

Contents

Vorwort	v
Introduction	3
I Static Foundations	11
1 GEI-Models with Exogenous Asset Structure	13
1.1 The Model	14
1.2 Existence and Properties of GEI-equilibria	19
1.2.1 Existence of GEI-equilibria	20
1.2.2 Some important properties	26
1.2.3 Pareto Efficiency	28
1.3 Comparative Statics with respect to the Asset Structure	35
1.3.1 Welfare Effects	36
1.3.2 Security Pricing	40
2 Uniqueness of GEI-Equilibria	47
2.1 Introduction	47
2.2 Examples for Uniqueness with Incomplete Markets	49
2.2.1 CAPM with Quadratic Utilities	49
2.2.2 Two Assets	51
2.3 Monotonicity and Uniqueness with Complete Markets	52
2.3.1 Strictly Monotone Excess Demand Functions	52
2.3.2 Mitjushin-Polterovich-Theorem	53

2.4	An Extension to Incomplete Markets	54
2.4.1	Spanned Endowments	55
2.4.2	Von Neumann-Morgenstern Utility Functions	55
2.4.3	A Generalised Mitjushin-Polterovich Theorem	55
2.5	Examples	60
2.6	Conclusion	64
3	GEI-economies with Transaction Costs	67
3.1	Introduction	67
3.2	Fixed Set-up Costs	69
3.2.1	The Setup	70
3.2.2	Existence of Core Allocations	72
3.2.3	Characterisations of Core Allocations	79
3.3	Liquidity and the Number of Assets	81
3.3.1	The Setup	82
3.3.2	Existence	86
3.3.3	Characterisations of Walrasian Equilibria	89
3.4	Conclusion	94
II	Financial Innovators in GEI-theory	95
4	GEI-literature on Financial Innovation	97
4.1	Introduction	97
4.2	Systematic Overview and Classification of the Literature	99
4.2.1	Short Sale Constraints as Source of Value	100
4.2.2	Market Makers and Coordination Failure	104
4.2.3	Short Sale Restrictions versus Imperfect Competition	109
4.2.4	Incomplete Spanning as Incentive to Innovate	111
4.3	Critical Discussion	112
	Appendix to Chapter 4: GEI-models with Innovators under Sym- metric Information	115

5 Homogenous Beliefs and Efficient Financial Innovation	119
5.1 The Model	120
5.2 Indeterminacy of the Endogenous Asset Structure	124
5.3 Homogenous Beliefs	126
5.4 Consistency with a Network of Communicating Innovators	128
5.5 Conclusion	130
 III An Evolutionary Approach to Financial Innovation	 133
6 Dynamically Stable Asset Structures with Restricted Participation	135
6.1 Motivation and Overview	136
6.2 The General Model	139
6.2.1 Time and Uncertainty	139
6.2.2 Interpretations of the General Framework	142
6.2.3 Temporary Equilibria with Restricted Participation	144
6.2.4 The Evolutionary Process	146
6.3 Illustrations of the General Model	151
6.3.1 Some Simplifying Assumptions	152
6.3.2 The "Nuts-and-Bolts"-Example	157
6.3.3 Evolution in the CAPM	164
6.4 Conclusion	171
 7 Conclusion	 173
 A Notation and Basic Mathematics	 175
A.1 Notation	175
A.2 Basic Definitions	176
A.3 Basic Results	178
 Bibliography	 181