Value at Risk and Bank Capital Management
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Contents

Preface ................................................................. xi

Chapter 1: Value at Risk, Capital Management, and Capital Allocation ......................................................... 1

1.1 An Introduction to Value at Risk ............................................. 2
1.2 Capital Management and Capital Allocation: The Structure of the Book ....................................................... 4


2.1 Regulatory Capital and the Evolution of Basel II ......................... 8
2.1.1 The 1988 Basel I Accord and the 1996 Amendment ................. 8
2.1.2 The Concept of Regulatory Capital .................................. 9
2.2 Overview of the Basel II Capital Accord ................................. 10
2.2.1 Pillar 1: Minimum Capital Requirements — The Main Changes Introduced by Basel II ......................... 11
Box 2-1: Impact of the Basel II Accord on the Level of Minimum Regulatory Capital Requirements ............. 12
2.2.2 Pillar 2: Supervisory Review Process ............................... 14
2.2.3 Pillar 3: Market Discipline ............................................ 15
2.2.4 The Debate about Basel II Adoption and Implementation .......... 16
2.3 Bank Estimates of Required Capital and the Different Notions of Bank Capital ............................................. 17
2.3.1 Book Value of Capital and the Impact of IAS/IFRS ................. 17
2.3.2 Market Capitalization and the Double Perspective of Bank Managers ..................................................... 19
2.3.3 The Impact of Alternative Notions of Capital on Capital Management and Allocation ............................ 20
Chapter 3: Market Risk

3.1 The Variance–Covariance Approach

3.1.1 A Simplified Example

3.1.2 The Choice of the Relevant Random Variables

3.1.3 Mapping Exposures

Box 3-1: Mapping Equity Positions through Beta: An Example

3.1.4 VaR for a Portfolio

Box 3-2: Calculating VaR for a Three-Stock Portfolio

Box 3-3: Why Mapping Is Important

3.1.5 Estimating Volatility and Correlation: Simple Moving Averages

3.1.6 Estimating Volatility and Correlation: Exponentially Weighted Moving Averages and GARCH Models

3.1.7 VaR Estimates and the Relevance of the Time Horizon

3.1.8 Implied Volatilities and Correlations

Box 3-4: Deriving Implied Volatility from Option Prices

3.2 Simulation Approaches: Historical Simulation and Monte Carlo Simulation

3.2.1 Historical Simulation

3.2.2 Hybrid Approach

3.2.3 Monte Carlo Simulations

3.2.4 Filtered Historical Simulations

3.3 Value at Risk for Option Positions

3.3.1 Problems in Option VaR Measurement

3.3.2 Potential Solutions for Option VaR Measurement

3.4 Extreme-Value Theory and Copulas

3.4.1 Extreme-Value Theory

3.4.2 Copulas

3.5 Expected Shortfall and the Problem of VaR Nonsubadditivity

3.6 Back-Testing Market Risk Models

3.6.1 Which Series Should Be Considered? Actual versus Theoretical Portfolio Returns

3.6.2 Back-Testing VaR Forecasts: Unconditional Accuracy and Independence

3.7 Internal VaR Models and Market Risk Capital Requirements

3.8 Stress Testing

3.9 Summary

3.10 Further Reading

Chapter 4: Credit Risk

4.1 Defining Credit Risk: Expected and Unexpected Losses

4.2 Agency Ratings

4.2.1 External Rating Assignment

4.2.2 Transition Matrixes and Cumulative and Marginal Default Probabilities
CONTENTS

4.3 Quantitative Techniques for Stand-Alone Credit Risk Evaluation: Moody’s/KMV EDF and External Scoring Systems .............................. 74

4.3.1 Merton’s (1974) Model and Moody’s/KMV Expected Default Frequency .................................................. 74

Box 4-1: Deriving the Theoretical Credit Spread for Risky Bonds in the Merton (1974) Model .................. 75

4.3.2 Credit-Scoring Systems .................................................. 78

4.4 Capital Requirements for Credit Risk under Basel II .......................................................... 80

4.4.1 Standardized Approach ........................................... 81

4.4.2 Foundation and Advanced Internal Rating–Based Approaches ...................... 82

4.5 Internal Ratings .............................................................. 82

4.5.1 Internal Rating Assignment Process ........................................ 83

4.5.2 Rating Quantification and the Definition of Default ...... 87

4.5.3 Point-in-Time versus Through-the-Cycle Internal Ratings ........ 89

4.6 Estimating Loss Given Default ........................................................................ 89

4.7 Estimating Exposure at Default .................................................................. 92

4.8 Interaction between Basel II and International Accounting Standards .... 93

4.9 Alternative Approaches to Modeling Credit Portfolio Risk ........................................ 96

4.9.1 CreditMetrics™ ......................................................... 97

4.9.2 Moody’s/KMV PortfolioManager™ .................................. 101

4.9.3 CreditPortfolio View .................................................. 102

4.9.4 CreditRisk+ ............................................................ 105

4.10 Comparison of Main Credit Portfolio Models .................................................. 108

Box 4-2: Industry Practices Concerning Credit Portfolio Models ................................. 110

Box 4-3: How Close Are Results Obtained from Credit Risk Portfolio Models? .............. 111

4.11 Summary ................................................................. 112

4.12 Further Reading ................................................................ 113

Chapter 5: Operational Risk and Business Risk ......................... 115

5.1 Capital Requirements for Operational Risk Measurement under Basel II ................................................ 116

5.1.1 Basic Indicator Approach (BIA) ........................................ 116

5.1.2 Standardized Approach (SA) ........................................ 116

5.1.3 Advanced Measurement Approach (AMA) .......................... 117

5.2 Objectives of Operational Risk Management ............................................. 118

5.3 Quantifying Operational Risk: Building the Data Sources ................................. 119

5.3.1 Operational Risk Mapping and the Identification of Key Risk Indicators ........................................ 120

5.3.2 Building an Internal Loss Database ..................................... 121

5.3.3 External Loss Databases ................................................ 124

5.3.4 Scenario Analysis ...................................................... 125

5.4 Quantifying Operational Risk: From Loss Frequency and Severity to Operational Risk Capital ...................................................................... 125

5.4.1 Modeling Severity Based on Internal Loss Data .......................... 126
CONTENTS

5.4.2 Integrating Internal Severity Data with External Data and Scenario Analysis ............................................. 127
5.4.3 Estimating Operational Loss Frequency ................................. 128
5.4.4 Estimating Correlation or Dependence among Operational Events .......................................................... 129
5.4.5 Deriving Operational Risk Capital Estimates through Simulation ............................................. 130
5.4.6 Is Risk Measurement the Final Step? ......................................................... 130
5.5 Case Study: U.S. Bank Progress on Measuring Operational Risk, by Patrick de Fontnouvelle and Victoria Garrity (Supervision, Regulation, and Credit Department, Federal Reserve Bank of Boston) ..... 131
5.6 The Role of Measures of Business Risk and Earnings at Risk .................. 134
5.7 Measuring Business Risk in Practice: Defining a Measure of Earnings at Risk .................................................. 137
5.8 From Earnings at Risk to Capital at Risk .................................................. 139
5.9 Summary .................................................. 142
5.10 Further Reading .................................................. 143

Chapter 6: Risk Capital Aggregation .................................................. 145

6.1 The Need for Harmonization: Time Horizon, Confidence Level, and the Notion of Capital ............................................. 146
6.2 Risk Aggregation Techniques .................................................. 148
6.2.1 Choosing the Components to Be Aggregated: Business Units versus Risk Types .................................................. 149
6.2.2 Alternative Risk Aggregation Methodologies .................................................. 149
6.3 Estimating Parameters for Risk Aggregation .................................................. 153

Box 6-1: Some Examples of Linear Correlation Coefficient Estimates from Existing Studies and Their Implication on Aggregated Risk Capital .................................................. 158

6.4 Case Study: Capital Aggregation within Fortis (by Luc Henrard, Chief Risk Officer, Fortis, and Ruben Olieslagers, Director, Central Risk Management, Fortis) .................................................. 159
6.5 A Synthetic Comparison of Alternative Risk Aggregation Techniques .................. 164
6.6 Summary .................................................. 166
6.7 Further Reading .................................................. 167

Chapter 7: Value at Risk and Risk Control for Market and Credit Risk .................................................. 169

7.1 Defining VaR-Based Limits for Market Risk: Identifying Risk-Taking Centers .................................................. 171

Box 7-1: Clarifying VaR Measurement Limitations: Deutsche Bank’s Example .................................................. 172

7.2 Managing VaR Limits for Market Risk: The Links between Daily VaR and Annual Potential Losses .................................................. 173
CONTENTS

7.2.1 Translating Actual Daily VaR Values into an Equivalent Ex Post Yearly VaR .................................................. 174

Box 7-2: Daily VaR Fluctuations and Their Implications for Ex Post Yearly VaR: An Example Based on Real Data .............. 176

7.2.2 Translating Yearly Ex Ante Acceptable Loss into an Equivalent Daily VaR .......................................................... 177

7.2.3 The Case of Variable VaR Limits and the Role of Cumulated Losses ................................................................. 178

7.3 Managing VaR-Based Trading Limits ................................................................. 179

7.4 Identifying Risk Contributions and Internal Hedges: VaRD, Component VaR, and Incremental VaR ................................... 182

Box 7-3: Variant for the Calculation of Component VaR ........................................................................................................ 188

7.5 Managing Risk and Pricing Limits for Credit Risk ......................................................... 189

7.5.1 Setting Loan Autonomy Limits: From Notional Size to Expected Loss ................................................................. 189

7.5.2 Setting Loan-Pricing Limits ....................................................................................................................... 190

7.5.3 Case 1: Large Borrower Applying for a Loan from an Investment Bank ........................................................................ 191

7.5.4 Case 2: SME Applying for a Loan from a Smaller, Retail-Oriented Bank ......................................................................... 192

7.6 Summary .................................................................................................................. 193

7.7 Further Reading ........................................................................................................ 194

Chapter 8: Risk-Adjusted Performance Measurement ................................................. 195

8.1 Business Areas, Business Units, and the Double Role of Risk-Adjusted Performance Measures .................................................. 196

8.2 Checking the Measure of Profit .............................................................................. 196

8.2.1 Transfer Prices .................................................................................................................. 197

8.2.2 Cost Attribution and Its Impact on RAP Measures ........................................................................................................ 198

8.3 Capital Investment versus Capital Allocation .......................................................... 199

8.4 Choosing the Measure of Capital at Risk: Allocated Capital versus Utilized Capital ........................................................................ 199

8.5 Choosing the Measure of Capital at Risk: Diversified Capital versus Undiversified Capital .................................................. 202

8.5.1 Comparison of Alternative Diversified CaR Measures ........................................................................................................ 202

8.5.2 Criteria for Choosing between Diversified and Undiversified CaR .................................................................................... 205

8.6 Choosing the Risk-Adjusted Performance Measure: EVA vs. RAROC ................................................................................. 207

8.7 Variants and Potential Extensions ............................................................................ 209

8.7.1 Differentiated Target Returns ...................................................................................... 209

8.7.2 Alternative RAP Measures .......................................................................................... 209

8.7.3 Expected Shortfall and Performance Measurement ........................................................................................................ 210

8.7.4 Operational Risk, Business Risk, and Performance Measurement ........................................................................................................ 210

8.8 Risk-Adjusted Performances and Managers’ Performance Evaluation ................................................................. 212

8.9 Summary .................................................................................................................. 215

8.10 Further Reading ........................................................................................................ 216
Preface

About the Book

Risk management is at the heart of bank management and is one of the most fascinating fields for academic research. Developments in risk measurement techniques, risk management practices, and regulation have reinforced each other to increase the attention of a wider and wider public to a number of topics that in the mid-1990s would have reached the attention of only a few specialists. Understanding bank risk management is now recognized as a key requisite for most (if not all) of the managers working at a financial institution. The purpose of this book is to present risk measurement methodologies and to discuss their implications and consequences on the bank’s decision-making process.

In fact, it would be limited to analyze and study risk management problems by focusing on risk measurement methodology issues only. While measurement methodologies are clearly very important and research in this field is crucial, a well-designed risk management process is also based on a clear and effective definition of risk control, performance evaluation, and capital allocation processes. The science of risk measurement and the art of management are both required, and this makes risk management an attractive topic not only for finance specialists but for human resource and organization specialists and researchers as well.

In my personal experience as a teacher in executive risk management seminars designed for different target audiences, as a researcher, and sometimes as a consultant, I have noted how important it is to consider carefully not only the technical soundness of risk measurement methodologies, but also the consequences their application may have on human behavior. Measuring a trader’s risk capital and including this number in his or her performance evaluation and compensation scheme sounds fine, but unintended consequences are always possible. Bankers Trust was among the pioneers in the development of risk management techniques and processes, but many think that lawsuits with some large customers in the mid-1990s and the subsequent reputational problems were mainly the result of a compensation scheme making the traders focus only on short-term profit, even if they were correctly measured in risk-adjusted terms.
The intent to link risk measurement methodologies with their impact on internal processes also explains the structure of this book. The first two chapters introduce the concept of value at risk and discuss the different types of capital that bank capital management has to consider (also discussing the main impacts of the Basel II Accord and the new IAS/IFRS accounting principles). The book then goes on to cover risk measurement. Besides dealing with “classic” market, credit, and operational risks (Chapters 3 to 5), it also discusses two crucial topics that have so far received less attention than they should: (1) how to measure business risk (Chapter 5) and (2) how to estimate overall economic capital through the aggregation of different risks (Chapter 6). The remainder of the book analyzes how a bank can structure risk control and risk-adjusted performance measurement processes, with the final chapter discussing the links between the capital allocation process and the budgeting and planning process.

Addressing all these issues while trying to keep the book as unifying as possible is not an easy task (even though suggestions for selected further reading are provided at the end of each chapter). Any reader can judge whether or not I have been able to find the right balance. In any case, I hope this book may give even nonspecialists a clear picture of key methodologies, their critical assumptions, and their implications for bank management while providing experienced readers with a useful critical discussion of a number of crucial topics that are still in their early stages of development, such as business risk, risk aggregation, and the definition of target returns for individual business units within the capital allocation process.

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The people I am indebted to for this book are almost uncountable. On one hand there are all the people in academia whom I have had the chance to listen to or to discuss or work with since the early 1990s and who contributed to the development of my interest in all the different aspects of risk management. On the other hand, this book is also the result of a number of meetings, interviews, and discussions with many talented risk managers, regulators, and consultants while facing real-world problems.

Though the people I should thank are many, the first one, and not only in order of appearance, is Andrea Sironi, who first introduced me to value at risk in 1992 and who has since been fundamental in developing my research interest in this field. All the projects and executive seminars in which we have worked together have been an opportunity for endless, passionate discussions on risk management problems, some of which are reflected in this book. He has always been not only a friend, but also the most wonderful colleague one could hope to work with.

Also of great importance to me have been the research environment at Bocconi University and the many great colleagues there and its proximity to the real world of financial institutions. I would like to mention in particular Roberto Ruozzi, who invited me to join Bocconi; Paolo Mottura, whose advice and example have always been precious; Luca Erzegovesi, who first introduced me to quantitative finance and who, together with Roberto Ruozzi, Pier Luigi Fabrizi, and Giancarlo Forestieri, patiently supervised most of my first publications. For this book, I am especially grateful to Andrea Resti for a number of interesting discussions and for the comments he gave me on some specific parts of the book. Very useful comments on individual chapters also came from Leo Corvino and Mascia Bedendo, from Bocconi, and Mauro Senati and Maria Egle Romano, from Banca Intesa and UniCredit, respectively. I would like to thank them all, together with Giacomo
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I am deeply indebted to many different people at New York University’s Salomon Center for the period I spent there as a visiting scholar in 1994–95, when I started researching (and interviewing people) in the risk management field. The frequent opportunity to listen to and have discussions with people such as Ed Altman, Tony Saunders, Roy Smith, and Ingo Walter (just to name the people most relevant for this book) has been invaluable, as for any young researcher wishing to understand risk management and decision-making processes in large financial institutions. I am particularly grateful to Ed Altman for the kind advice he has given me a number of times since then. I must also thank the many different top managers I interviewed during that period from two of the largest New York–based international banks and the numerous risk managers from European banks I interviewed or held discussions with more recently. While almost all asked for anonymity (about which I will keep my promise), they know how important they have been for this book. An exception can clearly be made for two groups of people. The first group includes Elio Berti from UniCredit, Luc Henrard and Ruben Olieslagers from Fortis Group, and Patrick de Fontnouvelle and Victoria Garrity from the Federal Reserve Bank of Boston, who were so incredibly kind to contribute to this book by directly writing some sections, making their experience and competence available directly to the reader. It is hard for me to express completely how much I appreciate their great kindness and support. The second group includes a number of Italian bank managers, risk managers, and supervisors whom I have had the chance to meet repeatedly at conferences of the Association of Italian Financial Risk Managers (AIFIRM) or of the Fondo Interbancario di Tutela dei Depositi (FITD) or even work with in one of the two research risk management projects sponsored by the FITD that I coordinated. It is impossible to list of all them (and I beg their pardon for that), but I must mention at least Fabio Arnaboldi and his team, Pierfrancesco Cocco, Domenico Gammaldi, Renato Maino, Fernando Metelli, Carlo Palego, Sandro Panizza, and Sergio Sorrentino.

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To Silvia,
with all my love
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