

Brief Table of Contents

Chapter 1. Introduction

Part I. CAPITAL ACCUMULATION AND ECONOMIC GROWTH

Chapter 2. Neoclassical Growth Models

Chapter 3. Endogenous Growth Models

Chapter 4. Some Other Growth Models

Part II. NEOCLASSICAL MODELING

Chapter 5. Consumption

Chapter 6. Investment

Chapter 7. Government Expenditure and Fiscal Policy

Chapter 8. The Current Account

Part III. MONEY, GROWTH, AND INFLATION

Chapter 9. Demand for Money

Chapter 10. Money and Growth

Chapter 11. Inflationary Finance

Part IV. BUSINESS CYCLES

Chapter 12. Standard Keynesian Theory

Chapter 13. Rational Expectations

Chapter 14. Real Business Cycles

Chapter 15. A New Keynesian Model

Chapter 16. Unemployment

Part V. STABILIZATION POLICY UNDER UNCERTAINTY

Chapter 17. Keynesians and Monetarists

Chapter 18. The Importance of Expectations

Chapter 19. Dynamic Inconsistency

Chapter 20. Some Other Useful Models

APPENDICES

Appendix 1. Stability of Equilibrium

Appendix 2. Dynamic Optimization

Table of Contents**1. INTRODUCTION**

- 1.1. A Two-Period Problem 1-1
- 1.2. An Infinite Horizon Problem 1-7
- Readings 1-10

Part I. CAPITAL ACCUMULATION AND ECONOMIC GROWTH**2. NEOCLASSICAL GROWTH MODELS**

- 2.1. Some Stylized Facts About Growth 2-1
- 2.2. The Solow Model 2-2
 - 2.2.1. Comparative Statics 2-6
 - 2.2.2. The Golden Rule 2-8
 - 2.2.3. The Model with Technological Growth 2-9
- 2.3. The Ramsey Model 2-10
 - 2.3.1. The Centralized Economy 2-11
 - 2.3.2. The Decentralized Economy 2-16
- 2.4. A Neoclassical Model with Exogenous Productivity Growth 2-18
- Readings 2-21

3. ENDOGENOUS GROWTH MODELS

- 3.1. The Rebelo Model 3-1
- 3.2. A Two-Period Model with Externalities 3-3
 - 3.2.1. The Decentralized Solution 3-4
 - 3.2.2. The Centralized Solution 3-5
- 3.3. Endogenous Technological Growth 3-8
 - 3.3.1. The Market (Decentralized) Solution 3-9
 - 3.3.2. The Centralized Solution 3-11
- 3.4. Human Capital and Growth 3-14
 - 3.4.1. The Lucas Growth Model 3-15
- Readings 3-20

4. SOME OTHER GROWTH MODELS

- 4.1. Overlapping Generations 4-1
 - 4.1.1. The Decentralized Economy 4-2
 - 4.1.2. The Centralized Economy 4-5
 - 4.1.3. Dynastic Concerns 4-7
 - 4.1.4. Social Security 4-9
- 4.2. The Aghion-Howitt Model of Economic Growth 4-12
- 4.3. Poverty Traps and Stagnation 4-17
 - 4.3.1. Multiple Steady States in the Solow Model 4-17
 - 4.3.2. Threshold Effects 4-20
 - 4.3.3. Stagnation at the Subsistence Level 4-20

Readings 4-24

Part II. NEOCLASSICAL MODELING

5. CONSUMPTION

- 5.1. The Basic Model 5-1
 - 5.2. The Permanent Income Hypothesis 5-5
 - 5.3. Liquidity Constraints 5-9
 - 5.4. Precautionary Saving 5-10
 - 5.5. Durables and Nondurables 5-14
 - 5.5.1. Consumption of Durables 5-14
 - 5.5.2. Durables and Nondurables 5-15
 - 5.6. Habit Formation 5-17
- Readings 5-17

6. INVESTMENT

- 6.1. The Basic Model 6-1
 - 6.2. Three Special Models 6-4
 - 6.2.1. The Neoclassical (Jorgenson) Model 6-4
 - 6.2.2. The Accelerator Model 6-5
 - 6.2.3. Tobin's q Model 6-5
 - 6.3. Investment Taxes, Subsidies, and Inflation 6-6
 - 6.4. Investment and Uncertainty 6-8
- Readings 6-8

7. FISCAL POLICY

- 7.1. Taxes and Growth 7-1
 - 7.1.1. Lum-Sum Taxes 7-1
 - 7.1.2. Income Taxes 7-3
 - 7.1.3. Consumption Taxes 7-6
 - 7.2. Distortionary Taxes and Laffer Curves 7-6
 - 7.2.1. Distortionary Taxes on Capital 7-7
 - 7.2.2. Distortionary Taxes on Labor 7-9
 - 7.3. Tax Smoothing 7-11
 - 7.4. The Optimal Government Size 7-13
- Readings 7-16

8. THE CURRENT ACCOUNT

- 8.1. A Simple Model of the Open Economy 8-1
 - 8.2. A Production Model of The Open Economy 8-6
 - 8.3. The Case of the Large Open Economy 8-11
 - 8.4. An Infinite Horizon Model 8-12
- Readings 8-16

Part III. MONEY, GROWTH, AND INFLATION**9. DEMAND FOR MONEY**

- 9.1. Money as a Store of Value 9-1
 - 9.1.1. Constant Money Supply 9-5
 - 9.1.2. Constant Money Growth 9-6
 - 9.2. Transactions Demand for Money 9-7
 - 9.2.1. The Baumol-Tobin Model 9-7
 - 9.2.2. The “Shopping” Model 9-8
 - 9.3. Precautionary Demand for Money 9-12
- Readings 9-13

10. MONEY AND GROWTH

- 10.1. The Tobin Model 10-1
 - 10.2. The Sidrauski Model 10-5
 - 10.3. Superneutrality Revisited 10-8
 - 10.3.1. Money in the Production Function 10-8
 - 10.3.2. Leisure in the Utility Function 10-9
 - 10.3.3. Technological Growth 10-10
 - 10.4. A Cash-in-Advance Model and Interest-Rate Smoothing 10-12
 - 10.4.1. The Real Economy 10-12
 - 10.4.2. The Monetary Economy 10-13
- Readings 10-15

11. INFLATIONARY FINANCE

- 11.1. Welfare Costs of Inflation 11-1
 - 11.2. Hyperinflations 11-4
 - 11.2.1. The Cagan Model 11-4
 - 11.2.2. Seignorage 11-6
 - 11.2.3. Seignorage and Hyperinflation 11-8
 - 11.3. Optimal Seignorage 11-11
 - 11.3.1. Seignorage as the Only Source of Revenue 11-11
 - 11.3.2. Income Tax and Seignorage 11-12
- Readings 11-13

Part IV. BUSINESS CYCLES

12. THE STANDARD KEYNESIAN MODEL

- 12.1. Aggregate Demand 12-1
- 12.2. A Keynesian Aggregate Supply and Output Determination 12-5
- 12.3. The Friedman-Phelps Supply Function 12-7
- Readings 12-9

13. RATIONAL EXPECTATIONS

- 13.1. The Muth Model 13-3
- 13.2. The Sargent-Wallace Model of Inflation 13-5
- 13.3. The Lucas Supply Function 13-7
- 13.4. Some Business Cycle Implications 13-10
- Readings 13-11

14. REAL BUSINESS CYCLES

- 14.1. A Stochastic Solow Model 14-1
- 14.2. A Stochastic Ramsey Model 14-4
- 14.3. A Multi-Sector Model 14-8
- Readings 14-15

15. A NEW KEYNESIAN MODEL

- 15.1. A New Keynesian Phillips Curve 15-1
- 15.2. A New Keynesian *IS* Curve 15-3
- 15.3. Some Monetary Policy Implications 15-5
 - 15.3.1. No Built-In Inflationary Bias 15-6
 - 15.3.2. Built-In Inflationary Bias 15-9
- Readings 15-11

16. UNEMPLOYMENT

- 16.1. Indivisible Labor Models 16-1
 - 16.1.1. A Simple Model 16-1
 - 16.1.2. The Model with a Union 16-4
- 16.2. The Efficiency Wage Model 16-6
- 16.3. The Persistence of Unemployment 16-8
 - 16.3.1. A Separation-Finding Model 16-8
 - 16.3.2. The Hysteresis Theory 16-10
- 16.4. The “Insiders-Outsiders” Theory 16-13
- Readings 16-16

Part V. STABILIZATION POLICY UNDER UNCERTAINTY**17. KEYNESIANS AND MONETARISTS**

- 17.1. Uncertainty About the Effects of Policy Variables 17-1
 - 17.1.1 The Theil Model 17-2
 - 17.1.2. The Brainard Model 17-3
- 17.2. Policy Errors and Lags 17-5
- 17.3. Asymmetric Effects 17-9
- 17.4. Optimal Targeting (The Poole Model) 17-11
 - 17.4.1. A Monetarist Central Bank 17-11
 - 17.4.2. A Keynesian Central Bank 17-13
 - 17.4.3. Comparison of the Keynesian and Monetarist Strategies 17-13
 - 17.4.4. A Combination Policy 17-16
- 17.5. Fixed vs. Flexible Exchange Rates 17-16
 - 17.5.1. Flexible Exchange Rate 17-18
 - 17.5.2. Fixed Exchange Rate 17-18
 - 17.5.3. Comparison of Fixed and Flexible Regimes 17-19
- Readings 17-21

18. THE IMPORTANCE OF EXPECTATIONS

- 18.1. No Role for Expectations 18-1
- 18.2. Adaptive Expectations 18-2
- 18.3. Rational Expectations 18-3
- 18.4. Keynesians vs Monetarists vs Rational Expectationists 18-4
 - 18.4.1. Keynesians and Monetarists Revisited 18-4
 - 18.4.2. Rational Expectations 18-6
- 18.5. A Complete Rational Expectations Model 18-8
- Readings 18-11

19. DYNAMIC INCONSISTENCY

- 19.1. The General Problem 19-1
- 19.2. Output and Inflation 19-4
 - 19.2.1. A Rule 19-4
 - 19.2.2. Cheating 19-5
 - 19.2.3. Discretion 19-6
- 19.3. Reputation 19-8
- 19.4. Conservative Central Bankers and Indexation 19-10
 - 19.4.1. Output Uncertainty and the Optimal Conservative 19-11
 - 19.4.2. Optimal Contracts for Central Bankers 19-14
 - 19.4.3. Inflation Uncertainty and Optimal Inflation Protection 19-15
- 19.5. Macroeconomics and Politics 19-17
- Readings 19-20

20. SOME USEFUL MODELS

- 20.1. Wage Indexation 20-1
 - 20.1.1. The Frictionless Equilibrium 20-1
 - 20.1.2. Fixed Nominal Wages 20-3
 - 20.1.3. Indexation 20-4
- 20.2. Monetary Unions and Dollarization 20-7
 - 20.2.1. A Simple Model 20-8
 - 20.2.2. A New Keynesian Model 20-10
- 20.3. A Unified Model of Business Cycles 20-14
 - 20.3.1. The Walrasian Economy 20-15
 - 20.3.2. Wage Contracts 20-18
- 20.4. The Barro Model of Fiscal Policy 20-22
 - 20.4.1. Exogenous Labor Supply 20-22
 - 20.4.2. Endogenous Labor Supply 20-27
- Readings 20-29

Appendices**A1. STABILITY OF EQUILIBRIUM**

- A1.1 Stability of Linear Systems A1-1
- A1.2 Stability of Non-Linear Systems A1-3

A2. DYNAMIC OPTIMIZATION

- A2.1 Lagrangeans and Hamiltonians: An Example A2-1
- A2.2 Dynamic Optimization with Bellman Equations A2-3