Contents

List of figures xiii
List of tables xv
List of contributors xvii
Preface xviii

1 Overview 1

1.1 Inflation and welfare 4
1.2 Money demand and velocity 8
1.3 Inflation and growth 10
1.4 Monetary business cycles 13

PART I
Inflation and welfare 15

2 The welfare costs of inflation in a cash-in-advance model with costly credit 17

2.1 Introduction 17
2.2 The deterministic costly credit economy 19
2.3 Discussion of first-order conditions 22
2.4 Substitution rates in the cash-in-advance economies 23
2.5 The welfare costs of stable inflation 24
2.6 Comparison of the interest elasticities of money demand 26
2.7 Estimates of welfare costs and elasticities 28
2.8 Qualifications 30
Appendix 2.A: stationary equilibrium solution 30
Appendix 2.B: parameter specification and data description 31

Gillman, Max
Inflation theory in economics
2009

digitalisiert durch:
IDS Luzern

3 A comparison of partial and general equilibrium estimates of the welfare cost of inflation 34

3.1 Introduction 34
3.2 Partial equilibrium differences 35
3.3 Partial versus general equilibrium 40
3.4 General equilibrium differences 44
3.5 Conclusion 45

4 The optimality of a zero inflation rate: Australia 47

4.1 Introduction: menu costs and suboptimality of the Friedman deflation 47
4.2 Economy with costly inflation adjustment: reducing the real wage 49
4.3 The effect of menu costs on the equilibrium 52
4.4 The cost of inflation with the adjustment cost 53
4.5 Alternative adjustment cost functions 56
4.6 Conclusions and qualifications 58

5 On the optimality of restricting credit: inflation-avoidance and productivity 62

5.1 Introduction 62
5.2 The economy with an explicit financial intermediation sector 64
5.3 Levelling the inflation distortion through credit taxes 67
5.4 Restricting credit when it has other benefits 71
5.5 Endogenous growth and the credit tax 74
5.6 Conclusion 76
Appendix 5.A: base model 76
Appendix 5.B: endogenous growth 77

6 Ramsey-Friedman optimality with banking time 80

6.1 Introduction 80
6.2 The "banking time" economy 82
6.3 Equilibrium 87
6.4 The Ramsey optimum 92
6.5 Discussion 95
6.6 Conclusion 95
Appendix 6.A: derivation of equations 96

PART II
Money demand and velocity 99

7 The demand for bank reserves and other monetary aggregates 101

7.1 Introduction 101
7.2 Sensitivity to lump transfers 102
7.3 Models of monetary aggregates 104
7.4 Changes in aggregates over time 114
7.5 Discussion 121

8 Money velocity with costly credit 127

8.1 Introduction 127
8.2 The representative agent economy 129
8.3 Data 136
8.4 Results 137
8.5 Conclusion 145
Appendix 8.A: first-order conditions of equilibrium 147
Appendix 8.B: additional estimation details 148

9 Money demand in general equilibrium endogenous growth: estimating the role of a variable interest elasticity 150

9.1 Introduction 150
9.2 Representative agent economy 151
9.3 Econometric model specification 157
9.4 Data 158
9.5 Results 159
9.6 Robustness 163
9.7 Discussion 167
9.8 Conclusion 168
Appendix 9.A: data description 169

10 Money demand in an EU accession country: A VECM Study of Croatia 171

10.1 Introduction 171
10.2 Croatian money, policy, and banking background 174
10.3 Data and descriptive analysis 176
10.4 Econometric modelling 180
10.5 Conclusion 186

PART III
Inflation and growth 191

11 Inflation and balanced-path growth with alternative payment mechanisms 193

11.1 The economy with goods, human capital and exchange production 196
11.2 Calibration 207
11.3 Comparison to other payment mechanisms 212
11.4 Conclusion 213
Appendix 11.A 214

12 Contrasting models of the effect of inflation on growth 218

12.1 Introduction 218
12.2 The general monetary endogenous growth economy 221
12.3 Physical capital only models 226
12.4 Human capital only models 230
12.5 Models with physical and human capital 233
12.6 Comparison of models 237
12.7 Conclusions 238
Appendix 12.A: section 12.2 first-order conditions 239

13 A revised Tobin effect from inflation: relative input price and capital ratio realignments, USA and UK, 1959–1999 242

13.1 Introduction 242
13.2 Endogenous growth, cash-in-advance model 244
13.3 Empirical methodology and results 248
13.4 Conclusions and qualifications 252
Appendix 13.A: description of the data set 252

14 Inflation and growth: explaining a negative effect 254

14.1 Introduction 254
14.2 Endogenous growth monetary framework 257
14.3 The data 263
14.4 The econometric model 264
14.5 Results 265
14.6 Discussion of results 268
14.7 Conclusion 271

15 Granger causality of the inflation–growth mirror in accession countries 274

15.1 Introduction 274
15.2 The model 277
15.3 Data and empirical methodology 282
15.4 Empirical results 282
15.5 Structural breaks in Hungary and Poland 292
15.6 Discussion 295
15.7 Conclusion 297

PART IV
Monetary business cycles 299

16 Keynes's *Treatise*: aggregate price theory for modern analysis? 301

16.1 The Treatise*'s theory of the aggregate price 301*
16.2 Construction of a Keynesian cross 303
16.3 A qualification about fiscal policy from this interpretation 306
16.4 Modification with a neoclassical definition of profit 309
16.5 Total revenue, total cost, and AS-AD analysis 310
16.6 Discussion and comparison of the analysis 313
16.7 Conclusions and qualifications 315

17 Credit shocks in the financial deregulatory era: not the usual suspects 320

17.1 Introduction 320
17.2 The credit model 322
17.3 Results: the construction of credit shocks 329
17.4 Credit shocks and banking deregulation 333
17.5 Discussion 337
17.6 Conclusions 338

18 A comparison of exchange economies within a monetary business cycle 340

18.1 Introduction 340
18.2 Exchange-based business cycle models 342
18.3 Impulse responses 348
18.4 Puzzles 350

18.5 Sensitivity and robustness 354
18.6 Discussion 356
18.7 Conclusion 357
Appendix 18.A 357

19 Money velocity in an endogenous growth business cycle with credit shocks 361

19.1 Introduction 361
19.2 Endogenous growth with credit 362
19.3 Impulse responses and simulations 366
19.4 Variance decomposition of velocity 369
19.5 Discussion 370
19.6 Conclusion 371
Appendix 19.A: construction of shocks 371

20 Epilogue: the perspective going forward 373

Bibliography 377
Index 395