

Risk Management and Financial Institutions. + Web Site. 3rd Edition. Wiley Finance

Description: The essential guide to managing financial institution risk, fully revised and updated

The dangers inherent in the financial system make understanding risk management essential for anyone working in, or planning to work in, the financial sector. A practical resource for financial professionals and students alike, Risk Management and Financial Institutions, Third Edition explains all aspects of financial risk as well as the way financial institutions are regulated, to help readers better understand financial markets and potential dangers.

Fully revised and updated, this new edition features coverage of Basel 2.5, Basel III and Dodd-Frank as well as expanded sections on counterparty credit risk, central clearing, and collateralization. In addition, end-of-chapter practice problems and a website featuring supplemental materials designed to provide a more comprehensive learning experience make this the ultimate learning resource. Written by acclaimed risk management expert, John Hull, Risk Management and Financial Institutions is the only book you need to understand—and respond to—financial risk.

- The new edition of the financial risk management bestseller
- Describes the activities of different types of financial institutions, explains how they are regulated, and covers market risk, credit risk, operational risk, liquidity risk, and model risk
- Features new coverage of Basel III, Dodd-Frank, counterparty credit risk, central clearing, collateralization, and much more
- Provides readers with access to a supplementary website offering software and unique learning aids
- Author John Hull is one of the most respected authorities on financial risk management

A timely update to the definitive resource on risk in the financial system, Risk Management and Financial Institutions + Web Site, Third Edition is an indispensable resource from internationally renowned expert John Hull.

Contents:	Business Snapshots xvii
	Preface xix
	CHAPTER 1 Introduction 1
	1.1 Risk vs. Return for Investors 2
	1.2 The Efficient Frontier 5
	1.3 The Capital Asset Pricing Model 8
	1.4 Arbitrage Pricing Theory 13
	1.5 Risk vs. Return for Companies 13
	1.6 Risk Management by Financial Institutions 16
	1.7 Credit Ratings 18
	Summary 18
	Further Reading 19
	Practice Questions and Problems 19

Further Questions 20

CHAPTER 2 Banks 21

2.1 Commercial Banking 22

2.2 The Capital Requirements of a Small Commercial Bank 24

2.3 Deposit Insurance 26

2.4 Investment Banking 27

2.5 Securities Trading 32

2.6 Potential Conflicts of Interest in Banking 33

2.7 Today's Large Banks 34

2.8 The Risks Facing Banks 37

Summary 38

Further Reading 38

Practice Questions and Problems 38

Further Questions 39

CHAPTER 3 Insurance Companies and Pension Plans 41

3.1 Life Insurance 41

3.2 Annuity Contracts 45

3.3 Mortality Tables 46

3.4 Longevity and Mortality Risk 50

3.5 Property-Casualty Insurance 51

3.6 Health Insurance 53

3.7 Moral Hazard and Adverse Selection 55

3.8 Reinsurance 56

3.9 Capital Requirements 56

3.10 The Risks Facing Insurance Companies 58

3.11 Regulation 58

3.12 Pension Plans 59

Summary 62

Further Reading 64

Practice Questions and Problems 64

Further Questions 65

CHAPTER 4 Mutual Funds and Hedge Funds 67

4.1 Mutual Funds	67
4.2 Hedge Funds	74
4.3 Hedge Fund Strategies	79
4.4 Hedge Fund Performance	83
Summary	84
Further Reading	85
Practice Questions and Problems	85
Further Questions	86
CHAPTER 5 Trading in Financial Markets	89
5.1 The Markets	89
5.2 Long and Short Positions in Assets	90
5.3 Derivatives Markets	92
5.4 Plain Vanilla Derivatives	93
5.5 Clearing Houses	103
5.6 Margin	104
5.7 Non-Traditional Derivatives	107
5.8 Exotic Options and Structured Products	111
5.9 Risk Management Challenges	114
Summary	115
Further Reading	115
Practice Questions and Problems	116
Further Questions	118
CHAPTER 6 The Credit Crisis of 2007	121
6.1 The U.S. Housing Market	121
6.2 Securitization	124
6.3 The Crisis	131
6.4 What Went Wrong?	131
6.5 Lessons from the Crisis	133
Summary	134
Further Reading	135
Practice Questions and Problems	136

Further Questions	136
CHAPTER 7 How Traders Manage Their Risks	137
7.1 Delta	137
7.2 Gamma	144
7.3 Vega	146
7.4 Theta	148
7.5 Rho	149
7.6 Calculating Greek Letters	150
7.7 Taylor Series Expansions	151
7.8 The Realities of Hedging	152
7.9 Hedging Exotic Options	153
7.10 Scenario Analysis	154
Summary	156
Further Reading	156
Practice Questions and Problems	156
Further Questions	157
CHAPTER 8 Interest Rate Risk	159
8.1 The Management of Net Interest Income	159
8.2 LIBOR and Swap Rates	162
8.3 Duration	164
8.4 Convexity	168
8.5 Generalization	169
8.6 Nonparallel Yield Curve Shifts	172
8.7 Interest Rate Deltas in Practice	174
8.8 Principal Components Analysis	176
8.9 Gamma and Vega	179
Summary	179
Further Reading	180
Practice Questions and Problems	181
Further Questions	181
CHAPTER 9 Value at Risk	183
9.1 Definition of VaR	183

9.2 Examples of the Calculation of VaR	185
9.3 VaR vs. Expected Shortfall	186
9.4 VaR and Capital	188
9.5 Coherent Risk Measures	190
9.6 Choice of Parameters for VaR	191
9.7 Marginal VaR, Incremental VaR, and Component VaR	195
9.8 Euler's Theorem	196
9.9 Aggregating VaRs	197
9.10 Back-Testing	197
Summary	200
Further Reading	201
Practice Questions and Problems	201
Further Questions	202
CHAPTER 10 Volatility	205
10.1 Definition of Volatility	205
10.2 Implied Volatilities	208
10.3 Are Daily Percentage Changes in Financial Variables Normal?	209
10.4 The Power Law	211
10.5 Monitoring Daily Volatility	213
10.6 The Exponentially Weighted Moving Average Model	216
10.7 The GARCH(1,1) Model	218
10.8 Choosing Between the Models	220
10.9 Maximum Likelihood Methods	220
10.10 Using GARCH(1,1) to Forecast Future Volatility	225
Summary	229
Further Reading	229
Practice Questions and Problems	230
Further Questions	231
CHAPTER 11 Correlations and Copulas	233
11.1 Definition of Correlation	233

11.2 Monitoring Correlation	235
11.3 Multivariate Normal Distributions	238
11.4 Copulas	240
11.5 Application to Loan Portfolios: Vasicek's Model	246
Summary	252
Further Reading	253
Practice Questions and Problems	253
Further Questions	254
CHAPTER 12 Basel I, Basel II, and Solvency II	257
12.1 The Reasons for Regulating Banks	257
12.2 Bank Regulation Pre-1988	258
12.3 The 1988 BIS Accord	259
12.4 The G-30 Policy Recommendations	262
12.5 Netting	263
12.6 The 1996 Amendment	265
12.7 Basel II	268
12.8 Credit Risk Capital Under Basel II	269
12.9 Operational Risk Capital Under Basel II	277
12.10 Pillar 2: Supervisory Review	278
12.11 Pillar 3: Market Discipline	278
12.12 Solvency II	279
Summary	280
Further Reading	281
Practice Questions and Problems	281
Further Questions	283
CHAPTER 13 Basel 2.5, Basel III, and Dodd–Frank	285
13.1 Basel 2.5	285
13.2 Basel III	289
13.3 Contingent Convertible Bonds	295
13.4 Dodd–Frank Act	296
13.5 Legislation in Other Countries	298
Summary	299

Further Reading 300

Practice Questions and Problems 300

Further Questions 301

CHAPTER 14 Market Risk VaR: The Historical Simulation Approach 303

14.1 The Methodology 303

14.2 Accuracy 308

14.3 Extensions 309

14.4 Computational Issues 313

14.5 Extreme Value Theory 314

14.6 Applications of EVT 317

Summary 319

Further Reading 320

Practice Questions and Problems 320

Further Questions 321

CHAPTER 15 Market Risk VaR: The Model-Building Approach 323

15.1 The Basic Methodology 323

15.2 Generalization 326

15.3 Correlation and Covariance Matrices 327

15.4 Handling Interest Rates 330

15.5 Applications of the Linear Model 334

15.6 Linear Model and Options 335

15.7 Quadratic Model 338

15.8 Monte Carlo Simulation 340

15.9 Non-Normal Assumptions 341

15.10 Model-Building vs. Historical Simulation 342

Summary 343

Further Reading 343

Practice Questions and Problems 343

Further Questions 345

CHAPTER 16 Credit Risk: Estimating Default Probabilities 347

16.1 Credit Ratings 347

16.2 Historical Default Probabilities	349
16.3 Recovery Rates	351
16.4 Credit Default Swaps	352
16.5 Credit Spreads	357
16.6 Estimating Default Probabilities from Credit Spreads	360
16.7 Comparison of Default Probability Estimates	362
16.8 Using Equity Prices to Estimate Default Probabilities	367
Summary	370
Further Reading	371
Practice Questions and Problems	371
Further Questions	373
CHAPTER 17 Counterparty Credit Risk in Derivatives	375
17.1 Credit Exposure on Derivatives	375
17.2 Bilateral Clearing	376
17.3 Central Clearing	380
17.4 CVA	382
17.5 The Impact of a New Transaction	385
17.6 CVA Risk	387
17.7 Wrong Way Risk	388
17.8 DVA	389
17.9 Some Simple Examples	389
Summary	394
Further Reading	395
Practice Questions and Problems	395
Further Questions	396
CHAPTER 18 Credit Value at Risk	399
18.1 Ratings Transition Matrices	400
18.2 Vasicek's Model	402
18.3 Credit Risk Plus	403
18.4 CreditMetrics	405
18.5 Credit VaR in the Trading Book	406
Summary	410

Further Reading 410

Practice Questions and Problems 411

Further Questions 411

CHAPTER 19 Scenario Analysis and Stress Testing 413

19.1 Generating the Scenarios 413

19.2 Regulation 419

19.3 What to Do with the Results 423

Summary 426

Further Reading 426

Practice Questions and Problems 427

Further Questions 428

CHAPTER 20 Operational Risk 429

20.1 What is Operational Risk? 430

20.2 Determination of Regulatory Capital 431

20.3 Categorization of Operational Risks 433

20.4 Loss Severity and Loss Frequency 434

20.5 Implementation of AMA 435

20.6 Proactive Approaches 439

20.7 Allocation of Operational Risk Capital 440

20.8 Use of Power Law 441

20.9 Insurance 442

20.10 Sarbanes-Oxley 443

Summary 444

Further Reading 445

Practice Questions and Problems 445

Further Questions 446

CHAPTER 21 Liquidity Risk 447

21.1 Liquidity Trading Risk 447

21.2 Liquidity Funding Risk 454

21.3 Liquidity Black Holes 462

Summary 468

Further Reading 469

Practice Questions and Problems 470

Further Questions 470

CHAPTER 22 Model Risk 473

22.1 Marking to Market 473

22.2 Models for Linear Products 475

22.3 Physics vs. Finance 476

22.4 How Models are Used for Pricing Standard Products 478

22.5 Hedging 484

22.6 Models for Nonstandard Products 485

22.7 Dangers in Model Building 486

22.8 Detecting Model Problems 487

Summary 488

Further Reading 488

Practice Questions and Problems 489

Further Questions 489

CHAPTER 23 Economic Capital and RAROC 491

23.1 Definition of Economic Capital 491

23.2 Components of Economic Capital 493

23.3 Shapes of the Loss Distributions 495

23.4 Relative Importance of Risks 497

23.5 Aggregating Economic Capital 498

23.6 Allocation of Economic Capital 501

23.7 Deutsche Bank's Economic Capital 503

23.8 RAROC 503

Summary 505

Further Reading 506

Practice Questions and Problems 506

Further Questions 507

CHAPTER 24 Risk Management Mistakes to Avoid 509

24.1 Risk Limits 509

24.2 Managing the Trading Room 512

24.3 Liquidity Risk 514

24.4 Lessons for Nonfinancial Corporations 517

24.5 A Final Point 518

Further Reading 519

Appendix A Compounding Frequencies for Interest Rates 521

Appendix B Zero Rates, Forward Rates, and Zero-Coupon Yield Curves 525

Appendix C Valuing Forward and Futures Contracts 529

Appendix D Valuing Swaps 531

Appendix E Valuing European Options 533

Appendix F Valuing American Options 535

Appendix G Taylor Series Expansions 539

Appendix H Eigenvectors and Eigenvalues 543

Appendix I Principal Components Analysis 547

Appendix J Manipulation of Credit Transition Matrices 549

Appendix K Valuation of Credit Default Swaps 551

Appendix L Synthetic CDOs and Their Valuation 555

Answers to Questions and Problems 559

Glossary 595

DerivaGem Software 615

Table for $N(x)$ when $x = 0$ 621

Table for $N(x)$ when $x = 0$ 623

Index 625

Ordering: Order Online - <http://www.researchandmarkets.com/reports/2216158/>

Order by Fax - using the form below

Order by Post - print the order form below and send to

Research and Markets,
Guinness Centre,
Taylors Lane,
Dublin 8,
Ireland.

Fax Order Form

To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit

<http://www.researchandmarkets.com/contact/>

Order Information

Please verify that the product information is correct.

Product Name: Risk Management and Financial Institutions. + Web Site. 3rd Edition. Wiley Finance
Web Address: <http://www.researchandmarkets.com/reports/2216158/>
Office Code: SCPJAGY9

Product Format

Please select the product format and quantity you require:

Quantity
Hard Copy (Paper back): USD 105 + USD 32 Shipping/Handling

* Shipping/Handling is only charged once per order.

Contact Information

Please enter all the information below in **BLOCK CAPITALS**

Title: Mr Mrs Dr Miss Ms Prof

First Name: _____ Last Name: _____

Email Address: * _____

Job Title: _____

Organisation: _____

Address: _____

City: _____

Postal / Zip Code: _____

Country: _____

Phone Number: _____

Fax Number: _____

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)

Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

Pay by credit card:

American Express

Diners Club

Master Card

Visa

Cardholder's Name _____

Cardholder's Signature _____

Expiry Date _____ | _____

Card Number _____

CVW Number _____

Issue Date _____ | _____

(for Diners Club only)

Pay by check:

Please post the check, accompanied by this form, to:

Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

Pay by wire transfer:

Please transfer funds to:

Account number	833 130 83
Sort code	98-53-30
Swift code	ULSBIE2D
IBAN number	IE78ULSB98533083313083
Bank Address	Ulster Bank, 27-35 Main Street, Blackrock, Co. Dublin, Ireland.

If you have a Marketing Code please enter it below:

Marketing Code: _____

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at <http://www.researchandmarkets.com/info/terms.asp>

Please fax this form to:
(646) 607-1907 or (646) 964-6609 - From USA
+353-1-481-1716 or +353-1-653-1571 - From Rest of World