B.A.J. 1, I, 149–154 (1995)

REVIEWS

Global Asset Allocation—Techniques for Optimizing Portfolio Management. Edited by JESS LEDERMAN and ROBERT A. KLEIN (John Wiley and Sons, Inc. 1994) £39.95

Global Asset Allocation comprises twenty independently written chapters authored by managers, presidents, vice-presidents and other investment professionals (including a Fellow of the Society of Actuaries) from various American investment houses and consultancies. Linking the articles is the aim of providing a comprehensive source of information about the allocation of assets and management of investment portfolios.

The authors of the first four chapters discuss various aspects of mean-variance optimisation in the context of modern portfolio theory. In Chapters 1 and 2 the key issues of estimation error in applying the optimisation algorithms of modern portfolio theory and parameter stability are analysed. In the third chapter, the importance of the time horizon implicit in applying modern portfolio theory is highlighted, with particular reference to pension funds with different liability profiles. The fourth chapter reviews portfolio rebalancing methods based on volatility.

The use of derivative instruments and overlay strategies to facilitate asset management are dealt with in Chapters 5 and 6. Among the many issues discussed are sophisticated options management techniques, such as the use of barrier options technology in a 'ratchet' strategy for locking in investment gains.

Chapters 7 and 8 discuss the identification and measurement of 'styles' within equity management, and show how the style of equity investment (e.g. an emphasis on growth rather than value) can be every bit as important as allocating assets between the main asset categories. Although the issues involved in equity investment form the main focus for most of the chapters in the book, the allocation of fixed-interest securities is also widely discussed. Chapter 9, for instance, deals specifically with proposals for constructing optimal fixed-income portfolios.

Chapters 10 to 13 are concerned more directly with asset allocation between the traditional asset classes. Asset/liability forecasting in the U.S. pension world is given extensive treatment in Chapter 10. In Chapter 11 methodologies are described which can be used to test for the added value of tactical asset allocation strategies which utilise leading economic indicators of asset returns. The tactical asset allocation algorithms used by two prominent investment advisors in the U.S.A. are outlined in Chapters 12 and 13, and evidence is presented of their success in beating prescribed benchmarks and market indices.

Standing somewhat on its own in terms of content in the book, Chapter 14 summarises the possible uses of chaos theory (as opposed to the use of stochastic processes) in modelling security price movements. The remaining chapters (Chapters 15 to 20) explore the opportunities for diversification and increased return available in non-U.S. markets to the American investor. In particular, Chapter 15 proposes the use of multiple-scenario deterministic forecasts to implement and assess strategic global asset allocation. The concerns of currency management in investing in 'global bonds' are highlighted in Chapter 16, which goes further to discuss the possible use of currency returns as a separate asset class into which funds may be allocated. Chapter 17 outlines a theoretical framework for appraising both local and global asset allocation strategies, although the measures of risk used in this chapter and others are subject to a brief critique in Chapter 18. Even although smaller markets are often treated as being synonymous with uncertainty, the author, in Chapter 19, suggests that there are opportunities for significant risk reduction in investing in emerging markets. Finally, Chapter 20 identifies the various sources of expense in global asset management, and explores how a passive approach to global investment can limit the costs of global diversification.

Global Asset Allocation provides broad coverage of many of the current topics of interest in asset allocation in the global market. Its viewpoint is American, but many of the concepts and ideas can be translated to the U.K. perspective. The authors are predominantly practitioners rather than academics; this may be the reason that most of the articles are readily accessible to a broad spectrum of readers and point quite clearly to practical implementation. I particularly enjoyed the articles on style allocation and analysis as a practical and interesting addition to what many actuaries would perceive as asset allocation. Other chapters offered some engaging and thought-provoking insights into how modern portfolio theory and similar models are currently adapted in practice, and what further concerns need to be addressed in asset allocation.

My major grumble with the book is that it lacks a consistent framework, or at least a consistent theoretical basis. As noted earlier, the authors of the chapters are drawn from independent sources, mainly asset management and investment consultancies. Although their differences generate variety and interest in writing style, they detract from the overall usefulness of the book in the way that the editors view it in their preface, i.e. a "working handbook ... to solve real-world problems and make portfolio management easier". For example, some chapters endorse modern portfolio theory and the capital asset pricing model, in total contrast to others which deny the validity of such models and tackle the issues in asset allocation in a more *ad hoc* way. A particular case in point concerns the relationship between risk and return, with utterly conflicting viewpoints (and supporting evidence!) being presented in Chapters 10 and 18. The author of Chapter 18 argues rather perversely (and disputably) that high risk and low return are associated; a contradictory position to the more conventional one taken by, among others, the actuary in Chapter 10.

In terms of style, some chapters are more readable than others, partly because of the varying levels of mathematical development and statistical expertise employed by the various authors. A disappointing feature of the disparity of styles is that several statements are not explained in sufficient detail to ensure clarity. The consequent lack of rigour considerably weakens the arguments of the relevant authors. For example, in Chapter 3 the author inexplicably writes: "Without normal or log-normal distribution, there are no 'variances' (in a true statistical sense) ... and no measurable areas of probability."

A second concern which arises with the structure of the book is that many of the chapters are wanting in sufficiently detailed references, or, in some cases, references at all; viz. six of the twenty chapters have no list of references and many more chapters have only token lists. Thus, although the authors introduce some fascinating concepts which could possibly see application in the U.K., the impression one is left with is that substantial further research would be required before they could be implemented. A more comprehensive list of references (or of further reading) at the end of every chapter to direct the reader to sources of additional detail would improve the usefulness of the book markedly.

A point of a more minor nature is that the book contains a couple of typographical errors in some of the mathematical expressions (e.g. pages 148 and 261) and in at least one of the references (page 319). These are, however, unlikely to cause actuarial readers much of a problem.

On the whole I found *Global Asset Allocation* to be an interesting text which contained pointers to many novel and fascinating areas of research and applications of asset management. However, a more theoretically consistent and rigorous approach in some of the chapters would have greatly enhanced its value as a reference work for readers wanting to explore the concepts and suggestions in more depth.

D. C. Bowie

The Reduced Utility of a Life Plan. By R. Koch (University of Stellenbosch)

This work, by a South African author, is a major thesis on the assessment of damages for personal injury and death. The author is both an actuary and a lawyer, and this dissertation was presented for a law doctorate at the University of Stellenbosch.

The title is unusual for a book on damages, but the concept of the 'utility of a life plan' is