BUTTERWORTH-HEINEMANN FINANCE

managing operational risk in financial markets

Amanat Hussain

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Managing Operational Risk in Financial Markets

This book is dedicated to my father Haji Mir Mohammad Hussain.

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BUTTERWORTH HEINEMANN

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Contents

ACKNOWLEDGEMENTS xi

1. INTRODUCTION 1

2. FINANCIAL LOSSES OVER THE PAST FEW YEARS 7
Collapse of Barings 11

3. REQUIREMENT FOR RISK MANAGEMENT 17
Derivatives and risk management 18
Hedging existing positions 19
Reduce borrowing costs 19
Investing to generate income 19
Leverage, risks and volatility 20

4. INTRODUCTION TO DERIVATIVES 22
Development of the derivatives industry 22
Understanding derivatives products 28
Futures contracts 30
Options contracts 32
Forward contracts 34
Forward rate agreements (FRAs) 35
Swaps 37
Product comparisons 39
Understanding the market structures 42
Impact of technology 44
Structure of the exchanges 45
Role of the clearing house 46
Clearing members and their clients 48
OTC derivatives clearing and settlement process 49
Transaction processing and settlement for OTC instruments 50
Trade execution 50

Data capture 51
Confirmation processing 51
Management information and internal controls 52
Settlement 53
Collateralization 53
Central clearing for OTC derivatives 53

5. OPERATIONAL RISK SURVEY CARRIED OUT FOR THIS BOOK 56
Results of the market survey 57
Operational risk parameters identified during the survey 58
Organizational structure identified during the survey 59
Operations structure 61
1997 Operational Risk Management Survey 70
Operations cultural model 71

6. RISK SPECTRUM 74
No unique risks to users of derivatives 74
Risk categories 76
Market risk 77
Credit risk 78
Operational risk 78

7. MANAGING OPERATIONAL RISK 91
Introduction 91
Why manage operational risk? 95
Recurring operating losses 95
Growing complexity of the trading environment 95
Client demand 97
Need for integrated risk management 98
Measuring operational risk 98
G-30 and Basle Committee reports on risk management 99
Risk management framework 103
The role of senior management 105
Risk management culture 110
Enterprise-wide co-ordination 116

Managing organizational paradoxes 117
The paradox of globalization 117
The paradox of control 120
The paradox of work flexibility 121
Toward a more flexible organization 122

8. BUSINESS PROCESS REENGINEERING 125
Benefits of BPR 127
Customer service 127
Cost management 127
Staff empowerment 128
BPR processes 129
Case study – ABC Futures 131
Phase 1 – Definition 133
Phase 2 – Implementation 139
Phase 3 – Measurement 141

9. THE LEARNING ORGANIZATION 143
Why become a learning organization? 144
Creating a learning organization 146
Barriers to learning 150
Knowledge management 151
The role of technology in knowledge management 155

10. CHANGE MANAGEMENT 157
Introduction 157
Resistance to change 159
Force field analysis 161
Stage 1 – Creating a vision 162
Stage 2 – Identifying the force for and against change 162
Stage 3 – Identifying the actions 162
Developing commitment 163
Preparing for change 164
Implementing change 164
Post-implementation issues 165

Framework for managing major change 165

11. NEW ROLE FOR OPERATIONS 168

12. ENTERPRISE-WIDE RISK MANAGEMENT 172
The role of technology 173
Enterprise-wide risk information systems 175
Component or product layer 179
Interface layer 181
Data integration engine 182
Data warehouse layer 182
Client interface layer 182
Challenges to enterprise-wide risk management 183
Build or buy? 186
In-house development 188
Deciding to buy a system 189
Outsourcing the development to an external supplier 191

13. PROJECT MANAGEMENT FOR AN ENTERPRISE-WIDE RISK MANAGEMENT SYSTEM 195
Technology risk 196
Scheduling risk 196
Financial risk 197
Supplier risk 197
Infrastructure risk 197
Business control and security risk 198
Project management framework 198
Project manager 199
Risk assessment 200
Technical issues 201
Project schedules 202
Progress monitoring and control 203
External suppliers and influences 205
Implementation and operational issues 206

14. OPERATIONAL RISK MODEL 208
Operational risk management cycles 210
Risk environment 212
Risk management and control 214

15. CONCLUSIONS 220

GLOSSARY 224

APPENDIX 1. EXCHANGE CODES 247
APPENDIX 2. OPERATIONAL RISK MANAGEMENT 248

BIBLIOGRAPHY 259

INDEX 265

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1 Introduction

The financial markets industry has undergone tremendous changes over the past few years. The main drivers for change have been, and continue to be, globalization, advances in information technology and telecommunication. With the current trends in mergers and acquisitions creating larger and larger institutions and the developments in technology, the pace of change within the industry is accelerating. The resulting competitive and challenging environment makes it imperative that financial institutions understand the risk that they are facing and have effective controls and procedures, systems and skills in place to deal with them.

The developments in technology provide financial institutions the ability to analyse and react to market information much more quickly. The continued development in data management and data analysis techniques and capabilities along with changes in communication technology mean that market data and rate movements are available to all institutions almost instantaneously across the globe. The ability to receive, assimilate, analyse and react to this flow of information will provide the key competitive advantage to an institution.

While market and credit remain the key focus of risk management, the importance of operational risk in this volatile, high volume, and high technology environment is also enhanced. Organizational structure and culture along with technical infrastructure and staff commitment and skills play an increasingly important role. In this environment, the presence of a strong and an effective risk management infrastructure is of paramount importance to a financial institution. This not only requires the development of robust models for monitoring market and credit

risk but also new approaches for understanding and managing operational risk. The nature of operational risk is that it does not easily lend itself to quantitative measurements and analysis. Therefore, in developing risk management infrastructure, institutions need to adopt a pragmatic approach that utilizes the best available tools and technology as well as common sense.

The purpose of this book is to outline what is important in terms of risk management and to focus on operational risk as a key activity in managing risk on an enterprise-wide basis. While risk management has always been an integral part of financial activity, the 1990s has seen risk management establish itself as a key function within banks and other financial institutions. With greater emphasis on ensuring that money is not lost through adverse market conditions, counterparty failure or inappropriate controls, systems or people, risk management has become a discipline in its own right within financial markets.

The current era of risk management is synonymous with the development of the derivatives markets. Two key events in the early 1970s provided impetus for the increased use of derivatives. The first was the collapse of the Bretton Woods agreement in 1973 that led to a system of more or less freely floating exchange rates among many of the major trading countries. The subsequent requirement for the measurement and management of foreign exchange risk led to the development and increased use of derivatives products. The second key development in 1973 was the publication of the ideas underlying the Black–Scholes formula that provided the conceptual framework and basic tools for risk measurement and management.

The introduction of financial derivatives products on the Chicago Board of Trade (CBOT) and Chicago Mercantile Exchange (CME) during the 1970s and early 1980s and the introduction of currency and interest rate swaps in 1981 and 1982 paved the way for the explosion in the use of derivatives products for portfolio