

## BOOK REVIEWS

LARS JAEGER (2002), *Managing Risk in Alternative Investment Strategies*, FT Prentice Hall ISBN 0-273-656988

This book delves into the arcane world of investments popularly known as “hedge funds”.

Read no further than the title page to gain an insight into some of the myths and misconceptions of this field. The subject, “Alternative Investment Strategies” is an accurate description of the subject matter, albeit too cryptic for many readers. The subtitle, “Successful Investing in Hedge Funds and Managed Futures” ironically, enlightens the reader. A Google search on “hedge fund” turns up over 300 thousand entries, while “alternative investments” yields just over 100 thousand. The term “hedge” does apply to some examples in the alternative investment world, but only a subset. “Alternative Investments” is the more accurate description, and increasingly common term.

Lars Jaeger does an excellent job of surveying this disparate collection of alternative investment strategies (AIS). The alternative investment world is still relatively small, accounting for roughly 1% of the total capitalization of financial markets, but it is growing faster than the financial markets as a whole. Many people first became aware of the industry during the Long Term Capital Management crisis. While this raised the exposure of the industry, it was a decided mixed blessing, as the press accounts emphasized some of the less desirable attributes of the industry. Despite the publicized problems, insurance companies have been attracted to the claims of non-correlated returns, often exceeding that available from more traditional sources. The author examines some of the flaws in the claims (e.g. survivorship and selection bias). Other aspects are put into context in a way that would appeal to actuaries. For example, he looks at conditional correlation. Roughly speaking, we aren’t simply interested in a lowered correlation, we are particularly interested in lower (or negative correlation) during extreme market moves.

Jaeger’s analysis eliminates some of the more inflated claims about the AIS world, but, ironically, may make the AIS world more attractive to some insurers. The maxim, “if it sounds too good to be true, it is” applies to some of the more inflated claims of hedge funds. The empirical results are less stellar than some of the claims, but still attractive enough to make the sector worthy of serious consideration by large investment portfolios. Opacity is still a problem, but the author makes a strong case for improving the transparency of the industry, and the signs point to a trend in that direction. The key, as is true for any investment decision, but particularly applicable to these lightly regulated investments, is to apply good risk management techniques to the selection of funds and advisors. A good portion of the book spells out the application of good risk management techniques to the problem of adding AIS to an investment portfolio.

Insurance professionals should feel at home in this book. Early in the book, the author explains AIS returns by analogizing to insurance operations. Later in the book, the author warns about the pitfalls of VaR analysis, arising from the skewed and long-tail results of certain Alternative investment strategies. The reader will even find reference to Expected Shortfall (Conditional VaR) measures, a measure popularized first in actuarial circles but now entering the investment portfolio lexicon.

STEPHEN PHILBRICK

*Credit Risk. Pricing, Measurement, and Management.* Princeton University Press, 2003, Darrell Duffie and Kenneth J. Singleton.

From the Institute/Faculty of Actuaries' definition of an actuary, we learn that "Actuaries manage assets and liabilities by analysing past events, assessing the present risks involved and modelling what could happen in the future." Actuaries are no doubt risk-professionals. In their "Brief Zoology of Risks" facing financial (including insurance) institutions, the authors list market, credit, liquidity, operational and systemic risk. The current discussions around Basel II and Solvency 2 make these categories well-known to every actuary. Whereas market risk has been blessed with numerous textbooks at all levels of quantitative detail, the field of credit risk has been much more sparsely treated. And this despite its paramount importance for practice. One of the main reasons for this is the fairly recent history of "standard" models. From a more scientific point of view, models break down in so-called structural versus reduced ones. The prime example of the former class is the celebrated Merton firm-value model, where a stochastic model of the variation of assets to liabilities lies at the heart of a corporate finance oriented approach. In reduced models, an exogenously specified process for the migration of default probabilities, calibrated to historical or current market data gets the modeller's prime attention. Around these two approaches, specific industry models like Portfolio Manager (KMV), CreditMetrics, CreditPortfolioView and CreditRisk+ have been developed.

Both authors have been at the forefront of academic research related to credit risk. Their joint work on intensity based models is widely referred to as the Duffie-Singleton model. As a consequence, academia as well as practice have been eagerly awaiting the write-up of their views on the subject. The result is a fine book which will shape the field for many years to come. The book masterly straddles the academic and the more applied fields. Behind all mathematical formulations, there is a clarifying discussion on the underlying economics. Several examples illustrate the transition from model to data. The subtitle of the book is "Pricing, Measurement, Management"; these three cornerstones of modern finance are treated in a well-balanced way. The reader will find out how to price basic defaultable securities, how to calibrate credit risk models to market data and how to measure risk (e.g. VaR) for credit portfolios. For the latter, a detailed discussion of default correlation (definitions,