WINNING THE INSTITUTIONAL INVESTING RACE

A GUIDE FOR DIRECTORS
AND EXECUTIVES

Apress°

For your convenience Apress has placed some of the front matter material after the index. Please use the Bookmarks and Contents at a Glance links to access them.



Contents

About the A	uthorsi
Acknowledge	ments
Preface	xii
Introduction	x
Part I:	Governance
Chapter I:	Procrustes Rules
Chapter 2:	Fiduciary Responsibilities
Chapter 3:	Ethics
Chapter 4:	Essentials of Governance
Chapter 5:	The Governance Document
Chapter 6:	Governance Structures
Chapter 7:	Outsourcing Investment Decision Making4
Chapter 8:	How Gatekeepers Harm Information Flow47
Part II:	Investments
Chapter 9:	Academia
Chapter 10:	Investment Basics57
Chapter II:	The Role of Risk
Chapter 12:	The Role of Money Managers67
Chapter 13:	Manager Search7
Chapter 14:	The Right Way to View Asset Allocation75
Chapter 15:	What Diversification Really Means83
Chapter 16:	Asset Allocation: The Process87
Chapter 17:	Portfolio Evaluation95
Chapter 18:	When You Don't Know What to Do99

viii Contents

Chapter 19:	The Nature of Fees	103
Chapter 20:	Investment Myths	107
Chapter 21:	Useful Statistics	Ш
Index		121

Introduction

As the complexity of investments continues to proliferate, and as the global economy evolves, institutional pools of capital are suffering from too much risk and not enough return. In many instances, these pools of capital are the lifeblood of the organization, while in some circumstances it's these pools of investable assets that *are* the organization. Yet investment management is seldom an integral part of the institution's core mission or its operations. In fact, it's often not treated with the same type of business intention that other parts of the organization (development, grants, IT, marketing, finance, legal) receive. There are many potential justifications for this dichotomy between the investment management program and the rest of the organization, but one common culprit is "that's the way it has always been" syndrome, which needs to be reevaluated and fixed.

Another culprit is cost. Yes, it's expensive to adequately staff and equip an internal investment office, but the popular myth that a fiduciary's primary focus must be on cost is hogwash. It is also untrue that cost is the only thing a fiduciary has control over. In truth, a fiduciary's primary mission is to act in the organization's best interest, which means cost can and should be considered, but it's certainly not the only factor, or even the most important factor.

A few years ago I (and probably every other CIO in the country) got a phone call and was offered a job as the CIO of a large (\$30 billion at that time) state employee pension plan. The compensation was miniscule, so I (and all the other candidates) turned it down. It seems they could not pay more than a certain fraction of the governor's salary. They eventually got someone that needed to pad a resume, and then someone else, and then increased the comp slightly, before going through several more CIOs. They saved a lot of money in compensation, but their funding level dropped drastically over this time period in spite of a strong equity market. They were penny wise and dollar foolish, using rules that didn't work with investments. The ultimate cost to top off the fund was far, far more that the cost of an experienced CIO.

Another, and perhaps even the most insidious, culprit is time, or lack thereof. Make no mistake about it; managing a company, foundation, or university is a full-time job, as is managing a team, or an audit. Managing investments is just as full-time. Unfortunately a CFO, CEO, treasurer, or the like, cannot focus on investments and do their day job at the same time—it's just not

possible if one expects superior (or even just good) performance. A board or investment committee, meeting only a few hours each quarter, or worse, three times a year? Fugettaboutit.

"How can a group of individuals (trustees) focus their limited resources in a way that can fully address all of the issues spanning everything from high level policy issues to manager selection and monitoring—and do it in the time they have?"

This is the question posed by Peter Bernstein at a large investment conference, and the answer is obvious: they can't. But then, neither can the board of any large company do all the day-to-day tasks necessary in running that business either. Tacking on investments as a collateral duty to a CFO or treasurer is not only unfair to the CFO, but is also a recipe for disaster.

Managing the investments for a foundation or endowment is much like managing a business of the same size. It takes capable staff, management with experience and skill in the field of investments, and a board or committee experienced in governing, like the board of directors for a business. If you owned a car dealership, would you hire someone to run it who said they "knew" all about cars because they drove one? Would you expect the board to approve each car sale and service invoice? What about using a consultant that showed up once every quarter and told you what happened to sales over the last three months, then said you needed a new sales manager and left? Oh yeah, he would be back in three months with three candidates. Would you hire a president for your hospital because they had spent a few days as a patient in one, or because they were a good manager of a real estate company or the local bank? Perhaps you would expect the board to make each diagnosis? Or, maybe you would hire as CFO someone who kept the household accounts? Or, yet again, would you as a board member of an organization spend your couple of hours each quarter trying to close the books, or handle the staffing issues? The answer should be a resounding no in each case, at least if you expect the organization to last.

These are not fatuous flights of fancy; they happen every day in the world of institutional investing. The question is then, "Why do so many boards and investment committees try to make all the decisions about investments themselves?" Some hear the word "fiduciary" and think they have to make each decision, but aren't they just as "fiduciary" to the rest of the organization? These same committees would not dream of taking over the role of CFO or CEO, even if supported by a consultant, but have no problem taking the role of chief investment officer, essentially the CEO of a separate business.

Why do they do it? We will leave that to the behaviorists. What we can know and prove is that when a committee focuses on strategic governance and experienced staff handles investments, success is highly predictable.

The success of any business is dependent on two important elements. The first is a board with a vision and governance designed for success, and the second is management, skilled not only in the industry but in management of a business within that industry. Don't be fooled; the investment fund of a foundation or university is as much a business separate from its foundation or university as any other business might be. A successful fund needs the same quality and industry specificity in both governance and management as any other business. Investment funds are truly unrelated to the everyday business of the university or foundation. Boards and staff skilled in the purpose and management of a foundation or in educating students are seldom equipped or skilled at managing an investment business. Nor should they be, if the foundation or university is to prosper at its tasks and reason for existence. Several universities have even set up their investment offices as separate companies so that governance can be focused on the unique needs of an investment company rather than those of a university.

The impact of the investment portfolio often has an outsized and disproportionate impact on the organization. Large endowments have been extremely successful in creating billions of dollars in assets for leading universities and foundations through their investment operations. In 2007, the CommonFund reported that each of the 75 largest endowments added an average of over \$400 million to their assets from investment returns, compared to an average of \$50 million in gifts and donations. For an endowment or foundation, even (and perhaps especially) small ones, the investment function is often worth several times the development function. Managing these assets is a business—a big business.

What is it about the successful investing of organizations that make them that way? A study found that the one thing that was the most predictive of success for these endowments and foundations was an investment office comprised of experienced investment officers and, we would add, an investment committee that provides governance but not management. In this study, those funds that failed more often had an investment committee that tried to make day-to-day decisions itself or tasked a CFO to add investments to his or her already full agenda; whether they had a consultant or not made no difference.

Success comes from the sophisticated and knowledgeable investment staff that endowments employ coupled with the governance models their boards use. The combination of sophisticated investments, long time horizons, the best third party managers and, importantly, access to quality investment staff, all contribute to the significant performance of these major endowments.

In the 1970's, endowment managers were the first to look beyond what was then the standard mix of stocks and bonds as they began to explore new sources of information and returns. They ventured into international equities, private equity, real estate, venture capital and even hedge funds.

They called this expanded use of investment classes—asset allocation and the heavy use of so-called alternative investments, and the selling of liquidity—the Endowment Model. Over time, these endowment managers learned and grew. They became more sophisticated and more focused on the delivery of dollars to support an organization's budget. The best of today's investment officers diversify across multiple sources of information, different methods of return generation, and different sources of risk rather than so called "classes" of assets.

Looking over the shoulder of successful funds has led some to believe that the Endowment Model is simply buying hedge funds, private equity, or venture capital in the naive belief that simply paying 2 and 20 will somehow create top decile returns. That the rather talented marketers of hedge funds and their friends the consultants trumpet this misconception does not make it so. The Endowment Model is simply a highly diversified portfolio with an equity bias (currently) and a long-term investment horizon. Diversification sometimes includes these hedge and private equity funds, but they are not required.

Over the last 20 years, Yale has moved from 60% domestic equity to about 10%, while increasing allocations in international equity, private equity and real assets. Even the average large foundation has changed its allocation over time, dropping its domestic equity allocation to 25% while maintaining the equity-like elements of the portfolio well over 60%. The experience of investment offices in evaluating the changing environment has differentiated endowments that today are the leading edge of portfolio management.

What is obvious is that these investment officers did not hold to static target allocations, but instead changed with the times and based on future expectations. One can assuredly expect that over the next 10 years the allocations will change again and will be different from those used today. It is this willingness to look forward by their experienced in-house investment staff, supplemented by good governance and strong investment committees, that make these endowments such leaders.

In every study of fund performance, larger funds on average outperform smaller ones. This is because the larger ones generally have investment offices and skilled staff. Skilled investment professionals and staff with strong networks lead to lesser known but lucrative investment opportunities sourced and diligenced by the most senior of the in-house staff, while smaller funds are left to depend on the consulting firm's junior staff.

For years, small funds have looked at the superior returns of large endowments and tried to replicate this success. They see that a marquee fund has X% in "alternatives," so the board says to their consultant, "do that," then are dismayed when their performance is a fraction of the marquee fund that they tried to emulate. While they can follow some of these strategies, they find it

difficult to replicate the skill, structure, environment and motivation of the investment offices of the large funds. These smaller funds have tried to get by with the use of a stopgap; but doing it yourself, with or without a consultant, is just not the same as a staff investment officer, and the difference has been apparent. For pension plans, especially the public plans, the difference is even more dramatic (appallingly so).

Endowment investment officers are not captive to the quarterly committee meeting cycle like a board or consultant, where at each meeting the committee has to have something to "do"—an activity, a decision, a discussion of the news of the day, or the floor show of a manager presentation. These large endowments are managed not only with patience over a long information cycle, but, with an investment officer. They also have the ability to conduct a short cycle review, and someone to act outside the standard committee meeting timing.

Well-run endowments have investment committees that use their time not to share or find personal investment ideas, but for long term planning and evaluation of governance. These well-run endowments have a plan and use the investment officer to help develop and execute that plan. They use their investment committee like a board to review and approve the plan, and then to evaluate the execution of the plan. The less well-run funds add investments ad hoc after seeing a presentation or learning of some other group that uses the investment. These same underperforming organizations ask their investment committee to review and evaluate themselves, not surprisingly, never seem to find themselves lacking. One California university consistently performed at the bottom of the NACUBO study for years until they were called out in an online blog as having one of the ten worst CIOs. Only this headline publicity caused them to finally change investment officers, even though their president emeritus (and investment committee member) was told repeatedly over several years of the problem.

One can see the difference quickly in the conversation at board meetings: "Why does this need to be in our portfolio?," "Why did you select that size for that investment?," and "How does it affect our risk budget?" vs. "Well, X use these guys, so they must be okay," or "I am on another committee that uses X, Y or Z asset class," or "Let's give them a small amount and see what happens," or even "Check out that performance!" One also sees the difference in the due diligence focus.

In the better funds, the evaluation of information and return sources and the ability to extract return at an acceptable level of risk is passed to the investment officer, who has specialization and experience. In the case of less stellar funds, reviewing the social connections, client list and performance takes up the board's time. The most telling example is the Madoff event, where those professionals that saw the red flags and backed away saved their foundations, while those that saw only social position and client list suffered mightily. More pointedly, a group of major organizations, with separate boards making decisions all with the same investment consultant but diverse goals, were invested heavily in the same group of failed hedge funds, including Madoff, to their disappointment. Each had different needs, but all had the same portfolio courtesy of the consultant. Even more incredible: they didn't fire the consultant. You wonder why.

When a fund uses a planned strategy where investments are coordinated and work with each other balancing and managing related risks, that fund gets better performance with less risk of failure. They use a staff that is personally invested in success and is an advocate driving the progress toward a goal, which lets the board focus on governance and evaluation.

The model using a consultant is different. Consultants are paid to bring or vet "options" and "ideas." The consultant's job is to sell new ideas or new projects. Their job is to throw stuff at the wall, always a new idea to be decided on, but deciding what sticks becomes the board's responsibility. In this environment, the board must have a planned strategy for the long term and hold to it—difficult for members with limited time, competing interests, and no experience in managing large complex funds. With this approach there is no baseline or long-term plan, since each investment is a stand-alone idea and all decisions are made ad hoc by the board, therefore all responsibility lies with the board, and the board is accountable to only itself. They always sound like the right things to do when the consultant starts using the F word (fiduciary), but when the board only works four hours a quarter it is difficult, if not impossible, to do it well.

The question then comes to how an organization manages itself and actually creates the investment return needed. The purpose of this book is to answer these questions by first examining how most organizations now execute their investment function and why it does not work; and then explore the best of the alternative options.

Our bias here is the staff model—that should be obvious by now. We believe that seeing the investment function as a business activity or division, and treating the CIO as the president of that division with the investment committee acting as its board of directors to provide governance, works best. The committee sets governance and the CIO executes. Yes, this really does work best, but we also recognize that not everyone is willing or even able to use this approach. Whichever approach is used, committee members need some tools to develop and execute their governance duties and to think about investments. This book is dedicated to providing a fresh look at those tools.

The two parts that make the whole of a business managing assets for pensions, endowments, or foundations are Governance and Investments. Our Governance section will explore the various things a committee member must know and do, and several different approaches toward them. The Investments chapters will explore different investment approaches and the optimal way to execute each one. Ideally, the investment committee of the board handles the governance and the investment office handles the investments. There are variations on this theme of board vs. management, and we discuss them here.

PART

Governance

1

Procrustes Rules

In the ancient Greek myths there was a blacksmith named Procrustes who had a magic bed; an iron bed that fit whoever slept in it. He let any traveler passing by try it out overnight and—would wonders never cease!—they all fit perfectly. Of course, it wasn't because of the bed. Rather, if the traveler was too short, Procrustes stretched him to the proper length, and if too long, lopped off the offending parts. This myth has come down to us today as a way to describe fitting a particular element into a predetermined shape or structure, adding where there is too little and discarding where there is too much.

It is also a good description of someone who is making your governance documents, procedures or reports, and even investments fit some structure established by a supposed third party authority. Stretch to fill out or lop off the excess. It is the ultimate extension of the notion that "this is the way it's always done!" There is always someone who has a need to fit documents and processes into another's format and rules. It is often but not always, a lawyer or an accountant but at other times it just someone with an internal need to follow "rules" for these documents or procedures. It is always, however, someone who does not fully understand investing, believing that others must know more and expects that someone else's document or process will CYA.

Whatever the root cause, you can find Mr. or Ms. Procrustes hurriedly skimming the report or document during the meeting, but frustrated that the parts they know are not where they expect to find them. Then again, Mr. or Ms. Procrustes may be insisting that their organization's investment policy needs to look like some other foundation's, or that their asset allocation needs to look like some other's. They do this because they don't understand the issues at hand and are not interested enough to learn, or because they haven't bothered to read and think about the information at hand prior to the discussion. They just want to check off familiar items in the order they're accustomed to. To Mr. or Ms. Procrustes, management requires checking the boxes on the

checklist in order. The more limited to that iron frame they are, adding or subtracting parts that don't fit, the more rigid the portfolio becomes, and the more it misses the mark.

Following some elements of format may not be bad; after all, there are similarities and some requirements can be fulfilled pretty much the same way. However, many, if not most, of these governance and investment elements are your set of decisions for your unique circumstances. Just because some other investment policy differs from yours doesn't mean yours is wrong or that yours needs to be changed. Maybe the other guy needs the change. Your regular reports should have the things you need rather than many pages of fill that you won't read. Your procedures should fit your governance, not some other foundation's. Your asset allocation should fit your requirements. And, that comment from the back of the room using the f word: fiduciary. Being a fiduciary means taking care of the fund and making decisions for your fund's benefit, not following others as CYA protection for the board.

The path trod by others might work well for their purposes, but it may or may not be the best for you. Just because "others have" is no reason to climb into Procrustes' bed. It may not fit after all.

2

Fiduciary Responsibilities

While serving as a trustee, you will have many different responsibilities—some that you are probably aware of and others that you are not. Ultimately as a trustee your primary responsibility rests with ensuring the best interests of the organization and/or stakeholders. Depending on the organization, these stakeholders will vary.

For example, if you sit on a hospital board there may be multiple pools of assets, each with their own stakeholders. One set of stakeholders may be the participants in the hospital's pension plan, while the operating fund may have an entirely different set of interests. Alternatively, you could be on a local university board where an endowment was established to provide students with financial aid, which consequently makes future and present students the beneficiaries. Or perhaps you serve a foundation working with children, whereby as a board member you have to ensure the wellbeing of the children (the ultimate beneficiaries). As a board member, you will ensure the interests of the stakeholders (beneficiaries), whoever they may be, and bear a fiduciary responsibility to the organization, entity, or trust.

Because you have been placed in a position of trust, you have a duty to administer the assets with care and prudence, a duty to exercise reasonable diligence and skill, and a duty to maintain loyalty to the organization. These five duties share some characteristics in common and oftentimes are all lumped into a single responsibility called "prudence." However you decide to slice and dice them, they all exist and are all a requirement of the job.

Loyalty

Your first and perhaps most important duty is loyalty. Loyalty to the organization and its stakeholders takes precedence over any other job, concern, or business. The reason for this is to prevent self-dealing and to keep one constituency from benefiting over another. While it may seem obvious to place loyalty to others over all else, regrettably, this duty is the most often violated. Even though it is not always done purposefully, and in many instances it is inadvertent, a breach of your duty of loyalty is a serious offense, regardless of intent. Loyalty snuggles up close to ethics, as well—you really can't be loyal and unethical at the same time. As challenging as it may seem, you really need to know yourself and whether the decisions you are about to make are in fact for the benefit of the fund or for some other reason.

Loyalty, or the lack thereof, could be as simple as how you view your advisor. Being unhappy with your advisor for a reason unrelated to their responsibilities toward your organization isn't necessarily justification to find a replacement. Being comfortable with an old friend when their performance is inferior, is not being loyal to your fund if you continue to employ that person. Maintaining an advisor simply because they make large donations to your organization is not being loyal to your fund, even if they would be difficult to replace as a donor. In each of these scenarios, and the many variations on this theme you must ensure that the organization takes precedence over all else. The situations you will likely encounter will differ from these examples, but at some point during your time as a board member, a loyalty issue will certainly rear its ugly head. How you and your fellow board members respond will dictate the ultimate success or failure of your organization. Loyalty is not a difficult concept to grasp, but each situation will be unique. Here are some real life examples of fiduciary loyalty misconduct:

Example 1:

A group of retired pension fund members elects a new trustee. The newly elected trustee feels indebted and seeks enhanced health care benefits for his retired "constituents," knowing full well that the enhanced health benefits will lower the fund's coverage ratio, which would be detrimental to the non-retired members. The trustee pushes for the benefits and ultimately wins.

Example 2:

Trustee number two was recently appointed to sit on the board of the defined benefit plan of their employer. In their new role, the trustee sees their only duty as that of reducing the employer contribution rates for the general benefit of the employer, even though the plan is underfunded.

In both instances, the trustees were fundamentally wrong. As a trustee, you owe your loyalty and duty to all stakeholders, not to the constituents who elected or appointed you. In the first example, the newly elected trustee violated the loyalty responsibility by harming the defined benefit plan for future beneficiaries. In the second example, the trustee violated her duty of loyalty because her allegiances were with the employer and not the plan as a whole.

Example 3:

An individual who sits on a foundation's board has a personal relationship with a consultant at a large broker-dealer. The large broker-dealer is willing to remunerate the trustee if he is able to convince other members that the consultant should oversee the foundation's funds. The broker-dealer has subpar performance and there are a handful of better alternatives available to the foundation. The trustee ultimately wins the debate, and the consultant is hired.

Although Example 3 is a bit more blatant and observable, these types of deals occur throughout the industry. Pay-to-play is not uncommon and works in both directions. Unfortunately, we only hear about the ones who get caught.

Example 4:

A new member convinces the committee that their current advisor, one who has successfully built the foundation's assets significantly, should be replaced. The new member believes the foundation needs a "brand name" advisor to match the foundation's importance and asset size. A brand name advisor is hired, even though their historical performance is lackluster.

This breach is much more subtle and may be a variation on Example 2, with the pay part being a non-monetary benefit; either the new member is personally unhappy with the old advisor, wants to exert power, wants to advantage an old friend, or is Procrustes' heir and wants to be like everyone else.

Skill

The second duty you must exhibit is skill."A pure heart and empty head will not do." For that reason, you must develop and use skills necessary to manage these funds, or you must delegate those tasks that you don't have the time or expertise to do yourself. The level of skill required is different for different types of funds. Your decisions in governance will determine which standard of skill you will be held to. In some cases, like ERISA (Employee Retirement Income Security Act), you have little choice and will be held to the more stringent prudent expert rule.

The traditional level of skill, or "prudent man rule" as it's more informally known, is based on the concept that each Board member has the skills and knowledge of a typical person (businessman, doctor, fireman, or whatever profession that board member may be). The prudent man rule, which is a relatively less -stringent standard, is often used by foundations and endowments. On the other hand, the ERISA "prudent expert" rule requires a skill level of "one knowledgeable in like and similar matters," in other words, an "expert" or professional. If you choose to use the older definition (prudent man) you can either manage the portfolio yourself or hire professionals, but if you use the prudent expert standard you'd better get well-educated or hire some professional help. This decision (prudent man vs. prudent expert) is largely dependent upon the legality of the organization's situation. ERISA plans must obey the prudent expert rule, while other entities have a bit more flexibility.

Example: One university's investment committee chairman is at the pinnacle of a narrow part of the investment world. He is incredibly knowledgeable and skilled in that narrow sub-sector. However, he has an inadequate understanding of multi-asset portfolios. This can be seen in the university's performance, which is near the bottom of all universities for many years. However, the university's investment committee fails to hire someone with the necessary skill set to manage the portfolio because the chairman's stature within this narrow space is so high that they relied heavily on his opinion when discussing "investments"—particularly investments within the university's portfolio. It isn't until a blogger posts about the top ten worst performing university endowments before a change is made. Even though the chairman has an esteemed investment background, he does not have the necessary skill set to manage a multi-asset portfolio. They are two entirely different animals.

As the famed management consultant Peter Drucker once said, "do what you do best, and outsource the rest." If the investment committee or board doesn't have the necessary skills to accomplish the tasks at hand (and obviously this chairman didn't), they need to obtain the skills or to hire someone with the necessary skills, or seek outside professional help.

Care

The next duty you must exhibit is care. Care is the responsibility of ensuring the collection of funds and monies due to the sponsor (such as the plan, foundation, or endowment) are received. This includes interest, fees for money lent, employer/employee contributions, dividends, brokerage dollars from commission recapture, soft dollars, security litigation proceeds, etc. Care also ensures that beneficiaries are informed about the financial standing and financial security of the fund. Care also requires the board to evaluate both implicit and explicit costs associated with brokerage, manager soft dollars, potential shareholder litigation proceeds, or custodial arrangement.

Example: A large state employees plan was buying securities that were sold net (fees, markups, and commissions included) but were also being charged a commission in addition.

The trustees at this particular employee plan were not exhibiting duty of care, as their broker was charging them twice on their commissions.

Prudence

The fourth duty—prudence—is often the most discussed, but in practice it is hard to detect its abuse. Essentially, when you act with prudence, you act in good judgment, with knowledge and deal advisably toward all fund matters. You monitor and manage the actions of staff and outside professionals, as well as assess the skill levels of both. The questions to ask yourself are: 1) "Have I used reason, or emotion?" 2) "Is this advisable?" and 3) "Does it make sense, or am I just following the lead of others?" Particular care must be taken because Procrustes lives here. It is too easy to force yourself into someone else's practice and think you are being prudent. Some gather several fiduciary duties under the rubric of prudence, and a failure of one can therefore also be a failure of prudence. See Example 4 under Loyalty. Is it prudent to fire a well-known and productive advisor just to look like others with a brand name advisor? Most often failure of prudence is directed at decisions that were not well thought through, or decisions that did not take into account foreseeable issues and knock-on effects. Is it prudent to sell all equities after a market crash? Is it prudent to insist on five years of firm history? What about the person who just stepped out of a large firm to start their own? Is it wise to buy long bonds when the foundation has a short-term need for cash? Where is the common sense when you hire a manager who has never had anything but massive returns without investigation just because your friend uses him? (Madoff, anyone?)

Failure of prudence is easy to see after the fact. The difficulty arises beforehand, when you must control yourself and others as well. The only solution is a detailed discussion and investigation of all the risks, the costs of failure and a brake on enthusiasm.

Diligence

Diligence is the last of the five duties and is relatively straightforward. Diligence implies that adequate attention is being delivered. To fulfill the diligence responsibility, you must be doing trustee and not just being trustee. But what is adequate? Is it enough to just show up once per quarter? Should you read and understand the entire suite of reports? Is it enough to read outside of the meeting reports? Unlike Justice Potter Stewart's pronouncement on pornography, this is one you notice when you don't see it.

Example: A committee member shows up late, did not preview the report, and then asks questions already answered by the report.

A committee member who is not prepared for meetings is not only being disrespectful to their fellow committee members, but is also likely making decisions on a whim instead of diligently—a complete failure by the trustee.

Taken as a whole, these five duties, and prudence in particular, are inherently conservative in that they favor the status quo and eschew change, even if it is advantageous change. Investing by its very nature means working with risk, and a decision to make no change is the same as a decision to change. Board and investment committee members that use the prudential rule as a decision rule rather than an element of decision making, rule out innovation when warranted, sway stakeholders away from risks they would or should otherwise take, and inhibit opportunities they would otherwise embrace. On the other side of that same coin, bad decisions or no decision can be sold as good governance if prudence is the decision rule.

Executing your duties as a fiduciary is the implementation of governance. Governance is the process and implementation of decision-making as a fiduciary.

3

Ethics

In his recent book, *The Economist's Oath* (Oxford University Press, 2011), economist and renowned ethicist Dr. George DeMartino described ethics in some of the same terms we normally reserve for fiduciary: loyalty and prudence. So, is there a difference? Can that difference be described as "one is legal and the other moral?" *Moral* is hard to put your finger on, as it develops in each of us differently from teachings and experiences at home, or in the church or synagogue, and from life. Everyone seems to know or have some understanding of ethics, and most see it as right vs. wrong. So is writing a code of ethics an attempt to convert from the moral to the legal, and thereby control ethical questions?

For a board of individuals given authority and trust to manage the funds of an organization, is there a defined set of rules to follow? To make all the heirs of Procrustes happy, most organizations establish a set of rules that addresses insider trading, receipt of gifts, inter-related party contracts, nepotism, pay-to-play, quid-pro-quo, third party relationships, former trustee/employee relationships, and whistle-blowers. These rules are then stretched or cut to fit each and every situation that comes along, which generally makes these rules ether too specific or too general. There may be too many rules, or too few. But are rules enough? Does the existence of a written policy ensure ethical behavior? How is behavior enforced, and what exactly is ethical?

Do ethics change if the actors change? Consider a PPM for Private Equity Fund presented by a salesman to your lawyer. Your lawyer approves the PPM; is it ethical or not for the salesman to fail to point out a clause that may not be in your best interest? What if he doesn't tell you that a certain clause can be negotiated— is he unethical? It may not be nice or even what you would want, but is it ethical on the part of the salesman to contradict your experienced and sophisticated lawyer? Most would agree that the salesman has fully executed his duty to you and your lawyer (both legal and moral) if he discloses all of the facts. The PPM listed all the facts and that was the duty of

the salesman; but does he owe an additional duty to you and your lawyer to interpret those facts? Probably not.

Does the answer change if the buyer is an 87-year-old retired fireman instead of a multi-million dollar fund with a dedicated chief investment officer? Does the answer change if the person promoting the investment is not the salesman, but a lawyer acting as advisor to the fireman? Definitely.

The SEC came in to do their standard exam of an investment advisor and, being generally nice people the advisor offered coffee and some muffins. The examiners made a very big point of refusing the muffins because it was against the written ethics policy—and they couldn't be swayed. Really? If they could not be trusted to know what was a bribe and what was not, could they be trusted to do a fair and competent exam? If they could be bribed with a muffin, there is no wonder why Madoff was not caught sooner. If an ethics code was so narrowly defined, then anything not proscribed in the code must be okay. Right? If your code says no lunches may be paid for by an investment manager, then it must be okay if you pay the bill and the manager instead introduces you to the leading lights of your particular industry? If your ethics code says not to accept any solo (i.e., one-on-one) trips with a potential manager, then it must be okay if there are other potential investors present, right? I guess that weeklong Disney World trip for all the manager's clients must meet your idea of ethical. There are hundreds of ways around a rule, but no way around true ethical behavior.

Not all ethical principles or policies apply to all groups equally or in identical ways. Ethics and policy must be tailored to each group, and even then there is inequality in applying the rules, which is why there is no "Uniform Code of Ethics for all Boards and Professions." For example, if you only play golf at the local muni course, a few invitations to Augusta may impact your decisions, and thus an over-written ethics code may exclude any golf; but if you are a member at Augusta, is an invite to a local muni course going to sway your vote? Your moral compass may be unaffected, such that you are able to look past the golf. There is, however, the appearance of a conflict, and appearances might matter. So, are ethics not only what you do but also what it looks like you are doing, or even might be doing? Does being ethical mean becoming Caesar's wife?

For a member of a board or investment committee, the primary concern is being and doing as a fiduciary: loyalty, care, skill, prudence, and diligence. DeMartino says, "They must take care to put the interests of those served above their own; and they must take care not to impose avoidable risks in hopes of bringing about favorable outcomes." This is virtually the definition of loyalty and prudence used in the discussion of fiduciary duty in the last chapter. Does that mean that being ethical and being a fiduciary is the same thing? They certainly are similar, but do they come into conflict? They shouldn't, but sometimes do.

Ethics in the sense of both "not harming" and "advocating for" your fund is part of the key, I believe. This is doing or not doing what is in the best interests of the organization or the fund. Where ethics and fiduciary part is when one begins to believe that what is in one member's or the whole committee's best interest is also in the fund's best interest. It is service to the institution's ends and not to one's own ends that points to the difference between fiduciary and ethical. When one works only in the interests of the organization, one is both ethical and fiduciary. When one begins to include what is good for one's self with what is good for the institution, one loses or violates ethics, even if you are convinced that what is good you is also good for the fund. What is interesting to note is that the same members being asked to be ethical and work only in the interest of the institution are the same members that establish what those interests are.

The focus of most "ethics" discussions by boards revolves around obvious elements including insider trading, receipt of certain gifts, inter-related party contracts, nepotism, pay-to-play, quid-pro-quo, third party relationships, former trustee/employee relationships and whistle-blowers, plus attempts to get around the rules. But these discussions often don't include the issue of personal feelings and benefits, even though the emphasis of the discussion is "what's in it for me?" Most would say that doing those things in the above list are unethical and that they do not advantage the organization or the fund, but what if they did? If a board member accepted a "gift" for bringing an investment to the board, and the investment was truly in the fund's interest, would it be unethical? We would have a hard time saying out of hand that either the investment tout doing the giving or the board member doing the receiving were being unethical. It probably would be situational depending on the member's prior expectation as well as the size of the gift. Although not knowing the difference between accepting a trip to Paris and accepting a box of candy, or a bottle of Two Buck Chuck, may mean you need a new board member. A muffin at a morning meeting? Let's not be silly.

One organization fired a long-time manager that they were happy with and who was doing a great job. They replaced him with a firm with a much higher profile only to gain that higher profile. Unethical? If they did it for status to benefit themselves at the club and to be able to say "we use such and such," then very much so. It was discovered that the new group had ties to members on the board that were undisclosed. This failure to disclose, I would have to say, is the definition of unethical. Ethics aside, we would also say that this was definitely a breach of their fiduciary duty of loyalty to the institution.

We can look at a case study to see many of these issues and conflicts at play. A foundation adds a new member to its investment committee who also happens to be on the investment committee of a large national organization. The national organization uses a particular investment advisor, and the new member advocates strongly for that manager. The foundation's investment

officer does the diligence and finds several significant and serious issues that should keep the foundation from investing and strongly recommends passing. At the new member's insistence, that manager is hired. It turned out bad.

Without ascribing bad intent to the new member, what could have been the ethical issues? What about the ethics of the other members? What about the fiduciary issues? What was the ethical dilemma of the new member? Should he have introduced the investment manager to the foundation? From both an ethical and fiduciary point of view, we would say that of course he should have made the introduction. Should he have participated in discussion and the voting? He probably should not partake in the discussion, and certainly should not vote.

What about the duties of the other members? Did the new guy have a better understanding of the manager? Did they have an obligation to listen to their designated expert, the CIO? Should the names of the money manager's other clients matter? Did they have an obligation to take into consideration the relationship between the new member and the money manager? Should they ask why the new guy pushed the investment manager so hard? Was it just a simple mistake, or hubris on the part of the new member or leading from behind on the part of the other members of the foundation's investment committee?

If the recommendation of the investment officer was accepted and no investment was made, then what was the new guy's duty to his national organization? If he had negative information, should he pass it along to that national organization? What did this do to his prior acceptance vote at that organization? Should his responsibility to the other organization affect his conduct at the foundation? Was the information at the national organization higher in the food chain and therefore better because of the "brand?" Did he see his position of authority as somehow lessened by not pushing his view? Whatever the specifics, we should all see a mix of both fiduciary and ethical issues with no easy answers. The difficulty in writing a rule that encompasses all of these factors is that it does not affect the knock-on events, which then makes writing an effective rule impossible.

To our thinking, the new guy should have brought the investment manager to the committee. It would have been a shirking of his fiduciary duty not to. The committee should have discussed each of the questions and issues listed above without regard to the national organization's decision to hire this manager. Then, since the diligence done by the CIO brought to light serious and significant issues, those issues should also have been discussed which most probably, would have led to the institution not hiring the advisor. The new guy would then have both a fiduciary and ethical duty to his other organization to relay the negative information to them.

So far the discussion has focused on acts committed, but what about acts omitted? An investment committee member uses a particular money manager but doesn't bring that manager to the committee because he feels that pushing a private agenda is not ethical, and is somehow a conflict of interest. It seems obvious that because he continues to use the manager that he believes is "good," he has done a certain amount of diligence and there is the possibility that this manager can help the institution's fund. Is not telling the committee about a possible advantage really ethical? Here we are confronted not with doing but with not doing. It is definitely not acting as an advocate for the fund and it is not being loyal to the fund, but is it ethical to withhold? "Not harming" is a central point in both ethics and acting as a fiduciary, so one could use the greater harm rule to decide to act or to not act. We believe one should surface the name and then step out of the discussion and decision.

Ethics goes, as we have seen, well beyond a list of things that are objectively right and things wrong in all cases. No matter how big a list of rules, one can't lop off or stretch every event to fit the rule. Ethics are situational and are dependent on the reason for whatever action or inaction taken. It requires a hard look at one's self and an ability to know if the action is really in the best interests of the organization, or one that caters to selfish reasons. Not an easy task.

4

Essentials of Governance

Governance delineates the functions that decision-makers are assigned to perform, provides those decision-makers with the authority to execute those functions, and gives someone the tools to monitor those decisions. While there are four primary governance models for investment funds, within each model there can be many variations, and the different sets of actors (decision-makers) will play varying roles from organization to organization. The governing oversight also varies from model to model (we discuss these models in the next chapter).

In any business, setting a "road map" for how an organization will navigate the challenges ahead is a critical component to the overall success of the organization. This is particularly true within the investment management business. Fortunately, a governing document provides that road map. By definition, governance is the overall system by which an organization is managed, directed, controlled, and monitored. Although all institutional investors are using some form of governance, it's worth revisiting what exemplifies a successful governance culture and why good governance is important to an institutional investor.

Strong governance demonstrates to the stakeholders that their assets are not only in good hands, but that internal controls and policies align with the investment objectives of the fund. Leadership, transparency, core competencies, and a strong moral and ethical compass are all required characteristics of a strong governing body. Boards that exhibit these types of traits are much more likely to meet their investment objectives and goals than organizations that do not.

Leadership can be evidenced through the establishment of strong policies and procedures that meet your organization's goals and not someone else's; Procrustes does not rule. Leadership is an essential element of governance. The policies and procedures essential to strong leadership are discussed in later chapters.

Transparency is another aspect of strong governance. Transparency is a simple concept, yet many organizations fail to properly implement it. Although you will not be able to share every single detail of your investment program, and rightfully so, increased transparency typically leads to increased accountability, and that accountability is also essential. By making your governance documents publicly available, your organization is demonstrating your willingness to be held accountable to your stakeholders. Fortunately, there are organizations that understand the importance of transparency, and how vital it is to a successful governance model.

Being knowledgeable and skilled is an integral part of executing your duties as a fiduciary. You can export some of that responsibility to knowledgeable and skilled professionals, or you can acquire that knowledge and skill yourself. For many, outside expertise is the wisest decision, but the rest of this book is here to help if you choose not to use professional help.

Within the actual governance plan and the document that describes it, there are a handful of key decision-makers or entities that will play a role in the management of investments. The inclusion and composition of these key players will differ from organization to organization, and it's likely that not all of the key players will be integrated into your own management plan. However, there are some that will be frequently seen in most programs.

Board

Successful governance requires strong leadership from the board. The board defines lines of authority and establishes roles and responsibilities. It also provides strategic direction for the organization and, most importantly, bears ultimate responsibility for the success or failure of the investment program.

As I mentioned, the makeup of the board will vary to some degree, as size, complexity, and resources available to an organization will dictate its composition. In general, it will include individuals who have diverse work experiences and backgrounds. Most have an understanding of the organization's obligations and objectives, and an interest in the purpose of the organization. They may or may not have core competencies in the investment of funds for a foundation or endowment, and therefore may or may not need to delegate some of those activities.

Ultimately, the board carries the responsibility of determining the most appropriate governing structure (more on this later), instituting lines of authority, establishing roles and responsibilities of both trustees and staff, delegating tasks, hiring or terminating key staff and/or outside service providers, and monitoring and evaluating all of these effectively.

With final discretion as to "how" the investment program will be carried out and how the governance structure is established, the board will spend a fair amount of time up front determining who the other key decision-makers will be and how tasks and responsibilities will be delegated. (Delegation is almost always required.) This includes decisions on whether or not to create an investment committee, hire an outside investment consultant, establish an internal investment officer and staff, or contract with an external investment office. These decisions are not one-time occurrences, and a "set it and forget it" attitude will not be successful. Instead, these decisions and discussions must be made on a regular basis. Even though the road might appear to be straight, the path will alter and change; the board must be flexible and open enough to alter its course when a detour is needed, because ultimately the buck stops with the board.

Investment Committee

The board can elect to delegate some of its duties and create a separate committee to oversee the investment program. This is oftentimes due to a lack of skill or time. Those boards that have other things to do at their infrequent meetings, boards that are large, or have little investment knowledge find that delegating to a committee tasked with only investments is helpful, if not essential. If the board elects to take this route, a number of responsibilities can be handed over to the investment committee. Broadly speaking, they will consist of developing the investment procedures and perhaps even the policies surrounding them. For board approval, of course.

The governance documents of the fund include not only a description of governance policy but also the policies and procedures used for investing. As a matter of practice, if the board creates an investment committee they also delegate the task of creating the entire governance document, including investment policy, to that committee. This document is important, and will be discussed in greater detail in a later chapter, but essentially it specifies how the funds will be managed, describes how they are evaluated, and establishes the investment objectives.

After both governance and investment policies have been established, the investment committee will then implement these policies. Implementation can be done through the investment committee in its entirety, through an individual (the CFO, perhaps), a consultant, an external investment office or an internal investment office. With these potential combinations (running from least effective to most effective), it is apparent that the implementation of the investment policy can and will differ from organization to organization depending on the roles and results desired, which we will discuss later.

CFO / Treasurer

The CFO plays an important role within the investment program. Typically, the CFO monitors the overall finances, liquidity, cash flows and audits of the organization. For an investment committee however, they are also often, and maybe should be, held responsible for the execution of documents as an internal control and as a best practice. This includes executing limited partnership agreements, custodial agreements, and external providers' contracts.

Many foundations and endowments add to a CFO's duties a collateral duty to function as the CIO. This works only if there is not much in the way of accounting during the year, and if there is a way to provide adequate internal controls, except of course during the audit or budget cycles, when there is no time for investments. One can only hope there is no need to manage investments for that period of time. It would not be a successful internal control nor would it be a best practice to have the CFO also function as the CIO. While it may be fun for the CFO, and could perhaps save the organization a few dollars by not hiring a separate investment officer, it costs significantly more in lost investment opportunity and increased risks.

Internal Investment Office

An investment office is primarily responsible for implementing the investment program independently, or with guidance from the investment committee. The office or officer would be responsible for performing investment manager due diligence, investigating new asset classes, allocating assets, reporting performance, and reporting to the investment committee. An internal investment officer often has varying levels of discretion, depending on the amount of control the board is willing to relinquish. It is a best practice for the investment officer to have discretion within broad guidelines with specific evaluation points, and for the investment committee to monitor those closely. In a situation where the internal investment officer does have complete discretion, portfolio performance falls directly on the shoulders of the investment officer, exporting some of the skill requirements from the board to that individual. Making the CIO responsible and accountable facilitates an environment of professionalism and gives the board a second tool with which to manage. We recommend an internal office and staff for funds able and willing to afford the added personnel.

Investment Consultant

Investment consultants are an interesting bunch, and certainly a common, if not always helpful, option. Depending on the firm and experience level of the individual investment consultant, they can engage in a wide variety of activities, including formulating an investment policy statement, performing investment manager due diligence and offering recommendations, selecting asset classes, providing reporting, and delivering unbiased and objective advice. One of the truly interesting aspects of an investment consultant is their position within the industry. Investment consultants are widely considered in the industry to be "gatekeepers" due to their large presence and the fact that they are positioned as middlemen between the fund and investment managers. It's well known that investment managers spend an inordinate amount of time with consultants in the hopes that the consultant will elect to put that manager on their platform, which in turn helps the investment manager raise assets.

For small institutions, investment consultants are essential to "stepping-up" their programs. Consultants are able to provide the board with an investment skill set that brings added professionalism and experience to the process. In a general sense, though, investment consultants are most likely to help an organization formulate an investment policy statement and offer reporting solutions to the board. A traditional investment consultant is unlikely to make specific manager recommendations and instead will suggest a handful of investment managers (three or four) that fit some predetermined criteria (large cap value, small cap growth, etc.), on which the fund must decide. For that reason, it's extremely difficult for investment consultants to deliver the accountability, in terms of performance, that is expected of an internal or contracted investment office. This is one of the key differentiators between an internal investment office, a contracted investment office, and an investment consultant.

Investment consultants have another common function (especially with the public pension set). They are targets to which the board can point and bellow "Off with his head!" when challenged.

Contracted Investment Office

The contracted or shared investment office is similar to an internal investment office. They can be given little discretion or total discretion. I think the best practice is to mirror what the fund would have liked to receive from an internal office. Like an internal investment office, a contracted office provides the professionalism, responsibility and accountability that shoulder much of the fiduciary responsibilities of the board. This is not an "outsourced CIO," as it is commonly thought of in the industry. Rather than a product provider, a contracted investment office is more like a contracted employee.

A contracted investment office is responsible for implementing the investment program independently, or with guidance from the investment committee. The office or officer would be responsible for performing managerial due diligence, investigating new asset classes, allocating assets, reporting performance, and reporting to the investment committee. It is a best practice for the investment officer to have discretion within broad guidelines with specific evaluation points, and for the investment committee to monitor those closely. In a situation where the contracted investment officer does have complete discretion, portfolio performance falls directly on the shoulders of the investment officer, exporting some of the skill requirements from the board to that individual. Making the CIO responsible and accountable facilitates an environment of professionalism and gives the board a second tool with which to manage.

5

The Governance Document

The Investment Policy Statement

This is the time for special care. It is so easy, being unfamiliar with writing a governance document, to simply get someone else's and copy. The thinking is that if it is good enough for them, it must be good enough for us. Trying to fit your organization into someone else's iron frame is a big mistake, and can make all the difference between success and failure. This document is uniquely yours, your governance, your goals, your risks, and your process. The effort to think through and write a unique document is the main reason for the governance plan. A secondary reason is to memorialize the development process results so that your investment committee and board will hold to the plan rather than ad hoc decisions. The governance document also exists to inform and educate new members as they come along so that the plan has legs and remains long-term. This is not to say it can't be changed, but changes should come infrequently, and not as an emotional reaction to every stress point.

Writing this governance document and investment policy statement after thought and discussion gives it weight and understanding, while pulling out someone else's means that the document and its contents are not all that important and are there just to paper the file. Not having one or having one of little importance means that at each juncture decisions are made with emotion rather than deliberate and unhurried care.

The investment policy statement or governance document is an integral component of the investment program because it lays the groundwork for the investment program and provides clear instructions and guidelines for implementation. An investment policy statement also articulates what roles

and responsibilities each party will have within the investment program. An effective investment policy will cover the major elements of philosophy and process; truly a plan for governance.

Return Objectives

Best practices indicate that an institution should articulate the primary goal or goals of the organization's investable assets, and what types of returns are needed to achieve those goals. Additionally, the board should determine what the appropriate time horizon is to achieve those goals, as well as how they plan to measure and monitor progress.

In many standard boilerplate investment policy statements, there is a tendency to create return goals that are relative in nature, whether to other funds, markets, inflation or, most commonly, to some sort of "policy" index. While it's nice to know that you beat your rival, or are better than average, you cannot spend relatives. The problem is that the fund is supposed to provide some cash money. That's the way checks are written—for grants, for budget support or to pay retirement benefits. Therefore, your return objective should be an absolute number.

Many funds are perpetual in nature; so, should your investment horizon be "forever?" We'd like to think our fund will last into perpetuity, but need to be realistic "forever" is just not going to happen.. More commonly we hear a three- to five-year time horizon, but is that realistic? I believe the best approach is the one used in both the pension and insurance industries, where the time horizon is based on your expenditure needs (liabilities). This would mean you have multiple and rolling horizons. For example, one organization had a short-term need for a return of 9% to support their budget during a long-term construction effort. But they also wanted to have as much in their fund at the end of the construction plus two years, (for a total of 14 years) as they had at the beginning, which meant a long-term return of 11%. They used a rolling three-year return of 9% and a fixed time that ended 14 years in the future as their goals.

Risk Tolerance

The organization needs to define risk and its own appetite for taking risk in order to accomplish its goals. Contrary to the belief of almost every academic or consultant, risk is not a standard deviation. Risk is the danger of not meeting your financial and non-financial goals. We will discuss risk in much more detail in a later chapter, but for now, note that it is the chance (probability) of some bad thing happening. Defining risk is defining that bad thing—loss of capital, a return below some number, not having enough for a construction project and the probability associated with failing.

For example, one institution defined risk as a minimum percentage of return on average as an absolute, plus a second (higher and less absolute) return number that would allow a particular construction project. Once risk is defined, the organization can establish the appropriate risk metrics to measure such risk—is it volatility, probability of loss, drawdown, or purchasing power loss?

Asset Allocation

While asset allocation is best left to your investment officer, those organizations that have chosen not to use one will need to determine which asset classes the investment program will include and exclude. Asset classes that can be considered are: equities (U.S., emerging markets, global, MLPs, REITs, commodities international); fixed income (treasuries, corporates, high yield, distressed debt, mezzanine, emerging markets, mortgage-backed securities, CLOs, collateral debt obligations, collateral mortgage-backed securities, residential mortgagebacked securities); and alternatives (long/short equity, multi-strategy hedge funds, fund of funds, venture capital, growth equity, levered buyouts, commodity trading advisors, managed futures, macro hedge funds, and the list goes on). As the list of financial products continues to grow, an organization should only venture into those asset classes for which they have the necessary expertise to understand the risks and benefits.

It is common and traditional (if 30 years can be called a tradition) to set a target allocation and then create ranges around those targets. The questions to ask are why those asset classes were chosen, and where the target allocation numbers and the ranges around them came from. Did they come in a dream, or do they simply feel good? Are you using someone else's? Why a certain percentage for domestic equity and not another? The most common approach is to just use someone else's, but, that is a big mistake. For example, a well-known university uses 10% as a target allocation for six different classes, and 40% for hedge funds. Come on really? Can they find that many really good hedge funds? Aside: they rank in the bottom few universities and their investment committee has some of the best resumes in the country. There is an old saw about what you step in if you are following the herd. We'll revisit asset allocation in a separate chapter.

Rebalancing Protocol

Portfolio rebalancing is a component of the portfolio management process, and again should be delegated to the investment officer. For those boards that choose to do it themselves, the rebalancing policy should describe how they plan to rebalance the portfolio, including methodology and rationale. There are a number of rebalancing techniques for organizations, but the most common are calendar, corridor ranges, and tactical asset allocation. Calendar

rebalancing is as simple as it sounds—every so many months, quarters or other pre-determined time interval, the portfolio is adjusted back to the original target allocation. Corridor ranges allow asset classes to trade within a band, and the portfolio will be rebalanced back to the original allocation only after an asset class breaches the asset allocation range. These asset allocation ranges are set based on several things including (unfortunately) how the board or investment committee feels. Tactical asset allocation allows for more flexibility, but skeptics believe it's a strategy designed to "time" the market. Specifically, tactical asset allocation allows an institution to take advantage of asset classes that are perceived to be undervalued relative to other opportunities, or, in some iterations, what's hot. Some institutions use systematic tactical asset allocation strategies, where a quantitative investment model (black box) is used to systematically exploit inefficiencies or temporary imbalances among different asset classes.

Portfolio Evaluation – Benchmarking

Whatever benchmark you write down will become the goal that the investment committee, the consultant and the investment officer will manage to—in order to exceed and win—win congratulations, commissions or bonuses. If you pay your yard guy by the hour, the work will take all day; if instead you pay by the job, don't blink or you'll miss him.

A successful investment policy will establish the definition of success success for you, not someone else. Then, through metrics designed to measure progress to that goal, real measurement and subsequent evaluation can take place. In advance of making a particular investment, an appropriate benchmark should be determined so that the underlying investment can be monitored and evaluated over the life of the investment.

A portfolio benchmark, in the form of an absolute return and not a customized benchmark (policy index), should be established after portfolio goals have been defined. The investment policy statement should also elaborate on which time periods will weigh more heavily for evaluation purposes, harking back to the investment horizons already established. Frequent review will permit the discovery of rapidly developing issues and the large amount of data will permit identification of slower trends. A well-thought-out portfolio evaluation process can protect investors from some of the irrational behavior that plagues both institutional and retail investors—namely, overreaction during large market downturns.

6

Governance Structures

When the facts change, I change my mind. What do you do?

—John Maynard Keynes

The issues we have so far discussed and their implementation are all subject to the structure of governance you select. Surprisingly, the structure you select is highly predictive of your success. While there isn't a "one size fits all" governance structure, we will focus on four primary models that are in vogue with many institutions and discuss a few variations within each model.

The first and simplest model is what we will call the *DIY Model*. In this model the board, or a subset of the board (the investment committee or even the CFO), manages, governs, and makes all investment-related decisions. This model is suited for organizations with straightforward investment objectives and policies, and minimal assets (less than \$10 million).

The second governance model is the *Traditional Model*, where the board or another entity (e.g., the investment committee or CFO) will supplement their work with an investment consultant. As an institution's size and the complexity of the investment strategy increases, institutions often look for additional help with their investments, and hiring an investment consultant is a common solution.

A third governance structure, the *Internal Model*, is where the governing body works in tandem with internal investment staff to carry out the mission of the organization.

The fourth and final governance model we will call the Contracted Model. Here, the governing body works with a contracted external investment team. The contracted investment office is responsible for all the same tasks that an internal investment office normally would do. The only obvious difference is they share some of their time with a small number of other clients. This would be called "outsourcing" in just about any other industry, but in the institutional investment world, the word "outsourcing" is used differently.

Depending on the complexity of the organization and investment program, and size of assets, each governance structure can incorporate many committees and individuals that play a role within the structure. For example, an organization that is implementing the Internal Model, which relies on an in-house investment officer, can also employ an investment consultant or contracted investment office if desired, based on the investment officer's skills and scope. These decisions on how to structure the governance model, and in particular how roles and responsibilities will be delegated, are an important responsibility of the board.

Ultimately, the success or failure of an investment program will fall on the board, so getting the right players onto the board and structures in place is critical. There are obviously many decisions a board must make while constructing their governance structure. Some of these decisions include which groups or committees should be established, who will take on each responsibility, what level of involvement each group will encounter, and how the committee will be constructed. To further illustrate this point, the following are a series of tables (one for each governance model) that illustrates the potential groups and individuals that are necessary within each model, which groups and individuals are optional, and the expected level of involvement for the various participants.

Table 6-1. DIY Model

Group / Individual	Level of Involvement	Required in Governance Structure
The Board	Very High	Yes
Investment Committee	Very High	Optional
Investment Consultant	Zero	Not used
Internal Investment Office	Zero	Not used
Contracted Investment Office	Zero	Not used

Table 6-2. Traditional Model

Group / Individual	Level of Involvement	Required in Governance Structure
The Board	Moderate	Yes
Investment Committee	Moderate to High	Optional
Investment Consultant	Moderate to High	Yes
Internal Investment Office	Zero	Not used
Contracted Investment Office	Zero	Not used

Table 6-3. Contracted Model

Group / Individual	Level of Involvement	Required in Governance Structure
The Board	Low to Moderate	Yes
Investment Committee	Moderate to High	Optional
Investment Consultant	Zero	Not used
Internal Investment Office	Zero	Not used
Contracted Investment Office	High	Yes

Table 6-4. Internal Model

Group / Individual	Level of Involvement	Required in Governance Structure
The Board	Low to Moderate	Yes
Investment Committee	Low to Moderate	Optional
Investment Consultant	Zero	No
Internal Investment Office	Very High	Yes
Contracted Investment Office	Zero	Not used

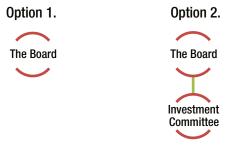
Irrespective of which committees and groups the board ultimately elects to include, the board must clearly declare the governance purpose for each body to ensure all roles, responsibilities and authorities are established well in advance. Any and all changes must be clearly communicated to all participants and decision-makers.

In the proceeding sections, we will discuss each of the governance models in further detail. Specifically, we will discuss how the chain of command can and ought to be structured, the key decision-makers within each model, the roles and responsibilities for various decision makers, and the benefits and shortcomings of each governance model.

DIY Model

	Option 1	Option 2	
Group / Individual	Level of Involvement	Level of Involvement	Accountability
The Board	Very High	Moderate	Very High
Investment Committee	Zero	Very High	Very High
Investment Consultant	Zero	Zero	Zero
Internal Investment Office	Zero	Zero	Zero
Contracted Investment Office	Zero	Zero	Zero

The simplest and most basic governance structure is the DIY Model. In this particular structure, and as the name suggests, the board opts to be the sole decision-making body. As such, an increased amount of time must be spent by the board on investment-related decisions.



DIY Model Structure

Being the sole and ultimate decision-maker, the board has a number of issues and responsibilities that must be ironed out. Highest on their priority list is formulating an investment policy. Secondarily, they must determine how to implement the policy. The board must decide who will lead the efforts, and how they (internally) will hold one another accountable. Other discussions the board must consider are: Who will be responsible for performing

investment manager due diligence? How will asset allocation targets be established? What liquidity is needed? What asset classes are investable? Who will be the custodian? Who will be the broker? How will best execution amongst brokers (implicit vs. explicit costs) be monitored? How will the board handle large market swings? Will the board tilt the portfolio to take advantage of market opportunities? Who will furnish performance reports? How often will performance reports be produced? How is risk being defined (volatility, probability of failure, drawdown, etc.)? What will spark a change in investments? Will external investment managers be used? Will the money be managed internally? How will future cash flows impact the portfolio? How often will the portfolio be monitored? Who will offer tax guidance? What is the appropriate time horizon? What legal or bond covenants must be considered?

Although the above list isn't all-inclusive, it should be fairly apparent that the number of potential issues and responsibilities that must be accounted for could cause an unnecessary burden on the board.

For smaller institutions, or institutions with a board unwilling to relinquish control, that want one or perhaps two mutual funds, or maybe just want to leave the money with the bank or someone's personal stock broker, this may be functional but not necessarily a "best practice." If the institution has a limited asset base (less than \$10 million) and a fairly straightforward investment program (perhaps all the money is at the bank), this governance structure may make sense, but if not, it's likely an alternative structure would be a wiser fiduciary solution. For a fund that is sizeable or complex, the board may in fact be doing their institution a disservice by doing it themselves.

One of the main issues with the DIY governance model is time. Board members already have a finite amount of time, and the additional responsibilities that are required to manage the investment portfolio only add to their workload. The board can elect to set up a separate committee (an investment committee) to help with establishing investment policies and implementation, although, again, the onus still falls on the organization to establish and execute policy.

Implementation is time-consuming, and monitoring a portfolio on a quarterly basis as opposed to daily can leave it vulnerable. One of the most important value-adds that external advisors bring is their resources, specifically the time that is needed to proactively screen money managers, evaluate various investment opportunities, research asset classes, and monitor the risk of the portfolio.

Another drawback of the DIY Model is investment knowledge, or lack thereof. Even though there may be some trustees who have some personal investment experience, managing an entire portfolio (across multiple asset classes) is

vastly different than managing a stock portfolio or personal 401k plan. Time is still another issue. Based on your institution's own circumstances, if you believe implementing the DIY Model gives your institution the best chance for success, you should ensure that your board meetings do not turn into investment club meetings. Instead, roles and responsibilities should be assigned to different members prior to discussing investments. For example, the chairman of the board should set the meeting agenda to include items such as evaluation of the managers, fund performance, rebalancing activities, and any suggested changes to the portfolio. To minimize groupthink, the governing body should consist of five to seven members, with varying backgrounds and skill sets. Members should have term limits to ensure fresh ideas are being discussed and evaluated. For an institution implementing the DIY Model, the board must be cognizant of the fiduciary role they assume as actors on behalf of their institution, particularly their role in developing and executing investment policy. Overseeing implementation of the investment policy is one of the largest challenges facing a board that chooses to use the DIY Model. Unless your investment program is simple, and your investable assets are less than \$10 million, it's our belief that you'd be better served employing an alternative governance structure, given the amount of time and resources that are required to manage the investment program.

Traditional Model

	Option 1	
Group / Individual	Level of Involvement	Accountability
The Board	Low to Moderate	Very High
Investment Committee	Moderate	Very High
Investment Consultant	High	Zero
Internal Investment Office	Zero	Zero
Contracted Investment Office	Zero	Zero

Although some organizations would argue the Traditional Model is a bit dated (and I would agree), the Traditional Model does provide for an outside perspective and added resources. Using a Traditional Model, an organization will work with an investment consultant, whose main task is to act as an external advisor establishing and implementing the investment policy. While an investment committee is not a requirement within this governance structure, most organizations will typically set up a committee to help monitor the investment consultant, enabling the board time to focus on strategy and policy decisions as opposed to investment implementation decisions.



Traditional Model Structure

George Russell, founder of Russell investments, pioneered the Traditional Model when, in 1969, he made a pitch to J.C. Penny to demonstrate the value of money manager evaluation. During his conversation with I.C. Penny, he convinced them that there was indeed value in evaluating and recommending money managers, and J.C. Penny in turn agreed to hire him (his first pension fund consulting client).

Over the past forty five years or so, the industry has changed dramatically. Historically, investment consultants, working in conjunction with the governing body, provided unbiased opinions regarding asset classes and manager selection; the service George Russell pitched to J.C. Penny. Today, though, it's extremely difficult to categorize all investment consultants as the same because their roles, responsibilities, and business models have evolved over time. In 2005, the SEC described the activities of investment consultants as: (1) identifying investment objectives and restrictions; (2) allocating plan assets to various objectives; (3) selecting money managers to manage plan assets in ways designed to achieve objectives; (4) selecting mutual funds that plan participants can choose as their funding vehicles; (5) monitoring performance of money managers and mutual funds and making recommendations for changes; and (6) selecting other service providers, such as custodians, administrators and broker-dealers, showing the wide range of services offered by consultants. This enables the governing body to seek out only those investment consultants who can effectively meet their needs.

Investment consultants often help organizations establish their investment policy, which is done through the creation of an investment policy statement. The investment consultant addresses return objectives, risk tolerance, acceptable asset classes, and portfolio rebalancing tactics when creating the policy statement. An investment consultant could also assist in the implementation stage, including help with investment manager due diligence, performance reporting, target asset allocation, and guidelines for asset allocation rebalancing.

While most consultants may offer investment manager due diligence and performance-reporting services, there are few who will make an actual hire-or-fire decision as it pertains to money managers. For that reason, many institutions operating with the Traditional Model still must rely on the governing body to implement the investment strategy by hiring and firing managers, implementing asset allocation decisions, and rebalancing. This, like the DIY Model, puts the responsibility for performance back in the hands of the governing body. This is one of the main pitfalls of investment consultants; some have described the role of a consultant as an "insurance policy."

This shouldn't come as a shock, because as their name implies, investment consultants do just what is expected—they consult. They offer multiple investment managers when presenting a particular investment idea to avoid accountability, and are often anything but transparent. The accountability and transparency issues (or lack thereof), has recently gained traction within the investment community. In fact, it was even highlighted by Andrew Kirton, global chief investment officer at Mercer. Mr. Kirton was quoted in September 2013 in Pensions & Investments magazine, saying "It's in our clients' interest to have the level of transparency that we have [none]. We're not forced by marketing purposes to give advice we think isn't in their best interest due to polishing numbers that makes us look better in a survey." Definitely a rationalization of hiding how well they do or don't do their jobs.

Lack of performance track records and poor performance are reasons so many institutions are looking for help elsewhere. Dr. Howard Jones and his colleagues, Professor Tim Jenkinson and Dr. Jose Vicente Martinez of Oxford University, examined the recommendations of investment consultants from 1999 to 2011 to determine whether or not they added value to a portfolio's performance adjusted for risk. According to Dr. Jones, "The analysis finds no evidence that the recommendations of the investment consultant for these U.S. equity products enabled investors to outperform their benchmarks or generate alpha." The study found that, on average, the consultants' recommendations underperformed their benchmarks by about one percent. Lack of performance track record, or an underwhelming track record, is not the only drawback to the Traditional Model.

Another major drawback is the numerous conflicts of interest that exist between investment consultants and investment managers. A study by Jay Youngdahl of Harvard University, "Investment Consultants and Institutional Corruption," addressed some of these conflicts of interest and other issues surrounding investment consultants. He found that, due to investment

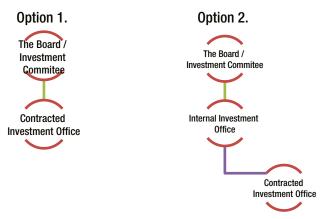
¹Tim Jenkinson, Howard Jones, and Jose Vicente Martinez, "Picking Winners? Investment Consultants' Recommendations of Fund Managers," Journal of Finance, Forthcoming (2014), http://ssrn.com/abstract=2327042.

consultants' position within the industry, they at times can and will collude with investment managers whereby the investment managers are recommended to the organization and in return the investment manager provides some remuneration for the consultant's recommendation. Because so many institutions use investment consultants as their de-facto investment expert, investment consultants have increasingly gained power through the accumulation of clients and assets. This in turn makes them especially important from the vantage point of an investment manager, because they are the gatekeepers to the institutions who are the true asset owners. Therefore, it's not uncommon to see investment managers wine, dine, send gifts, or offer free retreats to investment consultants.

That's not to say the Traditional Model is entirely bad or that all investment consultants are corrupt. The Traditional Model does add an additional layer of oversight and provides (perceived) safety to those board members that are worried about being fiduciaries. The most sought-after service offered by investment consultants is their managerial due diligence, often embodied by a platform of managers. A manager platform is a repository of investment managers that the investment consultant has already vetted and evaluated at the same level of diligence. The investment managers who occupy the consultant's manager platform are currently being recommended to clients by the consultant. Each manager platform is different; some managers might be on the platform to fit a specific style box (e.g., large cap value, large cap growth, mid cap value, mid cap growth), while others might be on the platform because of the investment type (fixed income, private equity, hedge fund). Being on a platform is highly lucrative for the manager and reduces the consultant's need to spend time or money on the diligence of many different managers.

Contracted Model

	Option 1	Option 2	
Group / Individual	Level of Involvement	Level of Involvement	Accountability
The Board	Low	Low	Low
Investment Committee	Low	Low	Moderate
Investment Consultant	Zero	Zero	Zero
Internal Investment Office	Zero	Moderate to High	Zero
Contracted Investment Office	High	High	Very High



Contracted Model Structure

Contracted investment offices have been used for years because of their flexibility and the customized nature of their service. Unlike investment consultants, for whom economies of scale lead to their own business success, contracted investment offices are successful for their member clients when working with a handful of clients. This leads to a much higher level of client service, more customized solutions, and advocacy for the fund that is not commonly found in the Traditional Model. The business is all about the client.

A fairly recent phenomenon is the increased use of contracted investment office in conjunction with an internal investment office. More public and private pension plans are seeking the expertise of a contracted investment officer not found with the in-house investment office. They leave the investment part mostly to the contract office and use the in-house office to interface with the stakeholders. It's not uncommon for an internal investment office to be run by an executive director and to not be fully equipped with the skill sets that span the spectrum of investments.

In terms of structuring a Contracted Model, an organization has two basic options. One is to work directly with the contracted investment office (most common), and the other is to outsource a portion of the investment program to the contracted investment office while simultaneously keeping the rest in-house with the internal investment office.

One of the main draws of the Contracted Models that contracted investment offices can work with varying levels of discretion and fiduciary roles. Specifically, contracted investment offices are able to help organizations in a similar capacity as an internal investment office. This includes assisting not only in meeting the return objectives, but also with developing funding requirements, cash-flow needs, volatility concerns, audit support, and sometimes even corporate finance decisions.

Working with a varying level of discretion depending on the board's preferences, the contracted investment office can develop an investment policy statement, implement the investment program, perform investment manager due diligence, make asset allocation recommendations, establish risk metrics, create performance reports, conduct research on various asset classes, assist in audit support, review all limited partnership agreements, advise on custodial and brokerage accounts, monitor liquidity, and tilt the portfolio given various market opportunities.

Institutions that can't afford, or choose not to afford, to use an internal office are able to replicate an internal investment office at a fraction of the cost. Institutions chose this approach because they can get experienced and highly productive investors at a reasonable cost.

Internal Model

Group / Individual	Level of Involvement	Required in Governance Structure
The Board	Low	Yes
Investment Committee	Moderate	Yes
Investment Consultant	Zero	No
Internal Investment Office	Very High	Yes
Contracted Investment Office	Zero	No



Internal Model Structure

The only real difference between the Internal Model and the Contracted Model is that the investment office is internal, with actual employees rather than contract employees. This internal investment office would include a chief investment officer and perhaps a staff, although that's not a requirement. The internal investment office would manage all the day-to-day nuances of the investment management program, including manager performance, investment manager due diligence, asset allocations, portfolio tilts, portfolio risk, and liquidity.

This internal structure allows the board and investment committee the time required to focus on oversight. Oversight includes constructing reasonable evaluation metrics so the internal investment office is held accountable for their investment decisions. In conjunction with the internal investment office, the governing body needs to set the investment policies at the onset of the investment program, so that the risk and return objectives are defined and established. Another decision is discretion. Investment discretion, in any of the governance models, is not necessarily black and white; it's more likely to be a shade of gray. Internal investment offices can work with varying levels of discretion, but this should be established well in advance so there are no questions as to who holds accountability for investment performance. Delegating full autonomy and discretion to the internal investment office places the accountability solely on the internal investment office. This accountability allows the governing body to quickly implement change if the internal investment office is not pulling their weight.

The only shortcoming of the Internal Model is cost. According to some in the industry, it isn't economically feasible to have an internal investment office until an organization reaches \$2 billion or so in assets, and becomes a necessity after about \$5 billion. Cost alone, or even assets, shouldn't determine the direction the board takes; control and perhaps secrecy are other factors.

As one of many variations on a theme, the Internal Model can also incorporate an investment consultant or contracted investment office in situations where (1) the governing body is looking for additional data points; (2) costs are an issue and hiring additional staff is a political nightmare; and (3) the internal investment office doesn't have the skill set or expertise in specialized areas such as hedge funds, private equity, or the like.

Recap

The Internal Model is the gold standard, and its success is dependent on the quality of the individuals employed. Cost is the factor most at issue for a board; can they, or are they willing to, afford one and its corollary: can they pay enough to get experience? Following that closely is the Contracted Model, which has nearly the same advantages as the Internal Model at a fraction of the cost. It is slightly less—an advocate and needs slightly more supervision. Because their use is observable in increased portfolio returns and in board satisfaction, these are the models we favor.

So what makes a good investment committee? Good investment committees debate issues and make recommendations that are framed openly and transparently. As Catherine D. Gordon and Karin Peterson LaBarge of Vanguard wrote in May 2010 in "Investment Committees: Vanguard's View of Best Practices," the best investment committee practices are:

- I. Establish an explicit understanding of a portfolio's purpose and objective and a clear definition of success in determining whether the portfolio fulfills that purpose and meets that objective.
- 2. Create a charter outlining the roles and responsibilities of committee members, support staff, and—if applicable—consultants and outsourced CIO.
- 3. Establish a clear investment strategy that includes a reasonable set of assumptions about a sponsoring organization's risk tolerance and expected returns.
- 4. Establish a straightforward process for hiring managers to implement that investment strategy and for identifying the circumstances under which such relationships can be terminated.
- 5. Act with common sense and discipline.

As the world of finance continues its exponential path of increased complexity, determining lines of authority, delegating roles and responsibilities, and implementing oversight policies are essential to success. This process and structure we will call governance. The actual definition of governance can be summed up as "the processes, structures and organizational traditions that determine how power is exercised, how stakeholders have their say, how decisions are taken and how decision-makers are held accountable."

7

Outsourcing Investment Decision Making

As we have discussed, good governance exists when the board and investment committee are allowed to focus on issues that impact the long-term objectives of the fund, rather than being responsible for investment decisions. Part of good governance is simply acknowledging the fact that managing investable assets is a full-time job, and not some collateral duty for the investment committee, the board, or the CFO.

While the investment committee or board focuses on strategy and the external investment managers select securities and investments, there exists a need to connect (or link) the right investment managers and strategies to the big-picture items recommended by the board. Constructing a connection between the investment committee (or board) and the external investment managers is done through one of the governing models we discussed earlier (Traditional, Contracted, or Internal Model). Metaphorically speaking, this individual (CIO) or group (investment office or consultant) can be thought of as the director between the script and the performer, or the conductor between the music and the musician.

Throughout the course of this book, we have discussed several approaches to answering "how" a governing body might supply that middle connection, and we hope we made it clear that our bias is toward an internal investment office or contract office rather than a "do it yourself" or consultant solution. A recent phenomenon that we have yet to discuss is a trend toward investment outsourcing.

Many smaller institutions discovered the Traditional Model (i.e., using a consultant) was an effective method for improving their investment management program from the "do It Yourself" approach. However, as the institutions' funds grew in size, most came to the realization that the traditional model and the consultant did not keep pace with their needs of good governance. In search of ways to address these needs, many institutions have looked for a different strategy, and outsourcing has been the fastest growing solution.

According to a Northern Trust survey, in 2012, 14% of institutions outsourced all of their investment management activities. In 2013, that number doubled to 29%. We believe this is a step in the right direction. Unfortunately, with such strong growth in the space, many marketers have grabbed hold of the word "outsourcing" and obfuscated its meaning to the point where it has left many institutional investors wondering what outsourcing models truly exist. To bring clarity to the issue we will discuss the three most common outsourcing solutions: (1) oCIO (also called discretionary consulting), (2) Pooled or commingled accounts, and (3) the contracted investment office. There will be some institutions that offer a variation of an outsourcing model, and others that call it something entirely different, but at its core these are the three main outsourcing solutions.

In a study entitled "The New Gatekeepers: Winning Business Models for Investments Outsourcing," Casey Quirk defined outsourcing as an investor delegating "... some level of investment discretion to a third party for a portfoliobased fee." Casey Quirk and others note that the outsourcing assignment may be all or part of the institution's assets, that discretion may be all-inclusive or partial, and that fees may be asset-based, fixed, or performance-based. So what does this mean for you? It means the outsourcing universe is enormous, and the number of varying arrangements is immense. It has also caused confusion among institutions looking at outsourcing options because they aren't exactly sure at what options exist. Under this common definition, almost any relationship can be called outsourcing (and is). However, as we mentioned, there are really only three basic outsourcing solutions.

The first of the solutions is the Outsourced CIO (oCIO) product, also known as discretionary consulting. This product was developed by investment consulting firms as a way to repackage their services into a higher margin business. The oCIO model is essentially a continuation of the traditional approach, the primary difference being that an oCIO, with full discretion, implements the manager recommendations and any asset allocation changes. This contrasts with the more traditional approach in which the consultant offers recommendations and the implementation is executed through the institution

(the board, investment committee, or CFO). Outside of implementation, the only other difference is cost. The oCIO model has a much higher price tag than the traditional investment-consulting model; yet the advice (such as which managers to hire and fire or asset allocation policy) must, in fact, be the same. If the advice being offered differs between the firm's investment consulting arm and the oCIO arm, one has to ask which entity gives the better advice. As fiduciaries, investment consultants have a duty to recommend the managers that they believe are best suited for the portfolio. Because the objectives of the portfolio haven't changed, how can the recommendations of the firm's oCIO arm be any different than those from their investment consultant arm?

You have to give consultants credit for figuring out a way to get institutions to pay more for the same product they have always delivered. By paying a higher fee, the oCIO division of the consulting firm will execute their own advice. An institution that elects to use an oCIO is paying for the execution of advice—the same advice offered by the consultant. Not much credit is due to the institution for paying the higher fees, as they could implement all of the consultant's advice without the added cost. Prior to the oCIO outsourcing product, investment consultants were giving their clients the best and soundest advice to each client, or so they said (and one should believe.)

The second outsourcing solution is a pooled or commingled fund. These funds are sometimes referred to as "endowment style" funds. They can also be thought of as "give us your money and go to sleep, we'll handle everything" funds. The best things they "handle" are fees—their own fees. If only the returns were as big as the fees. Institutions that use the DIY Model of governance and do not want to participate in the management of their funds often believe that the resumes of the people associated with the pool, and their touted "endowment style" fund, will be enough to properly fulfill their duties.

While the idea of a pooled, or commingled, endowment-style fund will resonate with smaller institutional investors, the "everybody in the pool" approach doesn't align well with many institutions' investment objectives. For smaller institutions (\$10 Million or less) worried predominately about diversification and access to investment managers, this solution may well be a viable option. Yet, these smaller institutions must weigh the tradeoff between customization (or lack thereof) and diversification. Pooled and commingled funds are designed to be a "one-size fits all" product that can benefit from scale. These funds often times over-diversify across managers (some firms have over 200 managers) and asset classes in order to accommodate that scale. The high degree of diversification and high fees often cause a diluted performance.

The last of the outsourcing CIO models is the shared or contracted office. This is the Peter Drucker outsourcing that many people think of when thinking of "outsourcing." Clients (members) are limited, portfolios are customized, and discretion is determined entirely by the client. Essentially, the contracted investment office acts as an institution's in-house investment office and operates in

a similar capacity. This includes assisting not only in meeting the return objectives, but also developing funding requirements, addressing cash-flow needs and volatility concerns, providing support during audits, and aiding corporate finance decisions. Working with various levels of discretion, the contracted investment office is tasked with developing an investment policy statement, implementing the investment program, performing managerial due diligence, making asset allocation recommendations, establishing risk metrics, creating performance reports, conducting research on various asset classes, reviewing all limited partnership agreements, advising on custodial and brokerage accounts, monitoring liquidity, and tilting the portfolio given various market conditions. One of the benefits of a contracted investment office is their lower cost. Institutions that can't afford or choose not to afford an internal investment office are able to replicate an in-house office at a fraction of the cost. A contracted investment office also provides their clients with the responsibility, accountability, and an advocacy that is typically only found internally.

There are some approaches to outsourcing that are hybrids (really a variation across multiple solutions) who take fewer clients and have mostly separate accounts, but who also offer pooled funds—most often funds in the alternatives space. Some hybrids are actually close to the shared (or contract) office; they just offer a pooled product. Yet, these hybrids often times have more accounts, which reduces service levels, and are generally more focused on new business, which takes time away from management of the investment portfolio and due diligence. Nevertheless, these hybrids have a place for some institutions.

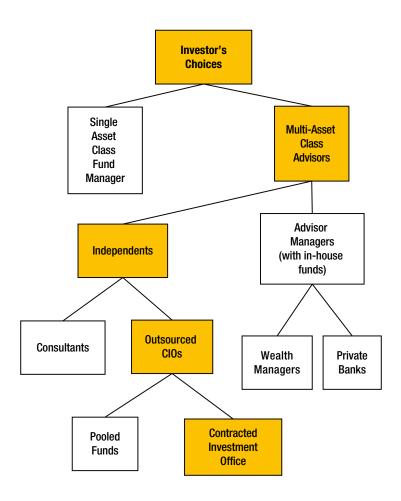
The many variations in these outsourcing models cause confusion among institutional investors, as it's not only difficult to distinguish one outsourced provider from the other but, perhaps more importantly, which outsourcer actually has your institution's best interest in mind. In our opinion, the best way to navigate this problem is to determine if the outsourcer is acting as a principal or as an agent. Much like the real estate and brokerage communities, an agent acts for the client's interest while a principal acts for his own. The same concept applies to outsourced CIO models; those acting for themselves first are principals and those acting in the client's interest are agents. How to distinguish from one another is not as hard as one might think. Size is the first indicator. A large organization that operates with multiple layers of management must focus their efforts on the organization and not on your fund. The number of clients can also be an indicator. Although a firm with many clients might look attractive initially, with a little thought, one would quickly realize that larger firms require more time to be exerted on other funds, which limits the amount of attention paid to your fund. The existence of pools or a large sales force are other indicators that the firm is acting as a principal and not as an agent.

Which outsourcer you chose depends on your goals and your institution's circumstances. There is no inherently right or wrong answer. Using an organization as a principal may make sense for your institution. It is, however,

important to recognize there are viable outsourcing alternatives. Outsourcing serves a purpose for many institutions that have needs to be met.

Outsourcing is a way for institutions to manage their investment risk and align the investment strategy with the institution's financial goals. Institutions want to leverage the professional expertise of these service providers. It might be easy to stick with the status quo, but it's imprudent not to explore your options.

The following chart outlines the choices for the institutional investment committee that choose not to DIY via the board or an internal office. The gold path is the path I think will provide the best results for most organizations. Each successive stop on the path is better than the one before it until you reach our bias the contract office.



8

How Gatekeepers Harm Information Flow

We have talked about several different approaches to governance, and as you have seen, we favor some and dislike some. As part of all of the approaches to governance, we find a particular mindset creeping in, that of the Gatekeeper. This always includes (or at least so often that we *think* it's always) the consultant, but can include the CFO or whoever is the responsible party at the fund. While it makes sense to have a filter that reduces the workload of the investment committee, a gatekeeper is someone who thinks it is their job to keep away *all* the investment managers and ideas from the investment committee rather than just filter out the truly unreasonable. They are a de facto "pre-decision" maker—one who the investment manager must convince, convert or compensate.

The consultants are easy to understand; they have an account and don't want any foreign intrusion to their domain and control. After all, if they are not bringing stuff to throw on the wall, what value do they bring? As a group, investment consultants control and dictate much of what transpires within the space, because they have so much sway in terms of assets and clients. This often has the effect of influencing asset managers as they seek to grow their assets. In fact, asset managers often times must dedicate resources specifically toward developing and maintaining investment consultant relationships; otherwise, they will fail to raise their assets under management. In 2013, the consulting industry advised on some \$13 trillion in tax-exempt U.S. institutional assets, and over 70% of the large public pension plans in the United States used a consultant.

Many asset managers have a separate consultant relationship staff. Investment consultants have the leverage to hold asset managers captive, paying-to-play before recommending these managers to the fund sponsors (consultant's clients). They do this by offering services to asset managers (for a fee of course) where the investment consultant will "teach" the asset manager how to present and market their product to other investment consultants. Investment consultants also host conferences, paid for entirely by the asset managers, that bring together sponsors (the consultant's clients) and asset managers. Many, especially the investment banks, have a "platform" and charge managers to participate or take part of the manager's fee.

What about the CFO, treasurer, board member, or other individual that is the first point of contact by the money managers or sellers of investments? They don't have an economic reason to hold the gate, so why do they? Sometimes it is a power thing—they can, so they do. Most often, however, it is because they simply don't know investments. They feel that by bringing up or permitting access, they are recommending the investment, which probably isn't so. They may also feel that since the board isn't clamoring for anything, isn't unhappy and isn't pushing for change, perhaps they shouldn't rock the boat, and should hold what they have and wait. There is often an element of time; they simply don't have any more time, what with the audit, budget, new construction, or whatever the event of the month is.

Whether it is a consultant barring the door for economic reasons, or someone else barring the door for other reasons, non-decision-makers are restricting the flow of ideas and options available to the decision-makers. The in-house or contract office doesn't have that problem, since they are the decision-makers.

Tim Jenkinson, Howard Jones, and Jose Vicente Martinez, "Picking Winners? Investment Consultants' Recommendations of Fund Managers," Journal of Finance, Forthcoming (2014), http://ssrn.com/abstract=2327042.

Having someone weed out the truly unusable in order to avoid wasting the board's time is commendable. Having a gatekeeper keep out usable ideas is not. Periodic review of those that did not make it past the gatekeeper or adding a board member to the gatekeeping function are two ways to manage the issue, and managing this filtering is a must for the board.

The CFO of a large Houston energy company was attending the SRE Certification class with an industry speaker on the functioning of the security execution system: how it operated, who got paid what and how, and how to reduce the cost of executions. She commented to me that the speaker had called her 8-10 times in the past but she had been too busy and didn't really know what he wanted. She said that not returning the call was a mistake, and could I introduce her to the speaker so she could make an appointment, because he could really help save some money.

Salesmen are like viruses; they spread things. In their case, it is information. Even in this information revolution and age of the internet, salesmen serve as a push for information that one may not know they need or could use. Speaking to them is important. Gatekeepers hold back that information.

PART

Investments

9

Academia

In theory there is no difference between theory and practice. But in practice there is.

—Yogi Berra

We are all conditioned to appeal to the academic for understanding and guidance on most, if not all, complex ideas. In economics, Milton Freidman, F.A. Hayek, and John Maynard Keynes are names many turn to. For investments, Harry Markowitz, William Sharpe, and Burton Malkiel start the list.

The global institutional investment industry is based on the Capital Asset Pricing Model (CAPM), Mean-Variance Optimization (MVO), and Modern Portfolio Theory (MPT). Developed or expanded by outstanding academics (Markowitz, Sharpe, Eugene Fama, and others), these theories and their expansions are elegant easily learned, and provide a theoretical base from which to expand research (and more academics). They are, as is the case with most academic research, tied up in the averages, the use of large numbers, an expectation that investors are part of some greater whole and that any set of actual experiences will mean revert to the averages of the universe. These theories provide a wonderful view from a window in the ivory tower at 80,000 feet and truly should be part of any academic curriculum, but they simply don't work "down in the weeds" of the day-to-day practice of investment management. They are divorced from the reality of managing the portfolio of a foundation as a unique entity and not as just one random observation in a universe of foundations. Investors live in a world of small numbers, where they are the universe, not some random sample, and so there is no mean to revert to other than their own.

As investors, we don't have the average of all investments to judge. We judge one investment at a time. It can't revert to a mean of the many just its own mean. Correlation of one class to another is not relevant, although correlation of one of your fund's investments to another one of your fund's investments might be—that is, if it didn't change every time you measured it. Standard deviation of the class can't be applied to our single investment, only the characteristics of our single investment's return distribution. Our fund's investment manager is, or might be, too skewed or peaked, or the tails may be too fat, or the whole thing might be asymmetrical, to even have the standard deviation concept apply, and if it does, is it relevant, and is it really risk?

The world of MPT and CPM has been taken over by consultants and popular business writers and treated like some gospel or holy writ. It has become a religion, which makes me a heretic to say that it is only a basic generalized description of the investment world (perhaps a good academic one). But to use the theory, one must—must—make several assumptions:

The first and most important assumption is that all returns are normally distributed. This is much like saying in physics that there is no friction. You can certainly assume it, but can seldom find it. The reality is that all investment return distributions are not normal (symmetrical around the mean, with a co-incident mean and median, and not peaked or flat). Actual investments and investment managers' return distributions are seldom symmetrical, often have different means and medians and are often more peaked or have fat tails.

The second assumption is that we are dealing with large numbers, such that the portfolio is just a random sample that might approximate the universe. In fact, we deal with small numbers and our fund is the universe (which changes). There is no reversion to the mean because there is no mean of a universe larger than our sample to revert to. Does anyone think that a particular 7-foot center playing for the Denver Nuggets will somehow revert to the 5-foot-8 average of all men? Or that Yo-Yo Ma will somehow regress to the mean of all high school cellists? These are terrible circumstances for a theorist, but wonderful ones for an investor.

The third assumption is that risk is equal to standard deviation. To make that assumption, one must believe that risk is the inability to predict the next period's return, and missing it by 5% over is the same as missing by 5% under. True, if you are a weather forecaster or a marksman, but this is the silliest of all the assumptions for a CIO or an investment committee. Risk, for a real investor (and not a theorist), is not achieving a particular goal; in other words, not winning, but losing. Crossing the street? Risk is getting hit —losing. Flying? Crashing is a big loss. We ask ourselves "What are the chances of..." not "What is the standard deviation of...?"

The last of the major assumptions is that everyone is equally above average (maybe in Lake Wobegon) and that they all make perfect decisions all of the

time. Far from it; some people are better at investing than others. We want those people. It is simply not true that no one can beat the averages. That lie is pedaled by people selling index funds to individuals who simply want to put their heads in the sand and not have to think. It is beyond any reasoned belief that there are stars and virtuosos in every profession except among professional investors. All of the hype and press surrounding Warren Buffet and the acclaim of past stars like Peter Lynch and Sir John Tempelton give the lie to that theory. Averages, by definition, mean some are better and some are worse. Finding the better ones may be work, but to borrow from the Marines: No one called investing a rose garden.

Also implicit in the CAPM theory is a serious and distracting element: that every investor needs to earn the highest absolute return per unit of volatility. This assumes portfolios need to be efficient relative to volatility, as if somehow volatility matters. What about efficient relative to compound return, or to cash flow, or to risk of loss?

These assumptions are required for the theory when applied on a macro scale, and may make sense looking out from that 80,000 foot ivory tower. But to manage real assets we must move beyond these theories to face the facts: (I) distributions of returns by real managers are often skewed or peaked, (2) we see only a small group of returns, but all of the returns of the manager or investment, (3) real risk is the chance that we lose money or under-perform our goal, and (4) some people really do perform better than others.

Theory is great from the ivory tower, a grand unification. But we are not flying so high, that everything looks smooth. We as investors are dodging the rocks and shoals of daily investing: recession, recovery, inflation, war, new discovery of oil, regulatory changes, fear, greed, irrational investor behavior, fads, innovation, creative destruction, destructive accounting rules, and the list goes on. Change is the only constant. We make good choices and bad choices. People are not perfect. There is random chance and fraud. Day-to-day investing for institutions is not some neat equation on autopilot, but a rather a real job of blending the theories with experience and risk-taking in order to produce results.

In the real world, investments drive performance. Diversification controls risk.

Investment Basics

Hell, there are no rules here—we're trying to accomplish something.

—Thomas Edison

$$\Re = \alpha + \beta + \varepsilon$$

Return = Alpha + Beta + Randomness

Overriding much of today's discussion of investment strategy is an implicit, and often explicit, belief in the existence of both Alpha and Beta, Alpha being the return skill adds over the strategy style or the market segment's return (Beta). Alpha and its importance (and identification) are being discovered, or rather rediscovered, after a long period of index focus. The tone over the last few years has been "Alpha is King." Before that, it was the index mantra of "Buy Beta, there is no Alpha." But are either correct?

As we see from the simple formula **Return = Alpha plus Beta plus a random error**, Alpha is only a part of the function; Beta also has an equal role, as does the random variable. A fund can manage the Alpha part only through the selection of managers, and manage the Beta part (if at all) with the timing of change in allocations (not the allocation itself). Most difficult is the random error term, which can be partly managed through diligence of the managers and the economy, partly through diversification and size control of assets, partly through investment policy and a loss buffer, and then, of course, there

is always prayer. The task of managing return is not as simple as doing each of the three parts of the equation in sequence. This is a problem of simultaneous equations, where one equation depends on another equation.

If not the originator of the idea, certainly one of the most diligent and wellknown of the promoters of index funds has been Burton Malkiel, author of Random Walk Down Wall Street. I spoke with him a few years back and what he said was quite revealing. He was then still a proponent of index, and by that he did not mean the S&P 500 (which he called a "managed fund"), but "the total market" (5,000 or more names). He said that in areas where Alpha is present he would "rather have a manager that can add that value." Absolute heresy from the high priest of indexing, but he was talking about hedge funds, and said that he thought that in the alternative investment world "things were different." They simply are not; Alpha or returns above the average exist everywhere by definition. Malkiel also said that "surviving mutual funds do 2% better than all mutual funds," "hedge fund survivors do 1,000% better than all hedge funds," and implied that we should buy a bit of all hedge funds. Why hedge funds? "Because they have Alpha," he said. (I'm not sure he makes a distinction between hedge funds and separate account managers.) We need not constrain ourselves to just hedge funds for Alpha; many other managers have it as well. There is nothing magic about paying 2&20 that generates Alpha.

α

What is important to institutions is that Alpha exists through the employment of intellectual capital, and that it adds value. It is this Alpha—value added intellectual capital that we as investors should be finding and using. A large and well-known university has identified that more than half of their performance is due to the identification of superior managers. Finding superior managers is much more than looking at their track record for the last five years. If only it were that simple; we could find the best track record, jump into the family time machine, and—bam!—do over those same five years. Since Apple has not come out with that app yet, we can only use a manager's track record to screen for managers that have some ability to do better, to add Alpha and hopefully continue to do so. It is the diligence and evaluation that will help us forecast and answer the question: can they perform in the future.

There are several ways of getting to that forecast, but the one that works best is to build a distribution of the investment's or the manager's returns and to see what is most common. If we can find a peaked (lots of the same thing), skewed (more good things than bad) and mean-shifted (high expected or average returns), we have a manager that we can feel somewhat confident about. While it is likely that this manager has a "something," some sort of asset (we call it intellectual capital) that will continue to provide that Alpha, there is also a chance that what we have seen is just that—chance. After all, someone

always wins the lottery. This is where diligence by experienced investment officers comes into play. This part of due diligence is beyond the simple clipboard checks of the consultants and investment banks; it's an examination of why the Alpha occurred. It is the search for and hopeful discovery of, understanding and getting one's hands around the intellectual capital. Who has it? One person, or more? Can it be transferred? Is it fragile? What risks might impact it negatively? And most importantly, how can it help our portfolio?

This piece of the management of a fund is important because you want evidence that a manager will continue to perform going forward. Once a manager has been hired, you are monitoring that "intellectual capital" to find changes (negative or positive). This part of the task is much like managing a ball team and trying to keep top players. What you want are investments or managers that fit into your particular system, your portfolio, to support return without adding risk. The unfortunate part is that many good managers or investments will not fit the plan because you are not only optimizing across return, but risk as well. This approach leaves out some otherwise good managers or investments because they don't add value (better returns or lower risk) to the whole portfolio. That is OK.

β

Strategies that try to produce only Alpha have been a problem for me, much like index investing. Why one would want to take a major part of the equation and set it to zero is beyond me. Just Alpha (market neutral hedge funds) is as bad as just Beta (index funds). Markets are a primary generator for returns and cannot be ignored. You should use them and be agnostic as to whether this month's return was from Beta or Alpha. A manager who rides only Beta in up markets, but then rides Alpha up while in a down market may very well be an outstanding option for you. Every manager rides Beta sometimes, but only a few can produce significant Alpha in addition over time. The key here is over time; not necessarily every day, week, month, or even year. Finding these managers is the investor's task.

We all should also be aware that not everything works all the time. Even though, over the long run, markets go up most of the time, they go down as well. You also know that not all markets or all parts of one market react in concert, so you should "adapt" or "tilt" or "invest strategically" during the midrange times (one, three, or five years). Timing here is not an all-in or allout strategy, and by timing we mean that you must consider the economy as well as any other areas that might impact the markets, and take those issues into consideration. For example, today, if you expect interest rates to go up, it would probably be a bad time to buy long dated zero coupon bonds, but in the 1980's, when long dated zero coupon treasuries were in the high teens, it was a good time to buy. We definitely do not mean "timing" in the mutual fund

flavor-of-the-month sense of timing, or in the momentum day trading investing sense, but rather in the sense of situational awareness, and only as a means for adapting to change.

As a baseline, institutional investors diversify by looking for investments that have different information sources, return sources, and a different set of risks; in other words, investments that are clearly differentiated from others. (Notice we did not include "name" of "asset class"). By spreading out the sources of returns and risk you are dealing with the question, "What do you do when you don't know what to do?" When you don't know what to do, you should do a little of many things, which is playing the middle of the road and not making a bet on any one sector or market. This means that you lean on the managers of the investments to know more and to make decisions within their area of expertise.

But what about when you do know (or think you know)? All in? No, this baseline is a baseline for a reason. It is a touchstone, a center point, so that you always know where you are or should be. If you know or think you know a certain thing, you can tilt or overlay the portfolio, but not necessarily make major shifts. While you think you might really know, you can be, and often are, wrong. We all are. This center point can be moved. It need not be fixed forever, but it does provide a "safe" haven.

We are not talking about asset allocation here, although that is part of dealing with Beta. We are talking about an interaction between our goals, policies, and managers, and the risks we are willing to take. Relying on Beta for some of our return will mean some volatility in the portfolio. How much one is willing to have is a question of policy. How much the fund is willing to tilt and what constitutes a major shift are also policy issues. Simple volatility is not a bad thing.

3

The random error term is really the sum of three error terms, and represents the tail risk in each of the return function's other terms (one for Alpha, one for Beta and one truly random one). In addition, each of those terms is split into two parts: the known unknowns and the unknown unknowns. These are events that you can describe but not know when, or even if, they will occur, and events that you don't know in order to forecast but can expect some event to surprise. In the tails of each manager's distribution or in the tails of each factor's distribution you can find events that will cause or may cause some impact to the portfolio, and for that event you can find an investment to either take advantage of the event or reduce the impact of the event. Obviously this is easier to do with those events we can identify as "mighthappen" and much harder with events you can't predict or, if you can predict,

don't recognize as important events. In both cases, even when these events are identified, it may not be possible to fully implement a solution, leaving you with increased risk.

Even though it is difficult, investors should, and do, try to reduce these risks or take advantage of the opportunities available. This effort adds value in times of great volatility and dislocation. The solution may be complex, or it may be as simple as increased cash. Looking forward and managing these issues highlights the skill of the investment officer.

Getting Started

To start, we need a plan, a document that represents the governance inputs of the investment committee. In the past, this was most often a set of rules called the investment policy, but more recently has been called by some the "risk budget" to more neatly fit the concept of budgeting risk as part of the portfolio management process. We think of it as a governance document that incorporates all three.

Whichever term, this planning document provides the basis—the beginning governance—for managing the portfolio. The document works best when used by the committee as its tool for governing (not day-to-day or month-tomonth managing) and monitoring the portfolio.

The plan must start with a well-chosen objective and time horizon added to a value and definition for risk. This gives you a place to start and to evaluate everything that follows. In my opinion, little that does not relate to governance, return or risk should be in there. A key issue to start with is: How do we define risk, and how do we measure it?

The Role of Risk

Opportunity is missed by most people because it is dressed in overalls and looks like work.

—Thomas Edison

From the academic view of the markets, return gets paired with either Beta or standard deviation (volatility) as a measure of risk. But when using volatility as a definition of risk, one must believe that risk is the difference amongst returns or, more precisely, the average of these differences each period from the average expected return. But is it? Expected return is the mean of the distribution; it is the one guess that has the least average error. To an engineer manufacturing parts, being too big or too small is truly an error and unacceptable; to a meteorologist, being a few degrees above or below the forecast temperature is an error and unacceptable. To a Naval Aviator, coming across the back end of a carrier a foot higher or lower is an error and really unacceptable. But what about to an investment portfolio? Are you forecasting a return such that exceeding that return is an error and unacceptable? Thankfully no, or many of us would be out of a job. What if you have an expected or average return of 15% and got 13%—is that risk?

Some take the higher return idea to point out that only half the standard deviation is risk—the part below the mean. Still, is 13% risky compared to an expectation of 15%? What about when our requirement is 8%, is 13% still risky? Not in my portfolio. If the requirement is 7.5% (frequently used by public pensions), is a US Treasury Bond at 6% risky? Of course! That's like playing Russian roulette with six live cartridges—you always lose.

Risk to an investment portfolio is that which is an error, a failure, and is unacceptable—generally a return below some actual number. It might be zero, which would mean any loss is unacceptable but any gain is acceptable, or it might be a number that is required to support a budget or to accomplish

something else. Frequently, foundations take the payout required (5%, perhaps), add inflation, and get a number, say for example, 8%. This would then mean anything less than the 8% makes for an unhappy organization and anything over 8% a happy one (and 13% even happier). Risk in every other arena is the chance of a bad outcome or failure, so the chance or probability of returning less than 8% in this portfolio would be the risk. The probability of not paying retirement benefits, the chance of a Madoff-like investment result, the chance that [whatever], all can be and are risks, and are measured by probability not deviations, standard or otherwise.

Risk has a few more elements to it. Not only is it the chance that there is a failure—the size of that failure counts, too. Can it be that walking down the sidewalk is risky? Probably not. What are the chances of falling off a fivefoot-wide strip of concrete (sober, that is)? Pretty low. What are the consequences? Also pretty low. But, raise that five-foot plank 100 stories into the air and risk rises as well because of the consequences. More specifically, for investments, a 1% position that has a high chance of going away is far less risky (to the portfolio) than another investment that is 30% of the portfolio with half the probability of failure as the first. The first investment, by itself, is risky, but when included as part of the portfolio, the portfolio's risk may be little affected or even reduced.

Standard Deviation

Standard Deviation is the traditional meme of the consulting industry and the academic. It is a measure of volatility, as if the simple movement of each month or quarter's return is somehow risk. Using standard deviation as a measure of risk would mean that risk is missing the mean of the return distribution by plus or minus some value. Some just use the downside deviation (Sortino ratio), again believing that a return of 12% when the mean is 15% is somehow risk.

In order to actually use standard deviation as risk, there are several assumptions that need to be made. First is that all returns are normally distributed (symmetrical around the mean, with a co-incident mean and median, and not peaked or flat), but in reality they seldom are. Financial data and especially time series data are seldom normally distributed, so this first assumption is a big one. Missing an expected value is risk for financial theorists, or the operational research guys, or medical researchers, or theoretical physicists, and even naval aviators, but not for investors. Risk, for a real investor (and not a theorist), is not achieving a particular goal; in other words, losing (not wining).

Built into this use of standard deviation is an insidious little quirk used by managers, consultants and investment officers that has crept into the popular culture. It is the phrase "risk adjusted return". What is that? Often we hear, "Our risk adjusted return last [period of time] was X%." Our next question is always "What was the actual un-adjusted return?" You know a strange thing?

It is always the same as the unadjusted return. Evidently, adjusting doesn't change the return at all. Try this for fun: Next time you hear those words, ask what the raw unadjusted return was, or better yet, how they adjusted the raw return, and watch them squirm. If you adjust something, you make it larger or smaller—it can't always stay the same. There is risk and there is return. This idea that one must take more risk to get more return is a myth discussed more in Chapter 20.

Stochastic Dominance

Another tool the industry used to use more often, stochastic dominance, has the right idea but can only be used pair-wise. We cannot use it to evaluate more than two distributions at a time. Even when you compare managers using a winner-takes-on-the-next-manager strategy to help narrow the field, stochastic dominance only sometimes works, and then only in special cases. It cannot be used in every case to evaluate risk.

What this approach does is compare one cumulative probability function to another in order to determine by how much one dominates (or exceeds) the other relative to the first, second and third moments of the utility curve. In **English:** at various returns, one or the other has more probability and therefore is a better selection, so by adding up all of these differences we can see which has the "best" net overall score, or "dominates."

Example:

One investment might have a 3% chance of losing 10%, and a different investment an 8% chance of losing 10%. Sounds like investment A is our winner. But then we see that the first option also has a 20% chance of losing money (a return of less than zero) and the second option a 15% chance of losing money. Maybe now we should change our minds. But then again, the first has a 10% chance of a return of more than 13% and the second only a 4% chance of exceeding 13%. Do we change our minds again?

The stochastic dominance method has always been seductive, but is so limited by the pair-wise restriction that its use is limited. It does, however, have a variation that leads to other risk review techniques—for example, if we only look at the dominance at a certain point and not the whole distribution. If one were to pick a number that represented the minimum required return say, 8%—we could determine which manager or investment dominates at that required return, and therefore which provides the least risk of failure. There are some issues that crop up in allocation using this technique only, like the 8% bond, which would dominate anything else at that one level but fail everywhere else.

Omega (Gamma)

There is a variation on stochastic dominance that tries to get around the pair-wise limitation. For this approach, you take the probabilities of doing less than a particular return and divide it into the probabilities of doing more. That gives you the omega ratio at that return number. If you do it for every return possible you get an omega function, a line or curve that can be compared to other lines/curves. It works, but is math-intensive and adds nothing over what a simple comparison of the actual distribution would show, and those distributions are more intuitive to read and understand.

Simulation

This approach uses the various managers and investments, calculates a distribution of all of each manager's returns, then using simulation (Monte Carlo sampling is most common) conducts thousands of random possibilities to find a resultant distribution of returns from which various probabilities can be determined. Selecting a single target (or several), we can then find the cumulative probability of doing better or of doing worse. Multiplying that probability by the assets gives us a consequence or "value at risk," bringing into the examination both the probability of loss and its weighted size.

Risk and its consequence seems the best place to start our investment process, and to do that we start with risk and its control. Risk is the probability of losing, so we start with a description of just what losing is. Is it actual loss of cash? Or is it a return below a certain level?

For most foundations and endowments, risk is, or should be, a return less than what they need to spend, plus inflation, plus something extra to grow the fund. Our assumption here is that they do not want to reduce principal, so they need a return that is at least as much as their payout. Then, since they often would like the money they spend to have as much effect tomorrow as it does today, they will need to add inflation. Then they may decide that all of that is good, but they also want to do more tomorrow than today, which will require another added bit. For example, if we need to spend 4.5% of the fund and inflation is running 2.5%, and we add another 1% (just because), we find that a "win" would be any return above 8%.

Using the simulation approach, we can value other risks to the portfolio besides the market-or investment-related risks. We can value business risk of the manager failing as a going concern, key man risk, event risk, or headline risk, or whatever else there might be.

12

The Role of Money Managers

Only the mediocre are always at their best.

—Jean Giradoux

Contrary to reports from all the index fund sellers, it is possible to beat the averages, and possible to find managers who can do so consistently. If you do even the slightest thinking on the subject, it becomes obvious. We learned in grade school that the "average" was the middle, so by definition some must be above (and of course some below). An index is supposed to be at or near the average, so some will (must) do better. While it is certainly possible to find the "better," it is not always easy. Instead of thinking like Buzz Lightyear and looking for a manager who will last "to infinity and beyond," it is best to think more like a coach of a ball team and find a set of star players for now, while continuing to look for upgrades. Sooner or later that star player will retire or miss a step.

This is one area that actually makes me mad. If you really believe that everyone is the same and no one can out-perform for more than just an instant, then why go to all this trouble? Simply buy that index and forget it until it's time to draw the funds. No need for a consultant, no need for an investment committee, no need to think. But it is strange, isn't it, that in every endeavor there are better and worse, good and bad, top and bottom, winners and losers, except

in the case of investments? If an economics professor can be better and be awarded recognition in the form of a Nobel prize, can't a money manager be better too?

Warren Buffett did not beat the indexes every day, every week, every month or even every year. So what? Money invested with him would shame all other foundations. A \$10,000 investment in Berkshire Hathaway stock in 1965 would have grown to be worth nearly \$30 million 40 years later. That's longterm investing, and about 60 times as much as you would have made if you'd invested \$10,000 in the Standard & Poor's 500 Index and held it for those same 40 years.

Even over shorter periods, Buffett's track record is clearly outstanding. A \$10,000 investment in Berkshire Hathaway in November 1976 would have been worth more than \$15,000,000 at the end of 2011. Over this time period, Berkshire realized an average annual return of 19% in excess of the T-Bill rate, significantly outperforming the general stock market's average excess return of 6.1%. Yes, the volatility was high; Buffett had a volatility of 25%, which was markedly higher than the market's volatility of 16%, but you would have been well compensated, even overcompensated, for that volatility.

Knowing this record, would you have hired him as a manager? Did you know that from July 1998 through February 2000, Berkshire lost 44% of its market value while the overall stock market gained 32%? No internet bubble for him. Would you have kept him?

What is disconcerting is that the academics and index fund sellers all make the assumption that there is no change in managers over time, no new ones coming in or old ones going out, and that all of those above and below the average will become the average over time. There is change; the managers change and your portfolio will change. The facts are that some are better than others in every endeavor, including investments, and it is those top money managers that we want on our team.

The key to success in any group or team is getting the best players possible. In every walk of life, understanding of this basic fact, and a realization that some are better than others, is part of the fabric of our nature. No one expects everyone to be equally good at sports, music, art, math, or anything else, except in the literature surrounding investments. There, we are told, all managers are equal and we all should aspire to be as close as possible to average (the index or benchmark). In fact, many managers are well above average over long periods of time, and some are far above average.

When an investment committee looks for an investment manager, just what is it that they want? What are they really looking for? For that ball player, it is physical prowess and skill; for a musician, talent; for a mathematician, intelligence and insight; and for a money manager, "intellectual capital." (Think entrepreneurial capital, financial capital or labor capital.) This is not necessarily an

IQ of 180 or an MBA from Harvard. This intellectual capital is just a name we give to the combination of (1) the philosophy, process, or approach to investing—the manager's "trick," if you will—and (2) the manager's skill at executing that process. This combination is the capital that you're buying and importantly want in your manager.

The focus must be on the individual providing that intellectual capital (actually making the decisions) far more than the organization he or she belongs to. As with anything that requires the skill of a person, the quality of this intellectual capital ramps up, plateaus and falls off over time. One can think of many oncegreat ball players with physical capital that, after an event (injury or age), just are not up to the task as well as a new player might be. Quality counts even if we can have it with a certain manager only a short time—at least for that time we have the best. Turnover in managers, like stocks in a portfolio or ball players on a team, is to be expected.

Often people use the brand name of an organization to make their decisions. (The old "you can't be faulted if you buy IBM.") They are lost souls. This is not picking cars or clothes; designer names or great corporate names are no guarantee of success, and often a bar to it. It is the individual(s) that make the decisions who are important, not the brand or logo on their business card. "Once upon a time" does not help either. The organization that once upon a time had a stellar reputation may no longer employ those individuals who created such standing. This perceived quality may no longer exist if the people that created it were not able to transfer the intellectual capital in its entirety to their successors. You may be dealing with the next generation, who may not be as good as the first.

This means that, much of the time, these outstanding managers are with smaller firms run by one or two outstanding people. This is not always the case, and should not diminish the value of large firms, but it does tend to be true. Dependence on small firms or one or two people within a large firm is not easy, nor is it well-received on the cocktail circuit. It's much easier to tell that fellow at the club a manager's name he has heard before than to explain why you are using a smaller firm or one unknown to him. It's also harder to monitor the small firm since the board or staff must always be on the lookout for any changes at the management firm, and can't always rely on the trade press (and even they get it wrong, mostly).

This evolution and change is just one of the risks in dealing with strong intellectual capital. Whether the change is rapid (hit by the proverbial bus), surprising (sale of the firm or retirement), or slow (transition to the next generation), the fund can expect to be finding a replacement sooner or later. Diligence is not something that one does only at the beginning; rather, it is regular and continuous.

Monitoring change is the heart and soul of diligence, both before, but most importantly after, you have hired a manager. Change is an unquantifiable risk element, a random element that experienced investment officers should be able to find. Diligence is the regular review of the manager with a mind to find anything that might impinge on the intellectual capital: that thing you are buying. It is the noticing of flags and hints, the turning over of rocks and the understanding of what is or might be happening that makes diligence difficult enough that real experience is required to execute it. It is not the filling out of a questionnaire on a clipboard of checklists.

For example: One manager with three principals had good performance and a great story, but digging deep on each name in the portfolio it became apparent that the analyst sitting in a cubicle was the one with all the answers. Soon it was obvious that the intellectual capital was actually held by this woman. So diligence became not talking to the principals, but to her as well. When she became pregnant—a flag—would she return? When asked—yes, she would but then her husband took a job in Memphis (an even bigger flag). It was time to find a new manager well before she actually left. Other flags? Buying an airplane before learning to fly. One manager had a habit of keeping every issue of the WS/ in stacks on the floor, but spending time in the office one could notice that the newest was several weeks old; obviously he had not been in his office for an extended period of time. Each of these three managers has one thing in common—they are now out of business. None of these flags is on some Procrustean checklist, but each heralds a change in the manager and a risk to the intellectual capital that you are buying. Finding that change and mitigating risk is what diligence and managing a portfolio is all about.

Sure, getting the best managers or investments is partly getting 25% returns when everyone else is getting 15%, but it is much more. How can you actually find these managers? Can you truly bag one, or is this a snipe hunt? You need to find managers not with low tracking error but with high tracking error. You want managers with biased (skewed) and concentrated distributions of returns. In these distributions, mean-variance tools like standard deviation simply do not work, and so we rely on several other tools to find these managers.

Manager Search

Most stockbrokers and investment consultants have a platform of managers that they tout. Generally, and unfortunately, those platforms are small and relatively unchanging. Why such a small number of managers fit such a large number of clients is one of the industry's mysteries. What is not a mystery is the financial relationship between them. Fortunately, today there are several commercial databases that collect money managers in varying styles or classes, which are used by investment officers and some better consultants. The databases make a convenient place to start since most managers list their performance with one or more of them.

The SEC requires every manager publishing his performance to make the statement "past performance does not guarantee future results," as though this somehow escapes your attention and this simple statement will protect the unwise or unwary from unscrupulous actors such as Madoff. I guess it takes a bureaucrat to think we all believe in time machines to redo past performance, or that anyone actually heeds those warnings. The reality is that past performance in every skill hints at a person's potential to perform in the future, even if it does not guarantee it. It is the person's skill we are looking for, and will ultimately buy, regardless of the provenance of their company's name. So, like everyone else, ignore the statement and initially screen for top past performers. Why anyone would hire someone with a proven inability to deliver is beyond me, well except for those that want only a marquee name to hide behind. But then their concern is for themselves, not their institution.

Once the huge list of names is pared down to a more manageable group of top performers, it becomes time to ignore the absolute return number and start a deeper dive into each manager. At this point, we should all be looking for the lottery winners who simply rose to the top by chance. Not an easy task, or one that can be done with a checklist. Perhaps you can find a manager who never hit the top of the lists except for a one-time shot in the 2008 financial crash, or had only one investment that was exceptional for one month or year.

These managers get eliminated, followed by any fund reporting performance generated by individuals who are no longer there. This is especially common with mutual funds and large organizations, and is where "past performance does not guarantee future results" is truly the case. The key thing to remember is you are trying to identify top and consistent individuals.

With the now even smaller list you can build a histogram of each manager's monthly returns. From the histogram you can see how the manager got to his performance. Was it tightly grouped? Were there a few bad returns, or just one? When did they occur? We are looking for managers that have high mean and median returns, but are also skewed (more good periods than bad) and peaked (grouped around a certain return number). If one or more does not meet the requirements, they can be eliminated, reducing the list even more. Now starts the really tough part—the onsite visits. You need to find the intellectual capital.

Before we discuss the onsite visit, let's talk about the "beauty pageant": That wonderful day when the consultant lines up three or (if he is especially sadistic) more managers to present, often in conjunction with that other approach to finding a marquee name and avoiding accountability—the RFP. On that sad day, after a coffee and sweet treat, the conga line of salesmen reading from their pitch books begins (they must believe the committee didn't or couldn't read them before and, unfortunately, they would be right), followed perhaps by a few questions from the committee and then a decision based on who gave the best presentation., This is an outstanding approach to selecting a good salesman, but to find outstanding intellectual capital, it never works. But, then again, it does feel good to say the committee spent all those hours doing diligence.

Real diligence is done in the manager's office, onsite, talking to the decisionmakers and not salesmen. It includes a discussion with the research and trading staff and an evaluation of the firm. The purpose is to evaluate the story the manager tells. Is it really true that a committee of equals decides on a particular portfolio name, or is that just eyewash for the more equal of pigs who really makes the decisions? Do they really evaluate a stock name by the numbers, or is that just backfill, and what they really are buying is a story? They say they buy growth, but in practice they buy a theme. Is their value story really a growth-at-a-price story? The list is far too long for a questionnaire, and none of these are deal killers. The purpose is to understand and know what they really do so you can form an opinion on the questions "Can they really continue with this high performance?" and "How, or even can, they fit into your portfolio?" You also want to know if this intellectual capital can be tracked once they are hired (if they are hired).

Beyond that, what about the firm? It used to be called "management by walking around," and it is a good way to get a feel for the firm and how it works for the employees. Some real examples: one firm, supposedly in business for years, had only one office, with personal stuff while the other five looked like they had been empty until about ten minutes ago. Were these guys for real? This was a red flag that marked a stone to look under; as it turned out, the firm was only a month old and had only one employee. The rest were friends for the day who wanted to work there. Other flags are the Dilbert cartoons the cube-dwellers put up often. They speak to management problems that may or may not affect performance. In another case, by talking to the management and staff of one firm you could have found they were focused on earnings for their families exclusively (even to the point of having the entire firm put up a wall of family photos), but not in providing for clients. "Good or bad" is your decision. Only a visit to the manager's office and not a sales presentation, would have found relevant issues allowing you to make a prudent and informed decision. Diligence is finding intellectual capital and discovering what may affect it. Deciding whether those issues affecting the intellectual capital matter or whether to use the manager is implementation of management of the portfolio. While these examples stand out, not all are so obvious. Sometimes it is only a feeling of unease, which must be further explored. Talking to their competition sometimes finds issues the manager would like to bury. None of this is on Procrustes' iron bed of a checklist.

Each manager is different and each firm runs differently. Spending time on site lets you in on much more than just the sales presentation, but the decision is yours. Nothing is right or wrong, but the knowing is essential. One may want a manager with no outside life except managing assets, while another may like the fact that the manager spends a great deal of time in social and political circles. One institution used to insist that its managers have a high golf handicap, thinking that a low handicap meant too much time on the golf course and not enough studying stocks.

After hiring, the diligence does not stop, because the manager must be visited regularly by your investment officer in order to gauge any change and to better understand the process the manager uses. This permits the committee to understand what is happening in various situations and why. Is the current under-performance a slump, or is it indicative of a negative change? Time with the manager also permits the committee to see these changes and take the necessary actions.

This ongoing diligence is as important if not more so than the initial diligence and must be maintained if the fund is to be successful.

The Right Way to View Asset Allocation

One myth that came about in the late '80s and early '90s is that asset allocation is responsible for 90% of your return. The study used to "prove" this did not say so nor did its authors. This was a misunderstanding of the work and was pushed by index fund sellers and asset allocation study providers. Among the flaws of the study: many of the universities in the study used the same managers, and when the managers in an asset class were of different names their correlation and R^2 were close. Asset classes were similar. About the only axis on which there could be difference was asset allocation, and it wasn't much.

What the study actually said was only that the difference between any two portfolios was caused by allocation. So if one portfolio had a return of 10% and the other 10.1%, it was that tenth that was 90% caused by allocation, not the ten, according to this study. So, with so little difference between managers and only one real axis open to change, the real news was not that there was so much correlation to asset allocation, but so little.

This study kicked off an era of emphasis on the proper allocation and the importance of allocation of asset classes to the portfolio. Board members so wanted to make sure they got the allocation percentages right and that they had control of the portfolio through this allocation process that they all but forgot about the managers or investments themselves. Much time and energy

was spent on the allocation number and the range around that number, but where did these numbers and ranges come from? Were they correct? What did they do to the portfolio?

You, as board members, are told that one must optimize to the "efficient frontier," but when your consultant begins that task he finds quickly that he gets strange results (52% in frontier markets, distressed debt or some such) and that he then needs to add constraints. But where do these constraints come from? Evidently, my copy of Bill Sharpe's work is missing a few pages, because it says nothing about how to construct constraints or even target allocation levels. Most board members don't ask questions like, Why that target? Or, Why that asset class? Or, Why that range? Or, Why, if the theory works, even have constraints? If they do ask, they are not well answered. How do the consultants really get targets, ranges and constraints? Gypsies with crystal balls? Do they do what everyone else is doing? Or, maybe, just give some kindergarteners a box of Crayolas? The reality is that asset allocation does not control return; the investments or investment managers do. Asset allocation controls risk. Yes, the two are interrelated, and one does have an impact on the other, but it is helpful for committee members to think about them separately: investment managers control return and asset allocation controls risk. Your investment officer may have a slightly more sophisticated way of looking at these two and see more of the interrelationships; but then he would, wouldn't he? As a base case for both the committee and the investment staff, this split is helpful and useful. One more thought about asset allocation: it does not exist as a complete and separate entity; it is actually two separate parts.

The National Association of College and University Business Officers (NACUBO) publishes a study of investments for over 800 organizations. From the 2013 study, we can compare the returns and allocations of three marquee universities with the average of all the universities, and with one private foundation (see Figures 14-1 to Figure 14-4). Obviously the same or similar allocations for the marquee three and the average university resulted in different performance results, but conversely, different allocations between the marque three and the foundation resulted in similar returns. QED; allocations did not cause returns.

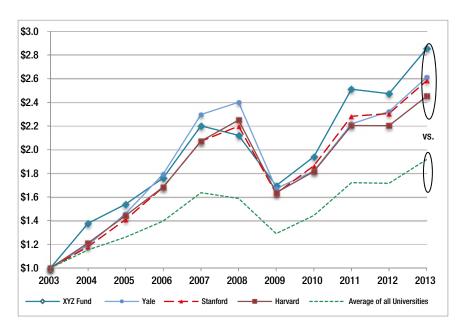


Figure 14-1. Growth of a dollar

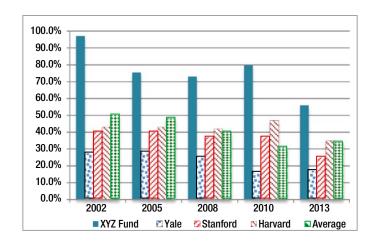


Figure 14-2. Historical equity allocation

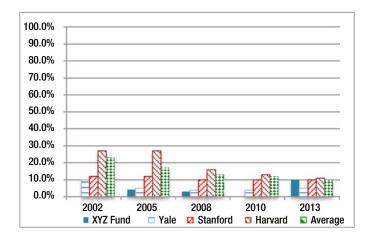


Figure 14-3. Historical fixed income allocation

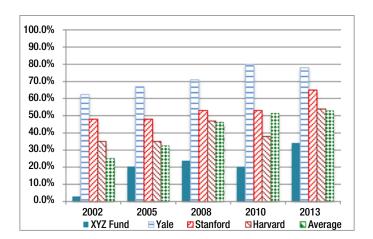


Figure 14-4. Historical alternative allocation

What we hear called "asset allocation" is in function two different activities: 1) the diversification and 2) the sizing of investments in our portfolios. Unfortunately, most think that adding one of every asset class they can dream up, coupled with weightings offered up by some "feeling," is diversification. It is not. The asset classes are the first problem. Marketers have gotten carried away inventing new asset classes. Alternatives 25 years ago included international public equities; now they include collateralized loan obligations, distressed debt, special situations, middle market buyouts, and so forth, the point being that the "names" of the asset classes themselves are meaningless. Take for example, a private equity fund that invested capital into Chrysler (a private company) versus a fund focused on large-cap public equities that invested

capital in Ford. How is Chrysler as a private company really any different than Ford as a public one? Both are impacted by the same economic winds. I am not arguing that you should not have both (or one over the other), but I am saying that if you do, you have concentrated the portfolio, not diversified it. This may be a good thing; you may make tons of money (at least we hope so), but it is not risk-reducing, and it is certainly not diversification. Real diversification is achieved by holding assets (investments) affected by (I) different information streams, (2) differing techniques for turning that information into return, and (3) differing risks. It is the opportunity to find differences along one or more of these three axes that creates the diversification. That reduces risk, not the name of the class itself.

For example (staying in the private equity class for a while, as proxy for the whole portfolio), a portfolio consisting of a fund-of-funds of only venture capital funds, or a portfolio of LBO funds, is vastly different and much less diversified than a portfolio that includes a fund of growth equity in China, a fund of small hydro plants in Brazil, and a fund of quick-serve restaurants in southeastern U.S. The first two portfolios are not diversified well, but the last one most certainly is. To make diversification work at all, one must have investments that are different on all (or as many as possible) of these three axes. Different names to classes of asset just aren't enough.

Next is the whole concept of correlation. Correlation should be thrown out of our lexicon and minds forever. The issue is connectedness, not some mathematical folderol. How closely are the assets connected, on which axis are they connected, and most importantly, when do they become connected? These are the real questions. Anything can be correlated and not connected. Many can remember when hemlines and the World Series winner were "correlated with" and "predicted" the stock market. But these days, we don't bet on hemlines.

Correlation is an attempt to measure the connectiveness of investments, but those connections are made between individual managers or investments, not the name of some group of assets grouped into a bucket and called a class. Even pair-wise correlation is a crutch that is often wrong and almost always changes over short amounts of time. The math is not wrong; it just lacks any real investment world application. Down in the rocks and shoals of daily investing, correlations sometimes exist for a bit, then change dramatically to a new set, which lasts until the next change. These periods reflect the individual relationship of each of the two investments to one another and the actual market and economic environments (the information streams and even execution methods). As the environment changes, so does the correlation. What matters is: In which environment are they acting in concert?

Some assets/investments are connected with soft bonds, like large-cap value and small-cap growth funds. For some part of a market downdraft they act unconnected, but if the markets fall far enough (or rise high/fast enough) they show their connectivity and move together. Why is that? We hear from our consultant friends that during market turmoil all correlations go to one; if so, what good are they? In reality, if in these market tumbles all correlations go to one, then shouldn't we really want a correlation of one when they go up as well? The key to good asset allocation is to find the connections between investments and to ensure that they are as far apart (as unconnected) as possible and to know (or at least suspect) what might cause them to work in concert.

In the following two chapters, we will discuss the two components of asset allocation: diversification and sizing of investments. Expecting diversification alone, or in conjunction with proper sizing, to insulate your portfolio from all shocks is as silly as expecting your kitchen knife to cut everything and anything. Using only asset allocation to manage your portfolio is like having only a hammer in your toolbox. It is only one of several tools that can be used, and if used correctly, it will help. Let allocation do its job and don't try to make it do everything. Managing a portfolio is not a one-tool job. Try using other tools, such as liquidity, volatility, risk, and quality.

Figure 14-5 to Figure 14-8 show the actual total performance of a fund compared to the hypothetical performance if one had used asset class indexes in exactly the same proportions. Obviously manager selection and not asset allocation created performance.

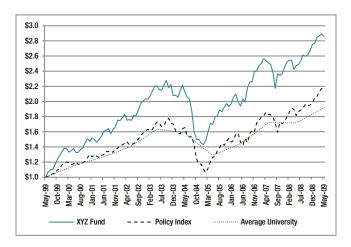


Figure 14-5. Attribution

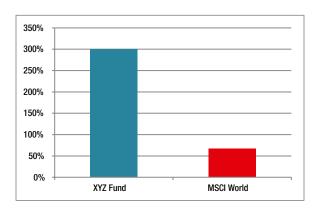


Figure 14-6. Attribution—International Equity

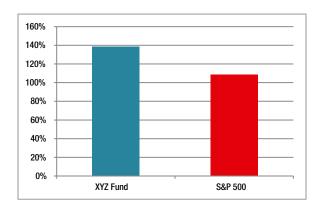


Figure 14-7. Attribution—Domestic Equity

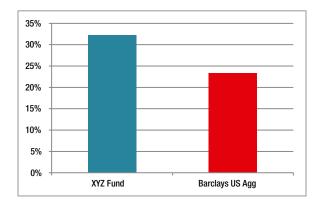


Figure 14-8. Attribution—Fixed Income

What Diversification Really Means

Diversification is not an end unto itself. More and more diversification is not necessarily helpful at all. The thing is, concentration adds to return and diversification removes risk, but both only to a point. So which is it that you need, a more concentrated or a more diversified portfolio? This is a question without an answer. There is no science to balancing these two—just art. As we will see in the chapter on allocation process, we can determine if an added manager reduces risk or not and by how much. We also can see what effect the new investment may have on the expected return and the right (good) side of the return distribution, but when is enough enough? The easy answer is that it depends. Certainly once a new investment stops subtracting risk or adding return, you have reached enough. Before that point however, it will only be your sense that your efforts toward risk and return have balanced one another.

In a general sense, as you or your investment officer add unconnected investments, you are increasing the probability of success but also reducing the returns that are possible. High average returns are part of reducing risk, and do provide a buffer for those inevitable down drafts. Also, part of your effort to reduce risk should be focused on the specific events you can forecast and the investments that have a high probability of impacting them. This part is less science and, again, more art. Are you forecasting inflation, geo-political disruptions, resurgence of particular markets, strong growth in particular

segments, bursting of market bubbles, or a change in political direction? What about a change in your need for cash, perhaps due to a big project or new grant program? Once these events are identified, the question then becomes, What investment will best push the portfolio in the direction you want, or do you have enough already in the portfolio? If not, more investments will be required-more "diversification," if you like.

The discussion of what constitutes diversification is an "inside baseball" discussion. Academics and most consultants tout "classes" of assets, while some CIOs and a few consultants like the "buckets" approach. Both depend on correlation coefficient calculations, which become their weak link. Correlations are a weak reed upon which to base decisions. The story is that you want investments that are correlated such that when one investment is up, the other is down. Hogwash is the nicest term we can use here. You already know that when markets are strongly down, all correlations become one; in other words, they all go down together. Those that live on correlations must then believe that when markets go up, they want part of their portfolio to go down, so that when markets go down all of their investments can go down as well, and the correlation stays low. If you buy the correlation theory, what you really want is a correlation of one, so when the markets go up so do all your investments, because when the markets are down you know all your investments will be down too. Following that line of thought, we would just ignore correlation.

Too often, people equate correlation with connectivity. You can talk about the correlation of the markets with ladies' skirt length, and with who won a sports game, or a particular year in a President's term, but no one really believes that skirt lengths or the number of years a President has been in office determine the market.

What we are trying to do when we diversify is to control the connectivity between our investments, or find investments that are not connected at all. The way to do that is not by assigning different names to asset classes or different buckets of investments. It is to focus on those areas that are or may be common to each investment. The three biggest elements or vectors on which to diversify are (1) information stream, (2) execution and (3) unique risks.

Let's take three private equity funds that all fit into the private equity bucket of the alternative asset class and explore just what we mean by these three diversification vectors. The three are a growth equity fund in China, an energy fund in Brazil, and a micro LBO fund specializing in fast food restaurants in the southeastern U.S. These were actual funds in an actual portfolio. We are using these three because the differences are easy to see, but the principles apply to every manager in your portfolio.

Information stream is the how and where does the manager get information. Research, sure, but what research, what markets, and what sub-parts of the market? Do they have something extra, some secret sauce or some lagniappe? These three example funds are all private equity, but one fishes from consumer-based growing companies with revenue in China, another uses only guaranteed contracts for energy in Brazil, and the last fishes from small franchise restaurants one or two at a time. A change in the U.S. has little connection with any of them. Take-or-pay energy contracts in Brazil have no connection to non-export consumer businesses in China, and going out to Taco Bell has nothing to do with China or Brazil, and a limited amount to do with the state of the economy in the U.S.

Even in the small-cap value asset class, two managers can use different sources of information; one can focus on IPO and mutual insurance conversions and the other on turnaround or underperforming names. The information stream will include all the data they use to track names in their space. One micro-cap manager added to his normal research through a massive Rolodex of individuals that he could call to get information—not inside, just public information that was not followed widely by most analysts.

Execution is the process the manager uses to convert the information into return. Back to our special three: The China group plots growth and focuses on the ability of the company to IPO or sell to a strategic buyer in a short time, the Brazil group on the ability to build and then contract for long-term delivery of electricity, and the Taco Bell fund rolls up those small franchises into one and relies on the economy of scale. Some equity managers use momentum and some use a discount cash flow or dividend approach.

Unique risks are just that: what will cause a particular manager to under perform? The unique risks of the three private equity managers are easier to see, but unique risks exist for domestic managers as well. One may be sensitive to interest rates, another to a regional economy and a third to regulatory approval or changes. The list is almost endless (unfortunately). The fewer shared risks the better the diversification.

Asset Allocation: The Process

Start with the end in mind.

—Stephen Covey

Currently, the starting point for investing in the industry is to assign various investments to differing buckets or asset classes, and then optimize the sizing of each bucket based on the average performance of the asset class, with the goal of reaching some "efficient frontier." First the investment committee or consultant decides how many and which buckets to name. Then they decide which bucket each investment belongs to. Some can be easy, but others not so much. Should this investment be called distressed debt, or is it high-yield? Does the high-yield manager fit into the fixed income class or alternative class? Is international equity separate from domestic equity or are they both part of global equity or is it an alternative? Does an equity mutual fund of natural resource commodities heavily biased to international names fit into the alternative box, or the international equity box, or is it a new class natural resources? Where do you put MLPs and REITs? After you decide on which bucket each belongs to, the next decision is how much of each bucket you want. Into the machine goes these several decisions, and like the Great Wizard of Oz out comes the answer. The next step is then to find filler for each bucket. The actual investment manager or investment used to fill the bucket is often the one who is on the consultant's list or platform, and not necessarily the "best" or even "good" for your portfolio.

Asset allocation like this is probably responsible for more failed performance than any other element of investing. One cannot separate allocation from manager selection and risk control. Asset allocation is the result of the portfoliobuilding process, not the start. This is crucial to successful investing.

Deciding that a certain percentage of your portfolio needs to be in any particular asset class is an exercise in hubris. Who can know in advance which managers one can find, or the state of risk? Does one add in any old manager just to satisfy an allocation percentage pulled from space? Where did that percentage come from—someone else's allocation? What risk did that fund take? What were their goals? A manager that fits the portfolio is more important than mere participation in some ill-defined asset class like "alternative" or "emerging market" or even "large-cap value." Building an iron box in advance and forcing your portfolio to fit that box would make Procrustes proud.

One state teachers' pension fund was convinced that they needed a certain percentage allocation to private equity. They were told it would take several years to find the right (diversified) funds for this \$300 million allocation, because not all the best were in the market at the time. They were also cautioned about the "J-curve" effect. They ignored the advice and committed the entire amount inside of a couple of months. They were a little big for that bed and so were severely chopped off, losing a significant amount of money.

The key to controlling a portfolio is diversification; a simple idea, but not so simple to execute. In fact, building a diversified portfolio is difficult because it requires deep thought and an understanding of the investment. This is the area that separates the middling investment officers from the outstanding ones. The average investment officer, average consultant, or average investment committee member thinks (because they have been told far too often), that diversification is a simple effort and that many differently named asset classes are all that is needed. The real truth is that asset classes don't provide diversification; they are used by academics only because they are easy to name, and the data is easy to get.

Rethinking the process

So how can a foundation or endowment allocate assets to control their risk? To start, they would look to the end point, their goal. If they don't have a destination, they won't get there except by chance. If return is not already stated as a percentage, you will need to convert your goal into a percentage. This becomes not your target return, but your minimum return. Anything more is wonderful and anything less is a failure.

Starting the process, not unreasonably, starts with the grist in your mill the diverse package of managers you have found. Using a field of potential investments as a core and then simulating (Monte Carlo) builds a distribution

of potential returns. You can start with a single manager or a small bloc of managers. Selecting these managers en bloc is required only when starting this process for the first time, or occasionally to test the portfolio. Once the fund is established, each newly suggested investment is modeled into the portfolio to see if the probabilities improve or not. The fund can test whether or not replacing a manager is helpful or if making a change to governance helps, or it can test a new type of asset or investment to see if it makes a difference, and if so, how much.

Businesslike decisions can be made. Implementing socially responsible investing rules is a business decision. Do social investing rules help or not? If they don't, how much in terms of risk will it cost to use them anyway? How much will it cost to dedicate a portion of the fund to short-term bonds in order to pay for a particular need? For example: one foundation wanted to exclude sin stocks. After evaluating, they discovered that decision was worth \$1,000,000 annually in potential returns, so since that million would feed and house many children in the orphanages the foundation supported, they decided that it was just fine that smokers and drinkers supported these activities. A note here: this was done with the managers available at that time, the market at that time, and within their governance set. It may or may not be different now and with different governance. A second example: one hospital made large changes to their portfolio at the end of a bad year in the market—against advice—which cost them \$87 million in the first year. An "expensive good night's sleep," to quote someone there. They did not test beforehand.

Simulation is not a black box approach. Will it give you precisely accurate numbers? Don't count on it. What it will do is get you close to the magnitude of the change and accurately give the direction of the change. Is there much difference in saying that there is a 95% vs. 96% chance of success? No, but there is a big difference if the numbers are 90% vs. 97%. It is a big flag if they move either up or down with whatever change was contemplated? In the hospital example above, the predicted cost, had they tested beforehand, was\$60 million, less than the \$87 million it actually cost. Either way, an expensive decision. Would they have made the same decision if they had examined the cost in advance? No one can ever know for sure.

We like a step-by-step approach because you can monitor the process and see where changes are coming from. Assuming you are starting from scratch, that process would look like this:

Core

To make it easier and quicker, we generally start with a small select group of listed equity managers. They are generally domestic, but on occasion may include a global listed equity manager(s) as well; you can start with just one single manager; the process is exactly the same.

Once you have identified your base group of managers, you can simulate possible returns and get a cumulative probability set or a distribution of returns. This set of probabilities tells us not what will happen but what the chances of a certain return or more happening will be, on average. This is a lot like rolling a pair of dice; we don't know exactly the next roll, but do know that the probability of rolling more than a three is high (in fact, it is 33 out of 36, or 91.7%). Once we have this return set with the managers, we can simply choose the return we are interested in, our minimum required return, (for a foundation this might equal spending + CPI + maybe something extra), and read the probability of achieving that return or better. Changing managers or changing allocated amounts will change this probability, which will in turn change our risk of failure. You can try out various options to find the optimal one. It will be the one with the highest chance of success and lowest chance for failure. If you started with a few managers, you may change them out one at a time with different potential managers to see which would be the better set. This approach gives you a core or base to your portfolio with a certain level of risk.

Absolute

Next, begin adding other managers and investments that tend to skew the distribution further or make it more peaked, in order to continue to lower the risk of failure (increase the chance of success). Always, always ensure that the managers add diversification to the portfolio. Remember, diversify along three axes: (1) information stream, (2) style of conversion of information to return, and (3) risks. For this phase, you must find investments that have a more regular return and stray little from their mean, like fixed income, or investments that act like fixed income. These investments may have lower returns than your average, maybe even lower than your required return (though high-return options are certainly welcome and can sometimes be found). The steadiness of these investments helps especially during those times that are outsized on the low side, but then may hurt the portfolio when returns are outsized on the high side. You can think of this as giving up return to buy insurance. This makes sense as long as the added investment(s) lower the probability of failure. There is no sense in adding a large contingent of bonds (or any other investment) to the portfolio if the chance of reaching the required return goes down. Keep adding more and more of that particular manager, pushing down the risk, until the risk starts to rise. You are done; the investment or manager is properly sized.

This is the biggest fault of pension plans (especially public ones). They like to add very low returns in order to get very low volatility. The fund needs to make a certain required absolute return in order to pay benefits, and they end up carrying so much fixed income or low returning hedge funds in order to ensure low volatility, they never get to the required return, which is a failure.

One state pension plan has a statutory requirement of 30% for fixed income. How can legislators know in advance the right amount of bonds? With tenyear bonds in the 2-3% range, right now they should not be surprised that they can't meet their obligations. What do they tell employees? "You can't have your retirement payment, but look...no volatility!"

Enhanced

The next set of managers or investments to add are the long-ball hitters, the expanded or enhanced return generators. Add these like you did the steady eddies and pull the return distribution back up, increasing returns but still decreasing the probability of failure. Add as much as you can until you can no longer increase the chances for a win.

Yes, these investments are much more risky individually, but adding a bit into the mix can, and does, reduce the risk of failure.

This approach gives you a method of evaluating the "goodness" of a manager or allocation. Good for you, that is good for the portfolio, means this manager or this investment or this allocation is a positive influence on the portfolio by increasing the chance for success. At exactly the same time as you are evaluating managers, you are sizing the allocation and adjusting risk in the portfolio. A great manager may well have great track record, but if he does not help the portfolio, why would you include him?

A special note here: using this approach means using managers with skewed and peaked return distributions, such that there are many more good things happening in the portfolio than bad. This most often eliminates CTAs (commodity traders) because they have many more bad returns than good, even if the occasional great return pulls up their average returns. This is often their marketing cry: that they are not correlated with other investments, and using them will lower volatility. We are maximizing the probability of success, not minimizing volatility; checks are not written in deviations, standard or not.

This approach gives the investment committee the ability to make knowledgeable businesslike decisions. They can evaluate the cost in terms of risk or dollars in making or not making a certain investment. One could look at the cost of using or not using hedge funds or international stocks or almost anything.

Event Risks

The next step is to look for outside risks, those known or unknown elements that, if they happen, would have a big negative effect on the portfolio. Then find investments that insure against that risk. (The word "hedge" used to be used, but now it conjures up different images, mostly of excess fees). For example: in a geo-politically unstable world, oil might be good insurance (so, perhaps, is the dollar). In an environment with rapidly growing economies, investments in emerging countries and natural resources are a good hedge to events. In an

era of inflation, real estate is often a good bet, but so are natural resources. The threat of down markets points to investments that are not marked to market frequently, such as private equity or perhaps even cash.

As you identify these event risks, look to your portfolio to see if you already have some investments that will backstop or insure against that risk. If not, add a manager or investment that will. Using the same approach as above, you can see if there is a cost in risk or potential return and balance it against the insurance you hope to get from the investment. You may find that increasing your risk is necessary to insure against whatever event is of concern.

Liquidity

The next step is to layer on any liquidity requirements, spending, benefit payments, and the like. It is important to remember that the entire equity portfolio is liquid; you do not need to match income or dividends with expenses (we are investors, not accountants). Trying to match income and expenses is not a best practice, since it reduces your total return. It is not uncommon to think, since equity markets are both up and down, that in the future you may need money when the market might be down, and therefore cash needs to be set aside now. That is not always the case. If you are earning, for example, 10% annually in the portfolio, even if the portfolio is down several percentage points, the resultant return may still be better than a money market over the same period of time. The comparison is of total dollars earned over the time period. One technique used heavily by corporate America, but not often by foundations or endowments, is the letter of credit.

The endowment model so often discussed includes the notion of selling liquidity. If your fund invests too heavily in private deals and has a liquidity crisis during a big sell-off of the equity markets, which happened in 2008, a standby source of short-term funds is most welcome and demonstrates superior prior planning. Why foundation CFOs and treasurers don't use letters of credit more often has always been a wonder to me; they should certainly be considered.

Tilt

As things change, or we think they might change, in the short run we could tilt the portfolio slightly to take advantage of the opportunity, or to avoid the risk. As we artificially increase some or decrease other investments, we can go back to the simulation process to measure any increased risk, which helps us gauge just how much tilt to put into place. An important note to remember: a tilt need not be made, and in fact we recommend few and generally only small tilts at that.

This is partly philosophical. If you were so good at picking (anything), you would do it and forgo a well-balanced or managed portfolio. You are not, and therefore should hold a position near the managed portfolio. This core or baseline portfolio is the answer to the question, "What do we do when we don't know what to do?"

The Whole

Taken step by step, this seems like a linear process—one is done, then the next, but in fact, all are done together, or more accurately, a little of one then a little of the next, and so on. This recursive rework of the portfolio is to find the optimal set of managers and allocations. Remember that, while this process seems incredibly precise, it is just not accurate. Therefore your "allocations" are often round numbers, and sometimes tied to minimum investment amounts.

The portfolio is now "allocated," at least for the moment, until something changes.

Conclusion

Gather the best managers you can find who have the return distributions that you need, and then, using simulation, allocate among them to find a sufficiently high return at a low level of risk. Then find asset classes and investments that will address event risks and opportunities and add them in, using the same simulation method. What matters is the return needed at a desired risk level, not whether or not a popular asset class is included or even if all classes are included. This is important: Not all asset classes or even the popular ones or newest ones need to be in your portfolio; just the ones that help it. You are solving a problem, not sampling every dish on the menu.

Allocation is under continuous review as conditions change in the economy or markets, and is entirely driven by your needs and perceived future risks. Allocations are (or should be) adjusted to control risk, and risk is forecasted (ex-ante), not reported (ex-post), as with standard deviation. Rebalancing is continual, but should not be done without thought. Letting winners run for a while is not a bad thing for the portfolio (the extent to which you let them run is a policy and governance issue) and always maintaining a stable risk profile is imperative.

When you are finished, the results are a distribution with your minimum required return marked, along with the probability of underperforming. In the end, this is the number you want to control. It represents the risk in the portfolio. Figure 16-1 is a real life example.

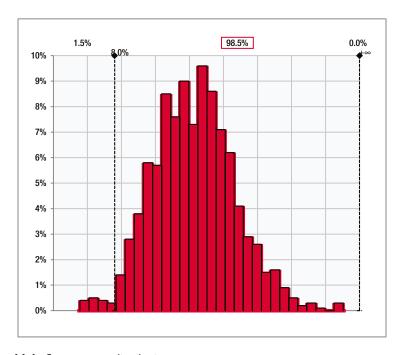


Figure 16-1. 5 year return distribution

Portfolio Evaluation

You can observe a lot just by watching.

—Yogi Berra

"The only reason for the assets are the liabilities" is a mantra that used to be heard frequently, but not so much anymore. Why hold back, or save, or avoid spending money, unless you have a reason or purpose for that money sometime in the future? Those future needs, for which we hold funds, are simply liabilities. For pension plans, it's easy for your actuary to assume the future benefit payroll attached to each employee, then once that total future payroll is estimated, discount it back at some assumed rate of return to today. That number can be compared to the assets on hand. For endowments and foundations, it is a much more direct proposition. They have a required payout that must be met, and often target a higher number to account for inflation or they have a specific budget amount that needs to be met. These requirements are the liabilities that must be covered and are the only reason for the assets.

Do employees or grant recipients really care if the S&P or some "policy" index got beat? Do benefit checks or grants get paid in dollars, or "relatives to the index?" On every check I've seen (and the only ones we want), that long middle line always ends in "dollars," never "relatives" or "frontiers" (efficient or not). The first and only goal of a pension plan must be to pay those bills—now and future. The first and only goal of a foundation or endowment is to pay their obligations and fund their programs—now and future. So how do trustees measure how well they are doing? How do they evaluate the need for change, and just how do they manage the fund?

First, and foremost, they have to define their job. Presumably, they did this in their governance document. It should not be to beat some popular index or even a policy index, nor is it to beat Dallas Police and Fire, Yale, or your favorite competitor, nor is it to do better than other "funds like ours." Their first job is to pay those liabilities when they are due. They must fund their programs and budget share. Anything else is not acting in the best interests of the fund, is disloyal, and shows a lack of care.

Yale professor emeritus James Tobin writes: "Trustees are the guardians of the future against the claims of the present. Their task is to preserve equity among generations."

The only true benchmark is therefore the liability (benefit) itself—but that slippery devil is different for each particular fund. In theory, it should be simple; just figure out what checks will be needed from now until "far in the future" and calculate an average rate of return needed by each contribution to get to that number. From the trustee's point of view, all that is needed is to earn that rate or better—right? In a world where crystal balls work (or towers are ivory) the answer would be yes. Otherwise, no.

The current fad is the "policy index," where the investment committee takes the preselected asset allocation weights multiplied by their individual indexes or benchmark returns to create a unique benchmark return that reflects "policy." Since that policy benchmark is calculated with average asset class returns and the investment committee would never hire or keep a below-average manager (at least in theory), it becomes a virtual guarantee that the fund will beat that policy index and will be successful. Unfortunately, much of the time many funds simply don't exceed the policy index, and when they do there may be no real success because they don't meet the required return.

Example: Not long ago, a state-run pension plan had beat its policy benchmark by over 200 basis points, and for that stunning success its staff awarded themselves almost \$2 million in bonuses. Just too bad the fund missed its required return by almost 300 basis points. Better luck next time, employees, and thanks for the new car.

The questions that are almost never asked are, "Why is this the policy?," "What is the purpose of this policy?," "Where did we get this policy?," and most importantly, "Will this policy get us where we need to be?"

Another common evaluation tool is the watch list. A manager underperforms for some specified period of time, therefore he is put on a "watch list" (what, no one was watching before?). Then he is given some specified period of time

James Tobin, "What is Permanent Endowment Income?", American Economic Review 64, no. 2(1974): 427-432.

to improve. The question never asked is Why? Why is he underperforming? Is there a reason? Could it be due to their philosophy, and the failure should be expected given the current market conditions? Is the intellectual capital gone? If so, why wait to find a new manager? Is it something that can be fixed? If so, what are you (or the manager) doing about it, and if it's not fixable, why wait? This brings up a corollary: Why is the consultant or your investment officer reluctant to fire this manager now? They may have a reason, but this is a reason that must be explained and justified to the committee.

Change is one of the key elements you should be tracking. First, are there changes to your goals, requirements and restrictions? Are there changes to your feelings toward risk, and how might that affect the portfolio? Next, are there changes at the managers? Is performance not what it should be or was expected to be? Did someone holding the intellectual capital leave, are there other changes at the firm, or has the firm been sold? The list is almost endless. The only thing you can be absolutely sure of is that things will change, and you must be out in front of them if you can, and not far behind if you can't.

The real benchmark is that minimum or required return. Are you getting there? Are you keeping that compound return over multiple periods of time—one, three, five or more years? If you did or did not get the required return this evaluation period, was this one of those left-hand-tail events and you are keeping up the required compound return over the life of the portfolio, or not?

Your portfolio is a team of real people making decisions and performing each and every day. They are not unlike a ball team when individual players underand overperform in a particular game. Their performance this month or this game is part of the evaluation, but not all of it. Yes, comparing each manager to his peers and to benchmarks can be helpful in managing the portfolio, but only in a general way. It is not uncommon to find good managers that simply do not look like the index they are paired with. They don't track nor do they have many of the characteristics of that index. We know one small-cap growth manager that sometimes has a decided value component (growth at a price?) and will let the cap size rise without selling. One name we remember ran from a small capitalization to a large capitalization because it could produce significant growth for the portfolio. The manager was more interested in managing our money than he was in maintaining a particular look for the consulting industry—by any definition, a good manager.

As fiduciaries and members of the governance of a fund, your benchmark is the goal of the fund. Is your investment office, the management of the investments, meeting that goal? All the other benchmarks, comparisons, and statistics are simply flags or point to questions for that investment officer. Does he or she know the answer? Can they say why? Are they out in front or just sitting back and waiting? They are for you to monitor and evaluate—manage—while they monitor, evaluate and manage the investments.

When You Don't Know What to Do

Things done well and with a care, exempt themselves from fear.

—William Shakespeare

Uncertainties can paralyze decision-making, or, even worse, compel investors to base their actions on gut feelings and little else. Uncertainty and fear can't be analyzed away. You are not trying to develop the best solution to one or even two events for your portfolio, but a good solution to many events. Then adapt as things develop over time. Using the simulation method, you balance simplicity and relevance by considering a likely set of events and the reaction to them by your managers, plus a likely set of outlier events and your possible responses to them. Experience and an understanding of the managers' histories guide the analysis. Knowing and tracking changes in the inputs (managers) is the most important part, and the only way you can be assured of a reasonable outcome. By considering only the most relevant factors to success, your investment officer is able to manage the complexity of the analysis, save time and identify the leeway they can give to each manager. In the end, they are investing for the next period, not reacting to the last.

Starting with a set of "good" managers to construct your portfolio and building the portfolio as we have discussed, you will have created a baseline or foundation portfolio. Keeping your eye on those risks that may impact your goal, and allowing yourself to adapt to change, you can be assured that you can be successful in the midst of chaos. You will always know what to do, because you have a plan—a base portfolio.

This is where the difference between governing models using an investment office, using a consultant, or especially doing it yourself becomes apparent. When a fund uses an investment officer (whatever his or her strategy for investing is) they get a planned long-term strategy, a baseline that can be used to accomplish a certain goal. That investment officer is personally and continuously invested in the performance and the progress toward the goal(s). The investments are coordinated, and tend to work with each other. Interrelated risks can be evaluated and managed. The board can focus on governance and evaluation.

When things are in chaos, when there is proverbial blood in the streets, when you are uncertain and don't know what to do, your baseline portfolio does. That baseline portfolio is the place to be. The simulation to develop a distribution of possible returns showed you that there could be, and that there are, times of extreme returns, but that over time the compound average will approach its mean, or at the very least the returns over time will exceed your required return. Each individual manager is dealing with the problems in a small subset of investments using the skill you hired. You layered the portfolio with protections (hedges) for these and even more extreme events. Trust that the line will hold. Decisions made in a calm, deliberative, and unstressed manner will outperform decisions made under stress and without deliberation. That is why good pilots think through their reaction to inflight emergencies on the ground, when they can work through the knock-on issues, and why well-run investment portfolios have a plan.

Holding to your baseline portfolio when frightened, uncertain or lost is simply the best and only solution. One large fund failed to hold to their baseline portfolio just after the debacle in the markets of 2008. Frightened for their reputations if they did not have the funds to complete a building program, they bailed. They sold everything liquid and put it into short-term bonds. This move cost \$87 million in the first year, and because they were unwilling to either admit a bad move or fix it or to "time" the markets (neatly forgetting they had already done so), they lost \$200 million over the next three years. Unfortunately, they were not the only ones to do so; many other foundations have done the same or similar things.

Part of the initial decision of portfolio strategy is often not deliberated or even consciously made. It is this decision that later causes much of the discomfort as the market or economy changes. There are two points of attitude toward a fund and its planed performance. The first is called "maxi-max" and is the intention or attitude that maximum effort should be made to maximize returns. The second, called "maxi-min," is that maximum effort should be made to minimize risk (loss). One works great until a big drop in the fund, and the other works until the board sees others with huge profits. At those points of inflection, the pressure is to switch to the other variant, and of course this is often a big mistake. A path in between, a middle road, is often the best, and is easiest to maintain in crisis. That middle road is your baseline portfolio. It will give you strong performance, although perhaps not the very top performance, and will help you minimize loss, although again perhaps not as small as some. In the long run, this baseline portfolio will ensure you have a corpus that will support current and expanded programs or an expanding share of budget support.

Realize that investment is risky, and some amount of risk is appropriate and that some amount of return is also appropriate. Planning for and building a portfolio to accomplish this and then holding to the plan at those crisis points will be the most successful path.

CHAPTER

19

The Nature of Fees

Penny-wise and pound-foolish

—Old English maxim

Fees often become the primary evaluation tool for many trustees because they are the most easily discovered and dealt with in the few hours each quarter that attention is given to the portfolio. Accounting (adding and subtracting) is something trustees know well, while discovering and tracking skills and processes are not. There is sometimes also a bit of resentment at the levels of income possessed by these managers (especially when these managers are really arrogant about it). Then there is that F word—fiduciary. Many think that being a fiduciary is all, or at least mostly, about watching the checkbook.

Fees are important; there is no denying that. But the fees you see are not always the ones you end up paying. Investment managers are doing a significant amount of work and should be paid, even paid well, just not overpaid or secretly paid. Fees are important because both paying too much and paying too little will have an impact on your fund. Evaluation by the committee should not start and stop at the size of the fee, but on the value received. It is important that all the cost—observable fees, hidden fees and opportunity costs—be evaluated. One large brokerage firm (a new term is "investment bank," a newer term is "wealth manager") touts that it does not charge anything for the execution of share trades if you use its managers. Right, and "the check is in the mail" and "I'm from the government and here to help you." You pay for everything, and if it is hidden you often pay too much.

An aside about fees, or more appropriately, expenses: if you are seeing a high turnover in your investment officers, you are either not paying enough or are hiring junior guys who leave when they have learned enough to step up to a bigger fund.

A word of caution here. The financial industry is the most dangerous place for the unknowing, the naïve, the incautious, the unaware, the gullible, the uninitiated... in other words, the average board member. This is not a place for parttime sailors; there be monsters, rocks and shoals in these waters. We don't mean that it is rife with scams and illegality. Yes, they do exist, but the SEC has had a dampening effect, with some notable exceptions.

What we are cautioning you about are the common practices that either are not illegal or just can't be found by regulators. The common assumption is that if you are on the investment committee for a large pool of money, you know what you are doing. This is not a place for learning about investments. Far too often, a person wants on the investment committee in order to learn about investments, and then learns they are not up to speed and turns to what the magazines, mutual fund sellers and personal wealth planers tout, which is a focus on fees.

Commissions, for example, are paid by the fund. Whenever your manager places a trade, the cost to the fund will range anywhere from a penny to four or five cents per share. The fund's manager directs those trades, and when the trade is placed, the manager almost always gets a credit of some part of the commission to spend almost however he wants. These are called soft dollars, and are legal, but are, in my opinion, just not right. This is not what you want to happen. Those are the fund's moneys, so if you want to pay for the manager's "research," or equipment, go ahead. But if not, don't and make the manager pay for it out of their fees. After all, isn't that what the fees are for? How to do so is simple: require that the manager use a broker that will rebate those excess commissions to you, not to them, or who will simply charge much less. The fund's consultant or investment officer will know how, but the committee must make sure they do so. Many consultants and some investment officers just want to be friends with the manager, hoping for more business, or not wanting to confront the manager. If the commissions are zero, look hard at the trade execution price—you may be paying more than you should.

Charging a commission to investments traded net (profit, fee, and commission already built in), or cutting the visible commission and then trading principal at a higher price, are just two ways to take a little more. This is common with some of the "discount" brokers who charge a fixed fee or low commissions, then trade at a price much higher than the volume weighted average price of the day.

One investment manager practice, which was used in the past and probably still is, is charging a full, undiscounted fee and then each year the investment manager will write a large donation check back to the foundation. Not a kickback per se, but isn't it nice to do business with such a generous patron of the organization? The foundation couldn't fire this guy, he donates so much, right? This is different than the typical arrangement, where the investment managers will simply discount their fee from the beginning. Although the managers are charging (net) the same total dollars for their investment management services, the manager who writes the big donation check each year is given more leeway when it comes to performance because organizations just can't quite give up that "donation." One manager in Texas made a career and loads of money doing just that.

There is a corollary to this approach that does not involve donations, but social access, where the committee will accept higher fees or lower performance because of some "benefit" of access to the board members of other foundations, or the advisory board of the manager, or maybe it's just that expenses-paid "conference" held each year at Disney World in February.

Private equity and hedge funds are prime examples of fees that do need to be controlled. The long/short hedge fund manager that charges "2 and 20" and then delivers 5% net should be fired (hung if it were legal).. It is unconscionable that someone would charge, much less pay, that much in fees for so little in return. If they returned you 25%, maybe. For many like this, it did not matter that these funds had a history of single-digit standard deviations. In 2008 they lost as much as any long-only fund, then gated so their clients could not get their money back.

Private equity managers often charge their fee on the total you have committed, which means you are paying fees on money you have not yet invested. Their argument about needing the revenue to employ good help holds water for the first and maybe second fund of small general partners, and while we don't like it, we can live with it. For established general partners, they should be charging on deployed capital only. There are pressures now in the industry to bring those "2 and 20" fees down to more reasonable numbers. Always remember they are negotiable, and your consultant should be negotiating.

An important part of the investment function is the evaluation and control of fees. This is not the only function, nor are you required to take the smallest fee. The whole no-load mutual fund and index fund industries have been built on the premise that the best investment is the cheapest one, and free is best of all. It is far too easy to focus on the obvious price and miss the cost. Price is short term, and cost will go on for a much longer time. What is, or at least should be, important to a governing board is what the institution gets, not what the investment manager gets.

Investment Myths

The science of investing is infested with so many myths and old wives' tales that even well-respected academics fail to question some of them. One well-publicized economics professor has even pushed in his blog the index myth when some simple arithmetic would show it to be false. Here are some of the more egregious myths that have a serious impact on board members and investment officers and their ability to manage the investment portfolio.

Asset Allocation

One of the biggest myths in the industry, and the one that seems to be known by every foundation board member, is the one about asset allocation. In 1986, Brinson, Hood and Bebower, and then again in 1991 Brinson, Singer and Bebower, wrote papers that were picked up by many news outlets, consultants and the sellers of index funds. One of the newspapers misprinted the results of those studies and stated that 90+% of a portfolio's returns were caused by asset allocation. Whether or not the mistake was intentional, it was picked up by the world as being true and has become now gospel.

Roger Ibbotson published a counter to that study, and Brinson himself spoke at many conferences denying the idea. What the study actually said was that 90% of *variation* between any two funds was caused by asset allocation, which simply meant that if one fund had a 10% return and the other a 10.1% return, then 90% of the .1% was caused by asset allocation, not the whole 10.1%. A big difference from the reporting! Who would spend all that money on allocation studies or index funds for just that little bit?

Look at the allocations of the largest of the university endowments—Harvard, Yale, and Stanford—and compare them to the allocations used by the average university as reported by NACUBO. Not much difference. Then compare the performance of the three to the average university—a big difference. The marquee three had an average performance of 9.81% annualized from 2003 to 2013, vs. 6.72% for the average university. These marquee universities averaged an allocation of 34% in equity, 12% in fixed income and 55% in alternatives. The average university was similar, with allocations of 40%, 15%, and 42% respectively. Allocation did not control 90% of their returns.

Index

The corollary to the asset allocation myth and a close cousin to the Alpha myth (see the following section) is the index myth. Proponents of the index myth, often sellers of index funds (go figure), contend that no investment manager can beat the index for long, and therefore there is no sense in trying. What is difficult about this myth is that it does hold some truth for boards or individuals without the time, education in investments, or desire to spend the time and education to invest as professionals. For them, index investing is probably a good idea, not because they can't beat the index, but because they won't do so. For institutional funds with boards that act professionally and actually care about the organization, it is possible to get someone with the time, education and experience to make the effort and to add value to the fund over time.

Alpha

The next of the great myths is that Alpha can't be found over a long period of time. This is the silly one. Alpha has a technical calculation (in fact it has two), but the term is most commonly used just to describe that part of performance that is above average. We have all heard the index fund salesmen and the professors of finance tell us nobody can beat the averages for long. At a conference in Portland for doctors, the speaker gave a talk in which he said that half of all doctors were below average. One bright fellow shot to his feet and announced that only 10% of all doctors were below average. You can guess which 10% he was in. We don't know if it is that math is not taught in grade school anymore, or if we are living in Lake Wobegon, or that there is no longer a belief in exceptionalism. Average means the middle, and so by definition half must be bigger, more, or above.

Whether we use an actual average or use an index, which is generally a managed group of stocks, someone always does better and someone else does worse. If it were actually true that no one is exceptional, then Dr. Sharpe himself does not exist and Stanford is no better than Metro State College If it were true that those that have Alpha today must revert to the mean later, then Pavarotti or Michael Jordan could not have had careers, or that seven-foot center playing for the Nuggets would have had to take a nap in Procrustes' bed.

Quality can be found; it exists everywhere. A particular investment manager can have alpha, but he might not have it forever. Pavarotti retired, you wouldn't hire Jordan to play today, and someday even Warren Buffet will lose a step, but none of them will ever revert to being average. Talent, physical capital and intellectual capital all have a life cycle; they grow, peak for a time (long or short), and fall off. While a particular artist, ball player, professor or investment manager may not be above average forever, there is always a new guy to keep your fund above average forever.

Best Execution

Another of the great myths and another of the salesperson's shibboleths is the one about "best execution." Your money manager swears that his trader is always focused on getting you the best execution, and as such needs to control all trading. Thinking this through, however, one has to wonder; if you are getting the best execution, then the guy on the other side of the trade must be getting the worst execution, and if your manager is always getting the best of executions then everyone will want him to do all their trading. So then, who will be left to trade with?

This goes around and around. The simple truth is that there is no best execution, just fair, good and bad. Most trades are fair, where the buyer and seller get a fair price, the market at that time of trade with a small spread. A good trade is one done at a better price than the volume weighted average price, along with a small commission. A bad trade is the opposite. Can each of your trades be good? Not every one will be, but most can, if you use a good institutional broker and direct your manager to use them to trade.

The manager or broker consultant will spend a great deal of time explaining how they need these trades to get "best execution." What they actually want is the excess commission—the soft dollars to pay for whatever they want (they say research, but it could be almost anything). The reality is that these excess commissions are the foundation's; the manager is already charging fees for his efforts, and there is no need to pay twice.

Fees

Related to the best execution fallacy is the myth that the manager can't use a dedicated institutional broker for technical reasons. Occasionally it is true that the broker you picked can't trade with the manager, in which case you simply find one that can. If the manager needs to buy research, they should spend their own money—that is what their fee is for.

All fees are negotiable. Back in the '70s and '80s, long-only managers routinely asked for and got 1.25% and 1.5%. Now they get less than 1%. The same thing is happening to hedge funds—fees are coming down."2&20" for a 5% return is ridiculous. At private equity firms, no longer it is it required to pay on committed but un-called capital. Many are now charging only on the called capital. Negotiate.

Return equals risk

One enduring myth is the one that says an increasing return requires an increase in risk. Or, said another way, if you see high returns, the manager must have taken too much risk. This, we suspect, comes from the graphic description of the capital pricing line and an expectation that increased return always mean more standard deviations, and that more deviations necessarily means more risk. Theoretically, from that 80,000 foot ivory tower, it may look so, but to those who actually manage a foundation's portfolio, it is empirically wrong. Risk is simply not standard deviation, and even if you invest as though it is, you can see that factually; not all high performing portfolios have higher standard deviations. High-performing portfolios actually can reduce risk by building a cushion over the required levels of return. This is a marathon—you are investing for the long term.

Good managers create returns; returns are not created by deviations and volatility. Good managers may be concentrated around a high return number with a long tail (skewed), giving a computed high standard deviation, but still with little chance of underperforming your required return. Risky, no; volatile, maybe. Checks are written in dollars, not deviations—standard or otherwise.

Useful Statistics

Lies, damn lies and statistics

—Samuel Clemens

The selection of a definition for risk and a goal for return is the core of the investment policy in a governance document. These ideas impact and ultimately control the process and methods for investing and establish success or failure. While it is certainly unkind to note, it is also true; if MPT and CAPM really worked for day-to-day investing, then Bill Sharpe (Nobel laureate and originator of CAPM) would be the richest investor, not Warren Buffet, who uses neither.

The key to using and understanding statistics is to know their construction and their underlying assumptions. The assumptions that are built into the statistic are the driver for their results and to the evaluation that you are trying to make.

Standard Deviation

In most endeavors of experimentation where statistics are used, the ability to find the "one number" or "one answer" is paramount. You want to know how much snow falls in January, or how many votes X will get, or what the return will be from a certain asset class or manager. When you forecast this single-point answer (expected result), you are concerned with how far off that guess will be—plus or minus—as a tool to describe how "good" the single-point expected result is. The bigger the plus or minus, the more uncertainty there is in using the estimate in planning or production. For forecasting industrial planning, medical research and much more, this is a good and appropriate measure of success. Missing the forecast by being higher than r the real number is just as bad as being off under it. But, when investing, you

are in a different world. Boards just don't (and shouldn't) care how accurate that single-point (expected return) forecast is; they care about making the budget—the minimum return needed, anything over that is gravy.

I can't say that you should be uninterested in the expected return (mean) or even the median, but they have little to do with decisions. What is of concern is the probability of meeting your required return, and because of that, standard deviation fails as a meaningful measure. Standard deviation is technically the square root of variation, and is used as a standard measure of volatility. It sums the square of differences between the average and each observation, divided by the number of observations, and then takes the root. This works well if the distribution you are evaluating is normal (symmetrical around the mean, coincident mean, median and mode, and not peaked or flat) and can work to some extent if the distribution is at least symmetrical around the mean. The more a manager's distribution of returns is skewed or peaked, the less usable standard deviation becomes. It is just those types of managers you should be finding. Standard deviation is often paired with an average return, and that average return is the arithmetic return, not compound.

Investment literature assumes that all return distributions are normal in shape, and so it follows that down "volatility" is the same as up "volatility," except not all asset classes or managers have normally shaped distributions, and so down and up probabilities are not the same. In fact, the more non-normal the distribution, the less standard deviation works, which is why consultants need to assume the normal distribution when discussing what they do. The overuse of standard deviation and other mean-variance statistics meant for different uses causes problems because they are just too inaccurate.

Return is a word often used without care for the underlying assumptions and the several underlying flavors of meaning. Even partners at Goldman Sachs don't always know which return they are using or misusing.

Returns

You would think that this would be the easiest of the statistics to determine; just divide the growth by the beginning, and voilà: the percentage. If only it were that easy. In fact, this is one of the most difficult and contentious of areas. Not because of the math—that's simple—but because of the meaning and interpretation of the results. The biggest complication is the moving of money into and out of the portfolio. The board must decide what it is they want to know or compare in order to decide which of several mathematical calculations to use.

Average Return

This is the arithmetical average of a series of returns over time (usually annually). To calculate, add each year and divide by the number of years. This is the return used in mean variance statistics. The average return is different than the compound rate of return. Care is needed to determine if the sales guy pitching a certain investment is using average (mean) or annualized (coumpound), or using both words to mean the same thing. Average is often (but not always) higher than annualized.

Compound (Annualized) Return

When boards (and individuals) talk about returns, this is the one they most often mean. It is the rate of return, which, if compounded over a period of time, would yield the actual gain or loss achieved in the portfolio during that period. It answers the question: "If we started with X amount of money and so many years (or months) later, after adding and spending along the way, we have Y, what average annual (annualized) return did we have along the way to equal that final number?" The various actual returns each year compound the actual dollars, so each year can't just be added and averaged; they must be annualized. Compounding is the underlying assumption that must be taken into consideration, and it is most definitely not the calculation used in measuring mean variance statistics for the portfolio.

Example: In the first year, the return is minus 50%, the second year's is plus 50%, and the third year's is plus 50%. A simple average of the years' returns is the sum of the three years: 50 divided by 3 equals 16.7%. But if we find the value of the fund stating at \$1,000 we can follow: \$1,000 less 50% is \$500, \$500 plus 50% is \$750, \$750 plus 50% is \$1,125. \$125 is not a sixth of \$1,000, so what gives? The real average compound return, or "annualized return," is 4%. You can check the work simply. \$1,000 plus 4% is \$1,040, then \$1,040 plus 4% is \$1,081.60, then \$1,081.60 plus 4% is \$1,124.86.

The question to ask is: Which do you want, the average of each year or the return required to get from here to there (or its converse—the return you received to get from there to here)?

Cumulative Return

The cumulative return is simply the aggregate amount that an investment or portfolio has gained or lost over time—in other words, the growth of each dollar or of the total fund. In the example above, it is \$125, or 12.5%. Mutual funds commonly use a mountain chart, which in the above example would start at \$1,000 and end at \$1,125, showing a dip (the negative first year), then a steep ramp-up (the positive next two).

Internal Rate of Return (IRR)

IRR is the rate of return that would make the present value of future cash flows plus the final market value of an investment equal the amount the fund initially invested. With multiple draws on the committed investment, modified IRR is generally used. Although a popular choice for analyzing venture capital and private equity investments, it has several limitations and may not give the answer to your real question.

The absolute number of the IRR can be misleading. In instances where one investment has a higher initial drawdown of the investment than a second mutually exclusive project, the first project may have a lower IRR, but a higher increase in the fund's wealth, and should thus be preferred over the second investment.

IRR assumes reinvestment of interim cash flows at rates of return equal to the IRR. Therefore, the IRR will overstate the annual equivalent rate of return for a project whose interim cash flows are reinvested at a rate lower than the calculated IRR. This presents a problem for funds, since there is frequently not another project available in the interim that can earn the same rate of return as the first project, especially if the IRR is high. This is especially true for private equity funds that have quick exits, which calculate a high IRR over a short time. The high number is carried forward for the rest of the investment's life. When the calculated IRR is higher than the true reinvestment rate for interim cash flows, the measure will overestimate—sometimes significantly the annual equivalent return from the investment.

As an investment comparison or decision tool, IRR should not be used to rate mutually exclusive projects, but only to decide whether a single investment is worth investing in.

Time-Weighted Return

If money is invested and then left alone, the calculation is that simple "difference divided by beginning value," but what about the real world, where money is invested and pulled out to be used for programs or budgets, then more is added and distributed on an uneven time frames? How does the board compare to peers or other funds when they all have differing cash flows? The time-weighted return calculation method was originally developed to measure the performance of a portfolio or fund manager, and sprung from a need for industry consistency in reporting returns that are independent of a clients' or individual investors' actions. Time-weighted rate of return measures how much your investments returned on average, without the influence of the size or timing of contributions. You can think of time-weighted return as the return on your portfolio, assuming \$1 invested at the beginning and ignoring cash flows in and out. This method is used to compare investment choices or strategies vs. appropriate benchmarks. This method was designed

to isolate the manager's specific performance from the fund's timing and size of contributions or withdrawals to the fund. Since investment managers usually have no control over client cash flow decisions, time-weighted return is the only fair way to evaluate managers versus their benchmarks. Furthermore, time-weighted return depends only on the length of time a contribution or withdrawal has been in or out of the portfolio and not on the size of the investment—hence the term "time-weighted."

An example works well here. In a single period, let's try a month, the fund starts with \$1,000, then by the 15th of the month the value is \$1,050. So you take the \$50 out on the 15th to make a grant and have no growth over the balance of the month, leaving \$1,000 at the end of the month. So what was the actual return of the portfolio or manager? If you had not taken the \$50 out, a gain of \$50 would have been a cumulative return of 5% for the month. For half of the month, if the cumulative value was up to \$1,050 or 5%, which would be a 10% internal rate of return and a cumulative return of 10% if the rate continues for the rest of the month. It did not. To calculate a time-weighted return, half the month at 10% (monthly rate) plus half the month at zero, divided by 2, is 5% for the month, which is the value had you left the money in the fund for the entire month.

This is the number that is published by money managers and mutual funds and is the number used to compare performance, the one that "does not guarantee future success." When applied to the entire fund, it is the number that the board can use to measure against a rival, a peer, or the universe of other funds.

Money-Weighted Return (Dollar-Weighted Return)

A dollar-weighted rate of return is highly influenced by the timing and size of cash flows into and out of the account, as well as the investment performance of the fund(s) chosen by the investor. This means your return is more heavily impacted when more money is actually invested, hence the term "dollarweighted." In this case, investors are rewarded more for larger investments made during periods of greater price appreciation (of the fund). This method is more investor-centric because it does not isolate the funds' performance from an investor's luck or timing. Dollar-weighted return is the same as IRR.

When evaluating a manager's performance, one uses the time-weighted measure, since the manager can't control the timing of cash flows. Time weighting accurately tells you how well the manager has done and is the number you can compare to peers and benchmarks. Dollar weighting tells you how well you have done, including cash flows, whether or not you were timing the flows. It is not a number that can be compared to any other fund or benchmark.

Alpha

Is a measurement of performance relative to a benchmark index. Any excess return of a portfolio relative to the return of the benchmark is the fund's Alpha, the idea being that the index is the average or target for that part of the market. The higher the Alpha, the better, as it represents the investment manager's ability to add value to the fund's return. One of the two different calculations will adjust a portfolio's return for volatility before calculating Alpha, and the other does not. Which to use depends a great deal on your view of volatility. Alpha is also shorthand for "value added."

Beta

Is a measure of the volatility of a portfolio in comparison to the market as a whole. This statistic is calculated using a regression analysis to determine the tendency of a portfolio's return to respond to swings in the market. The market Beta is always one, so if your portfolio has a Beta that is greater than one, it may be more volatile than the market. The opposite is true when your portfolio's Beta is less than one, in which case the Beta on your portfolio is dynamic and will change over time. Beta is also shorthand for "the market."

Up-Market Capture

This measures how your portfolio has performed during periods when the market is rising. The ratio is calculated by dividing the portfolio's returns by the returns of the index during the up-markets and multiplying that factor by 100. A ratio of greater than 100 indicates the portfolio outperformed the market during periods of rise, while a ratio of less than 100 indicates that it went up less than the market in those periods of rise. A portfolio with an upmarket capture ratio of 130 indicates the portfolio outperformed the market by 30% over that time. Note that this includes all up-market periods in a given time horizon, and they need not be consecutive.

Down-Market Capture

This measures how your portfolio has performed during periods of market decline. The ratio is calculated by dividing the portfolio's returns by the returns of the index during the down-market and then multiplying that factor by 100. A ratio of less than 100 indicates that the portfolio outperformed the market (fell less) during that market decline, while a ratio of greater than 100 indicates that it fell more during those down periods. A portfolio with a down-market capture ratio of 70 indicates the portfolio was down 30% less than the market. Note that this includes all down-market periods in a given time horizon, and they need not be consecutive.

Sharpe Ratio

This statistic measures performance by subtracting the risk-free rate from the rate of return for a portfolio and dividing the result by the standard deviation of the portfolio's returns. A Sharpe ratio greater than one suggests the portfolio had more return per unit of volatility than would be expected. Users of this ratio also suggest that it indicates Alpha.

R-Squared

R-squared is a statistical measurement that represents the percentage of a fund that can be explained by movements in some benchmark. It is also called the coefficient of determination. R-squared values range from 0 to 100. The higher the R-squared (100 being the highest) the better the benchmark fits a portfolio and that the more movements of the fund are completely explained by movements in the index. An R-squared between 85 and 100 indicates the investment is more index-like, and one with a reading of 70 or less means the fund doesn't behave much like the index.

Tracking Error

This statistic represents how closely a portfolio follows the index to which it is benchmarked. An actively managed portfolio will likely have a higher tracking error, while an index ETF (which is deliberately constructed to mimic the index) would have a low tracking error. If you really want low tracking error, use an index fund, but there is no real reason to be concerned with it. Outstanding managers providing the skewed and highly mean-shifted returns you need to find will most often have high tracking error because they are doing so much better than the index benchmark.

Information Ratio

This ratio measures a portfolio's return above the benchmark to the volatility of those returns. The information ratio is similar to the Sharpe ratio, the only differences being the Sharpe ratio uses the risk-free rate instead of the benchmark, and the Sharpe ratio uses standard deviation as a measure of volatility, while the information ratio uses the manager's tracking error.

A manager's information ratio is highly dependent on the tracking error. If two managers have the same information ratio and one lowers his tracking error by one, say from 5 to 4, the other manager would have to increase his return by much more, say from 10 to 12.5, to keep the same information ratio. A great name for a statistic, but to what purpose? So what does an information ratio that is equal between these two tell you? One tracks the benchmark closer so it can return less (significantly less) than one that has a higher tracking number? The information ratio and the tracking error are loved by the consultants, but just obfuscate the information you really need.

Volume-Weighted Average Price

This is the average price of a stock during the day, weighted by volume. The more shares traded at a high price, the higher the VWAP, and the more traded at a lower price, the lower the VWAP. VWAP is calculated by adding up the amount traded for every transaction (price multiplied by number of shares traded) and then dividing by the total shares traded for the day.

VWAP is a benchmark used to tell how well your manager is trading, adding or subtracting value over time. If your manager is consistently buying above VWAP and selling below VWAP, they are not making good trades, and you need to have a strenuous conversation. If buying below and selling above, they deserve, at the very least, a pat on the back.

One last thought on statistics

As lawyers, doctors, academics, or other professionals in today's information age, we have grown accustomed to statistical analysis and the significance placed on these analytics. For example, in the field of medicine we are told, with bold headlines and a breathless sense of urgency, that a particular food, activity or medicine will double our chances of some dire result, but then find the statistical difference in probability is in fact double, but from .000000002 to .000000004. True, but does anyone care? Is it significant to our lives?

In the field of investments, and more specifically the investment of endowment and foundation funds, boards and investment committees have come to place an unwarranted faith in these statistical significances rather than in their economic significance to the fund. Boards are told that, for example, for a particular statistic, one investment is 10% or even 20% better than another. Certainly a significant difference in the statistic, but what impact does it have on the fund? Has risk changed? How much more return will the fund get? Is the fund being paid to take that risk? Does it matter at all? Unfortunately, statistical difference does not speak to substantive issues. Over-reliance on statistics is often a misplaced hope for a mechanical solution to non-mechanical problems.

This is often seen in the pitch for hedge funds by consultants, especially those employed by the big banks, who are selling their "platform" managers. They tout the advantages of some long - short fund, or a market-neutral fund that cuts the volatility in half or more. The foundation gets a manager earning 5% net after paying 2 and 20, which means the investment actually earned closer to 8%, and somehow the reduced volatility makes it all worthwhile. If the required return was 8%, it seems like a bad trade. Then there are all of the structured techniques with names like "portable Alpha," and "liability directed investment" that are designed simply to add leverage to the fund (and fees to the seller). Leverage may reduce volatility, but it never reduces risk.

Index

A	private company, /8
Academia CAPM, 53, 55 CPM, 54 macro scale, 55	private foundation, 76 risk of failure, 91 simulation process, 92 VAR, 94
MPT, 53–54 MVO, 53	В
normal distribution, 54 standard deviation, 54	Baseline portfolio, 101
Asset allocation	C
attribution, 80 board members, 75 business decisions, 89, 91	Capital Asset Pricing Model (CAPM), 53, 55
committee/consultant, 87	CAPM. See Capital Asset Pricing Model (CAPM)
controls risk, 76	CFO/ treasurer, 20
correlation, 79 cumulative probability, 90 diversification, 78–79, 88 domestic equity, 80–81 economic environments, 79 efficient frontier, 87	Contracted investment office, 21–22 Contracted model contracted investment office, 36 internal investment office, 36 structure, 36
fixed income, 76, 78, 80-81	D
fund sellers, 75 governance, 89	Decision-making, 99
growth, 76–77 international equity, 80–81, 87 investments, 80, 90 liquidity, 92 NACUBO, 76 natural resources, 92 pension plans, 90 portfolio-building process, 88	Diversification allocation process, 83 asset class, 85 correlations, 84 execution, 85 information stream, 85 investments, 83 private equity funds, 84
potential investments, 88	risk 83

DIY Model	internal investment office, 20
governance model, 31	investment committee, 19–20
implementation, 3 l	investment consultants, 21
investment policy, 32	leadership, 18
investment program, 31	transparency, 18
sole and ultimate decision-maker, 30	Governance document
structure, 30	asset allocation, 25
	investment policy statement, 23
E	portfolio evaluation, 26
Ethics	rebalancing protocol, 25
board/investment committee, 12	return objectives, 24
boards, 'ethics' discussion, 13	risk tolerance, 24
description, II	Governance structures
investment committee, 13, 15	contracted model, 29, 36–37
PPM, I I	DIY Model, 28, 30–32
principles, 12	internal model, 29, 37–38
SEC, 12	investment committee, 39
,	investment program, 28
F	organization and investment
-	program, 28
Fiduciary responsibility	traditional model (see Traditional model)
care, 8	(
description, 5	I, J, K, L
diligence, 9–10	, • ,
loyalty, 6–7	Internal investment office, 20
prudence, 9	Internal model
skill, 7–8	board and investment committee, 38
Foundation portfolio, 99	investment consultant/contracted
	investment office, 38
G, H	structure, 37
Gatekeepers harm information flow	Internal Rate of Return (IRR), 114
CFO, 48–49	Investment basics
consultants, 48	asset allocation, 60
decision-makers, 48	budgeting risk, 61
economic reasons, 48	diversification, 57
investment committee, 47	economy, 59
non-decision-makers, 48	intellectual capital, 59
pre-decision maker, 47	managed fund, 58
salesmen, viruses, 49	random variable, 57
security execution system, 49	risk, 59
Governance	superior managers, 58
actual governance plan and	timing, 59
document, 18	Investment committee, 19–20
board, 18	
CFO/treasurer, 20	Investment consultants, 21
contracted investment office, 21–22	Investment decision making
description, 17	CIO models, 43
and evaluation, 100	committee/board, 41

discretionary consulting, 42 diversification, 43	N, O
endowment style funds, 43 governance, 41 hybrids, 44 investment-consulting model, 43 management program, 42 risk strategy, 45 traditional model, 42	Nature of fees accounting, 103 commissions, 104 dampening effect, 104 hedge funds, 105 investment function, 105 investment managers, 103
Investment myths asset allocation, 107–108 best execution, 109 board members, 107 economics, 107	organization, 105 private equity, 105 soft dollars, 104 wealth manager, 103
exceptionalism, 108 fees, 110 index investing, 108 quality, 109 risks, 110	P, Q Portfolio evaluation asset allocation, 96 benchmarks, 96–97
Investment officer, 100	capitalization, 97 foundation/endowment, 95 intellectual capital, 97 liabilities, 95
Manager search databases, 71 diligence, 72–73 funds and organizations, 72 implementation, management, 73 intellectual capital, 72 performance, 71 SEC, 71	pension plans, 95 policy index, 96 Procrustes rules description, 3 governance and investment, 4 organization's investment, 3
Mean-Variance Optimization (MVO), 53	R
Modern Portfolio Theory (MPT), 53–54 Money managers benchmark, 68 diligence, 70 fund sellers, 68 infinity and beyond, 67 intellectual capital, 68–69 long-term investing, 68 organization, 69 volatility, 68	Rebalancing protocol, 25 Risk average error, 63 investment portfolio, 63 Madoff-like investment, 64 Monte Carlo sampling, 66 omega function, 66 probability, 66
MPT. See Modern Portfolio Theory (MPT) MVO. See Mean-Variance Optimization (MVO)	resultant distribution, 66 standard deviation, 64–65 volatility, 63

S	standard deviation,
Statistics alpha, 116 arithmetical average, 113 beta, 116	time-weighted return, 114–115 tracking error, 117 up-market capture, 116 VWAP, 118
compound (annualized) return, 113 cumulative return, 113	T, U
dollar-weighted rate of return, 115 down-market capture, 116 information ratio, 117 IRR, 114 "liability directed investment", 119 money-weighted return, 115	Traditional model insurance policy, 34 investment consultants, 33–34 investment managers, 35 structure, 33
returns, 112 R-squared, 117 Sharpe ratio, 117	V, W, X,Y, Z Volume-weighted average price (VWAP), 118

WINNING THE INSTITUTIONAL INVESTING RACE

A GUIDE FOR DIRECTORS AND EXECUTIVES

Michael Bunn Zack Campbell

Winning the Institutional Investing Race: A Guide for Directors and Executives

Copyright © 2015 by Michael Bunn and Zack Campbell

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed. Exempted from this legal reservation are brief excerpts in connection with reviews or scholarly analysis or material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work. Duplication of this publication or parts thereof is permitted only under the provisions of the Copyright Law of the Publisher's location, in its current version, and permission for use must always be obtained from Springer. Permissions for use may be obtained through RightsLink at the Copyright Clearance Center. Violations are liable to prosecution under the respective Copyright Law.

ISBN-13 (pbk): 978-1-4842-0833-5

ISBN-13 (electronic): 978-1-4842-0832-8

Trademarked names, logos, and images may appear in this book. Rather than use a trademark symbol with every occurrence of a trademarked name, logo, or image we use the names, logos, and images only in an editorial fashion and to the benefit of the trademark owner, with no intention of infringement of the trademark.

The use in this publication of trade names, trademarks, service marks, and similar terms, even if they are not identified as such, is not to be taken as an expression of opinion as to whether or not they are subject to proprietary rights.

While the advice and information in this book are believed to be true and accurate at the date of publication, neither the authors nor the editors nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

Managing Director: Welmoed Spahr Acquisitions Editor: Jeff Olson

Editorial Board: Steve Anglin, Mark Beckner, Gary Cornell, Louise Corrigan, James DeWolf, Jonathan Gennick, Robert Hutchinson, Michelle Lowman, James Markham, Matthew Moodie, Jeff Olson, Jeffrey Pepper, Douglas Pundick, Ben Renow-Clarke,

Gwenan Spearing, Matt Wade, Steve Weiss

Coordinating Editor: Rita Fernando Copy Editor: Lauren Marten Parker

Compositor: SPi Global Indexer: SPi Global

Cover Designer: Anna Ishchenko

Distributed to the book trade worldwide by Springer Science+Business Media New York, 233 Spring Street, 6th Floor, New York, NY 10013. Phone 1-800-SPRINGER, fax (201) 348-4505, e-mail orders-ny@springer-sbm.com, or visit www.springeronline.com. Apress Media, LLC is a California LLC and the sole member (owner) is Springer Science + Business Media Finance Inc (SSBM Finance Inc). SSBM Finance Inc is a Delaware corporation.

For information on translations, please e-mail rights@apress.com, or visit www.apress.com.

Apress and friends of ED books may be purchased in bulk for academic, corporate, or promotional use. eBook versions and licenses are also available for most titles. For more information, reference our Special Bulk Sales-eBook Licensing web page at www.apress.com/bulk-sales.

Any source code or other supplementary materials referenced by the author in this text is available to readers at www.apress.com. For detailed information about how to locate your book's source code, go to www.apress.com/source-code/.

Apress Business: The Unbiased Source of Business Information

Apress business books provide essential information and practical advice, each written for practitioners by recognized experts. Busy managers and professionals in all areas of the business world—and at all levels of technical sophistication—look to our books for the actionable ideas and tools they need to solve problems, update and enhance their professional skills, make their work lives easier, and capitalize on opportunity.

Whatever the topic on the business spectrum—entrepreneurship, finance, sales, marketing, management, regulation, information technology, among others—Apress has been praised for providing the objective information and unbiased advice you need to excel in your daily work life. Our authors have no axes to grind; they understand they have one job only—to deliver up-to-date, accurate information simply, concisely, and with deep insight that addresses the real needs of our readers.

It is increasingly hard to find information—whether in the news media, on the Internet, and now all too often in books—that is even-handed and has your best interests at heart. We therefore hope that you enjoy this book, which has been carefully crafted to meet our standards of quality and unbiased coverage.

We are always interested in your feedback or ideas for new titles. Perhaps you'd even like to write a book yourself. Whatever the case, reach out to us at editorial@apress.com and an editor will respond swiftly. Incidentally, at the back of this book, you will find a list of useful related titles. Please visit us at www.apress.com to sign up for newsletters and discounts on future purchases.

The Apress Business Team

For Joan Bricher, the most demanding and hardest working CFO we have ever met (but the easiest to get along with), and Fred Kavli, a crusty and fractious Chairman who trusted us and listened.

About the Authors



Michael Bunn has over 30 years of investment experience. As President and CIO of The Endowment Office in Denver, Colorado, he provides a contract investment office and staff for foundations and hospitals. The Endowment Office clients have more than \$I billion in assets and a I4-year track record that put them into the top percentile of their peers. He has worked with public pension funds, Indian tribes, hospitals, unions, universities and foundations in a career that included leading Arthur Anderson's investment office outsourcing practice in Houston. He established and taught

at the Institute for Pension Funds at both Baylor University and George Washington University. Michael served as an aviator in the Marine Corps.



Zack Campbell, CFA is an Investment Officer at The Endowment Office. Zack's 10-year career has carried him from the Summit Fund managing a portion Colorado State University's endowment to Hitachi Consulting, trading Forex and Oppenheimer Funds. Zack is currently the lead investment officer on a \$1 billion fund.

Acknowledgments

We owe a debt to the many directors and trustees that we have worked with over the years. We learned much from errors and successes, both ours and theirs, and hope to pass along some of that experience.

The attitudes and approaches to investment and governance by people like Dr. Nick Vincent, Paul Brown, Al Feldman, and Fred Gluck are something to be admired and emulated.

Preface

A number of years ago the Scholarship, Research and Education Foundation established by TEXPERS (Texas Public Employees Retirement System Association) asked me to set up a training and certification program for public retirement fund trustees and executives. They saw that one of the problems shared by these public employees (and even foundation board members) is that they seldom have any training or backgrounds in managing an investment fund. This is not an indictment, just a fact: after a career as a fireman, cop, CFO, doctor, or lawyer, people are selected to become a member of a board and then to the investment committee. What to do? How to do it?

Most, especially those not familiar with the function of an investment committee will simply keep the status quo or try to mimic what other committees are doing. After 30 years of work with many different boards, I have seen much of what works and what does not. Following your neighbor is not always the best way to go, and sometimes it is the worst. This book was written for board members without a background in investments and for those investment professionals who are experienced in a narrow area. Managing an entire fund representing all of an institution's assets is different than having a deep understanding of real estate, bonds or private equity; it is not even close to the same as managing one's own 401k, nor is it anything like managing financial audits or a bank.

The men and women who took the SRE course were highly motivated. They needed to be, because this was no party conference; they worked and studied hard and, most importantly, paid in hard dollars. For the first several years it was established at Baylor University, then moved to George Washington University. The course was a full week of long, intense days (and evenings) of class and practical exercises culminating in a five-hour exam for certification. A serial three-part course was also offered to small Texas firefighter funds with an exam after each section. Nearly 500 people were certified of the almost 600 or so who took the course. This book is not a recreation of that course, but intends to do much the same—provide a background and framework for investing an institution's assets, with a focus on foundations and endowments.

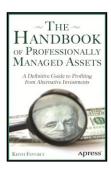
xiv Preface

You will find several points of view and themes that underlie the entire book. The first is that these funds exist for a reason. They have a purpose. Money was given or contributed for that purpose and it is fulfilling that purpose that is, or should be, the goal of the investment committee. No other purpose, not peer competition, not indexes, not what others may say, not the concern for self (reputation or getting re-elected). No other goal but the defined purpose of the fund should be key. You are a fiduciary. Yes, we know that "others" are trying to influence where, how, and with whom the money gets invested; any large pool of money draws these people like flies to a picnic. We also know that many committee members are concerned with what they get or what the risk to their reputations may be, but that does not make it right, or what a fiduciary should do.

The second point is our abhorrence of the words "that's the way it has always been" and its cousin "that's what everyone else does." These Procrustean ideas get expressed in many ways and almost always demonstrate a lack of effort, thought, and understanding by fiduciaries. But most importantly, they demonstrate a lack of interest. Rationalization is easy, especially when throwing around the word "fiduciary," but doing what someone else does just because they do, or hiring based on "marquee" or name brand is not being loyal to the organization, and loyalty is very much a part of being a fiduciary. This is not to say that everything done in the past is wrong, or that everything done by "everybody else" is wrong, either. Much is right and some even good. It is the lack of a critical eye, the lack of questioning, the lack of divergent views and the lemming-like following of the pack that leads to a failure that we think is avoidable.

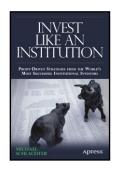
This book is in two main parts: **Governance**, which sets the rules, and **Investment**, which executes within those rules.

Other Apress Business Titles You Will Find Useful

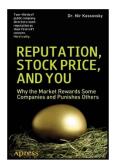


The Handbook of Professionally Managed Assets

Fevurly 978-1-4302-6019-6



Invest Like an Institution Schlachter 978-1-4302-5059-3

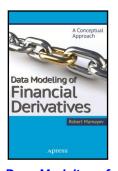


Reputation, Stock Price, and You Kossovsky 978-1-4302-4890-3

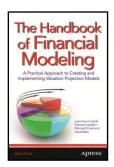


Practical Methods of Financial Engineering and Risk Management Chatterjee

978-1-4302-6133-9



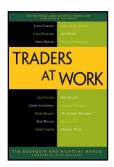
Data Modeling of Financial Derivatives Mamayev 978-1-4302-6589-4



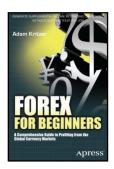
The Handbook of Financial Modeling Avon 978-1-4302-6205-3



Managing Derivatives
Contracts
Shaik
978-1-4302-6274-9



Traders at Work
Bourquin/Mango
978-1-4302-4443-1



Forex for Beginners Kritzer 978-1-4302-4050-1