

Contents

<i>List of Figures</i>	<i>page</i>	ix
<i>List of Tables</i>		xii
<i>Preface</i>		xv
<i>Foreword</i>		xix
1 GDP and Inflation		1
Objectives of this Chapter		2
1.1 GDP		3
1.1.1 Definition of GDP		3
1.1.2 GDP and Welfare		9
1.1.3 Historical Behavior of Nominal and Real GDP		11
1.1.4 Caveats		15
1.2 Components of GDP		15
1.2.1 Private Consumption		16
1.2.2 Private Investment		20
1.2.3 Government Spending		22
1.2.4 Net Exports		25
1.2.5 Miscellany		27
1.3 More GDP Accounting		28
1.4 Inflation		31
Further Reading		37
Homework		38
2 Firms and Growth		43
Objectives of this Chapter		44
2.1 Cobb–Douglas Production		45

2.1.1	Constant Returns to Scale	46
2.1.2	Declining Marginal Products	47
2.2	Profit Maximization	48
2.2.1	Optimal Capital	49
2.2.2	Optimal Labor	51
2.2.3	Optimal Profits	51
2.3	Growth Accounting	52
2.3.1	Growth in Developed Countries	55
2.3.2	Balanced Growth	56
2.3.3	Growth in Developing Countries	58
2.3.4	Barriers to Growth	60
2.4	Measurement of K_t , L_t , and z_t	68
2.4.1	Measurement of the Capital Stock	68
2.4.2	Measurement of the Labor Input	76
2.4.3	Measurement of Technology	80
	Further Reading	83
	Homework	84
3	Households and Asset Pricing	89
	Objectives of this Chapter	90
3.1	Optimal Labor Supply with No Saving	93
3.2	Optimal Consumption and Investment	97
3.2.1	A Two-Period Model	97
3.2.2	Mathematics of the Solution	99
3.2.3	Reinterpreting the Household Budget Constraint	101
3.2.4	Intertemporal Elasticity of Substitution	102
3.2.5	Discussion of Assumptions	104
3.2.6	Discussion of Uncertainty	106
3.3	Saving and Investment in Multiple Assets	109
3.3.1	Stocks and Bonds: The Equity Premium Puzzle	109
3.3.2	Housing	118

3.4	Optimal Labor, Consumption, Investment	129
3.4.1	Model	129
3.4.2	Calibration	133
	Further Reading	134
	Homework	136
4	Trade	141
	Objectives of this Chapter	142
4.1	Trade of Goods for Goods	144
4.2	Current and Capital Accounts	148
4.3	Data on Current and Capital Accounts	150
4.4	Trade of Goods for Assets	152
4.5	Factor Prices and Trade	159
4.6	Topics in Exchange Rates	161
4.6.1	Covered Interest Parity	161
4.6.2	Purchasing Power Parity	162
4.6.3	Fisher Equation	163
	Further Reading	164
	Homework	165
5	Business Cycles	167
	Objectives of this Chapter	168
5.1	Business Cycle Dates	169
5.2	Trends and Cycles	169
5.3	Business Cycle Statistics	178
5.4	The Theory of Business Cycles	184
	Further Reading	186
	Homework	189

6	Monetary Policy	191
	Objectives of this Chapter	192
6.1	A Very Brief History of the Federal Reserve	192
6.2	The Taylor Rule	196
6.3	Monetary Policy and Inflation	201
	Further Reading	205
	Homework	207
	Appendix: Math	209
	Objectives of this Appendix	209
A.1	Derivatives	209
	A.1.1 Derivative of Polynomials	210
	A.1.2 Derivative of the Natural Logarithm Function	212
	A.1.3 Derivative Approximation to the Natural Logarithm Function	213
A.2	Constrained Optimization: Econ 1 Revealed	214
	A.2.1 Writing Down and Solving the Problem	215
	A.2.2 Notes on the Lagrange Multiplier (λ) and Expenditure Shares	217
	<i>Bibliography</i>	219
	<i>Index</i>	223