

Marek Gruszczyński

Financial Microeconometrics

A Research Methodology in Corporate
Finance and Accounting

 Springer

Contents

1	Introduction	1
1.1	The Core of This Book: Microdata, Microeconometrics, Corporate Finance, and Accounting	1
	Microeconometrics	2
	Microdata	2
	Financial Microeconometrics	3
	Empirical Corporate Finance and Applied Accounting	3
	FM and ECF	4
	A Pragmatic Approach in Corporate Finance and Accounting	5
	FM and ECF in the Classroom	5
1.2	Corporate Finance, the Theory of Corporate Finance, and the Theory of Economics	5
1.3	The Theory of Corporate Finance: Tirole	8
1.4	Empirical Corporate Finance/Financial Microeconometrics:	
	Eckbo	10
	Eckbo	10
	Literature on ECF/FM	12
1.5	Sample Considerations	13
	Sources of Microdata for FM	13
	Sampling	13
	Analyzing the Entire Population	14
	Purposive Samples	15
1.6	ECF and FM: An Introductory Resume	15
	ECF = FM?	15
	Financial Econometrics and FM	16
	Examples of FM Models	16
	What Comes Next and What Has Been Omitted?	18
	References	19

2	Models of Financial Microeconometrics	23
2.1	The Types of Models Used in Empirical Corporate Finance and Accounting Research	23
	Types of Microdata	23
	Types of Models	24
	Modeling Equation	24
	Modeling Strategy	26
2.2	The Binomial Model: An Auditor Change After a Going-Concern-Modified Audit Opinion in Australia	28
	Outline	28
	The Logit Model	30
	Estimation	31
	The Marginal Effect and the Odds Ratio	32
	Statistical Validity	32
	Comment	34
2.3	Practical Use of the Binomial Logit: Prior Correction	34
2.4	Multinomial Ordered Variables Model: The Security Choice by US Companies	36
	More on Ordered Models	40
2.5	The Multinomial Unordered Variables Model: The Choice of Auditor by Chinese Companies	40
2.6	The Tobit Model: Why Foreign Outside Investors Provide Capital to a Country's Firms?	43
2.7	Multiple Regression: CEO Cash Compensation, Accounting Performance, and Compensation Committee Quality	46
	More on Multiple Regression and Statistical Signification	48
2.8	How to Prove Causality in Regression: The Advent of "Metrics"	49
2.9	Treatment Effects in Empirical Corporate Finance: Effects of French IPOs	52
	ATE and ATT	52
	Propensity Score Matching	54
	More on Treatment Effects Methodology	56
2.10	Self-Selection Modeling in Empirical Corporate Finance and Accounting Research: Dividend Decisions, Dividend Payments, and Corporate Social Responsibility	59
	Outline	59
	The Heckit Method	60
	Self-Selection, the Tobit, and Treatment Effects Modeling	61
2.11	Endogeneity	63
	Endogeneity in Examining Company Performance Versus CEO "Power"	63
	Reverse Causality and Unobserved Heterogeneity	64
	Instrumental Variables Approach	64

- The Surveys of Roberts and Whited (2013), Atanasov and Black (2016), and Gippel et al. (2015) 65
- 2.12 Difference-in-Differences Estimators and Regression Discontinuity Designs in Corporate Finance and Accounting Research 66
 - Difference-in-Differences Estimators 66
 - Regression Discontinuity Design 67
- 2.13 Good Practices 68
 - Modeling Strategy in Financial Microeconometrics 68
 - The Deficiencies of the Regression Model 69
 - Good Practices 69
- References 73
- 3 Modeling Financial Distress and Bankruptcy 77**
 - 3.1 Research on Corporate Financial Distress and Bankruptcy 77
 - Fifty Years of the Altman Z-Score 77
 - The Notion of Financial Distress 79
 - Does Financial Distress Lead to Bankruptcy? 80
 - Going-Concern Opinions 82
 - 3.2 Microeconomic Models of Bankruptcy and Financial Distress 82
 - Methods for Predicting Bankruptcy/Distress 82
 - The Choice of Predictors and the Drawbacks of Modeling 84
 - Comparing Financial Distress and Bankruptcy Models 86
 - Multinomial Models 89
 - Binomial Models 94
 - 3.3 Unbalanced Samples in Bankruptcy Prediction 97
 - Bankruptcy: A Rare Event 97
 - Unbalanced Samples 97
 - Sampling Bias, Weighting, WoE, and Resampling 99
 - Prior Correction in the Logit Model 100
 - 3.4 Models of Firm Exit 105
 - Two States of Exit: Binomial Models and LDA 105
 - Models for Many States of Exit 106
 - 3.5 Models of Firm Survival 109
 - Microeconomic Models of Firm Survival 109
 - Single Spell Duration Models 111
 - Competing Risks Models 112
 - References 116
- 4 Accounting Research and Disclosure Microeconometrics 121**
 - 4.1 Topics in Empirical Accounting Research and Sources of Knowledge 121
 - Introduction 121
 - Categories of Research Topics and Methods 122

	Australia	123
	USA	123
	Europe	125
	Probability Expressions in Accounting	126
4.2	Microeconomic Methodology in Accounting Research	127
	Surveys by Maddala (1991) and Ge and Whitmore (2010)	128
	Choice-Based and Matched Samples	128
	Sample Selection	129
	Financial Microeconometrics in Accounting: Two Examples	130
4.3	Financial Disclosure, Investor Protection, and Disclosure Indices	135
	Accounting Disclosure and Corporate Governance	135
	Investor Protection, Disclosure, and Legal Systems	136
	Disclosure Indices	138
	Disclosure Ratings and Rankings	140
	Text Analyses for Disclosure Research	140
4.4	The Microeconometrics of Disclosure	141
	Research Questions	141
	Studies on the Association Between Disclosure and Investor Protection	143
	Comparative Cross-Country Studies	144
	Research on a Specific Type of Disclosure	145
	Single Country Studies	146
4.5	The Polish Corporate Disclosure Index (<i>PCDI</i>) and Investor Protection	148
	Composition of the <i>PCDI</i>	148
	<i>PCDI</i> for Companies Listed on the Warsaw Stock Exchange	149
	<i>PCDI</i> and Investor Protection	150
	Disclosure Types and Market Sentiment	150
	References	154
5	The Microeconometrics of Corporate Governance	159
5.1	Sources of Knowledge and Areas of Corporate Governance	159
	Literature on CG	160
	The Areas of CG	161
	CG in Common Law and Civil Law Countries	164
	Codes of Good Governance	164
5.2	Research Topics in Corporate Governance	166
	Research Questions	166
	Methodological Issues	167
	Corporate Governance and the Performance of Companies: Two Studies	168
	Firm Performance and CEO Change: Two Studies	173
	The Accounting Effects of CG: Two Studies	175
5.3	Indices and Ratings of Corporate Governance	178

- CG Ratings and CG Indices at the Country Level 179
- International CG Ratings and Indices 179
- CG Ratings and CG Indices in the USA 180
- Discussion on Uses and Misuses of CG Indices: Klausner (2018) 180
- Six Myths: Armstrong et al. (2010), Brickley and Zimmerman (2010) 181
- Seven (Other) Myths: Larcker and Tayan (2011, 2015b) 182
- CG Indices and Company Performance 182
- 5.4 Corporate Governance and Firm Performance in Poland 183
- CG Ratings for Polish Companies 183
- References 192
- 6 Topics in Empirical Corporate Finance and Accounting 197**
- 6.1 Value Relevance of Companies' Financial Statements 197
- The NYSE 199
- The Warsaw Stock Exchange (WSE) 199
- 6.2 Microeconometrics for Equity Valuation 202
- Fundamental Analysis 203
- Relative Valuation 203
- Regression Models for Relative Valuation 204
- Fundamental Strategies 206
- 6.3 Mergers and Acquisitions, IPOs, and Dividend Payouts 208
- Mergers and Acquisitions 208
- Initial Public Offerings 209
- Dividend Payout 210
- References 213