PREFACE

WHAT THIS BOOK IS ABOUT

Investment Management: Theory & Practice offers a short, non-technical introduction to portfolio design, implementation, monitoring and management. It is directed towards investors wishing to understand critical asset management issues without having to become experts in the fields of finance, economics, and statistics.

In the field of asset management, it is rare to find uniformity of opinion. To become informed, investors face the challenge of understanding heterogeneous viewpoints.

This book neither evangelizes for a school of academic thought (e.g., active management v. passive indexing; efficient market approach v. a behavioral finance approach), nor does it avoid pointing out areas of controversy and disagreement within the body of academic research. It steers clear of a sales agenda because it is not intended to promote a transaction. Rather, it acquaints the reader with the findings and conclusions of thoughtful individuals who employ differing research methods along a spectrum of academic approaches.

The book aims also to provide investors with information sufficient to enable them to work effectively with their investment advisor(s). The book seeks to help them understand the basis of advisor recommendations and the implications of investment choices. In this respect, it fulfills the duties owed to clients detailed in Standard V(A) of the CFA Institute's *Standards of Practice Handbook:*

> *Clients turn to members and candidates [of the CFA Institute] for advice and expect these advisers to have more information and knowledge than they do … At a basic level, clients want assurance that members and candidates are putting forth the necessary effort to support the recommendations they are making. Communicating the level and thoroughness of the information reviewed before the member or candidate makes a judgment allows clients to understand the reasonableness of the recommended investment actions.* [1]

Adequate communication forms the subject matter of Standard V(B):

[CFA Institute] Members and candidates must:

1. *Disclose to clients and prospective clients the basic format and general principles of the investment processes they use to analyze investments, select securities, and construct portfolios, and must promptly disclose any changes that might materially affect those processes;*
2. *Disclose to clients and prospective clients significant limitations and risks associated*

[1] Standards of Practice Handbook, 11th Edition, CFA Institute (2014), pp. 155-156.

with the investment process;

3. *Use reasonable judgment in identifying which factors are important to their investment analysis, recommendations, or actions and include those factors in communications with clients and prospective clients;*

4. *Distinguish between fact and opinion in the presentation of investment analyses and recommendations.*[2]

Among other things, this book provides a rationale for drafting and approving an Investment Policy Statement [IPS]. An IPS is a written document that codifies the asset management guidelines deemed most appropriate for an investor's needs, circumstances, and objectives.

The academic literature in the field of portfolio design and management is extensive. The principles underlying asset management tools and techniques differ greatly depending on whether one considers a single planning horizon – what is the best course to take over the next three months? – or a multi-period planning horizon. Likewise, portfolio decisions during an accumulation phase – e.g., saving for retirement – may differ greatly from decisions during a distribution stage – e.g., retirement spending. Prudent decision making over a multi-period horizon in the presence of cash flows, changing rates of inflation, and uncertain investment returns is a very complex undertaking. Therefore, this book focuses primarily on providing a basic and intuitive understanding of investment decision making in the more tractable setting of wealth accumulation absent cash flows. Footnotes provide information on more advanced resources should the reader wish to explore topics at a greater level of analytical insight. Finally, the book is not so much a financial planning roadmap – e.g., how much should I save to pay for college expenses? – as it is an introductory survey of relevant and informed viewpoints about the theory and practice of investment management. It is primarily an introduction to issues rather than a 'how to' guide.

That said, knowing 'why' is a necessary prelude to figuring out 'how.'

INVESTMENT DECISION MAKING

Prudent Investing

More money is better than less. The paradox of investing is that, although investors generally agree with this statement, the pursuit of more money in the form of investment returns is not always prudent. A primary objective of money managers is to generate attractive returns. They hope to do this by trying to identify undervalued securities with above average prospects for future growth or income. Money managers market the portfolios formed from these 'mispriced' securities either to the retail public or to wealthy individuals qualifying as "sophisticated investors" under current securities laws. The easiest way for a money manager to claim superior performance is to outperform either a peer group of competitors or a benchmark such as the S&P 500 Stock Index.

While this may sound like a good idea, many investors lack a clear understanding of the functional relationship between their unique personal investment goals and the index returns they see on the nightly business report.[3] Is the return of the index sufficient to fund future consumption and wealth accumulation objectives? Does the risk of an index align with personal risk tolerance? Is the money manager taking risk greater than the index? Despite, or, perhaps because of the difficulty of interpreting personal goals in terms of risk and return, for many investors the investment problem reduces itself to finding a money

[2] Ibid., p. 169.

[3] Commonly reported indexes are the U.S. Dow Jones Industrial Average, the U.S. S&P 500 Stock Index, and the U.S. NASDAQ Stock Index.

manager with a good track record – a manager who can "beat-the-market." Curiously, however, a money manager's primary goal (the speculative objective of beating the market) is only tangentially related to the investor's objectives – securing a sustainable and substantial retirement income, accumulating funds to pay college expenses, maintaining wealth sufficient to make gifts or bequests, and so forth. Prudent investment decision making extends well beyond the single dimension of historical track record.

Prudent investing requires that the risks and returns of the portfolio align with concrete investor objectives rather than with abstract 'beat-the-market' goals. Portfolios must generate returns sufficient to support the needs and expectations of their owners. But it is best if the portfolio is conformed to the investor's aspirations rather than designed to outperform a peer group. After all, investment strategies intended only to maximize expected return without regard to risk may prove to be bonanzas or catastrophes. On the other hand, strategies designed to enhance the probability that a critical goal will be successfully met are more prudent and suitable for most investors.

Prudent investment decision making begins when the investor's focus shifts from discussing how to maximize return to determining the risks and returns required to secure an economic future. If you don't need to outperform the S&P 500 to have a secure economic future, why should you take the risks necessary to do so?

Historically, the professional U.S. money management industry has offered investors a 'treasure hunting' model. Success under the treasure hunting model is a function of the manager's skills in selecting undervalued securities and in timing price movements either between or within capital markets. The treasure hunting model requires many highly concentrated bets that are correct more often than not. For a variety of reasons, however, this has proved difficult to accomplish. Although treasure hunting has produced examples of investment success, it has not served the average investor well:

> *… the industry looks very much like an unconcentrated, highly segmented, service-oriented industry for which perceptions of the qualities of individual firms vary widely over time and across customers. The structure of this industry is not unlike that of hair salons or trendy restaurants … Money managers who can provide a good story about their strategy have a comparative advantage. In fact, the product sold by the professional money managers is not just good performance but schmoozing, frequent discussion of investment strategies, and other forms of hand holding.*[4]

The following pages offer a view of portfolio design and management that is more prudent than traditional treasure hunting. A prudent investment approach begins by identifying the returns required to generate money sufficient to meet the wealth accumulation goals or cash flow liabilities that the portfolio must meet.[5] Although generating returns above the risk-free rate requires that investors take on risk, such risk ought to be commensurate with the return objectives. Furthermore, both risk and return must be measurable and consistent with investor needs and risk

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[4] Lakonishok, Josef, Shleifer, Andrei & Vishny, Robert W., "The Structure and Performance of the Money Management Industry," Brookings Papers On Economic Activity (Brookings Institution, 1992), pp. 339-391.

[5] This should be expressed quantitatively. Examples of relative return objectives are: "return of x% over the risk-free rate," or "inflation plus y%." Examples of absolute return objectives are: "a real return of x%," or "a return sufficient to sustain a cash-flow of $y per month for 30 years." Labels such as "growth" or "income" are mere descriptors that provide no basis for portfolio design or performance assessment. A threshold requirement for portfolio management is to know the return required to meet portfolio objectives and to express the return in appropriate quantitative terms.

tolerance. A prudent approach evaluates the evolution of the portfolio not solely in comparative terms (did I do better than a benchmark or a peer group?), but also in terms of progress towards objectives.

OBSTACLES TO PRUDENT DECISION MAKING

Many people have difficulty making effective investment decisions. Investors face significant obstacles, such as:

- Complexity – informed financial decisions require insight into abstruse financial, economic, and mathematical relationships, and may require serious introspection to define personal objectives;
- Uncertainty – decisions must be made without complete knowledge of future consequences. Good decisions do not guarantee successful outcomes; bad decisions may result in outcomes that succeed by mere chance;
- Conflicting Objectives – an investment decision may facilitate progress towards one objective (e.g., generating current income to support a dependent), while simultaneously impeding progress towards an equally important objective (e.g., wealth accumulation);
- Lack of Perspective or Multiple Perspectives – issues may be difficult to resolve because differing perspectives on the same data set can lead to different conclusions. An investor who accumulated wealth in the 1980s might react differently to recent stock market returns than an investor who accumulated wealth in the twenty-first century;
- Information Overload – investors are deluged by an ever-deepening torrent of financial, economic, legal and tax information. Determining which data really matter may be close to impossible.

Successful investors must overcome these obstacles. A general understanding of the fundamental nature of capital markets and investments is a necessary starting point. Recent advances in the scientific understanding of markets make it possible to deal with each of these obstacles systematically.

This book summarizes relevant academic developments pertaining to financial economics and portfolio management. It first addresses basic investment concepts that investors must consider in formulating any successful investment program. These include investment prudence, market efficiency, risk, diversification, and asset allocation. It then proceeds to a more detailed discussion of the mechanics of portfolio construction and wealth management. Topics include:

- Characteristics of asset classes that may be included in a portfolio;
- Determinants of return;
- Designing a suitable portfolio structure;
- Selecting appropriate investment vehicles; and,
- An overview of alternative asset management approaches.

Often, there are no absolute “right” or “wrong” decisions. Depending on the context of the decision, one course or another may be appropriate. This book provides background information that will facilitate:

- Good decision making by informing investors about the merits of various investment elections;
- Implementation and supervision of a portfolio once investment strategies and tactics have been selected; and,
- Evaluation of the economic consequences of asset management decisions as the portfolio evolves over time.

It introduces investors to important investment topics and fundamental concepts in asset management. It is not a textbook on investment analysis, nor is it a self-help guide on how to pick winning securities.

Rather, its purpose is to provide non-technical communication about:

- The nature and scope of prudent investment policy decision making (good decisions increase the probability of good outcomes);
- The variety of portfolio management elections that are available to you; and,
- The portfolio management elections best suited to your particular investment objectives.

INVESTMENT POLICY

Investors sometimes confuse 'making money' or 'generating investment returns' with investment policy – "my 'policy' is to make money." However, a return generating process that does not flow from a carefully considered investment plan often relies on mere luck. A written Investment Policy Statement reflects and memorializes a process of careful deliberation which has the goal of designing portfolios to meet savings, consumption, and bequest objectives, within the preferences and constraints imposed by the investor's personal circumstances and risk tolerance.

Depending on the nature and scope of the investment endeavor, investment policy encompasses the planning steps required to determine:

- Which assets are suitable investments (asset selection and retention policy)?
- How should the investor combine the assets into a portfolio (asset allocation policy)?
- What is the portfolio return required to achieve my investment objectives ('required' return vs. 'desired' return)?
- What is the portfolio's risk (the probability of failing to meet the required return over the planning horizon)?
- Does the portfolio require tax payments (tax management policy)?
- Does the portfolio require periodic adjustments to maintain its strategic asset allocation (rebalancing policy)?
- If the portfolio is funding periodic distributions, how much money can be spent without jeopardizing the investment capital (distribution policy)?
- If the portfolio comprises several taxable and non-taxable accounts, what is the optimal location for the assets (asset location policy)?
- As the portfolio evolves through time, how are investment results evaluated (monitoring and evaluation policy)?

If this process is completed with sufficient care, skill and caution, the investor may begin the return generating process armed with the confidence that investment choices have been well considered prior to their implementation. Although a prudent decision making process cannot guarantee a good result, it greatly enhances the probability of a successful financial outcome.

Investment policy is just one of several topics that are revisited, within differing contexts, throughout this book. The purpose of thematic repetition is to provide the reader with a multi-dimensional perspective on portfolio design and asset management. Preliminary conclusions made in one chapter are often revisited and sometimes modified in subsequent chapters. As the reader progresses through the book, arguments which originally seem 'black-and-white' are subject to further assessment and evaluation. If the book succeeds, an end result will be a deeper and more nuanced view of the process required for investment success.

RESOURCES

The Schultz Collins website (www.schultzcollins.com) is a source for more information, often at a greater level of detail. The website provides working papers, reprints of published articles, and links to

other helpful information and resources. The website features "A Gentle Introduction to Investing," written at a basic level, for readers lacking familiarity with investing or financial products. If you don't know the difference between a stock and a bond, this is a good place to visit.

The website also provides access to lecture notes from the graduate-level course in Asset Management taught by Patrick Collins at the School of Management of the University of San Francisco. The course is part of the University's Masters of Science (combined MBA/ Masters in Financial Analysis) curriculum. The lecture notes [Course Notes for USF Masters of Science in Financial Analysis] discuss several topics covered in this book. Much of the course focuses on institutional investors such as trusts, endowments and foundations.