate the senior development officers of the institution on the goals and asset allocation of the endowment and how it is managed. That kind of detailed information needs to be updated and disseminated to the development group – perhaps in a half-day retreat once a year.

Very often there is inconsistency and misinformation, a lack of in-depth information by the senior development people. This often means they cannot talk cogently with their best donors.

Also, I think it's extremely valuable for the investment group to communicate broadly with donors and prospects, talking to alumni groups or sending out an annual letter about the endowment: how it's managed, how it's doing, what's the asset allocation, and why.

For example, Jack Meyer, president of Harvard Management Company, sends out a well-crafted, three- or four-page letter every September discussing asset allocation, investment results, the investment outlook. It goes to more than 500 top prospects and donors.

Commonfund What about the rest of the donors?

Collier *Harvard Magazine* just came out with a story about the endowment performance through our latest fiscal year. We get the information out in various ways to various groups.

I think the investment group has a wonderful opportunity not only to serve the university well but also to educate the alumni community on how the institution is run from an endowment perspective and on the role the endowment plays over the very long haul. Alumni are very interested in this information and in their university's approach.

It's a win/win situation, because the investment group can learn something as well. I know their job is quite specific, but I think they can gain perspective and knowledge by continuing a thoughtful dialogue with the senior administration and the alumni body.

A Strong Growth Strategy is the Safest Path to the Future

By Bennett Fisher

It took me a number of years to appreciate the importance of a strong offense.

When you've taken a thorough look at your school's situation and the role of its endowment, you ultimately realize the futility of an investment strategy based on protecting it from what could go wrong. You should, instead, be investing to capitalize on what is likely to go right.

A defensive psychology indicates a short-term outlook. But in endowment investing you face a uniquely unlimited time horizon. In the long term, you really need not be so concerned about volatility in the short term. With just a little fixed-income balancing, I believe a strong growth strategy, even with its risks, is the more certain way to ensure the financial health of the institution during its long future.

When I first joined the board of Pomfret School in 1975, our outlook was decidedly short term. A question at that first meeting was: will we have enough money to open in the fall? One of the trustees had sole responsibility for investing the endowment, such as it was.

In the late 1970s, we decided to hire professionals – a bank in Connecticut. Investment policy, to the extent that we had one, was driven by the need for income. That was the bank's responsibility, so far as we could tell.

By the mid-1980s, the wave of bank mergers drove us to rethink the arrangement. After some searching, we moved the endowment to another manager. Our investment committee made a basic decision to hold 60% in equities. And that, we thought, solved the problem.

Very soon, our new manager began to prod us with new investment ideas – tactical asset allocation, venture capital, real estate, ever finer slices of the equity allocation. Our first alternative investment was a venture capital fund. Two of us on the Investment Committee simply looked at each other and concluded, "Why not?"

During the next few years, through alumni publications and other reading, we became increasingly aware of the offensive strategy taken by Yale in its endowment investing. And meanwhile, our manager kept asking those difficult questions. The light dawned.

We finally recognized the need to become proactive in determining our investment strategy, starting with an overall plan. This required that we frame an understanding of Pomfret's objectives – its near-term and longer-term needs – and its competitive position. We realized we had to examine what others were doing in a changing world and sort out our own preferences and biases.

Pomfret is a modest size boarding school–about 300 students, grades 9 through 12. The plant is in good shape. We are proud of our academic and other programs.

"You ultimately realize the futility of a strategy based on protecting the endowment from what could go wrong."

And we have a list of improvements we want to make. But our endowment is inadequate.

From this perspective the Investment Committee addressed the issues of asset allocation. We concluded that a traditional conservative (defensive) investment posture would not close the gap. In fact, it would risk widening it, impairing the long-term health of the school.

By this time, we had become quite familiar with the range of alternative investments, having participated in several of those.

Our balance at present reflects the preference of a majority of our Investment Committee for growth. We understand that we may well encounter greater short-term volatility than we would with a defensive strategy, but this is acceptable; it can be managed.

Here, then, is a summary of our current asset allocation:

Fixed Income, 17%. We consider this the cushion for our spending when we encounter a streak of poor markets and do not want to sell equities. It would cover 3 to 4 years. (We operate with a spending rate of 4.5% for current needs but allow for some "extras" when the justification is sufficient.) We do not hold high-yield or distressed bonds, because we want this sector to have minimum risk.

U.S. Equity, 51%. Comprised of Large Cap 31%, S&P Index Fund 12% (there is ongoing debate in the Committee about the portion to be invested in an index fund), U.S. Small Cap 4% (would be larger but for the significant venture and private-equity investment, listed below) and Hedge Fund 4% (which remains under review).

International Equity, 14%. Comprised of Core International 10%, Emerging Markets 3%, and Small Cap 1%. This sector is likely to be increased in view of its long-term relative attractiveness vs. the U.S., from both a growth and valuation perspective.

Other, 18%. Comprised of Real Estate 3%, Domestic Venture and Private Equity 13%, and International Venture and Private Equity 2%. All of this is invested in pooled funds with wide diversification of managers and investments. Commitments in place for future funding are significant and likely to bring this portion up to 20% or more.

Bennett Fisher is a trustee of Pomfret School and until recently was chairman of its Investment Committee. He is a senior vice president of Fiduciary Trust International, an investment management firm in New York City.

Two Ways to Smooth Payout and Five Other Suggestions

An interview with Laurance Hoagland

During his years as president of Stanford Management Co., one of the nation's largest endowments, Laurance Hoagland took part in shaping a payout policy that is regarded as a model of effectiveness. He had recently joined The William and Flora Hewlett Foundation as treasurer when he took time out to talk with us about the problems of managing the annual payout.

Commonfund You've been close to a number of educational institutions. How would you sum up your observations of their approach to payout policy?

Hoagland Aside from the issue of investment responsibility, there's nothing that sparks more spirited debate among trustees. I would say that two apparently conflicting points stand out. One, I find almost universal agreement that the principle of intergenerational equity should be honored – the principle that Professor Tobin has stated so eloquently (see front of this brochure). And, two, the current faculty, administration and students all passionately believe that the institution is at a crossroads and its long-term interests will be best served by spending more now. That generally leaves the trustees as the only ones to weigh the counterarguments for protecting future spending capacity.

Commonfund There's a lot of discussion about smoothing the payout. How important is this really?

Hoagland That's the challenge – to reduce the fluctuations in dollars transferred from endowment to budget year by year. It is crucial to the budgeting process and to the quality of the education the school provides.

Commonfund What have you found to be the best smoothing formula?

Hoagland The most common method is to compute the payout not on the current market value of the endowment but on its average market value over the past three or five years. This algorithm is highly effective in sheltering the school from the impact of short declines in the investment markets – declines of one to three years.

"During good times, get the building built and renovated so that that burden is avoided during tough times."

Even better in the short run is the approach used by some schools of increasing payout dollars each year by the current inflation rate or by a fixed percentage. The weakness of this approach, however, is that, if spending becomes too high relative to market value, an abrupt spending reduction may become necessary to re-establish equilibrium.

While these smoothing formulas can iron out the impact of short-term market fluctuations, we have to recognize that neither of these approaches protects the institution against long periods of low or negative inflation-adjusted returns.

Commonfund Well, what about that? What can trustees do to protect against a protracted weak market?

Hoagland This is the most sobering issue for the fiduciary concerned with endowment management. We have to take a historical view, and the picture isn't pretty.

Our current expectations are shaped largely by the past two decades, since 1982, during which investment returns, with only a few interruptions, have been extremely high and enormously helpful to schools. If, however, we take a longer view, we see a very different picture.

For example, we can simulate the real, inflation-adjusted payout from one share of an endowment fund that pays out 5% of its market value, smoothed over three years, a fund that is indexed 75% in U.S. stocks and 25% in U.S. bonds. The good news is that the smoothing irons out any short-term kinks in the year-to-year real payout. The bad news is that over long cycles the real payout fluctuates dramatically.

During the post-World War II bull market – 1946 to 1966 – the real payout per share trebles. Over the next 16 years – 1966 to 1982 – it declines steadily, and precipitously, by two-thirds, returning finally to its 1946 starting point. It's not until 1998 that real payout per share exceeds its 1966 level.

Commonfund What do you think trustees ought to learn from this history?

Hoagland First, they must realize that the last two decades cannot be viewed as business as usual, that we could again experience long periods of below-normal returns. During the 1970s, real faculty salaries were under

"Spend less in good times – for instance 4% – so that you can spend more in bad times."

heavy pressure across the whole field of higher education. Second, while it is normally a blessing to have a large endowment that can support a substantial fraction of an institution's budget, during extended market downswings a large endowment can also increase the school's vulnerability.

Commonfund What, then, can trustees do to protect their institution?

Hoagland I know of no panacea, but here are a few thoughts.

First, awareness and acknowledgment of this risk helps prepare the school's governance structure psychologically should the threat become reality. Second, a broadly diversified asset allocation policy should make the school's portfolio less vulnerable to a decline like that suffered by an all-U.S.-stock-and-bond portfolio from 1966 to 1982. Third, during good times get the buildings built and renovated so that that burden is avoided during tough times. Fourth, build a strong development team. Productive development activity will cushion the effect of a down period – even though gifts are more difficult to secure in such an environment. Fifth, and finally, spend less in good times – for instance, 4% – so that you can spend more – such as 6% – in bad times.

The last of these suggestions is, of course, easier said than done. If a school is spending a lower than normal percentage of market value when returns are high, you can expect growing political pressure to spend more. Spending more when the economy and markets are depressed will also provoke opposition. And finding the oracle who will tell you when markets are high and when they're low – that isn't easy either.

Watch Out for the Risks that Lurk Below the Waterline

By William P. Miller II

I sometimes like to think of our organization as a giant ship, sailing the rolling ocean on a voyage to a distant port.

Our ship is a beautifully designed system, managed by a crew of smart, responsible professionals. Our passengers (the clients) can enjoy the trip with confidence.

But, as everyone knows who saw that big Academy Award movie a few years ago, even an unsinkable ship can sink, if you don't watch out.

Yes, of course, all sailors know the risks: storms, lightning, high waves, icebergs, torpedoes. In the same sense, all investors know the risks to which the market exposes their investments. Sure.

But in my profession, risk management, we know something more: that a complex system such as this actually imposes many more risks than those of the cruel sea (market volatility). And any one of these risks could prevent us from reaching our destination on schedule.

Enough metaphor! The plain fact is that risks pervade the investment process. Our job is to scrutinize that process minutely and identify every area of risk or of potential risk. Anticipation is one of the keys to effective risk management. No surprises!

That is why, for every step of every activity in our investment process, we continually ask, "What can go wrong?" And you should do likewise.

With a few moments of thought, you can quickly sort the investment process into discrete steps. In our work, we distinguish among a dozen separate activities in the investment continuum, starting with: 1. asset allocation, 2. benchmark determination, 3. manager selection, 4. manager retention, 5. portfolio construction, 6. manager review, and a half dozen more.

With that simple list in hand, you can proceed to focus on each one of the named activities, and, by asking yourself, "What can go wrong?" identify the areas of potential risk. You might be surprised at how many you'll think of.

Now, the point I want to make here is that you have to drill down into that list, because it's never been more true than right here that the devil hides in the details. The big, important risks, such as those related to asset allocation, are probably the ones that everyone worries about anyhow. The risks that can suddenly assault you in the night are the risks that lie below the waterline (oops, that metaphor again!).

For instance, consider the process of valuation (eleventh in our list of investment activities). The values printed in your statements are assumed to represent the amounts you would obtain through liquidation of those assets. And you might depend on that information in making endowment management decisions.

"For every step of every activity in our investment process, we continually ask, 'What can go wrong?'"

But we can mention a number of risks that you should keep in mind, and if you find this disturbing it may be all to the good.

For instance, the valuation of a publicly traded stock is based on the price of the last trade of the day. But in one day only a small fraction of the outstanding shares are likely to have been traded. You have no valid indication that any other share owners would be willing to buy at that price.

And, by the way, is that last quote a bid or ask price? And are you sure your shares would be sold on the same exchange, if you were to sell?

The size of your position in a holding could pose a risk if the position is larger than the market can absorb without causing distortions. If a large position is placed on sale all at once, the price will of course plummet.

You also face a risk in the pricing source used. Is it an appropriate source for those assets? Is the pricing timely?

At the end of the calendar year, when valuations are commonly made, you face an unusually tranquil market. The brokers have already received their bonuses and are reluctant to make markets again until the new year begins. So who is following the stock you are valuing? Who would be willing to commit capital? How valid are the valuations you get at that time?

If the assets are not publicly traded, you face still more valuation risks. Since you have no independent pricing source, you depend on valuations based on modeling, or comparables, or a combination. And if comparables are used, was a buffer added? Each of those elements represents a risk that the valuation you depend on actually deviates from the value you would realize through liquidation.

And what I've just mentioned are only a few examples of commonly unnoticed risks that good risk management monitors.

Andrew Grove immortalized an apt saying, naming his book, "Only the Paranoid Survive." I know, there's nothing to love in those words. But, frankly, an effective risk management program requires that all members of your crew systematically act a little paranoid, continually asking, "What can go wrong?"

You won't win any Academy Awards for acting that way. But you'll have dramatically improved your chance of achieving your institution's objectives.

William P. Miller II is Independent Risk Oversight Officer for Commonfund. Previously, he was Director of Trading Operations and Asset-Mix Management for General Motors Investment Management Corporation.

The Full Array Can Dampen Volatility

By Todd E. Petzel

Asset allocation is one of the hardest decisions for an endowment to make. How much total equity? What should be the split between large cap and small? Domestic and international? What bonds make sense for the portfolio? Should alternative investments play a significant role?

At Commonfund we are often asked our opinion as to the "best" asset allocation. Giving a definitive response would be like picking out shoes for somebody else. We may like a certain style and we can guess on the size, but only the person who has to wear them can say whether they are functional and feel good.

Those are, indeed, the relevant general questions for asset allocation. Does the mix of assets work for us and are we comfortable with it? If the answer to either question is no, then it's time to roll up your sleeves and get to work.

The decision process should begin with a clear statement of objectives. Most institutions have a goal that says they seek to grow the endowment in real terms. That is, average investment returns should at least equal inflation plus spending through time.

In today's environment, this translates to a target rate of return for most schools of 8-9%. We would also add that asset allocation should be for long-term strategic goals and not short-run market timing. There is little evidence to suggest that anyone other than a few market professionals, who are constantly in the market, do the latter very well.

There is also the objective of intergenerational equality. If too much risk is taken to meet the return objectives, then the current generation of students (and trustees and administrators!) is at risk if the portfolio should take a sudden dive. Asset allocation is a constant tradeoff between expected return and risk.

One sometimes sees asset allocation suggestions for different stages of a retirement plan. A healthy 30-year old can take more portfolio risk than an already retired 70-year old, and plans are crafted accordingly. We do not believe those distinctions are relevant to infinitely lived institutional portfolios. Instead, we see schools dividing themselves into those that stay with more traditional asset classes and those that are willing to expand into a fuller array of alternatives.

Consider two different portfolio mixes that can act as the foundation for further discussion. One that we'll label "Traditional Mix" is a basic 65/35 stock/bond split. The other, which we'll call the "Full Array Mix", reduces these two categories in order to fund alternative investments such as hedge funds and real estate and less traditional diversifiers such as venture capital, private equity and dis-

"It is certainly appropriate to have long-term allocations in alternative investments such as hedge funds and real estate."

tressed debt. The "Full Array Mix" might have a stock/bond/other breakdown of 55/30/15.

Using a part of our Endowment Planning Model, we are simulating the performance of these two mixes over a variety of economic environments.

Our tests suggest that both mixes have comparable target rates of return of more than 8-9%. But the "Full Array" mix can be expected to demonstrate 25% less volatility because of the added diversification. Bear in mind that these tests are based on long-standing relationships across asset classes and may not precisely predict actual results in any given time period.

It may seem counterintuitive to add things like hedge funds and distressed debt to a portfolio and wind up lowering risk, but that is one of the great wonders of building a portfolio. If the asset classes do not demonstrate a high degree of correlation with one another, even adding some high volatility investments can actually lower the overall risk of the portfolio. The key here is to focus on overall portfolio results (which should be our objective) and not dwell on short-run movements in individual investments.

Institutions that have approximated the "Full Array Mix" for the past few years have done well, but they have not gotten a lot of reinforcement for their decision to diversify. In many cases, they have done less well than schools that made concentrated bets in large cap U.S. stocks and were rewarded by the raging bull market in that sector.

In recent years, we've seen more and more institutions looking at hedge funds, private equity, venture capital, distressed debt and real estate. We believe it is certainly appropriate to have long-term allocations in these areas.

Such investments are not without risks, however. The "Full Array" portfolio is considerably less liquid than the "Traditional" one. In most instances this should not be an issue. But for institutions running operating deficits and drawing heavily on their endowments, this illiquidity in one area, coupled with market volatility in the other, could prove problematic.

So, before you buy the shoes, look them over carefully and make sure they fit.

Todd E. Petzel is president and chief investment officer of Commonfund Asset Management Company, the investment arm of Commonfund.

I Know I Don't Want Too Much of It, But What Is It?

By William T. Spitz

The hardest part of an endowment fiduciary's job is determining how much risk is appropriate for the fund and the institution it supports. Informed trustees understand the trade-off between risk and return, and most investment committees have been presented with asset allocation studies that depict alternative portfolio structures with different combinations of risk and return.

For example, a committee might narrow the choices to two alternatives: one with a projected standard deviation of 11%, and another with 13%. Each committee member understands that the second alternative is "riskier." But how much standard deviation is appropriate, and what does a statistical measure have to do with operating an educational institution?

I believe that endowment trustees need to step back from the statistical analysis and think much more fundamentally about the nature of educational institutions and the risks they face.

Ideally, trustees would think about all of the revenue streams of an institution and the risks to which each of those streams is exposed. Then, a comprehensive strategy could be developed that considers the extent to which these risks are related. But, the state of the art has not yet reached this point, so an appropriate level of risk is typically established in relative isolation.

How should endowment trustees think about risk? I believe it is sensible to describe various kinds of risk in plain English and then to employ investment technology to quantify and control them.

There are three fundamental risks that we should be concerned with. First, the endowment could experience a decline in market value that would be unacceptable. In an ideal world, a temporary decline in value should not be of concern for an endowment considering its long time horizon. But, in reality, such an event could impact fund raising, lead to poor publicity, or, most important, cause the investment committee to abandon a well-constructed investment strategy.

A second and related risk is the possibility of a decrease in the level of support that the endowment provides to the operating budget. Since most endowments use a spending formula that is tied to smoothed market value, an occasional decrease in the payout can be reasonably expected. But such an event can wreak havoc on an operating budget given the high level of fixed costs in most institutions.

"Studies suggest that the probability of a short-term decline is reduced only modestly for more conservative portfolios."

Finally, endowment trustees should be worried about earning a return sufficient to preserve the real or inflation-adjusted value of the fund after subtracting annual spending. In the booming markets of the 1980s and 90s, this has not been an issue, but it is worthwhile to recall that the average endowment suffered a 60% decline in its purchasing power during the decade of the 1970s.

As is the case with every other facet of investing, these risks involve tradeoffs. A temporary decline in market value or spending can be prevented by investing in stable securities such as cash equivalents. But, these investments offer little chance of preserving the real value of the corpus over time. Equities offer the best chance of maintaining generational equity, but they are certain to experience periodic declines in value. The challenge is to construct an investment program that offers a high probability of preserving real value while keeping the frequency and magnitude of temporary declines at acceptable levels.

Happily, optimization and simulation tools can be used to analyze these risks, and most studies conclude that the best balance may be found in highly diversified portfolios with significant exposure to all forms of equity.

Interestingly, these studies suggest that the probability of a short-term decline in value is reduced only modestly for more "conservative" portfolios while the odds of preserving their real value over the long-term are significantly reduced.

Unfortunately, investment technology does not absolve the trustees from their responsibility to make hard decisions. While we can describe and quantify risk, only the trustees can decide how much risk is appropriate. And in making that decision, it is critical that they set aside their own feelings and consider the true nature of the institution. They must remember, for example, that the time horizon of an endowment is measured in decades and not in the length of their tenure on the committee.

Finally, while the word "fiduciary" has a conservative connotation, trustees should understand that the nature of endowments allows for creative and expansive thinking. As Admiral Horatio Nelson said, "I am of the opinion that the boldest measures are the safest."

William T. Spitz is treasurer of Vanderbilt University, responsible for management of its $1.7 billion portfolio, and adjunct professor in its Owen School of Management.

References and Resources

Suggested Reading:

1999 NACUBO Endowment Study. Cambridge Associates, National Association of College and University Business Officers, 2000.

An Unconventional Approach to Institutional Investing. David F. Swensen. The Free Press, 2000.

Asset Allocation: A Handbook of Portfolio Policies, Strategies, and Tactics. Robert Arnott and Frank J. Fabozzi, eds., Probus Publishing Co., 1988.

Classics: An Investor's Anthology. Charles D. Ellis and James R. Vertin, eds., Dow-Jones Irwin, 1989.

Commonfund Benchmarks Study.™ Commonfund Institute, 2001.

Creating and Using Investment Policies: A Guide for Nonprofit Boards. Robert P. Fry, Jr., Association of Governing Boards of Universities and Colleges, 1997.

Dow 36,000: The New Strategy for Profiting from the Coming Rise in the Stock Market. James K. Glassman and Kevin A. Hassett, Times Books, 1999.

Endowment Management. William T. Spitz, Association of Governing Boards of Universities and Colleges, Board Basics Series, 1997.

Endowment: Perspectives, Policies, & Management. William F. Massy, Association of Governing Boards of Universities and Colleges, 1990.

Endowment-Spending Policies. Stephen T. Golding and Lucy S. G. Momjian, Morgan Stanley Investment Management, 1998.

Fixed Income Portfolio Strategies. Frank J. Fabozzi, Probus Publishing Co., 1988.

Funds for the Future: College Endowment Management for the 1990's. J. Peter Williamson, The Common Fund in cooperation with Association of Governing Boards of Universities and Colleges, and National Association of College and University Business Officers, 1993.

Improving the Investment Decision Process: Quantitative Assistance for the Practitioner and for the Firm. H. Russell Fogler and Darwin M. Bayston, Institute of Chartered Financial Analysts, 1984.

Investing with the Best. Claude N. Rosenberg, John Wiley & Sons, 1986.

Investments. Zvi Bodie, Alex Kane and Alan J. Marcus, 4th ed., Richard D. Irwin, Inc., 1999.

Investments. William F. Sharpe and Gordon J. Alexander, 4th ed., Prentice-Hall, 1989.

Irrational Exuberance. Robert J. Shiller, Princeton University Press, 2000.

Managing Your Investment Manager. 2d ed., Arthur Williams, III, Dow-Jones Irwin, 1986.

Performance Presentation Standards. Financial Analysts Federation, Adopted as amended by the Committee for Performance Presentation Standards, April 1990.

Pioneering Portfolio Management: An Unconventional Approach to Institutional Investment. David F. Swensen, Free Press, 2000.

Principles of Real Estate Investment. Commonfund, 2000.

Spending Policy For Educational Endowments. Richard M. Ennis and J. Peter Williamson, The Common Fund, 1976.

Succeed in Private Capital Investing. Commonfund, 1999.

The Challenges of Investing for Endowment Funds. Cathryn E. Kittell, ed., Institute of Chartered Financial Analysts, 1987.

The Complete Guide to Securities Transactions. Wayne H. Wagner, ed., John Wiley & Sons, 1989.

The Financial Analyst's Handbook. Sumner N. Levine, ed., 2d ed., Dow-Jones Irwin, 1988.

The Investment Committee. John H. Biggs, Association of Governing Boards of Universities and Colleges, Board Basics Series, 1997.

The Law and the Lore of Endowment Funds. William L. Cary and Craig B. Bright, The Ford Foundation, 1969.

The Standards of Measurement and Use for Investment Performance Data. Investment Counsel Association of America, ICAA, 1988.

The Yale Endowment. Yale University Press, 1995.

The Yale Endowment, Updates 1996-1999. Yale University Press, 1996-1999.

Winning the Loser's Game: Timeless Strategies for Successful Investing. Charles D. Ellis, McGraw-Hill, 1998.

Web sites:

www.agb.org

www.commonfund.org

www.nacubo.org

www.treasuryinstitute.org

About Commonfund

Commonfund provides vital financial services for institutions dedicated to bettering society.

Our mission is to enhance the financial strength of our clients, all nonprofit institutions, through fund management, investment advice, and services designed to lower costs and improve administrative efficiency.

Through well managed, long-term investment programs, we endeavor to help these institutions strive to build the financial resources they need to maintain and improve their programs, staff, physical plant and infrastructure. Our investment funds are designed with the goal of helping increase their operating income. And our state-of-the-art treasury management tools help them increase financial productivity and reduce administrative costs.

Commonfund was founded in 1971 as a nonprofit corporation. Together with our subsidiaries, we have approximately $26 billion in assets under management for more than 1,400 nonprofit clients.

DESIGN: CLARION MARKETING AND COMMUNICATIONS ILLUSTRATION: NICHOLAS WILTON

Commonfund
15 Old Danbury Road
P.O. Box 812
Wilton, CT 06897-0812

Tel 888-823-6246
Tel 203-563-5000
www.commonfund.org

commonfund
INSTITUTE