

ALTERNATIVE ASSETS & STRATEGIC ALLOCATION

JOHN B. ABBINK

Alternative Assets and Strategic Allocation

Alternative Assets and Strategic Allocation

Rethinking the Institutional Approach

John B. Abbink

BLOOMBERG PRESS An Imprint of Copyright © 2010 by John B. Abbink. All rights reserved. Published by John Wiley & Sons, Inc., Hoboken, New Jersey.

Published simultaneously in Canada.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 646-8600, or on the web at www.copyright.com. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at www.wiley.com/go/permissions.

Limit of Liability/Disclaimer of Warranty: While the publisher and author have used their best efforts in preparing this book, they make no representations or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the publisher nor author shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

For general information on our other products and services or for technical support, please contact our Customer Care Department within the United States at (800) 762-2974, outside the United States at (317) 572-3993 or fax (317) 572-4002.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books. For more information about Wiley products, visit our web site at www.wiley.com.

ISBN 978-157-6-60368-0

Printed in the United States of America 10 9 8 7 6 5 4 3 2 1 For Carol

CONTENTS

List of Illustrations ix
Acknowledgmentsxiii
Introduction
PART ONE ANALYTIC TOOLS
1 Risk and Return17
2 Return Enhancement
3 Some Features of the Quantitative Toolkit59
4 Risk Estimation 81
PART TWO SOME EXAMPLES
5 Long/Short Equity 103
6 Direct Lending 123
7 Merger Arbitrage 141
8 High-Frequency Trading 161
9 Holding Private Assets for Their Cash Flows 183
10 Fixed-Income Arbitrage 199
11 Event-Driven Investment
PART THREE POSITION MANAGEMENT
12 Investment Strategies in Practice 237
13 Optionality 253

14 Trade Capacity 271
15 Institutional Liquidity 287
16 Tactical Allocation 305
17 Portfolio Liquidity 323
18 Alternative Investments and Information Theory 343
PART FOUR PORTFOLIO CONSTRUCTION
19 Classification of Investments
20 Diversification among Strategies
21 Multi-Dimensional Risk 403
22 Filling Out the Allocation 419
23 Time and Tide 433
24 Managing the Allocation Decision
25 Concluding Remarks 469
Bibliography
Index

LIST OF ILLUSTRATIONS

Figures

1.1	The Dollar and Oil: 90-Day Trailing Coefficient of	
	Correlation	28
1.2	Annualized Return from Doubling Capital over	
	Different Holding Periods	30
1.3	Fiat Savings Share Relative to Fiat Common	32
2.1	Option Payoff Diagram: Buy Straddle	56
3.1	Volatility and Compounding	61
3.2	Two Non-Correlated Series	63
3.3	Two Highly Correlated Series	64
3.4	Counter-Correlated Price Series	66
3.5	Spot Gold and the Russell®* 3000 Index: 90-Day Trailing	
	Coefficient of Correlation	68
3.6	Efficient Frontiers	70
3.7	Efficient Frontiers: Higher Return Asset has Higher	
	Standard Deviation	71
3.8	Normal and Kurtotic Distributions	74
3.9	Normal and Skewed Distributions	75
3.10	Standard & Poor's 500 Index: Distribution of Returns	76
3.11	Standard & Poor's 500 Index: 90-Day Trailing Kurtosis	78
3.12	Standard & Poor's 500 Index: 90-Day Trailing Skewness	78
4.1	Dow Jones Select REIT † and Russell 3000 Indices:	
	90-Day Trailing Coefficient of Correlation	87
4.2	Barclays Capital U.S. Aggregate Bond Index: 90-Day	
	Trailing Standard Deviation	90
4.3	Stocks, Bonds, and Commodities: 90-Day Trailing	
	Coefficients of Correlation	97
5.1	Selected HFRI Indices	104
5.2	HFRI Short-Bias Index versus the Broad Market	107

^{*} Russell Investments is the owner of the trademarks, service marks, and copyrights related to their indices. The indices are unmanaged and cannot be invested in directly. † "Dow Jones" and "Dow Jones Select REIT Index" are service marks of Dow Jones & Company, Inc. The Dow Jones Select REIT Index is published by and proprietary to Dow Jones & Company, Inc.

5.3	Long the Russell 2000 Index, Short the Standard & Poor's	
	SmallCap 600 Index	111
5.4	Stocks, Bonds, and Market-Neutral: 90-Day Trailing	
	Coefficients of Correlation	113
5.5	VIX* and Standard & Poor's 500 Indices: 90-Day Trailing	
	Coefficient of Correlation	115
6.1	Barclays Capital U.S. Intermediate High-Yield Index	139
7.1	HFRX Merger Arbitrage and Russell 3000 Indices	144
	Value of U.S. Mergers	
7.3	XM Satellite Radio Price versus the Price of 4.6 Sirius	
	Satellite Radio Shares	146
7.4	Sirius, XM, and the Russell 2000 Index	148
	An All-Cash Acquisition	
8.1	A Price Series at Two Levels of "Magnification"	162
8.2	HFRX Volatility, VIX [†] , and Russell 1000 Indices	171
9.1	Quarterly Returns on U.S. Office Properties	
9.2	Baltic Exchange Dry Index © Baltic Exchange	
10.1	A Yield-Curve Butterfly	
10.2	HFRI Indices versus Barclays Capital U.S. Aggregate	
10.3	A Butterfly Structure with Yield-Curve Steepening	
11.1	HFRI Event-Driven and Russell 3000 Indices	
11.2	HFRX Event-Driven and Russell 3000 Indices:	
	90-Day Trailing Coefficient of Correlation	
11.3	The History of an "Event"	
	HFRX and Russell 3000 Indices: 90-Day Trailing	
	Coefficients of Correlation	
12.1	Standard & Poor's 500 Indices: Cash and Total Return	
	Exxon Mobil at One-Minute Intervals	
	Tight Coupling in Financial Networks [†]	
	NASDAQ Composite and Russell 3000 Indices: 90-Day	
	Trailing Coefficient of Correlation	
	0	

х

^{*} Provided as a courtesy by Chicago Board Options Exchange, Inc.

[†] The source of this illustration is a Staff Report of the Federal Reserve Bank of New York. This paper presents preliminary findings and is being distributed to economists and other interested readers solely to stimulate discussion and elicit comments. The views expressed in the paper are those of the authors and are not necessarily reflective of views at the Federal Reserve Bank of New York or the Federal Reserve System. Any errors or omissions are the responsibility of the authors.

17.3	Procter & Gamble and General Electric: 90-Day Trailing	
	Coefficient of Correlation	335
17.4	Procter & Gamble and General Electric: 90-Day Trailing and	
	β-Adjusted Coefficient of Correlation	336
17.5	Procter & Gamble and General Electric: 90-Day Trailing	
	Standard Deviations	337
19.1	A Sample Classification	376
19.2	Alaska Permanent Fund: Old and New Classification Systems	380
20.1	Barclays Capital U.S. Treasury Index	387
20.2	Diversification Benefit of Adding Positions to a Portfolio	394
21.1	Some Views of Flatland	406
23.1	Two Hypothetical Investments	439
23.2	A Stylized Illustration of Vintage Diversification	440
25.1	Risk and Reward over Time	475

Tables

3.1	The Coefficient of Correlation and R ²	65
3.2	Statistical Characteristics of Gold and Equities	69
3.3	A Chronicle of Crises	77
4.1	Annualized Daily Standard Deviation of the Standard & Poor's	
	500 Total Return Index and its Largest Components	85
5.1	HFRI Long/Short Indices	.104
6.1	Some Direct Lending Techniques	.127
7.1	Merger Arbitrage and the Broad U.S. Equity Market	.144
8.1	HFRX Volatility Arbitrage Index versus Market Indicators	.172
10.1	HFRI Fixed-Income Indices and the Barclays	
	Capital U.S. Aggregate Index	.207
11.1	HFRI Event-Driven Index versus the Broad U.S. Equity	
	Market	.221
15.1	The Yale University Endowment, Fiscal 2008	.295
15.2	Yale University Endowment, Subsequent Performance	.298
16.1	HFRI Indices: Annual Returns	.312
19.1	Outline of a Taxonomy of Investments	.375
19.2	Classification of a Collectible	.377
20.1	The Arithmetic of Percentages	.388
24.1	CalPERS Investment Committee	454
24.2	Harvard Management Co. Board of Directors	.455

ACKNOWLEDGMENTS

The have never been as punctilious a scholar as I should be, and in any case most of what I think I know about finance has been acquired through osmosis rather than formal study. I cannot believe that all of the observations I make in this volume, but for which I lack a reference, are original to me, and I am fairly certain that much that I have gained through experience or conversation has occurred to and been published by others. While I attempt to reference them where I can, I apologize to those who deserve a citation but have not received one. If my readers are kind or indignant enough to help me with references and my effort is fortunate enough to achieve a second edition, I will attempt to give credit where it is due to those whom I have unintentionally slighted.

Although I accept full responsibility for the errors and omissions I have doubtless made, I have benefited from conversations with numerous friends and colleagues as well as comments on drafts of my text from many others. I am indebted to Wally Anders, Jeffrey Boardman, William Hayes, Stephen Hoedt, Richard Katz, Michael Mainelli, Steven Resnick, Ferenc Sanderson, Andre Sharon, Timothy Swanson, and Gary Zdolshek as well as my editors at Bloomberg Press for their criticisms and suggestions. I would also like to thank my wife for her patience with a project that consumed many evenings and weekends.

I am grateful to my sources, in particular the Federal Reserve Bank of New York for permission to use the illustrations in Figure 17.1 and to the CFA Institute for permission to quote at length from one of their publications in Chapter 17. I would like to thank the data providers Baltic Exchange Information Services, Barclays Capital, the Chicago Board Options Exchange, Dow Jones & Co., FactSet Mergerstat, Hedge Fund Research, IntercontinentalExchange, NASDAQ OMX Group, the National Council of Real Estate Investment Fiduciaries, the Russell Investment Group, and Standard & Poor's Financial Services for permission to use their data. Bloomberg Finance L.P. has provided me with currency, spot commodity, and equity price data, as well as permitting me to use its Bloomberg Professional[®] service to obtain convenient access to the data of several of the other providers already mentioned, for which I am also grateful.

Introduction

There is a wealth of literature on alternative investments, ranging from collections of admiring interviews with the various wizards and rocket scientists whom the media seem to think populate the industry, to detailed strategy-by-strategy guidebooks and an evermounting corpus of densely argued academic discussion. Although there is considerable chaff among the wheat in all this mass of material, alternative investments are certainly not in want of attention, and by now many of the requirements of serious investors who are new to the topic, let alone those of sensation-seekers, have been quite fully addressed. There is little need for yet another introduction to alternative investments or yet another encyclopedic handbook to guide newcomers through the luxuriant profusion of different alternative investment techniques.

The literature on what to do with alternative investments—how they fit into portfolios and their role in an investment allocation that includes traditional investments as well—is much thinner on the ground. This is not to say that no useful work has been done in this area, and this volume relies on a number of authors who have made important contributions to the study of the portfolio function of alternative investments, as witnessed by my references to them. However, it remains somewhat puzzling that there are not more studies of this kind—after all, institutional interest in the area has been extremely lively for several years. On reflection, it seems that there are three influences that discourage significant progress on this front. One is an intense focus on the role of talent in investment management, to the exclusion of virtually all other possible influences on the ability of alternative investment managers to generate returns. The second is the fairly widespread view—almost but not quite the consensus—that alternative investments are something radically different from conventional investments, so conceptually distinct that they cannot usefully be discussed in the same context, using similar terms and comparable analytic techniques. Finally, there is an intractable problem deriving from the woefully inexact terminology of alternative investments, which constantly forces commentators into problems of definition, resulting in yet more encyclopedic surveys of the territory simply to achieve some clarity about what exactly it is that is being discussed.

Talent is a great discussion stopper: once it is accepted as essentially the only explanation for investment performance, then there is not a great deal more that can usefully be said. It is God-given and inherently mysterious. While talented investors clearly share with each other certain characteristics, such as insightfulness and decisiveness, talent of any kind is fundamentally opaque to further analysis. There are no handy touchstones or interview techniques that can assure us that we are in its presence. It is only somewhat helpful that, unlike God's grace (at least according to St. Paul), we can recognize talent by its works, but even then it is usually very difficult to distinguish the products of skill from those of luck and hard work. The fact that the managers of alternative investments have an interest in maintaining the mystique of talent does not help matters.

The contribution of talent to good investment performance is undeniable. Where numerous highly trained and diligent professionals have access to much the same information required to support their decision-making, luck and relentless dedication alone cannot account for the investment successes of the few compared to the mediocre performance of the many. However, there is a tendency in far too much of the literature on alternative investments to identify talent with α (excess risk-adjusted return). In fact, α is often treated explicitly as though it were somehow a quantitative measure of skill. This neglects Edison's analysis of the relative contributions of inspiration and perspiration to genius, but it also discourages analysis of the risk-taking that is the ultimate source of all returns. We can give talent its due-and no one should dream of denying its importance in investment or in other walks of life-while still finding useful things to say about how talent, hard work, and luck conspire to generate investment returns in an environment of uncertainty.

This focus on talent is most pronounced in the hedge fund arena. It is possible to read entire volumes on private equity or real estate investment without encountering much, if any, name-dropping, but this is not the case with any but the driest and most scholarly writing on hedge funds. An important contributor to this cult of personality is almost certainly hedge funds' near-universal lack of transparency. Although the enhanced performance that derives from active management of private equity or real estate investments may not receive much press attention, the primary investment activities—the purchases and disposals—that are executed by managers of these types of assets are carried out very much in the open. The lack of similar transparency for hedge funds seems to have driven their chroniclers to concentrate on the managers themselves, rather than their activities and the decision-drivers that motivate them.

The second unfortunate influence on the literature of alternative investments is the very widespread tendency to treat them as though they belong to a separate asset class, something completely different from conventional investment vehicles. This is another discussion stopper: to insist on radical difference is to insist on entirely different terms of reference. It is an impediment to comparative analysis, and, if taken to an extreme, it implies that it is not possible to adopt a rational approach to allocation between conventional and alternative investment categories or even within the alternative category. In fact, most alternative investments employ the same assets as conventional investment vehicles, and few of their trading practices are completely unique to alternative investments alone. The fairly rare exceptions are far outnumbered by alternative investment vehicles that use publicly traded equity and fixed income or something very similar to them as the fundamental sources of their returns. It would seem unlikely on the face of it that alternative investments' differences from conventional ones place them in a category entirely apart from them.

The content of the term "alternative investment" has been lost if it does not make sense to ask the question, "Alternative to what?" If the question is still meaningful, then we are forced to conclude that alternative investments must be analyzed as part of a continuum of investment opportunities stretching from savings accounts through the wilder regions of venture capital, commodity speculation, statistical arbitrage, and so on. Unless we regard alternative investments as completely exogenous return generators, analogous to "investing" in lottery tickets, then we must be able to analyze them with the same sorts of tools that are used in thinking about conventional investments—perhaps not

3

identically the same tools, but at least very similar ones. If alternative investments were truly members of one or more distinct asset classes, quite separate from conventional investments, then it is not clear that they would be amenable to comparative analysis at all. In that case an investigation of the grounds for making allocations to them, such as is attempted in this volume, would be largely beside the point.

Apart from tone and an artificial segregation of alternative investments from investments generally, the third aspect of the way that alternative investments are discussed that has interfered with institutionally oriented examination of them is rampant terminological inexactitude. There are many occasions when knowledgeable professionals have to nail down the definition of commonly used terms simply to hold a meaningful conversation about alternatives with each other. The confusion fostered by loose terminology may enhance the crepuscular allure of alternative investments and may in some cases be helpful to funds' marketing efforts, but it unquestionably interferes with any attempt to understand them. When every term needs to be defined, it is difficult to get past the starting gate of discussion, and I believe that this accounts for most of the difficulty that the literature faces in attempting to progress much beyond general introductions to the topic.

However, the battle to achieve precise nomenclature has long been lost, so there is little point in attempting to offer a new taxonomy of alternative investments, because it would only add to the muddle. And perhaps a certain amount of imprecision is appropriate to the discussion of alternative investments. In a field where creativity is so rife and nuance so important to differentiating among the various approaches to investment, a rigid system of terminology might well constitute a greater barrier to understanding than allowing for a certain amount of interpretive ambiguity in the terms of reference. Constant retracing of steps to concrete examples and clarifying definitions may be a tiresome impediment to progress, but perhaps that is the price required to make any progress at all. While I discuss the classification of investments in Part IV, the intention there is to offer an aid to thinking about allocation, rather than a fixed and exhaustive scheme of categories, and what I offer is intended to be quite flexible.

Throughout this book, my intention is to examine alternative investments as investments. Their strategies are explored in the context of strategies that are applied to conventional investments, and their risks are examined from the standpoint of where any investment's risks come from. What results turns out to be a comparatively colorless treatment of the topic, lacking in "war stories," gossip, and hyperbole, but I do not believe that an attempt to understand alternative investors' remarkable creativity detracts from or trivializes their undeniable accomplishments. While I hope that my remarks can be of some value to any investor who has acquired an interest in these vehicles, they are directed primarily at plan sponsors, trustees, managers of funds of funds, and others with the responsibility for forming investment policies that employ these vehicles. The ranks of institutional investors who are confronted by allocation decisions involving alternative investments have swelled rapidly over the last decade or so, and may continue to do so despite recent disappointments. In my view, their needs for a functional understanding of these investment vehicles have only occasionally been well served by what has been written about them. This volume will by no means succeed in filling that gap, but in conjunction with the contributions of others, it endeavors to push that project forward.

What Is Alternative about Alternative Investments?

It is not unreasonable to expect that something that is generally identified as "alternative" should in some sense be different, and many alternative investments truly are. By this, presumably everyone who uses the term means that they are different from conventional investments in cash, stocks, and bonds. However, much to the bewilderment of the uninitiated, their difference is not usually to be found in their choice of investment instruments—some truly strange alternative specimens nevertheless restrict their attentions to familiar assets. In this respect, at the very least, alternative investments as a group certainly do not inhabit a separate asset class.

The majority of hedge funds trade exclusively in stocks and bonds, perhaps with some options and futures thrown in for variety's sake. Private equity is first and foremost equity, whereas real estate assets are, at bottom, either equity or debt. Direct financing strategies differ fundamentally from purchasing certificates of deposit only insofar as they may include an equity "kicker" apart from their basic structure as loans. Commodities, foreign currencies, art, and collectibles are noticeably different from the assets held by conventional investment vehicles, and there are a handful of true exotica of the alternative investment world that are completely unfamiliar to conventional investment practice. By and large, however, it is impossible to conclude that the assets employed in alternative investment products are what make them "alternative." Alternative investments may be leveraged or activist, they may be hedged, operate over unusual time horizons, or be parts of an arbitrage strategy. *Any of these may also be true of conventional investments*:

- The Investment Company Act of 1940 permits mutual funds to leverage themselves up to 50 percent of the value of their assets, and increasing numbers of funds make at least partial use of this permission. Although use of leverage in other regulated investment contexts such as ERISA pensions or IRAs is more restricted, it is not impossible to find ways to introduce leverage into them, too.
- Activism, such as initiating proxy contests and similar initiatives to encourage managements to pursue a desired course of action, has become a common technique among many conventional investors, including mutual funds and, in a very high profile way, certain states' retirement plans. Arguably, it was conventional investors who introduced alternative managers to the idea of such activism.
- Hedging is by no means absent from conventional investing notably currency hedging in cross-border products, but also position and transaction hedging activities that make use of futures or options in fixed-income mutual funds and domestic equity vehicles.
- □ Time horizons can also be quite varied in conventional investment vehicles—although very short-term trading strategies may not be so common, they are not unknown. There are equity managers with annual turnover well in excess of 200 percent and a large number of bond funds with twice and even three times that level. These amounts of trading turnover may not rival some of the most active Commodity Trading Advisors (CTAs) or high-frequency hedge funds, but they are certainly enough to keep their trading desks very busy. At the other extreme, there are numerous conventional managers that hold equity positions for five years or more, approaching the average holding periods of private equity vehicles.
- Participation in arbitrage is fairly unique to alternative investors, but there are arbitrage-like aspects to many conventional investment techniques—particularly those encountered in bond markets and by no means all alternative strategies engage in arbitrage or anything that resembles it.

In each of these respects, the difference between alternative investment vehicles and conventional ones seems to be a matter of degree rather than a difference in kind. No radical change is encountered in moving from the sphere of one to that of the other. We could be tempted to conclude that alternative investments are in fact just like conventional investments—only more so. Reaching a similar destination by a quite different route, Bookstaber (2007) writes,

The hedge funds/alternative investments moniker is a description of what an investment fund is not, rather than what it is. The universe of alternative investments is just that: the universe. It encompasses all possible investment vehicles and all possible investment strategies minus the traditional investment funds and vehicles. (244)

Cynics might argue that what truly makes alternative investment vehicles different is their fee structure, and like all competent cynics, they have a point. It has been suggested, I think by Warren Buffett, that hedge funds in particular are less an investment category than a compensation scheme. Although performance-related fee structures are permitted to conventional investment managers, few in fact adopt them. And the often breathtaking generosity of the fees charged even for very simple investment vehicles that are hardly even "alternative" (2 percent management fee and a 20 percent incentive fee for an index buy/ write option strategy!) are unknown among conventional investment managers, whose charges generally bear at least a vague relationship to the cost of offering their services. However, their fee structures can hardly be regarded as a fundamental, distinguishing characteristic of alternative investments. These structures are external to the investment program, and although they have proven highly resistant to change, it is not inconceivable that an alternative investment vehicle could charge economically justifiable fees and still be regarded as "alternative." Various products of this kind have in fact found their way into the marketplace: no one regards them as conventional simply because they are comparatively affordable.

Most alternative investment vehicles also share various features of legal structure and regulatory oversight that differentiate them from typical conventional investment instruments. But again, these are external differences rather than characteristics inherent to these products, and in many cases there are conventional vehicles that have chosen to adopt the same or similar structures. Most alternative investments are structured as Limited Partnerships, and most of them impose some form of lockup on their investors' commitments. Most of them are lightly regulated if at all, and if they are subject to U.S. regulation, it may be through the

7

Commodity Futures Trading Commission or even the Small Business Administration (in the case of some mezzanine funds) rather than the Securities and Exchange Commission (SEC), which oversees most U.S. conventional managers. These characteristics may not be distinguishing features of alternatives in the sense that we are looking for, but they do account for a number of important differences between alternative and conventional investment products, including minimum net wealth requirements, maximum numbers of investors, restrictions on solicitation, the blithe vagueness of offering memoranda, and so on. However, alternativeness seems to have created a conventionality of its own. For certain forms of investment, these inconvenient structures are unnecessary-vehicles making these sorts of investments could be structured in a way that was much less of an imposition on their investors. When their managers are asked why they have chosen the less convenient structure, they invariably reply that it is what customers for that type of investment expect. Having steeled themselves to the nuisance of this or that structure, the customers would presumably be disappointed not to have the opportunity to demonstrate the sophistication implied by their tolerance for its inconvenience.

In alternative investments' heroic period, during the late 1980s and early 1990s, they were notable for their sheer, swashbuckling aggressiveness. When "macro" hedge fund managers were Kings of the Street and buyout firms were Barbarians, it was common practice to characterize investment strategies as "alternative" simply on the basis of their voracious risk appetites. Yet even in that fabled Golden Age, this characterization failed to encompass the entire alternative investment universe-some investors were concerned with market neutrality, the pursuit of "absolute return," and similarly less-than-gun-slinging risk profiles even thenbut it was a widespread view amply reflected in the media. The environment has changed considerably since then, both because the returns to swashbuckling are no longer as great as they once were, and because the entry of institutional investors into the alternative investment arena has encouraged a different attitude toward risk. Since the 1990s, this sort of aggressiveness has become much less characteristic of alternative investment managers, although it persists in isolated spots and experiences the occasional revival. The media have yet to notice, and continue to regard all alternative investors as inveterate risk-takers, when they are not otherwise engaged in fawning on or vilifying them.

A feature of many alternative investment vehicles that is related both to their colorful pasts and to their legal and regulatory status is their lack of a specified investment discipline. General Partners frequently grant themselves extremely wide latitude in the sorts of assets they may hold and the techniques that they may employ to select and exploit them. It is not uncommon, for example, for a hedge fund's or commodity pool's private placement memorandum to neglect to mention even in the most general terms which types of instruments it will employ, what trading signals will motivate its activities or the time horizon(s) over which it will trade. Alternatively, the permissions a General Partner grants itself may be specified at excruciatingly pedantic length, but so encyclopedically as to impose no effective restraint on its activities whatsoever. For example, one such document I encountered recently lists, in exhaustive detail, thirty classes of instruments that the fund might choose to employ ("...collars, floors, warrants, swaps, swaptions...") and, on the off chance that any possible investment vehicle was overlooked, concludes with "...and any other interest or instruments on a cleared and non-cleared basis as determined by the Portfolio Manager in its sole discretion." However, the growing presence and influence of institutional investors in the alternative investment arena, with their desire to allocate among identifiably different investment vehicles, has tended to encourage greater style purity among alternative investment managers. In this respect, alternative investments are arguably becoming less "alternative," and in certain respects they increasingly resemble conventional, institutionally oriented investment products in their concern with consistency and predictability.¹ And in any case, indiscipline has never been unique to alternative investments: even in these Style Box-obsessed times, there are still plenty of mavericks among conventional equity and fixed-income managers who invest more or less as the spirit moves them and in the assets that attract their momentary fancy.

There is also what might be regarded as a counter-trend underway, toward the creation of explicitly multi-strategy vehicles. This does not actually represent a "renaissance of indiscipline," as multi-strategy managers clearly require at least the same degree of style transparency in their underlying investments that institutions demand, in order to inform their allocation decisions among them. And because they manage the underlying investments themselves, they can be certain of obtaining it. Rather, it is motivated by the perception that returns to tactical allocation can be

^{1.} A useful discussion of hedge fund transparency as it relates to the needs of institutional investors can be found in Anson (2002), Chapter 9. In the course of his discussion there he mentions still another form that the lack of hedge fund transparency can take, when he informs us that Long-Term Capital Management carried some 60,000 positions in its portfolio.

attractive, as well as the potential that a multi-strategy format offers to compete for investors' assets with funds of hedge funds. However, the trend creates a sort of second-order opacity: while the underlying strategies may be style-pure, the techniques these funds employ for allocating among them are not likely to be transparent at all. It is the goal of this book to shed some light on such allocation procedures, but it is worth noting that in some cases, multi-strategy funds employ no top-down allocation procedure whatsoever. Instead, their portfolios are built from the bottom up in conformity with risk parameters placed on the individual investment disciplines, and investment allocation is determined entirely by the investment choices made by those disciplines' individual portfolio managers, without any coordination or selection from "on high."

Perhaps in reaction to the reputation that they have acquired for uncontrolled indiscipline, these days the managers of many alternative investment vehicles take great pains to stress their risk aversion and their attentiveness to issues of risk management. Increasingly, they describe themselves as seeking "absolute return." However, not all alternative investment managers would describe their strategies as "absolute return"–oriented. And in any case, "absolute return" is not a property that is unique to the vehicles that lay claim to it: a certificate of deposit offers absolute returns, as does cash in a mattress. Arguably, all modern investment thinking that insists upon the central importance of portfolio diversification to sound investment practice is driven by the desire to achieve "absolute return," or at least something that comes as close to it as possible.

However, aggressiveness, comparative indiscipline, and an attraction to "absolute return" provide an indication of what it is that distinguishes alternative from conventional investments. Alternative investors seek to generate returns that do not correlate closely with those offered by conventional investment strategies. In other words, their difference consists largely in their desire to be different. Given that any investment technique seeking excess returns, whether alternative or conventional, must depart from the risks inherent to the broad aggregate of the assets in which it invests—usually, if slightly inaccurately, identified as their β —any actively managed return-seeking technique seeks non-correlation to a greater or lesser extent. Thus, at the end of the day, what distinguishes alternative from conventional investment managers seems to be the lengths to which the former will go in seeking return, and thus the lengths to which they will go in seeking ways to invest that have little or no correlation with conventional approaches to investing. This is clearly a matter of degree rather than a difference in kind—as already suggested, a matter of "only more so." It is likely that a great deal of the "gee whiz" factor that attaches to the practitioners of alternative investing derives from their obsession with being different from the crowd.

So I have become comfortable in the prejudice that alternative investments should be considered in the context of conventional approaches to investing, because there is little evidence that alternative investments are so radically distinctive that they require a completely different analytic framework. Every investment of any kind claims a spot on the continuum of investment risks. As I will argue in my first chapter, this continuum results from a fairly simple observation about investments—that, at bottom, there is a rather narrowly restricted number of return-generating risks that any investment manager can take.

The Plan of This Book

This volume is addressed to investment policymakers who are confronted with the task of making investment allocation decisions that embrace both conventional and alternative assets. In deference to this audience, I have assumed that my readers are fairly sophisticated about investments generally, but to the extent that I have been able to, I avoid highly technical discussion and financial mathematics, and I have attempted to isolate the technical material in Chapter 3, where it can be safely ignored by those who dislike such matters. I have chosen not to dwell on issues that affect taxable investors, since it seems very likely that changes in the Tax Code will soon render stale most comments that might be specifically relevant to them. And I have not addressed the other issues that are peculiar to high net worth investors, since in most respects the concerns of those who are able to allocate across several categories of alternative investments resemble those of institutional investors in any case.

The bias of the discussion is toward the practical and empirical rather than the theoretical, not least because the devil's primary residence is in the details rather than the broad principles of investment allocation. Further, the state of research and the data available afford relatively few opportunities for truly meaningful application of mathematical modeling to many of the issues discussed here, and I do not believe that formalization that is then dismissed as approximate adds a great deal of value to such a discussion. I regret that the discursive approach I have adopted demands some patience: if what this book attempts to accomplish ever becomes clear to the reader, it will probably not do so until its final section.

The first section lays out an analytical toolkit that amounts to a way of thinking about any investment product, as well as some criteria by which commonality or distinctiveness among them can be discerned. Readers with a keen appreciation for nuance may find my approach reductionist, but I appeal to a comment from one of my university professors, who grouped cognitive styles into two camps-"splitters" and "lumpers." "Splitters" look for distinguishing features in whatever absorbs their attention, while "lumpers" seek a common thread that binds their experience together. Neither is a superior mode of thought, and there is considerable power in both approaches, although each is better- or worse-suited to some varieties of inquiry than others. The project of integrating all investment categories into a reasonably consistent allocation framework of necessity implies a cognitive bias toward finding commonality. But I endeavor nevertheless to pay due attention to important nuances, and to help assure this, Part II adopts something resembling a case study approach to examining various approaches to alternative investing.

Given the comments made above regarding the vagaries of alternative investment terminology, some discussion of examples is in any case probably unavoidable, to lend my discussion concreteness. The maxim that "concepts without percepts are empty, percepts without concepts are blind" applies to investing as well as to most other spheres, but especially where the received nomenclature threatens "emptiness" at every turn. So although this volume makes no attempt to offer a comprehensive guide to the vast array of alternative investment techniques that is available, its second part examines various investment approaches to illustrate the application of the analytic framework laid out in Part I. These chapters provide illustrations rather than proper case studies, in that they still deal generally with various investment approaches rather than examining specific vehicles and actual managers in the act of making "live" investment decisions. Because this portion of the book is not intended as a general guide, I have not included in it many of the metrics, such as maximum drawdown, and so on, that an institution actively engaged in a manager search would no doubt want to examine. By restricting the discussion to operational and more formal considerations, the examples discussed in Part II are meant to provide the "percepts" that I hope will give meaning to the "concepts" that are developed in the final two sections of the book.

My choice of examples is idiosyncratic, intended to provide interesting illustrations of the application of the analytic framework rather than to cover any prescribed portion of the investment universe. Inclusion in the set of examples does not imply any judgment of this or that investment technique's importance or value. Nor does exclusion imply that an investment category is unimportant or in any way flawed—it only indicates my failure to find anything useful to say about it in the context of what I am attempting to accomplish with these examples.

The order in which the examples are presented is not dictated by any internal logic or system of classification. Rather, Part II traces out what are, in effect, a couple of tours d'horizon, covering the alternative investment territory and then re-visiting it to examine it from different perspectives that are informed by an accumulating view of the whole. This is my attempt to deal with what Swensen calls the "complex simultaneity of the asset management process" (2000, 3; 2009, 4).² Although Swensen was writing about the specific problems of disentangling top-down from bottom-up influences on security selection in the context of choosing investment managers, his phrase can aptly be applied to the whole range of challenges that allocation among investment categories presents. Investment allocation is not a linear process, but involves complicated feedback loops and a certain circularity of logic that is easier to illustrate than to articulate. Part III attempts to draw these various strands of inquiry together and erect some generalizations about the material discussed in Part II.

Part IV is entitled "Portfolio Construction," because any title incorporating the term "theory" would be a misuse of too good a word for my attempts to build toward generality. What results is neither grand nor elegant, and although it should be of general application, it is more empirical than conceptual. Even inattentive readers will notice the lack of mathematics in what attempts to be a serious investment discussion—a confirmation, if one were needed, that this volume stops far short of theory in any formal sense. Although I hope to offer something more than just handy tips, cautionary advice, anecdotes, and a few rules of thumb, I do not pretend that my efforts make any great contribution to science. But the allocation of portfolio investments

^{2.} I quote from Mr. Swensen in several places in this volume, and his publisher has requested that I provide the following acknowledgment: *Pioneering Portfolio Management: An Unconventional Approach to Institutional Investing* by David F. Swensen. Copyright © 2000, 2009 by David F. Swensen. Reprinted with permission of the Free Press, a division of Simon & Schuster, Inc. All rights reserved.

is first and foremost a practical activity, something that needs to be accomplished whether it has strong theoretical underpinnings or not. After all, the foundations of investment theory are barely fifty years old, but investment activity has gone on since time immemorial. If readers indulge me with their patience and come away from this volume with a clearer sense of how to approach the investment problems that it addresses, even though the problems are by no means definitively solved, then I will have achieved everything that I can reasonably hope to.