

CONTENTS

PREFACE	11
THE APPLICABILITY OF MERTON'S CREDIT RISK MODEL IN THE CZECH REPUBLIC by Martin Peška	19
1. Introduction	20
2. Accounting based measures	23
2.1 Beaver's financial ratios	23
2.2 Altman's Z-Score	24
2.3 Ohlson's O-Score	25
2.4 Z- and O- Scores with updated coefficients	25
2.5 Rankings	26
2.6 Problems of accounting-based models	27
3. Credit ratings	28
3.1 Public sources of credit ratings	28
3.2 The purpose of credit ratings	30
3.3 How the credit ratings originate	30
3.4 Advantages of ratings	31
3.5 Problems of ratings	31
4. Merton's model for individual firms	33
4.1 Assumptions	33
4.2 The option theory	34
4.3 Probability of default	37
4.4 The case with dividends	40
4.5 Step-by-step calculations of the probability of default	41
4.6 Other issues in the asset-based framework	46
4.6.1 The Greeks	46
4.6.2 Risk-neutral probability of default	47
4.6.3 The value of debt	48
4.6.4 Credit spreads	49
4.7 Advantages of the structural models	50
4.8 Disadvantages and problems	51
4.9 Model improvements	52

4.10	The Moody's KMV model	53
4.11	Empirical testing of the Merton model	56
4.11.1	Evidence speaking for the use of the Merton model	56
4.11.2	Evidence speaking against the use of the Merton model	57
5.	Merton model in the Czech Republic	58
5.1	Previous research	58
5.2	The probabilities of default for Czech companies	59
5.2.1	The company selection process	59
5.2.2	Computing the default probabilities	59
5.3	Comparison with other indicators of credit risk	60
5.4	Comments on the results	69
5.4.1	The ability of the measures to incorporate new information	69
5.4.2	Comparison with credit ratings	70
5.4.3	The quality of the accounting-based measures	71
5.4.4	The quality of the Merton model	71
6.	Model quality evaluation	74
6.1	Tests of model quality based on credit spreads	74
6.2	Tests of model quality based on large samples of bankrupt and non-bankrupt companies	75
6.3	Test of model quality based on credit ratings	75
6.3.1	Rating models	76
6.3.2	The ordered logit regression	76
6.4	The test of the Merton model in the Czech Republic	78
6.4.1	Rankings as the ground for model quality	78
6.4.2	The ordered logit regression for the Czech companies	79
6.4.3	Results of the ordered logit regression with all variables	80
6.4.4	Ordered logit regression without original Z-Score	81
7.	Conclusion	82
	Appendices	84
	References	91
	ATtribution Analysis, Performance and Risk Measurement by Vladimír Mrázek	97
1.	Portfolio managers' environment	98
1.1	The role of investor and manager	98
1.2	Performance measurement in general	100
1.3	The role of the ROR formula	100
1.4	Global Investment Performance Standards	102
1.5	Benchmark typology	103
1.6	Herding in financial markets	105
2.	Performance and risk measurement methods	108
2.1	Traditional methods	108
2.2	Econometric approach	112
2.3	Value at Risk usage	114
2.4	Dynamic trading approach	116
2.5	Simulation	116

2.6	Copulae	117
2.7	Certainty equivalent valuation	120
2.8	Investment opportunity sets	122
2.9	Orthant probabilities	125
3.	Principles of attribution analysis	130
3.1	Definitions, goals and features	130
3.2	General attribution analysis model	132
3.2.1	Decomposition	133
3.2.2	More components	134
3.3	Attribution typology	135
3.4	A particular approach	135
3.4.1	Accruals	136
3.4.2	Roll down	136
3.4.3	Yield curve changes	137
3.4.4	More benchmark components	145
3.4.5	Non benchmark instruments	148
3.4.6	Applicability	152
3.5	Complex approach	154
3.6	Selectivity and timing attribution technique	157
3.7	Top-down and bottom-up	159
3.8	Liability driven performance attribution	161
4.	Attribution analysis and risk management application	163
4.1	The euro portfolio and the benchmark in the CNB	163
4.1.1	The benchmark	163
4.1.2	The portfolio	165
4.2	Particular model application	167
4.2.1	Theoretical background and remarks	167
4.2.2	Model output	170
4.3	Complex model application	171
4.4	Attribution analysis and risk management in other institutions	172
4.4.1	Danmarks Nationalbank	173
4.4.2	Banco de España	175
5.	Summary	177
	Appendices	179
	References	182

A COMPARISON OF CAPITAL ADEQUACY CALCULATION METHODS FOR INTEREST RATE RISK by Jindra Klobásová 185

1.	Capital adequacy for market risk	186
2.	Calculation of capital adequacy requirement to interest rate risk	188
2.1	Standardized method	188
2.2	Value at Risk method	188
3.	An Application of the two major methods to sample portfolios	190
3.1	Capital requirement according to VaR as well as to standardized method	191

3.2 Change in capital requirement caused by using different sets of market parameters	194
4. Conclusion	196
Appendices	199
References	204
MERGERS AND ACQUISITIONS: VALUE AND RISK by Viktor Hanzlik	207
1. Introduction	208
2. Why do firms merge?	210
2.1 Mergers increasing shareholder value	210
2.1.1 Economies of scale	210
2.1.2 Complementary resources	211
2.1.3 Improving efficiency – the bargain theory of mergers	211
2.1.4 Mergers exploiting own stock overvaluation	212
2.1.5 Achieving market power	212
2.2 Mergers increasing the welfare of the decision makers	213
2.2.1 Accounting EPS improvements	213
2.2.2 The Eat-or-be-eaten theory	214
2.3 Fallacious rationales for mergers	214
2.3.1 Gaining sufficient size to be included in a major stock index	215
2.3.2 Diversification	215
2.3.3 Lower costs of financing	216
2.4 Costs of mergers	216
3. Methodology	218
3.1 Discounted cash flow valuation	218
3.2 Event study methodology	219
3.2.1 Evaluation of the event study methodology	223
3.2.2 Discounted cash flow vs. event studies	224
3.2.3 Other applications of the event study methodology	224
3.3 Methodologies used in the case studies	225
4. Review of large-sample studies	226
5. Case studies	229
5.1 Survey of published case studies	231
5.1.1 Cities Service Takeover	231
5.1.2 NCR Takeover	232
5.1.3 Volvo/Renault Proposed Merger	232
5.1.4 Cameron Industries Takeover	233
5.1.5 Summary and implications	233
5.2 Criteria for the selection of case studies	235
5.3 Data sources and availability	236
5.4 The SABMiller case study	237
5.4.1 General information about the companies	237
5.4.2 Rationale for the acquisition	239
5.4.3 The market model	240
5.4.4 Reaction of SAB shares to new information	242

5.4.5	Value created in the merger	245
5.4.6	Discussion	246
5.5	The Peoplesoft/Oracle Case Study	247
5.5.1	General information about the companies	247
5.5.2	Rationale for the acquisition	248
5.5.3	The market model	250
5.5.4	Reaction of shares to new information	251
5.5.5	Value created in the merger	257
5.5.6	Discussion	258
5.6	Implications for the large-sample studies	260
5.7	Implications for the Czech Republic	261

6.	Conclusion	262
----	------------	-----

	References	263
--	------------	-----

	THE CZECH FINANCIAL MARKETS AND THEIR ROLES IN CORPORATE FINANCE AND RISK MANAGEMENT by Zdenek Sid Blaha	267
--	--	-----

1.	Introduction	268
----	--------------	-----

2.	Investment, risk avoidance and financing problems of the firms: stylized facts	271
----	--	-----

3.	Data and summary statistics	272
----	-----------------------------	-----

4.	Examining the liquidity and financing constraints with investment equations	274
----	---	-----

5.	Conclusion	281
----	------------	-----

	References	282
--	------------	-----