



Jian-Guang Shen

Models of Currency Crises with Banking Sector and Imperfectly Competitive Labor Markets



Bank of Finland Studies
E:21 • 2001

Contents

Abstract	5
Tiivistelmä.....	7
Foreword	9
1 Introduction	11
2 Theory and empirical work on currency crises: a survey	17
2.1 A review of currency crisis theory.....	17
2.2 Banking sector and currency crisis models	22
2.3 Empirical work on currency crises	25
2.4 Stylized facts concerning the Finnish economy and currency crisis	28
2.4.1 Sticky prices despite large devaluation.....	29
2.4.2 A tradition of competitiveness-oriented exchange rate policy.....	31
2.4.3 Time lag between deposit and lending interest rate liberalization prior to the crisis	32
2.4.4 Widening interest rate differentials	34
2.4.5 Imperfectly competitive labor markets	36
3 Currency crises model with banking sector	38
3.1 Introduction.....	38
3.2 Setup	41
3.3 Agents' optimization problems	43
3.3.1 Household	43
3.3.2 Firm	45
3.3.3 Bank	49
3.4 When the central bank is able to commit to the pegged exchange rate system	53
3.5 Monetary policy under speculative pressures	55
3.5.1 Monetary policy rule and the central bank optimization decision	55
3.5.2 Self-fulfilling currency crisis	58
3.6 Overoptimistic expectations	69
Appendix 3.1	72

4	Exchange rate policy under imperfectly competitive labor markets.....	73
4.1	Introduction.....	73
4.2	Wage bargaining and exchange rate policy.....	77
4.2.1	Setup.....	77
4.2.2	Agents' optimization problems.....	80
4.2.2.1	Firm	80
4.2.2.2	Bank.....	85
4.2.2.3	Wage bargaining and the trade union	85
4.2.3	A special case: monopoly trade union model.....	90
4.2.4	Profits of the private sector.....	92
4.2.5	Wage setting and exchange rate policy.....	93
4.3	The bank as Stackelberg leader	96
4.3.1	Setup.....	96
4.3.2	Agents' optimization problems.....	98
4.3.2.1	Firm and trade union	98
4.3.2.2	Bank.....	98
4.3.3	Private sector profits and monetary policy	99
4.4	Results and conclusions.....	101
4.4.1	Comparison of setups.....	101
4.4.2	Conclusions	106
	Appendix 4.1–4.4.....	107
5	Fiscal policy, wage setting and exchange rate policy.....	113
5.1	Introduction.....	113
5.2	Setup	117
5.3	Agents' optimization problems	118
5.3.1	Firm.....	118
5.3.2	Bank	121
5.3.3	Fiscal authority.....	123
5.3.4	Trade union	126
5.4	Wage negotiation, fiscal policy and currency crises	128
5.4.1	Fiscal authority under a predetermined tax rate	129
5.4.2	Trade union under a predetermined tax rate.....	130
5.4.3	Equilibria of government investment and wage.....	131
5.4.4	Fiscal policy and exchange rate determination.....	135
	Appendix 5.1	138
6	Concluding remarks	141
	References	146