Contents

List of Figures ix
List of Tables xi
Preface xv

Chapter 1 Introduction 1

PART I. FACTS AND FICTION IN ECONOMETRICS 31
Chapter 2 The Construction of Social Reality 33
Chapter 3 The Social Construction of Reality 52
Chapter 4 Facts and Fiction in Econometrics 71

PART II. THEORIZING IN ECONOMICS 93
Chapter 5 Theories and Models 95
Chapter 6 The Purport of an Economic Theory 117
Chapter 7 Rationality in Economics 143
Chapter 8 Topological Artifacts and Life in Large Economies 168

PART III. THEORY-DATA CONFRONTATIONS IN ECONOMICS 191
Chapter 9 Rational Animals and Sample Populations 193
Chapter 10 The Theory Universe 216
Chapter 11 The Data Universe 237
Chapter 12 The Bridge Principles 262

PART IV. DATA ANALYSES 283
Chapter 13 Frequentist Analogues of Priors and Posteriors 285
Tore Schweder and Nils Lid Hjort
Chapter 14 On the COLS and CGMM Moment Estimation
Methods for Frontier Production Models 318
Harald E. Goldstein
Chapter 15 Congruence and Encompassing
Christophe Bontemps and Grayham E. Mizon 354
Chapter 16 New Developments in Automatic General-to-Specific
Modeling 379
David F. Hendry and Hans-Martin Krolzig

PART V. EMPIRICAL RELEVANCE 421
Chapter 17 Conjectures, Theories, and Their Empirical Relevance 423
Chapter 18 Probability versus Capacity in Choice under Uncertainty 458
Chapter 19  Evaluation of Theories and Models
   Clive W. J. Granger 480

PART VI.  DIAGNOSTICS AND SCIENTIFIC EXPLANATION

Chapter 20  Diagnoses and Defaults in Artificial Intelligence and Economics
   Appendix: Section 20.3 from a Logical Point of View by Herman Ruge Jervell 499

Chapter 21  Explanations of an Empirical Puzzle: What Can Be Learned from a Test of the Rational Expectations Hypothesis?
   Heather M. Anderson 520

Chapter 22  Scientific Explanation in Economics 525

Chapter 23  Scientific Explanation in Econometrics: A Case Study
   Heather M. Anderson, Bernt P. Stigum, and Geir Olve Storvik 558

PART VII.  CONTEMPORARY ECONOMETRIC ANALYSES

Chapter 24  Handling the Measurement Error Problem by Means of Panel Data: Moment Methods Applied on Firm Data
   Erik Biørn 578

Chapter 25  On Bayesian Structural Inference in a Simultaneous Equation Model
   Herman K. van Dijk 611

Chapter 26  An Econometric Analysis of Residential Electric Appliance Holdings and Consumption
   Jeffrey A. Dubin and Daniel L. McFadden 642

Chapter 27  Econometric Methods for Applied General Equilibrium Analysis
   Dale W. Jorgenson 683

Index 702

755