

Contents

1	Introduction	1
1.1	The Macro-Finance Approach to the Analysis of Monetary Policy and Financial Risk	1
1.2	Plan of the Book	4
 Part I Theoretical Foundations for Policy Analysis		
2	Financial Markets and Asset Pricing	9
2.1	Asset Pricing Theory	9
2.1.1	No-Arbitrage and the Stochastic Discount Factor	9
2.1.2	Individual Agent Optimality and Asset Pricing Equations	14
2.1.3	Representative Agent and Equilibrium Asset Pricing	18
2.1.4	Asset Returns and a First Look at Risk	20
2.2	Asset Pricing with Utility Specifications	33
2.2.1	Agents and Risk Aversion	33
2.2.2	Power Utility and General Equilibrium	36
2.2.3	Pitfalls and the CCAPM	38
3	The Theory of the Term Structure of Interest Rates	43
3.1	Bond Pricing Representation and Yields	43
3.1.1	Notation and Pricing Relations	43
3.1.2	Coupon-Bearing Bonds and Duration	46
3.2	Stylized Facts on the Yield Curve	49
3.2.1	Moments of the US, German and UK Yield Curve	49
3.2.2	Common Factors Driving the Yield Curve	51
3.3	Fitting Zero-Coupon Bonds	56
3.4	Understanding the Term Structure of Interest Rates	63
3.4.1	A Formal Representation of the Expectations Hypothesis and No-Arbitrage	63
3.4.2	Empirical Tests on the Expectations Hypothesis	68

3.5	Affine Term Structure Representations	73
3.5.1	General Setup	73
3.5.2	An Essentially Affine Term Structure Model	77
4	A Systematic View on Term Premia	83
4.1	Forms and Sources of Term Premia	83
4.2	Evidence on Interest-Rate Risk Premia	86
4.2.1	A Two-Factor Affine Term Structure Model	86
4.2.2	An International Comparison of Essentially Affine Risk Premia	92
4.3	Compensation for Default Risk	100
4.4	Liquidity Risk and Asset Prices	106
4.4.1	Micro-Finance Approach to Liquidity	106
4.4.2	Liquidity Preference and Uncertainty in Light of Financial Intermediation	112
Part II	The Term Structure of Interest Rates and Monetary Policy Rules	
5	The Macro-Finance View of the Term Structure of Interest Rates	117
5.1	On the Use of the Yield Curve for Monetary Policy	117
5.1.1	The Information Content and Its Interpretation	118
5.1.2	Term Structure Reaction to Monetary Policy Events	122
5.1.3	Implementation of Monetary Policy and the Yield Curve....	124
5.2	Joint Modeling Strategies of Interest Rates and the Macroeconomy	126
5.2.1	The Macro-Finance View of the Term Structure of Interest Rates	126
5.2.2	VAR-Based Models	129
5.2.3	Semi-Structural Macro-Finance Models	131
5.2.4	Asset Pricing in a DSGE Model	132
5.3	Term Structure Implications of New-Keynesian Macroeconomics	135
5.3.1	Stylized Facts and Benchmark Results	135
5.3.2	An Extension: Learning, Volatility and Persistence	145
6	Monetary Policy in the Presence of Term Structure Effects	159
6.1	The Term Structure of Taylor Coefficients	159
6.2	Incorporating Long-Term Interest Rates into Monetary Policy Analysis	164
6.2.1	Determinacy with Bond Rate Transmission	164
6.2.2	Optimal Simple Rules with Term Structure Information	173
6.3	Selected Further Issues on Interest Rates and the Conduct of Monetary Policy	176
6.3.1	Policy Inertia: What Does the Term Structure have to Say?	176

6.3.2	Monetary Policy Communication and Yield Curve Reflections	182
6.4	Decomposition of the Nominal Yield Curve – BEIRs and Inflation Risk	185
Part III Financial Stability and Monetary Policy		
7	Financial Risk and Boom-Bust Cycles	197
7.1	Traditional Transmission Channels	197
7.2	The Risk-Taking Channel of Monetary Transmission	201
7.2.1	Classification and Definition	201
7.2.2	Risk-Taking, Financial Intermediaries and the Role of the Short-Term Interest Rate	203
7.2.3	Empirical Evidence	209
7.3	The Impact of the Monetary Policy Strategy on Risk Tolerance	215
7.3.1	Shaping Risk Premia in Monetary Policy Regimes	215
7.3.2	Optimal Monetary Policy and Bond Risk Premia	219
7.3.3	Risk Premia in the New-Keynesian Model Economy	232
7.4	Challenges for Monetary Policy	235
7.4.1	The Debate on “Too Low for Too Long” in the Pre-Crisis Period 2002–2006	235
7.4.2	Financial Intermediaries, the Yield Curve and Credit Boom-Bust Cycles	240
7.4.3	Macprudential Policy and Implications for Central Banking	246
7.4.4	Addressing Financial Instability from a Monetary Policy Perspective	252
8	Conclusion and Outlook	265
A	Dynamic Optimization	269
B	State-Space Model and Maximum Likelihood Estimation	273
C	Recursive Nature of the Expectations Hypothesis	277
D	Derivation of Affine Coefficient Loadings	279
E	Optimal Monetary Policy	283
	References	289