Operational Risk Assessment: The Commercial Imperative of a more Forensic and Transparent Approach. By BRENDON YOUNG and RODNEY COLEMAN (Chichester, John Wiley & Sons, 2009. 430pp. ISBN: 0470753870)

The literature is divided into two main sections. The first section mainly covers the qualitative assessment of operational risk and its strategic importance to the financial sector. The second section deals with the quantification of operational risk using statistical modelling techniques. The book is aimed at investors and operational risk professionals who wish to enhance their understanding of the methods used to assess the financial standing of banks. Notwithstanding that the examples used in this book are mainly from banking, the insurance sector also faces operational risk and insurance practitioners will also find many of the concepts relevant for their purpose.

In the first chapter, the authors justified the need for a more forensic approach to properly understand the dynamic nature of risks, their interactions and correlations. Managing operational risk cannot be done in isolation without considering organisational needs and changes in circumstances. More importantly, the authors pointed out the widely held misconception that the long-run financial strength and credit rating of a bank are determined by the level of capital it holds. Notwithstanding the importance of capital to meet immediate needs, it is vital to recognise that the longer-term viability of a financial institution is dependent on the quality and level of its sustainable earnings. As such, the topics covered in the literature are targeted at improving the management of an institution and enhancing the sustainability of its earnings.

Chapter 2 discusses the importance of corporate governance, which is one key consideration in the overall credit rating of an institution. The authors provided a concise overview of the global corporate governance initiatives driven on the international front. In addition, countries are at different stages in developing their corporate governance requirements and a comparison is made between the experiences in Europe, United Kingdom and United States. At the end of the chapter, the reader can find a corporate governance questionnaire, which serves as a useful checklist to assess the robustness of an institution's corporate governance framework.

In the next chapter, the book provided an understanding of how traditional analysis techniques such as equity and credit analyses are incorporated into the assessment methodologies of regulators and rating agencies. In particular, the Moody's Analytical Framework for Operational Risk Management of Banks and the UK FSA's ARROW Framework are described in greater detail. It provides some insights into the different aspects of concern to the regulators and rating agencies.

The book continued with the discussion of credit risk and operational risk models. The main difference between both types of models is that credit risk

models adopt an external perspective of an institution, whereas operational risk models adopt an internal forensic perspective. Commercial banks have begun to develop their own internal operational risk expert systems and models according to Basel II requirements. These expert systems link together various modules such as loss data register, scenario generation and assessment, Control Risk Self Assessment (CRSA), casual analysis modelling, dynamic financial analysis, etc. These modules and the related strategic issues are discussed in subsequent chapters. A useful feature in these chapters is that they provide a good mix of views from the regulatory bodies, rating agencies, accounting bodies and banks. These modules come together to form a holistic enterprise-wide risk management framework.

Investors and industry practitioners will find Chapters 13 (Observed Best Practices and Future Considerations), 14 (Industry Views) and 15 (Summary, Conclusions and Recommendations) very useful and informative. Chapter 13 recommends the best practices that are either advocated by regulators or adopted by financial institutions which are fundamentally sound. There is international consensus that the responsibility of instilling an enterprise-wide culture of risk awareness resides with the Board of Directors. In addition, the authors also highlighted that there is broad agreement within the banking industry on best practice methodologies that are forward-looking and take into account an institution's size and sophistication. Although most banks have well-developed business continuity plans, the authors were of the view that regulators and analysts should seek confirmation that such plans are regularly reviewed for their effectiveness. This is indeed a valid point, especially in the light of those institutions which are at the verge of collapse during the 2008 global financial crisis.

Chapter 14 is an amalgam of industry views on the latest hot topics that are widely deliberated in the financial industry. For instance, rating agencies were heavily criticised for their catalytic role in bringing about the downfall of several major institutions during the global financial crisis. Several interesting questions and responses were made on the future reforms and prospects of rating agencies. Further, the authors provided a succinct conclusion in Chapter 15, using the latest topics from the financial crisis such as off-balance sheet instruments, fair value accounting and the role of central banks. This provides a good overview of the myriad of relevant issues that would drive future developments in the financial industry in the next few years.

The second section of the book covers the quantification of operational risk using statistical modelling. This section is not meant to provide a complete beginner's guide to statistical modelling. Instead, the reader is expected to have some statistical background before using the text as a quick refresher.

The strength of this book is that it draws on relevant real-life events from the global financial crisis and the reader can relate easily to these examples.

The authors also consolidated many interesting risk management frameworks that are used by financial institutions to manage risk, and provided the reader with an understanding of the latest initiatives in the financial industry. The literature is written in clear prose without excessive use of technical jargon. Hence, students who require comprehensive knowledge of operational risk management will find this book useful.

HUANG CHUXIN ESTHER

Market Valuation Methods in Life and Pension Insurance. By THOMAS MOLLER and MOGENS STEFFENSEN (Cambridge University Press, 2007. 279pp. ISBN: 9780521868778)

With the move towards market-consistent valuation methods in international accounting and solvency standards, traditional valuation methods are being rapidly superseded by concepts derived from modern financial mathematics. With this in mind, this book is aimed at practising actuaries and students who need an introduction to the practical application of modern financial theory in life insurance.

The book introduces a range of different approaches for market-consistent valuation of common life and pensions insurance contracts. These techniques are described alongside more traditional methods.

The methods are presented from the perspective of the Danish approach to market valuation; however, the underlying theory is applicable to market consistent valuation in a wider context.

Chapter 1 sets the scene, giving the reader an introduction to life insurance practice with focus on the parties that underlie an insurance contract — policyholders and an insurance company — and the payment streams that form the legal obligations of any policy.

Chapter 2 looks at some aspects of life insurance valuation that are relevant for accounting at market value through the example of a with-profits endowment insurance contract.

Chapter 3, on interest rate theory as applied to insurance, covers some basic concepts taken from interest rate theory and financial mathematics and applies these for the calculation of values of life insurance liabilities. The latter sections of this chapter look at arbitrage-free pricing in discrete time, and modelling the spot rate in continuous time. Various stochastic interest rate models are introduced.

Chapter 4 continues along the path laid in the previous chapter, extending the stochastic theory in a stock market framework. The binomial option pricing model and Black-Scholes are covered.

Chapters 5 and 6 look at specific examples of market consistent valuation in the areas of unit-linked and with-profits contracts. The final chapter,