

Contents

Lists of Figures, Tables, Abbreviations and Denotations 15

Chapter 1

Introduction	21
1.1 Research Topic	21
1.2 Research Object	25
1.3 Research Design	30
1.4 Structure of the Present Work	33

I
FOUNDATIONS 35

Chapter 2

Background	37
2.1 On Economic Growth	38
2.2 Economic Growth and the Environment	47
2.3 Stationary State and Secular Stagnation	65

Chapter 3

Existing Concepts on Economies Without Growth	83
3.1 Steady State Economies	84
3.2 Degrowth	87
3.3 Prosperity and Managing Without Growth	90
3.4 “Postwachstum”	92
3.5 Comparison and Implications	98
3.6 Macroeconomic Conditions in Existing Concepts	98

Chapter 4

Intermediate Results	107
--------------------------------	-----

II	
NEOCLASSICAL THEORIES	109
Chapter 5	
Introduction	111
Chapter 6	
Fundamentals	115
6.1 Basic Macroeconomic Model: Neoclassical Foundations	115
6.2 Solow Model: Savings and Capital Accumulation	121
6.3 Neoclassical Growth Model: Microfoundations	128
6.4 Results and Discussion	134
Chapter 7	
Endogenous Technological Change	143
7.1 AK Model: Human Capital and Improvement of Knowledge	143
7.2 Endogenous Techn. Change I: Extension of Technologies	147
7.3 Endogenous Techn. Change II: Replacement of Technologies	150
7.4 Directed Technical Change: Different Types of Techn. Change	154
7.5 Results and Discussion	161
Chapter 8	
Environment and Technology	167
8.1 Dasgupta-Heal-Solow-Stiglitz Model: Substitution and Techn. Change	168
8.2 Green Solow Model: Abatement	173
8.3 AK Model with Environment: Abatement Depending on Techn. Change	175
8.4 Endogenous Techn. Change with Environment: Natural Resources	178
8.5 Directed Technical Change with Environment: Clean and Dirty Sectors	180
8.6 Results and Discussion	187
Chapter 9	
Sustainable Economies Without Growth in Neoclassical Theories	191
9.1 Overview	191
9.2 Three Scenarios for Economies Without Growth	194
9.3 Environment, Distribution and Stability	213
9.4 Insights in the Light of Existing Literature	214
9.5 Limitations to Insights from the Neoclassical Theories	215

III		
KEYNESIAN THEORIES		217
Chapter 10		
Introduction		219
Chapter 11		
Fundamentals		225
11.1 Keynes: Effective Demand		226
11.2 Harrod: Warranted, Actual and Natural Growth		243
11.3 Domar: Capacity and Demand Effects		247
11.4 Neoclassical Synthesis: Aggregate Demand and Aggregate Supply		251
11.5 Kalecki: Investments and the Business Cycle		257
11.6 Kaldor: Technical Progress Function		275
11.7 Robinson: Biased Technical Change		280
11.8 Results and Discussion		288
Chapter 12		
Monetary Theories		295
12.1 Davidson: Revenue Expectations and Monetary Constraints		296
12.2 Monetary Keynesianism: Equilibrium Without a Labour Market		304
12.3 Binswanger: Growth Imperative and Growth Impetus		312
12.4 Godley and Lavoie: Stock-Flow Consistent Models		324
12.5 Results and Discussion		336
Chapter 13		
Environment and Demand		339
13.1 IS-LM-EE: Environmental Constraints		340
13.2 Harris: Clean and Dirty Sectors		345
13.3 Fontana and Sawyer: Environmental Depletion Rate		351
13.4 Results and Discussion		355
Chapter 14		
Sustainable Economies Without Growth in Keynesian Theories		359
14.1 Overview		359
14.2 Four Scenarios for Economies Without Growth		376
14.3 Environment, Distribution and Stability		390
14.4 Insights in the Light of Existing Literature		392
14.5 Limitations to Insights From Keynesian Theories		393

IV	
MARXIAN THEORIES	395
Chapter 15	
Introduction	397
Chapter 16	
Fundamentals	403
16.1 Marx: The Accumulation of Capital	404
16.2 Conditions for Sustainable Economies Without Growth . .	415
16.3 Results and Discussion	423
Chapter 17	
Theory of Monopoly Capitalism	427
17.1 Monopoly Capitalism	428
17.2 Conditions for Sustainable Economies Without Growth . .	442
17.3 Results and Discussion	448
Chapter 18	
Environment and Capitalism	451
18.1 Capital Accumulation With Fossil Fuels	451
18.2 Conditions for Sustainable Economies Without Growth . .	463
18.3 Results and Discussion	468
Chapter 19	
Sustainable Economies Without Growth in	
Marxian Theories	471
19.1 Overview	471
19.2 Two Scenarios for Economies Without Growth	472
19.3 Environment, Distribution and Stability	485
19.4 Insights in the Light of Existing Literature	487
19.5 Limitations to Insights From Marxian Theories	489
V	
SYNTHESIS OF RESULTS	491
Chapter 20	
Summary of Results to This Point	493
20.1 Foundations	494
20.2 Neoclassical Theories	495
20.3 Keynesian Theories	496
20.4 Marxian Theories	497

Chapter 21	
Comparison of General Results	499
21.1 Is Zero Growth Possible?	499
21.2 Three Perspectives Leading to Very Different Contributions	500
21.3 Scenarios From the Three Schools of Economic Thought	501
Chapter 22	
Synthesis of Macroeconomic Conditions	505
22.1 Method to Compare and Synthesize	505
22.2 Environmental Regulation	508
22.3 Investments and Capital Depreciation	510
22.4 Business Types	515
22.5 Consumption and Government Spending	518
22.6 Employment	521
22.7 Distribution	523
22.8 Monetary System and Savings	525
Chapter 23	
A Model of Sustainable Economies Without Growth	527
23.1 Intuition and Summary	527
23.2 Step I: Basic Conditions	529
23.3 Step II: Detailed Conditions	532
23.4 Outcomes Concerning Sustainability	538
Chapter 24	
Embedding the Results in the State of Research	541
24.1 General Comparison	541
24.2 Comparison of Conditions	543
Chapter 25	
Summary and Future Research	545
25.1 Summary	545
25.2 Future Research	548
Appendix A	
Kalecki's Investment Multiplier and Savings Due to Investments	551
Appendix B	
Kalecki's Investment Multiplier	554
Bibliography	557
Acknowledgements	585