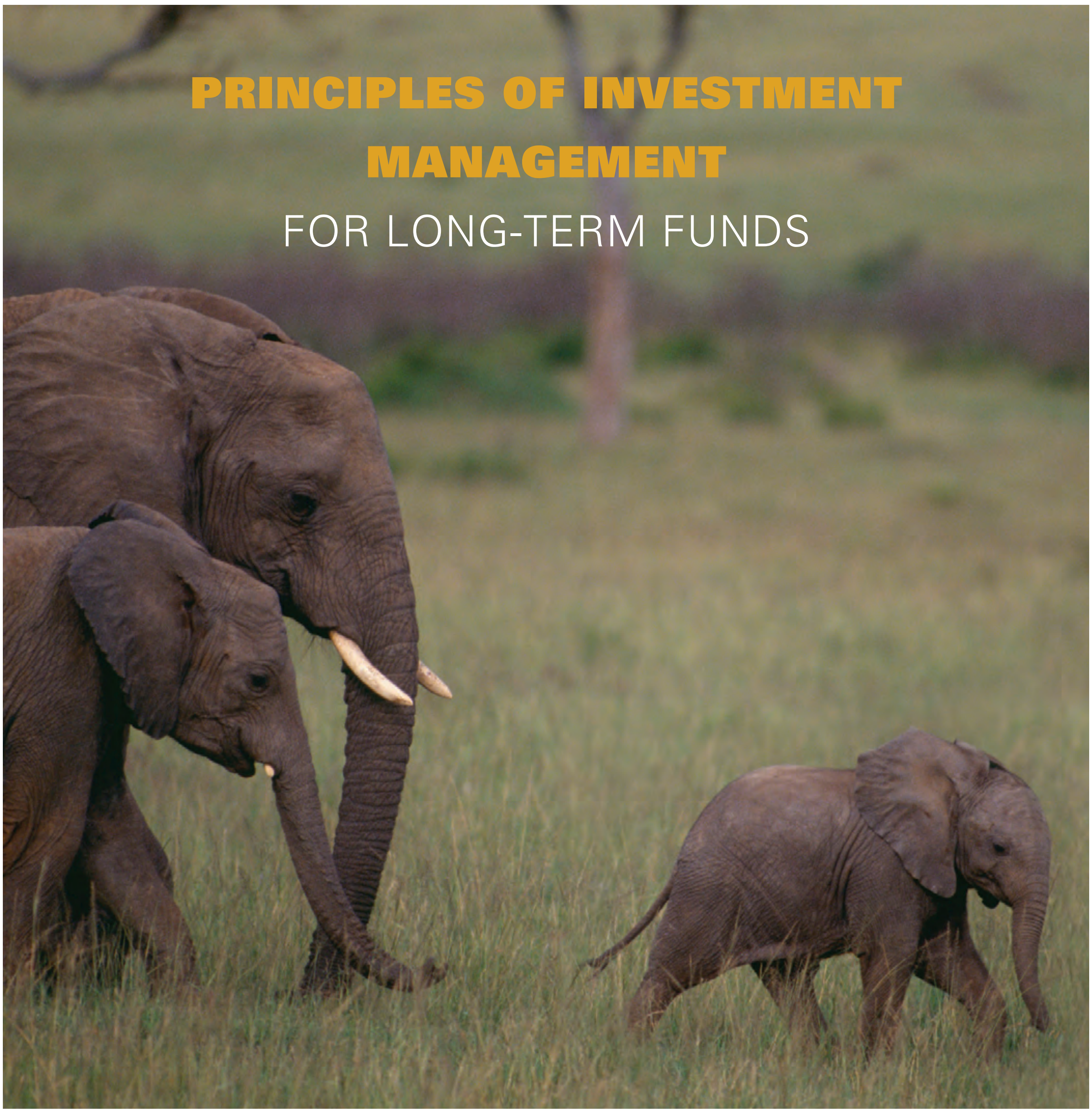
commonfund
INSTITUTE

PRINCIPLES OF INVESTMENT MANAGEMENT

FOR LONG-TERM FUNDS



Preface

The responsibilities of those charged with oversight of a long-term investment fund such as an educational, religious or charitable endowment, foundation, hospital asset pool or pension fund differ fundamentally from those of other investment fiduciaries. The differences arise primarily from the nature of these funds' beneficiaries.

In most asset management structures the beneficiaries, or clients, can speak for themselves. In the case of long-term funds, however, a large proportion of the beneficiaries have not yet been born. These future generations are as entitled to the benefits of the fund as those currently living, and their rights must be protected. Even pension funds, which nominally exist to provide benefits to retirees during their lifetimes, support as-yet-unborn offspring by relieving them of the future burden of their parents' financial support and by making possible the creation of an inheritable estate.

This difference in time horizon—between today's needs and those of the longer term, extending even to perpetuity—creates important differences in management perspective. The distinction may appear overly subtle, because the issues and terms appear superficially to be the same. But for a fiduciary with responsibility for a long-term fund, the term "capital preservation" takes on increased gravity; it means preservation not just of the nominal dollar value of the fund but of its purchasing power—its ability to provide the same inflation-adjusted level of benefits—into the indefinite future.

For that reason, we at Commonfund have created this publication. In the following pages we set forth a perspective on the management of long-term funds that all concerned can share—experienced financial professionals and those less experienced, trustees who establish policy and officers who execute it.

After defining basic terms, we focus on key issues in long-term fund management that you, as a fiduciary, must take into consideration in making your decisions. To keep our presentation clear, we suggest one essential principle for each issue.

In a brief publication such as this, we cannot presume to provide a thorough education. For further information and guidance, please see References and Resources on page 22.

"The trustees of an endowed 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 existence of a long-term fund poses important questions for the institution's policy makers.

Let's begin by defining some key terms and outlining the tasks that you, as a fiduciary, must undertake.

Long-term funds can take many forms. For our purposes here, we will define two main types: endowments and pension funds.

An *endowment* is a portfolio of assets donated to a nonprofit institution to aid in the support of its mission, usually over a perpetual period. The concept originated in medieval England, where churches and other religious establishments received gifts and bequests of land which they then rented to tenants, using the income for poor relief and other charitable missions. In modern times, endowment assets are held primarily in financial instruments, though they may include real estate investments. Endowments realize investment income not only from dividends and interest payments on the underlying securities, but also —importantly—from increases in the market value of the portfolio.

Institutions may, from time to time, receive new gifts from donors to augment their endowments. While a few donors make general, unrestricted gifts that can be used by the institution for any mission-related purpose, most donors make restricted gifts that are limited to specific purposes. As an example, an educational institution might receive gifts restricted to faculty compensation, scholarships, research, athletics or arts programs. Amounts accumulated by the institution through its operations may be designated by the board as *quasi-endowment*, to be invested and spent as if they were unrestricted endowed funds.

Institutions may also periodically conduct capital campaigns to attract new contributions. Larger organizations have development offices staffed by professionals who work to raise endowment funds by matching donor interests with institutional goals.

In the U.S., investment of endowment funds is generally governed at the state level, both by common law and by the Uniform Prudent Management of Institutional Funds Act ("UPMIFA"), a statute first introduced in 2006 and now enacted in nearly all the states and the District of Columbia (the only exception being Pennsylvania, which has a separate law containing broadly similar provisions).[1] We discuss the influence of common law and UPMIFA on fiduciary duty and portfolio management throughout this publication.

Possession of an endowment brings both short-term and long-term benefits to the institution. In the short term, a portion of the pool's annual return on investment can be transferred each year to the operating budget. Over the longer 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 an enhanced ability to achieve the institution's mission. An endowment can also help an institution to differentiate itself from competitors by the quality of its programs and offerings.

The other main type of long-term fund is a *pension fund*. This is a portfolio of assets invested to provide retirement income to designated beneficiaries (and frequently their surviving spouses and minor children) who are employees or members of public or private corporations, governmental entities or unions.

Pension investments are governed by common-law fiduciary principles combined with a complex of state and federal laws designed to protect the interests of the beneficiaries. These laws also govern the relationships among the trustees, managers, sponsors and service providers for the fund, with the goal of enabling the fund to achieve its mission of providing the promised stream of payments to each beneficiary.

Pension funds benefit society by providing a degree of income security to private individuals, augmenting whatever other retirement savings they may have and helping to alleviate the burden on their children and families of having to support them in retirement.

In the discussion that follows, we will refer generally to "funds." By this term we mean both endowments and pension funds, bearing in mind that while endowments can (and do) support an extremely broad set of purposes, pension funds have essentially the single purpose of providing a stream of payments to a designated set of beneficiaries. While pension funds in theory can terminate when the last beneficiary has died, most (particularly public pension funds) are, in practice, pooled investment vehicles with a horizon that extends over many lifetimes, to the point that they can be considered, for investment purposes, at least, to be similar to perpetual funds like endowments.

Inherent in these brief descriptions are a number of crucial questions that trustees, as the policy makers for the fund, must continually face:

- What is the objective of the fund?
- How should it relate to the institution's mission?
- In the case of an endowment, how much should it contribute to the operating budget?
- Or, in the case of a pension fund, what level of benefits is appropriate and sustainable?
- How can the fund's 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?

In the following pages, we offer a way to approach the answers.

1 For further information about UPMIFA, visit www.upmifa.org.

Objectives

Essential Principle: *The board, in consultation with the institution's administration, should determine the objectives of the fund and the policies that will guide its management, explain them in a written statement, and periodically review and update the statement.*

Trustees or governing board members whose experience lies primarily in the private sector are accustomed to thinking of financial objectives in terms of net profit, return on investment, and shareowner value, all of which are measurable in quantitative terms. In their roles as fiduciaries of a fund, however, they have to measure success against more subjective goals.

The terms may resemble those used in business; profit and growth certainly have relevance to the management of an organization's endowment or pension fund. But in this environment, success has very different implications.

It must first be understood in terms of the social purpose and utility of the institution (taken here to include a mutual benefit institution such as a pension fund), however intangible that may seem. And it must be viewed in a time frame that is much more extended than those normally considered in business.

The trustees, in planning investment policy for a fund, must therefore start with an understanding of the institution's charter and its mission. And against that background they must proceed to review the condition of the institution and its short-, medium- and long-term needs.

These deliberations are best carried out in a formal legislative manner, with the resulting policy expressed in writing. The members of the board may represent various backgrounds, points of view and priorities. As in any such deliberative body, the final result—a written investment policy statement—will, in most cases, reflect the give and take of negotiation and compromise.

The investment policy statement should bring these varied perspectives to a resolution, providing a written guide for the management of the fund. Thus, before assets are allocated or investments selected, the trustees, through their policy-making, make the most significant contribution to the achievement of their objectives.

The investment policy statement should resolve these key issues

- The role of the fund in supporting the institution's mission
- Who in the organization should have responsibility for investment decisions
- Which investment decisions, if any, should be delegated to outside consultants, advisers, or investment managers
- Overall investment strategy, particularly asset allocation
- How much of the fund's return should be spent each year, and how much reinvested
- Where applicable, the role of the fund in maintaining a healthy balance sheet for the institution
- In the case of a fund other than a private foundation or pension fund:
  - The proportion of the institution's operating budget that should be supported by the fund
  - What proportion of expendable gifts should be channeled to the fund as opposed to current spending

Payout Policy

Essential Principle: *In deciding the amount to be transferred annually from the fund, the board, working with the institution's staff or administration, must, in the case of an endowment, carefully balance the current needs of the institution and its constituencies against the obligation to preserve the real, inflation-adjusted value of the fund's benefits for future generations, and in the case of a pension fund ensure the ability of the fund to provide the promised payments to beneficiaries.*

Having recognized the primary purpose of the fund, we now turn to the question of how much the fund should contribute to the organization's mission, or to beneficiaries, each year.

For pension funds, the amount to be paid out is dictated primarily by actuarial rules; for private foundations, legal and regulatory provisions mandate a minimum average payout level. There is thus less flexibility regarding payout policies for these institutions.

For endowment funds, however, the answer is more subjective. Indeed, for these organizations it may appear that the response is simply to assess how much the organization needs and contribute that amount, or even to transfer the fund's entire annual earnings.

These approaches, however, are inappropriate. The organization's perceived need provides questionable guidance; an accumulation of favorite programs and causes could induce excessive withdrawal from the endowment, reducing its value for the future. Similarly, transferring the entire annual return each year risks diminishing the fund's purchasing power, thereby impairing the organization's ability to fulfill its mission over the long term.

UPMIFA permits fiduciaries of an endowment to consider the expected total return of the institution's investments when making spending decisions. Thus, capital appreciation, together with dividend and interest income, constitute the fund value from which spending can be calculated.

Spending Formulas, Payouts and Withdrawals

Since most institutions desire a constant and, ideally, constantly growing flow of support from their fund, a number of formulas have been developed to enable spending to be calculated in a predictable manner. For pension funds, as we have noted, these formulas are the result of actuarial and legal considerations. For other nonprofits, the most widely used methodology involves spending a percentage of the fund's market value each year, which is often calculated using a smoothing or averaging technique that aims to reduce the variation in spending from year to year. Another group of methods depends less on the fund's market value and seeks instead to maintain a stable amount of dollar spending from year to year, usually adjusted to keep pace with inflation. Still a third group of methodologies uses a hybrid approach, in which a market value-based rule is combined with an inflation-based rule.

The main spending rules, and their calculation, are shown on the next page.

UPMIFA does not specify what a nonprofit fund's payout percentage should be. An optional provision, adopted in some states, holds that spending above 7 percent is, by definition, imprudent, but there is no other specific guidance. The institution's governing

Spending Policy Examples

Assumptions and Starting Points

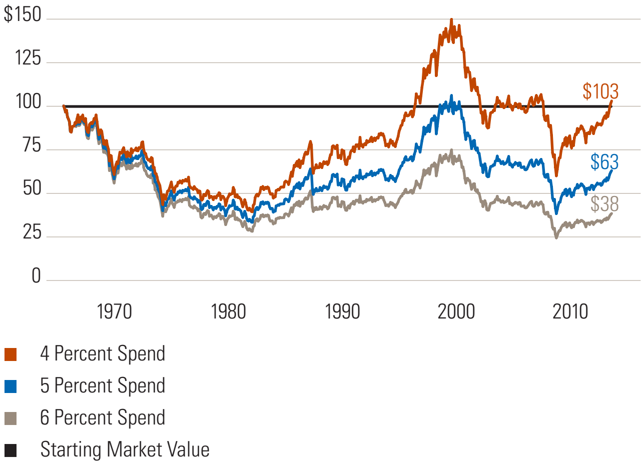
Endowment	$100,000,000
Spending Rate	5%
Prior Year Spend	$5,000,000
Inflation Rate	3%

Spending Policy Approach	Definition	Spending Equation	Spend
Category I: Simple Rules			
Income-Based	Spend all current income.	Endowment Income (assume income of 4.5%)	$4,500,000
Decide on an appropriate rate each year			
Spend a pre-specified percentage of beginning market values			
Meet IRS minimum of 5 percent	For private foundations subject to this requirement.		
Category II: Inflation-Based Rules			
Inflation-Based	Increase spending each year based on rate of inflation.	(Endowment x Rate) + Inflation Adjustment	$5,150,000
Banded Inflation	Last year's spending plus an inflation rate, but bound by range—e.g., no more than 6.5% nor less than 3.5% of market value.	Prior year Spend x (1 + Current Inflation Rate) *If calculated spending dollars are below Lower Band then default to Lower Band amount and if dollars are above Upper Band then default to Upper Band.*	$5,175,000
Category III: Smoothing Rules			
Traditional	Pre-specified percentage of moving average of market value—typically 5% of a three-year moving average of beginning market values.	Endowment x Rate	$5,000,000
Spending Reserve	Segregation of 5–10% of market value in separate account, invested in 90-day Treasury bills. Reserve is drawn down when endowment performance is less than policy target.		
Stabilization Fund	A fund created from endowment returns in excess of the target spending rate which is used to control the long-run growth of the total endowment. The stabilization fund is invested alongside the endowment, but with a different (higher) spending rate.	(Original Endowment x Spending Rate) + (Stabilization Fund balance at end of previous fiscal period x Spending Rate)	
Category IV: Hybrid Rules			
Yale Rule	The amount released under the spending rule is based on a weighted average of prior spending adjusted for inflation (80% weight) and the amount that would have been spent using 5% of current endowment market value (20% weight).	(Prior year Market Value x Spending Rate x 20%) + (Prior Year Spend x [1 + Inflation Rate] x 80%)	$5,120,000
Stanford Rule	The amount released under the spending rule is based on a weighted average of prior spending adjusted for inflation (60% weight) and the amount that would have been spent using 5% of current endowment market value (40% weight).	(Prior year Market Value x Spending Rate x 40%) + (Prior Year Spend x [1 + Inflation Rate] x 60%)	$5,090,000

Effects of Various Spending Rates* Over Time

January 1966–December 2013

Lower spending rates allow for greater capital accumulation in the pool and result in a higher absolute dollar payout level.



Inflation-adjusted using Commonfund Higher Education Price Index® (HEPI)

The equity portion of the hypothetical portfolio is based on monthly returns of the S&P 500 Index (1/66–current quarter-end), and the fixed income portion is based on monthly returns of the Barclays U.S. Aggregate Index (1/73–current quarter-end) and the Ibbotson Associates Long Term Corporate Bond Index (1/66–12/72). Returns for this hypothetical inflation-adjusted portfolio assume that it is rebalanced to 70/30 annually on 1/1/yy and 5% is distributed annually on 1/1/yy.

Sources: Bloomberg, Commonfund Institute, Ibbotson

board bears the burden of the spending decision and, in making it, must give due consideration to projected returns on the fund's investments. Market conditions will, of course, influence investment results. But no one can predict market changes reliably, and attempts to time the market have been repeatedly shown to fail.

Surveys of nonprofit spending practice indicate that withdrawals, on average, have tended in recent years to average between 4.5 to 5.5 percent of the net asset value of the investment pool (private foundations are required to spend a minimum of 5 percent of their investment pool's market value each year, subject to certain adjustments). This level was long deemed to be sustainable but, in the aftermath of the 2008–09 economic crisis, economic growth rates have generally been lower, and it is unclear whether spending rates for institutions other than private foundations will remain in this range or decline.

Over the long term, spending restraint increases the likelihood that the fund will be able to grow in dollar terms and, perhaps, even maintain or increase its purchasing power. Analyses comparing spending rates of 4, 5 and 6 percent have demonstrated that, over a period of nearly 50 years, lower spending rates, by allowing for greater capital accumulation in the pool, result in a higher absolute dollar payout level.

Inflation and Fees

Two other important factors that must be considered by fiduciaries are inflation and fees. Inflation, while subdued in recent years, remains a constant worry. Even at its current low rates of 2 or 3 percent, inflation erodes purchasing power over time and must be considered in calculating investment return goals and spending policy. And the cost of managing the fund 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 or the needs of beneficiaries.

Spending policy decisions also raise important issues about the health of a nonprofit institution's balance sheet, particularly if it has debt outstanding. Should some portion of annual spending be directed to debt reduction?

Apart from investment returns and any surplus funds that may be obtained from operations, the other source of potential growth for the fund is contributions. These, by enlarging the fund's capital, can serve to increase the potential dollar return of future investing. In this regard, potential returns from fund-raising campaigns (or, in the case of a pension fund, from special contributions) should be taken into account.

In the long run, the factor that has the greatest effect on investment results is how the board or investment committee balances the assets in the portfolio. And that takes us to our third principle of perpetual fund management—asset allocation.

Asset Allocation

Essential Principle: *Your most important investment-related decision—the one that will largely determine the level of risk-adjusted return you are seeking—is how to apportion various asset classes and investment strategies in the fund's portfolio. This is a decision that the board or investment committee should review annually and maintain through rebalancing.*

Asset allocation is the cornerstone of your fund's investment policy and a key responsibility of the governing board. Your strategic asset allocation policy should set the course for investing the fund for many years to come. But determining an optimal asset allocation for your institution's portfolio involves more than numbers.

Interpretation of the legal responsibility that trustees bear for protecting long-term pools has changed considerably since the 1950s. Until that time, traditional trust law was interpreted to require preserving the nominal value of the original capital contributed. For example, if a donor gave $1,000, trustees were supposed to preserve that same $1,000 into perpetuity. The preferred route for accomplishing this goal was usually to invest the money in debt-related instruments such as bonds. In fact, until the 1970s charity regulators in many states maintained "legal lists" of permitted investments for nonprofit endowments and pension funds, according to which many types of investments in common stock were deemed imprudent. This approach ignored the fact that economic and interest rate fluctuations could lead to losses on bond investments, and that—perhaps most important of all—the purchasing power of a $1,000 bond investment could be eroded by inflation so that, even in the absence of other factors, the real value and purchasing power of the original gift could be substantially reduced by the time the bond matured.

In the aftermath of the Great Depression of the 1930s, which proved that bonds could indeed be risky, the legal principle of the "prudent man," first introduced at the beginning of the 19th century, became the standard for trustees. The introduction of UPMIFA's predecessor statute in 1972 broadened the "prudent man" rule into a "prudent investor" criterion that gave fiduciaries discretion in selecting investments. Successive court decisions enforced the concept that a prudent investor acted for the long term, considering and balancing risk and opportunity and avoiding short-term speculation.

Modern Portfolio Theory

These legal developments, culminating in UPMIFA, permitted fund fiduciaries to take into account many of the new developments that changed the landscape of the investment world in the late 20th century. These changes included new financial management technologies, asset classes and investment strategies such as international debt and equity, private equity, venture capital, real estate and commodities, together with the advent of a new generation of investment management professionals. All of these developments were fostered by important new academic thinking about portfolio management.

This new thinking, under the heading "modern portfolio theory," emerged from work done by a number of economists, many of whom later became Nobel laureates in recognition of their contributions to the investment field. Their aim was a better understanding of the relationship between investment risk and return. Their ideas can be briefly summarized as follows: The degree of risk entailed in a particular investment can be expressed as its volatility, or the degree of movement in its return, 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

Asset Allocations* for Fiscal Year 2013

July 1, 2012–June 30, 2013

numbers in percent (%)	Total Institutions	Over $1 Billion	$501 Million–$1 Billion	$101–$500 Million	$51–$100 Million	$25–$50 Million	Under $25 Million
Domestic equities	16	13	20	27	33	36	43
Fixed income	10	8	11	15	20	22	26
International equities	18	17	19	19	20	17	14
Alternative strategies	53	59	45	34	23	20	11
Private equity (LBOs, mezzanine, M&A funds and international private equity)	12	15	8	6	2	2	1
Marketable alternative strategies (hedge funds, absolute return, market neutral, long/short, 130/30, event-driven and derivatives)	20	20	21	17	10	10	6
Venture capital	4	5	3	2	1	1	0
Private equity real estate (non-campus)	7	8	4	3	3	2	1
Energy and natural resources	5	6	4	3	1	1	1
Commodities and managed futures	2	2	1	1	2	2	1
Distressed debt	2	2	2	1	1	0	0
Alternatives not broken out	1	1	2	1	3	2	1
Short-term securities/cash/other	3	3	5	5	4	5	6
Short-term securities/cash	2	2	3	3	2	3	4
Other	1	1	2	2	2	2	2

*dollar weighted

Source: NACUBO-Commonfund Study of Endowments, 2013

course of arriving at its mean return over a given time period. In general, investments with greater standard deviations have been shown to produce higher returns over the long term. To get the highest long-term return for their portfolio, therefore, fiduciaries must include some investments that have a relatively high degree of risk. This risk can, however, be offset by building a portfolio of investments that do not move up and down together—that have, in other words, a low degree of correlation with each other.

This understanding of risk shifted the main focus of investors from the selection of securities to the design of the overall portfolio. The allocation of the portfolio among various types of relatively uncorrelated investments is now recognized to be the most important determinant of investment success. A well-diversified portfolio might include, for example, not only small- and large-capitalization stocks and corporate and government fixed income assets of varying maturities but also allocations to less-liquid alternative strategies such as private equity, venture capital and hedge strategies, as well as to investments such as real estate and commodities that can provide protection against inflation.

The availability of large databases of investment information and the development of sophisticated modeling techniques have enabled investors to estimate how various asset allocation strategies are likely to perform over the long term and the degree of volatility they are likely to experience. These computations can take into account the way in which, in a portfolio context, the volatility of one type of asset may diminish or cancel the volatility of another, less correlated, asset. They can also show the effect of the portfolio's payout methodology on the inflation-adjusted value of the portfolio over time.

Trustees' Decision-Making Process

These models are particularly useful in showing the interaction and relative behaviors of different asset mixes. But though they are enormously helpful, the future may differ significantly from the historical experience reflected in the models. Thus, they cannot decide the asset allocation for you and should not be relied on to forecast specific returns or volatilities.

The asset allocation process is best carried out in a systematic, disciplined manner. Indeed, in agreeing on its planning agenda, the board should make sure it gives each trustee the opportunity to express both an overall vision and specific 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 describe the level of risk or volatility that should be considered tolerable.

What types of assets or investment vehicles should the portfolio include? The trustees should discuss the pros and cons of each and determine the function that each should perform in the portfolio. A frank discussion of these topics can help to promote better understanding between the investment professionals on the board and those trustees for whom these issues are relatively unfamiliar.

Fiduciary Oversight and Rebalancing

Decisions should be recorded in the form of the investment policy statement. The clarity of the statement can make a vital difference in the months and years ahead as it becomes the guide for implementation of the investment strategy, maintaining continuity as the individual fiduciaries who oversee the portfolio change.

Over time, as market fluctuations occur, the prices of the various investments in the portfolio will move up or down and the portfolio's actual asset allocation will therefore stray from that set forth in the policy. At set intervals, and especially when the portfolio exceeds the permissible ranges that have been set around the policy targets, good investment practice prescribes selling the appreciated assets and reinvesting the proceeds into those permitted asset classes that have become cheaper, to bring the allocation back to the policy proportions. This process is called rebalancing.

At its most fundamental level, rebalancing is the very essence of successful investing—to buy cheap and sell dear. Especially in volatile markets, however, it may be emotionally difficult to sell winners in order to buy losers. On the other hand, if carried out too often or done irregularly rebalancing can raise the cost of investing or vitiate the benefits of your asset allocation strategy. For this reason, rebalancing requires a discipline, which should be defined in the investment policy statement.

Correlations Among Asset Classes and HEPI

10 Years Ending June 2013

Perfect correlation is indicated by 1.0, meaning that returns for different asset groups move in unison. A correlation of -1.0 means that returns move in unison, but in opposite directions. A 0.0 correlation means that knowing the direction of one asset's movement will not predict the direction of the other asset's movement.

	A	B	C	D	E	F	G	H	I	J	K	L	M
A S&P 500	1.00												
B Barclays Aggregate Bond	-0.26	1.00											
C Wilshire Real Estate Securities	0.79	0.00	1.00										
D MSCI World ex-U.S.	0.90	-0.17	0.73	1.00									
E MSCI Emerging Markets Free Net	0.79	-0.06	0.63	0.92	1.00								
F MSCI Europe	0.90	-0.16	0.73	0.98	0.89	1.00							
G 3-Month Treasury Bill (Average Yield)	-0.03	-0.02	-0.03	0.10	0.17	0.11	1.00						
H NCREIF	0.26	-0.18	0.26	0.21	0.14	0.22	0.41	1.00					
I Thomson Reuters Private Equity	0.83	-0.28	0.69	0.83	0.77	0.82	0.21	0.55	1.00				
J HFRI Distressed Debt	0.86	-0.32	0.73	0.89	0.84	0.86	0.02	0.23	0.88	1.00			
K HFRI Fund of Funds Composite	0.78	-0.25	0.53	0.87	0.89	0.83	0.21	0.30	0.85	0.89	1.00		
L DJ Commodities	0.52	-0.18	0.39	0.63	0.66	0.58	0.12	0.28	0.56	0.63	0.69	1.00	
M HEPI	-0.14	-0.15	-0.09	0.08	0.13	0.06	0.67	0.33	0.08	-0.03	0.13	0.32	1.00

Sources: Commonfund, Zephyr StyleADVISOR

Manager Selection

Essential Principle: *Investment managers must be studied with an eye to more than just past performance and selected to effect a diversification that will optimize return while limiting overall portfolio risk.*

Modern portfolio theory has made diversification the first commandment of investment prudence. In its fullest realization, however, diversification applies not only to the contents of asset classes within the portfolio but also to its management.

In the past, the work of portfolio management tended to be concentrated; trustees did the investing themselves or assigned the task to one or two all-purpose managers. During the last 30 years, that model has been superseded by one in which fiduciaries delegate management of the portfolio to a variety of specialized investment managers, seeking those with a demonstrated record of exceeding their benchmarks. To implement its asset allocation policy, the institution employs professional investment managers. The fiduciaries, in exercising their responsibility, maintain oversight.

The manager selection process should start with a list of candidates for a particular segment of the portfolio. 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 the quality and timeliness of its internal reporting system?

Consider its investment approach. How will its approach and strategy complement those of the other investment managers in your roster?

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

How large is the firm in assets under management? How has it grown? Is it too large? How has growth changed its processes and culture?

What are its fees? How do they compare with those of similar managers? How do they compare with the value that this manager could add to the portfolio, taken as a whole?

Finally, does the firm have any connection to any member of your institution's board? And if so, how is that connection treated under your institution's conflict of interest policy?

Selecting investment specialists requires patience and skill. There are thousands to choose from, and because outperformance over long periods is rare, the investment stars of the moment do not always represent the best choice. Indeed, performance in less than one market cycle (typically 5 to 7 years) could tell more about the firm's luck than its skill. And past performance alone has never been a reliable predictor of future success.

Your institution's responsibilities do not end with completion of the selection process. Once the manager has been hired and the funds have been transferred, regular monitoring must occur—including not only performance review against relevant benchmarks but also vigilance for any fundamental changes in the firm. These indicators may constitute reason to review the manager closely or even to start the selection process for that segment all over again.

Steps in the selection process

In each investment 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 from the finalists
- Making the final selection
- Negotiating the contract

Outsourcing and the Manager-of-Managers Approach

The selection and oversight of a varied roster of investment managers requires organizational resources. Although business or financial staff can carry out many operational tasks, the board or investment committee must retain ultimate fiduciary responsibility. Since most institutions have few staff resources to devote to ongoing portfolio and manager oversight, the responsibility for selecting, monitoring, and rebalancing investment managers may weigh more heavily on the board, investment committee, investment consultant and business staff than they consider comfortable.

For that reason, many institutions have decided to outsource all or part of this function, either through a manager of managers or by appointing a single multi-asset management firm as Outsourced Chief Investment Officer, or OCIO. The OCIO trend, which has been apparent since the mid-2000s, mirrors the decision made by a large number of business enterprises to concentrate on their core competencies and outsource other tasks to specialized service providers.

If your institution decides to use one of these structures, it can benefit from the OCIO or manager of manager's base of information on investment managers. The chosen firm works with the trustees' investment committee and its consultants on the composition of your institution's portfolio, proposing an array of solutions that, in combination, best serve the institution's objectives. As we have noted, a substantial proportion of institutions have used this structure to outsource their entire investment office function, enabling the board to focus on more important governance and oversight activities.

The investment professionals at an OCIO or manager of managers evaluate performance and other important factors about the investment firms they review. To facilitate portfolio building, they create asset-type-specific funds of varying breadth and specificity—for instance, a small cap value fund, an international bond fund, or a real estate fund. The firm may offer funds 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 also offer funds in hard-to-access asset categories such as private capital, hedge funds and other alternative investments.

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

At its best, the OCIO or manager of managers operates as a skilled partner of the investment committee and business staff in the management of the institution's long-term funds.

Risk Management

Essential Principle: *Risk can be defined broadly as anything that can result in the objectives of the portfolio not being met. The process of risk management seeks to enable fiduciaries to make the best possible investment decisions in the face of uncertainty and to maximize the likelihood that your portfolio objectives will be achieved. This is accomplished by harnessing those risks for which the portfolio is being compensated while minimizing the occurrence and impact of non-compensated risks.*

Perhaps most prominent among compensated risks are investment risks, where the investment return is expected to be positive over the long run but is uncertain over the short to medium term. As a result, the portfolio may fall short of your total return target at any point in time, or may not have sufficient liquid income or assets to transfer to the operating budget or to beneficiaries when needed.

For this reason, your investment return target and funding targets should be rigorously defined and explicitly related to your ability to accept illiquidity and temporary mark-to-market losses. Your policy portfolio should specify these compensated investment risks and expected returns, both as targets and within reasonable ranges. The risk of the actual invested portfolio is measured relative to the maximum acceptable risks in the policy portfolio.

Once these specifications have been made, a risk management process should be in place—either internally or via a consultant or outsourced chief investment officer—to measure and monitor investment risks and to ensure that they remain within your stated risk appetite.

Non-Compensated Risks

You are not compensated for every type of risk you take in the investment process. For some non-compensated risks, such as operational and counterparty credit risk, failures can occur in any part of the investment process where assets move among intermediaries, agents and managers. Specific examples would be failures in the safekeeping and accounting of assets, failure to comply with legal or regulatory obligations, failure of a derivative counterparty, or failure to avoid outright fraud.

These risks need to be avoided as much as possible, and mitigated when they cannot be avoided. Risk management here consists of due diligence to ensure that you are dealing with counterparties and managers of complete integrity and competence, ongoing monitoring of manager and counterparty quality, and diversifying or insuring against unpredictable events.

Managing Risk in Perpetual Funds

Not all risks can be measured using past data. Investment risk is frequently defined as the possibility of a loss in portfolio value, using estimations based on statistical analysis of the past. In investment management, risk of loss is most of often measured in terms of short-term price volatility. Other statistical measures of the probability of loss, such as Value at Risk, Conditional Value at Risk, Relative Value at Risk, and Semi-Variance, are built upon historical price movements, correlations, and volatility. Since these change relatively slowly over time, they can be adequate for estimating risks for short periods into the future, but they are less helpful in the world of perpetual funds with their long-term outlook.

For perpetual funds, scenarios based on longer-term fundamental economic changes may be a better guide to portfolio vulnerabilities. Scenarios that simulate the effect on the portfolio of different levels of interest rates, economic growth, inflation, and equity and liquidity risk premiums in different countries can highlight unintended concentrations or weaknesses in portfolio diversification.

Risk Management Discipline

Risk policies, processes, reports, systems, metrics, and data alone do not ensure that risk is adequately managed. Failures in risk management often are attributable simply to organizational behavior. Risk management can therefore be said to be a mindset and discipline that should pervade every facet of long-term investment management. The ultimate responsibility resides with trustees, who as fiduciaries must judge the importance of risk management discipline when delegating to staff, managers, consultants and other suppliers the responsibility of implementing risk management policies and practices. Trustees must be alert to behavioral and organizational biases, challenge assumptions, and construct incentives for staff where asking appropriate, if uncomfortable, questions is encouraged.

Managing risk includes asking good questions

- Are the views and experience of our trustees adequately diversified, and are all opinions encouraged?
- How have we defined our risk tolerance for the portfolio? Does our risk tolerance change if key assumptions (for example, regarding contributions and fee income) turn out to be overly optimistic?
- Is the endowment inviolable or would we draw on it in excess of our spending rule if we experience an unanticipated short-term liquidity need?

The specific questions will vary and final answers will be difficult, but developing a culture in which they can be asked is essential. If the board or staff does not embrace a risk management discipline, then you may need external help to get you started.

Costs

Essential Principle: *The costs of your investment program can quietly undercut returns; make sure you keep those costs reasonable in relation to the returns you expect to receive.*

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

Cost control essentially involves three types of activity. The first is a diligent investigation of alternative candidates. The second is tough negotiation of fees. The third is ensuring efficient management of the firms managing investments for you.

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

At the same time, it needs to be borne in mind that cost reduction itself can have its costs. You do not want to compromise the effectiveness of your investment program in the sole pursuit of the lowest all-in cost. The job of a fiduciary is to maintain a constructive balance between the return sought for the fund and the cost of obtaining that return.

Responsibilities

Essential Principle: *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 the major participants in the fund management process, starting with its own.

The board's most basic responsibility is to preserve the ability of the fund to fulfill its mission. To cite one example, for an educational scholarship fund this means preserving the real, after-inflation purchasing power of the fund in perpetuity so that future students will be able to obtain the same level of benefits from the endowment as do current students, not counting the effect of gifts. The fund must earn a total return at least equal to the spending rate, plus inflation, plus the cost of managing the 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 they are still responsible for the ultimate results.

Upholding the board's basic responsibility can prove daunting. Many of the institution's constituencies are likely to argue against preserving long-term fund assets for future generations. Their own needs are clear, present and possibly urgent; the needs of future generations may be undefined and all but invisible. Perpetuity can seem too far away to matter.

Investment Committee Role

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 and who can bring a measure of expertise and a sharper focus to these issues.

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. Committee members must be careful to 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 issues relating to the management of the perpetual pool 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.

Roles of the Business Manager and 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 managing the pool 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 individual 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 institution's operations, arguing for the importance of continually investing in mission-related staff 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 participants, 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 and guidance, 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 management of long-term investment pools.

Conclusion

In this publication, we have briefly examined key issues that all fiduciaries must consider when making decisions: Objectives, Payout Policy, Asset Allocation, Manager Selection, Risk Management, Costs, and Responsibilities. We have posed essential principles to address these issues along with important questions for thoughtful consideration. There certainly are more questions, more answers and more issues and for that we refer you to References and Resources on page 22. But these essential principles, even if introductory in nature, warrant crucial consideration by all investors and fiduciaries—experienced financial professionals and those less experienced—as a guide for the establishment and execution of investment policy for their long-term funds.

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For additional information about Commonfund, please visit www.commonfund.org.

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