

Financial Enterprise Risk Management

Second Edition

This comprehensive, yet accessible, guide to enterprise risk management for financial institutions contains all the tools needed to build and maintain an ERM framework. It discusses the internal and external contexts within which risk management must be carried out, and it covers a range of qualitative and quantitative techniques that can be used to identify, model and measure risks.

This new edition has been thoroughly updated to reflect new legislation and the creation of the Financial Conduct Authority and the Prudential Regulation Authority. It includes new content on Bayesian networks, expanded coverage of Basel III, a revised treatment of operational risk, a fully revised index and more than 150 end-of-chapter exercises. Over 100 diagrams are used to illustrate the range of approaches available and risk management issues are highlighted with numerous case studies. This book also forms part of the core reading for the UK Actuarial Profession's specialist technical examination in enterprise risk management, ST9.

PAUL SWEETING is Professor of Actuarial Science at the University of Kent, where he teaches enterprise risk management. His research covers areas as diverse as longevity, pensions accounting and investment strategy. Prior to joining the University of Kent, Professor Sweeting was Head of Research at Legal and General Investment Management and Managing Director at J.P. Morgan Asset Management. Professor Sweeting is a Fellow of the Institute of Actuaries, the Royal Statistical Society and the Chartered Institute for Securities and Investment. He is also a CFA Charterholder and a Chartered Enterprise Risk Actuary. He has written a number of articles on financial issues and is a regular contributor to the written and broadcast media.

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FINANCIAL ENTERPRISE RISK MANAGEMENT

Second Edition

PAUL SWEETING
University of Kent



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Preface

I found myself writing the first edition of this book during a time of crisis for financial institutions around the world. The global financial crisis was under way, and it was clear that poor risk management had played a part – both within firms and on a macro-economic scale. As a result, regulations were strengthened. For banks, Basel III was introduced. This brought capital requirements that were stronger yet more flexible, and a new focus on liquidity. For insurance companies, planning for a new regulatory regime was already well underway. However, the financial crisis meant that Solvency II included measures to provide some protection for insurance companies from capital market volatility.

In the years since the crisis, the stability of financial institutions has largely been maintained. However, we are still in a time of enormous uncertainty. With interest rates reaching new lows around the world, the efficacy of monetary policy is now being questioned. And from a local perspective, the decision of the United Kingdom to leave the European Union could have global implications, both economic and political, even if the nature of these implications remains to be seen.

On a smaller scale, the issue of cyber risk is of growing importance. Hackers seem regularly able to gain access to supposedly secure account information through attacks on firms' IT systems. Individuals are also at risk from phishing emails, which can lead them to infect their computers with malware, or even to hand over personal data explicitly. These and other forms of cyber risk are causing ever growing losses for individuals and for financial institutions.

But risk management techniques are also developing. For example, Bayesian approaches are being used increasingly to model complex networks of risks, even extending to the calculation of capital requirements.

In this second edition, I have tried to address these changes as well as updating the book more generally. I have also added questions at the end of each chapter, to try to help understanding of the various topics covered. More questions can be

found at <http://www.paulsweeting.com>; a QR code for this site is given at the end of this preface.

Despite these changes, the principle behind the way in which these risks should be approached remains the same – in particular, all risks should be considered together. Whilst identifying the extent – or even the existence – of individual risks is important, it is even more important to look at the bigger picture. Such an approach can highlight both concentration and diversification. And, of course, risk is bad only if the outcome is adverse. Upside risks exist, and without them, there would be no point in taking risks at all.

This second edition has benefited greatly from the views of those kind enough to comment on the first edition, particularly Patrick Kelliher. I am also grateful to the team of reviewers for the Japanese translation to the first edition, led by Professor Naoki Matsuyama. Finally, I must mention again those whose work was so helpful with the development of the first edition, namely Andrew Cairns and Lindsay Smitherman.

