

Contents

1 Risk Measures in Asset Management	1
1.1 Introduction	1
1.2 Measuring Investment Returns	3
1.2.1 Notation	3
1.2.2 Basic Performance Measures	7
1.2.3 Random Variable and Expected Value	14
1.3 Traditional Risk and Risk-Adjusted Return Measures	16
1.3.1 Volatility	16
1.3.2 Tracking Error	31
1.3.3 Relationship of Tracking Error and Alpha	35
1.3.4 Covariance and Correlation	38
1.3.5 Beta	53
1.3.6 Bull and Bear Market Beta	58
1.3.7 Sharpe Ratio	63
1.3.8 Information Ratio	66
1.3.9 Treynor Ratio	69
1.4 Advanced Risk and Risk-Adjusted Return Measures	73
1.4.1 Maximum Absolute Drawdown	79
1.4.2 Maximum Relative Drawdown	83
1.4.3 Semi-deviation and Semi-variance	88
1.4.4 Shortfall Probability	90
1.4.5 Sortino Ratio	93
1.5 Portfolio Return and Volatility	95
1.6 Summary	97
References	97
2 Modern Portfolio Theory and Its Problems	101
2.1 Introduction	101
2.2 A Quick Review of Regression Analysis	102
2.2.1 Simple Linear Regression	103
2.2.2 Multi-Linear and Non-Linear Regression	110

2.3	The Capital Asset Pricing Model (CAPM)	112
2.3.1	Introduction	112
2.3.2	Assumptions	113
2.3.3	The Model	114
2.3.4	Empirical Tests	122
2.3.5	Evaluation of the CAPM	145
2.3.6	A Critical View of the CAPM Assumptions	155
2.4	The Fama–French Three-Factor Model	158
2.4.1	Introduction	158
2.4.2	The Model	158
2.4.3	Theoretical Explanations of the Fama–French Three-Factor Model	160
2.4.4	Empirical Tests	162
2.5	Summary	170
	References	170
3	Stock Market Anomalies	175
3.1	Introduction	175
3.2	Weekend Effect	176
3.2.1	Description	177
3.2.2	Evidence	177
3.2.3	Explanations	179
3.2.4	Persistence	180
3.2.5	Summary	181
3.3	January Effect	181
3.3.1	Description and Evidence	181
3.3.2	Explanations	182
3.3.3	Persistence	183
3.4	Turn-of-the-Month and Holiday Effect	183
3.4.1	Description	183
3.4.2	Evidence	184
3.4.3	Explanations	185
3.4.4	Persistence	185
3.5	S&P 500 Index Effect	185
3.5.1	Description	186
3.5.2	Evidence	187
3.5.3	Explanations	190
3.5.4	Persistence	193
3.5.5	Summary	194
3.6	Trading by Insiders	194
3.6.1	Description	195
3.6.2	Evidence and Insider Behavior	195
3.6.3	Information Effect	196
3.6.4	Stealth Trading Hypothesis	197
3.6.5	Newspaper and Mimicking	198
3.6.6	Persistence	199

3.7	Momentum of Industry Portfolios	200
3.7.1	Description	200
3.7.2	Evidence	201
3.7.3	Explanations	205
3.7.4	Persistence	210
3.8	Home Bias and International Investing	211
3.8.1	Description	212
3.8.2	Evidence of the Advantages of International Investing	212
3.8.3	Explanations	218
3.8.4	Summary	222
3.9	Value Line Enigma	223
3.9.1	Description of Value Line Ranking System Timeliness	223
3.9.2	Evidence of Outperformance	224
3.9.3	Possible Explanations for Abnormal Returns	227
3.9.4	Possible Explanations for Implementation Shortfall	230
3.9.5	Persistence	231
3.10	Expiry of IPO Lockups	232
3.10.1	Description	232
3.10.2	Evidence	234
3.10.3	Explanations	236
3.10.4	Persistence	238
3.11	Summary	239
	References	240
4	Stock Market Crashes	245
4.1	Introduction	245
4.2	What is a Crash?	246
4.3	Before a Crash: A Bubble	248
4.4	Characteristics of a Crash	251
4.5	Crashes with Regional Impact	260
4.5.1	Tulip Mania (1637)	260
4.5.2	South Sea Bubble (1720)	262
4.5.3	Railway Mania (1846)	264
4.5.4	Souk Al-Manakh (1982)	266
4.5.5	Dubai Real Estate Bubble (2009)	270
4.5.6	Greek Crisis (2010)	277
4.5.7	Flash Crash of May 6, 2010	285
4.5.8	Conclusion	291
4.6	International Crashes	291
4.6.1	The Great Wall Street Crash (1929)	292
4.6.2	The Asian Financial Crisis (1997)	295
4.6.3	The Russian Financial Crisis (1998)	304
4.6.4	Dotcom Bubble (2001)	311
4.6.5	Subprime Crisis (2007)	319
4.6.6	Conclusion	331

4.7	Forecasting a Bubble: A Case Study	332
4.7.1	How to Spot a Bubble?	332
4.7.2	China: A Stock Exchange and Real Estate Case	333
4.8	Summary	343
	References	344
5	Explaining Stock Market Crashes: A Behavioral Finance Approach	355
5.1	Introduction	355
5.2	What Is Behavioral Finance?	358
5.2.1	A Short Introduction to Behavioral Finance	359
5.2.2	Historical Overview	362
5.3	Behavioral Biases and Stock Market Crashes	372
5.3.1	Availability Bias	373
5.3.2	Representativeness Bias	376
5.3.3	Herding Bias	381
5.3.4	Overoptimism Bias	383
5.3.5	Overconfidence Bias	386
5.3.6	Anchoring Bias	392
5.3.7	Prospect Theory	398
5.4	The Positive Feedback Trading Theory	402
5.4.1	A Case Study	403
5.4.2	The Positive Feedback Trading Model	404
5.5	Summary	410
	References	411
6	Investor Risk Perceptions and Investments: Recent Developments	415
6.1	Introduction	415
6.2	A General Overview	417
6.2.1	Frequency of Financial Shock Events and the Awareness of Investors	417
6.2.2	Expectations of Tail Risk Events	420
6.2.3	Change Drivers in Risk Strategy	422
6.3	Germany and Austria	426
6.3.1	Institutional Asset Owners	429
6.3.2	Third Party Distribution	432
6.4	Switzerland	434
6.4.1	Institutional Asset Owners	434
6.4.2	Third Party Distribution	436
6.5	United Kingdom	436
6.5.1	Institutional Asset Owners	437
6.5.2	Third Party Distribution	439
6.6	Ireland	441
6.6.1	Institutional Asset Owners	441
6.6.2	Third Party Distribution	442

6.7	Italy	442
6.7.1	Institutional Asset Owners.....	442
6.7.2	Third Party Distribution	444
6.8	Nordic Region	444
6.8.1	Institutional Asset Owners.....	444
6.8.2	Third Party Distribution	446
6.9	Benelux Region	447
6.9.1	Institutional Asset Owners.....	448
6.9.2	Third Party Distribution	449
6.10	France	450
6.10.1	Institutional Asset Owners.....	450
6.10.2	Third Party Distribution	452
6.11	Middle East and North Africa.....	453
6.11.1	Institutional Asset Owners.....	453
6.11.2	Third Party Distribution	455
6.12	Central Banks	456
6.12.1	Before the Crisis	456
6.12.2	During the Crisis	457
6.12.3	The Years Directly After the Crisis	458
6.12.4	Early 2014.....	460
6.13	Summary	460
	References	462
About the Authors		463
Index		465