

Dsge Macroeconomic Models A Critique E Garcia

This book offers a practical guide to Agent Based economic modeling, adopting a “learning by doing” approach to help the reader master the fundamental tools needed to create and analyze Agent Based models. After providing them with a basic “toolkit” for Agent Based modeling, it present and discusses didactic models of real financial and economic systems in detail. While stressing the main features and advantages of the bottom-up perspective inherent to this approach, the book also highlights the logic and practical steps that characterize the model building procedure. A detailed description of the underlying codes, developed using R and C, is also provided. In addition, each didactic model is accompanied by exercises and applications designed to promote active learning on the part of the reader. Following the same approach, the book also presents several complementary tools required for the analysis and validation of the models, such as sensitivity experiments, calibration exercises, economic network and statistical distributions analysis. By the end of the book, the reader will have gained a deeper understanding of the Agent Based methodology and be prepared to use the fundamental techniques required to start developing their own economic models. Accordingly, “Economics with Heterogeneous Interacting Agents” will be of particular interest to graduate and postgraduate students, as well as to academic institutions and lecturers interested in including an overview of the AB approach to economic modeling in their courses.

The Oxford Handbook of Computational Economics and Finance provides a survey of both the foundations of and recent advances in the frontiers of analysis and action. It is both historically and interdisciplinarily rich and also tightly connected to the rise of digital society. It begins with the conventional view of computational economics, including recent algorithmic development in computing rational expectations, volatility, and general equilibrium. It then moves from traditional computing in economics and finance to recent developments in natural computing, including applications of nature-inspired intelligence, genetic programming, swarm intelligence, and fuzzy logic. Also examined are recent developments of network and agent-based computing in economics. How these approaches are applied is examined in chapters on such subjects as trading robots and automated markets. The last part deals with the epistemology of simulation in its trinity form with the integration of simulation, computation, and dynamics. Distinctive is the focus on natural computationalism and the examination of the implications of intelligent machines for the future of computational economics and finance. Not merely individual robots, but whole integrated systems are extending their "immigration" to the world of Homo sapiens, or symbiogenesis.

In this collection of 17 articles, top scholars synthesize and analyze scholarship on this widely used tool of policy

analysis, setting forth its accomplishments, difficulties, and means of implementation. Though CGE modeling does not play a prominent role in top US graduate schools, it is employed universally in the development of economic policy. This collection is particularly important because it presents a history of modeling applications and examines competing points of view. Presents coherent summaries of CGE theories that inform major model types Covers the construction of CGE databases, model solving, and computer-assisted interpretation of results Shows how CGE modeling has made a contribution to economic policy

This book summarizes the evolution of modern macroeconomics (New Consensus Macroeconomics, NCM) and proposes a new approach to theoretical and empirical analysis, which is based on a recently developed dynamic stochastic general equilibrium (DSGE) model. Dynamic macroeconomic analysis in emerging market economies is challenging, and of growing importance in the global economy, where emerging markets are becoming more and more influential. Clearly, a deeper understanding of the inner workings of emerging economies, particularly with respect to their socioeconomic structure and the urbanization process, is needed. The book's extends the NCM/DSGE model to better account for significant economic and social features in emerging market economies. In particular, household heterogeneities and social stratification are explicitly incorporated into the framework proposed here, substantially enhancing the comprehensiveness of the model economy, and allowing it to better account for underlying social structure in emerging economies. Furthermore, financial and housing markets have not been considered sufficiently in either the advanced or emerging economy literature, an oversight this book remedies. As such, it makes an original and valuable contribution to the field, and a direction for future research.

This thesis investigates nominal frictions in price setting behaviour from both microeconomic and macroeconomic perspectives. Chapter I and II use the unpublished retailer-level and producer-level microdata underlying CPI and PPI in the UK statistical authority to study empirical price rigidity and price setting mechanisms. Based on the conventional frequency-based method, little rigidity is found since the implied price duration is less than half a year. However, this method is shown to significantly underestimate the true duration due to oversampling of short price spells. Alternatively, a trajectory-based cross-sectional approach is adopted, giving an unbiased and robust estimate for average duration over 9 months (retailer price) and 15 months (producer price). That is to say, producer price has higher degree of rigidity than retailer price if cross-sectional approach is used. Both time-dependent and state-dependent features exist in price setting. In particular for retailer price, results also suggest conspicuous heterogeneities in price rigidity across sectors and shop types, but weak difference across regions and time. The overall hazard function of price change can be decomposed into a decreasing component from goods sectors and a 4-month cyclical component from services sectors.

The empirical findings in the microdata not only contribute to the microdata literature on price setting behaviour, but also make possible the calibrations of macroeconomic DSGE model with heterogeneous price setting. Hence, based on the microdata findings in Chapter I and II, Chapter III uses Classical maximum likelihood and Bayesian inference to evaluate and estimate DSGE models with various price setting mechanisms. A vital problem with homogeneous price setting models is that they cannot generate enough persistence while keeping calibration of average price rigidity consistent with microdata evidence. In contrast, this -persistence puzzle? is successfully resolved by heterogeneous price setting models, which greatly improve the dynamic performance of macroeconomic models.

This book offers an introductory step-by-step course to Dynamic Stochastic General Equilibrium modelling. Modern macroeconomic analysis is increasingly concerned with the construction, calibration and/or estimation and simulation of Dynamic General Equilibrium (DGE) models. The book is intended for graduate students as an introductory course to DGE modelling and for those economists who would like a hands-on approach to learning the basics of modern dynamic macroeconomic modelling. The book starts with the simplest canonical neoclassical DGE model and then gradually extends the basic framework incorporating a variety of additional features, such as consumption habit formation, investment adjustment cost, investment-specific technological change, taxes, public capital, household production, non-ricardian agents, monopolistic competition, etc. The book includes Dynare codes for the models developed that can be downloaded from the book's homepage.

Introduction to Quantitative Macroeconomics Using Julia: From Basic to State-of-the-Art Computational Techniques facilitates access to fundamental techniques in computational and quantitative macroeconomics. It focuses on the recent and very promising software, Julia, which offers a MATLAB-like language at speeds comparable to C/Fortran, also discussing modeling challenges that make quantitative macroeconomics dynamic, a key feature that few books on the topic include for macroeconomists who need the basic tools to build, solve and simulate macroeconomic models. This book neatly fills the gap between intermediate macroeconomic books and modern DSGE models used in research. Combines an introduction to Julia, with the specific needs of macroeconomic students who are interested in DSGE models and PhD students and researchers interested in building DSGE models Teaches fundamental techniques in quantitative macroeconomics by introducing theoretical elements of key macroeconomic models and their potential algorithmic implementations Exposes researchers working in macroeconomics to state-of-the-art computational techniques for simulating and solving DSGE models

The last twenty years have witnessed tremendous advances in the mathematical, statistical, and computational tools available to applied macroeconomists. This rapidly evolving field has redefined how researchers test models and validate

theories. Yet until now there has been no textbook that unites the latest methods and bridges the divide between theoretical and applied work. Fabio Canova brings together dynamic equilibrium theory, data analysis, and advanced econometric and computational methods to provide the first comprehensive set of techniques for use by academic economists as well as professional macroeconomists in banking and finance, industry, and government. This graduate-level textbook is for readers knowledgeable in modern macroeconomic theory, econometrics, and computational programming using RATS, MATLAB, or Gauss. Inevitably a modern treatment of such a complex topic requires a quantitative perspective, a solid dynamic theory background, and the development of empirical and numerical methods--which is where Canova's book differs from typical graduate textbooks in macroeconomics and econometrics. Rather than list a series of estimators and their properties, Canova starts from a class of DSGE models, finds an approximate linear representation for the decision rules, and describes methods needed to estimate their parameters, examining their fit to the data. The book is complete with numerous examples and exercises. Today's economic analysts need a strong foundation in both theory and application. *Methods for Applied Macroeconomic Research* offers the essential tools for the next generation of macroeconomists.

Macroeconomics is evolving in an almost dialectic fashion. The latest evolution is the development of a new synthesis that combines insights of new classical, new Keynesian and real business cycle traditions into a dynamic, stochastic general equilibrium (DSGE) model that serves as a foundation for thinking about macro policy. That new synthesis has opened up the door to a new antithesis, which is being driven by advances in computing power and analytic techniques. This new synthesis is coalescing around developments in complexity theory, automated general to specific econometric modeling, agent-based models, and non-linear and statistical dynamical models. This book thus provides the reader with an introduction to what might be called a Post Walrasian research program that is developing as the antithesis of the Walrasian DSGE synthesis.

Modern business cycle theory and growth theory uses stochastic dynamic general equilibrium models. In order to solve these models, economists need to use many mathematical tools. This book presents various methods in order to compute the dynamics of general equilibrium models. In part I, the representative-agent stochastic growth model is solved with the help of value function iteration, linear and linear quadratic approximation methods, parameterised expectations and projection methods. In order to apply these methods, fundamentals from numerical analysis are reviewed in detail. In particular, the book discusses issues that are often neglected in existing work on computational methods, e.g. how to find a good initial value. In part II, the authors discuss methods in order to solve heterogeneous-agent economies. In such economies, the distribution of the individual state variables is endogenous. This part of the book also serves as an introduction to the modern theory of distribution economics. Applications include the dynamics of the income distribution over the business cycle or the overlapping-generations model. In an accompanying home page to this book, computer codes to all applications can be downloaded.

"Even long before the recent financial and economic crisis of 2007/2008 economists were more than aware of the insufficiencies and a lack of realism in macroeconomic modelling and model calibration methods, including those with DSGE methods and models, and spelled the need for further enhancements. The issues this research started addressing even before the 2008 crisis imposed demand for improvements, was use of single, fully informed rational agents in those models. Consequently, the first part of this research project was aiming to improve the DSGE econometric methods by introducing novel solution for DSGE models with imperfect, partial information about the current values of deep variables and shocks, and apply this solution to imperfectly informed multiple agents with their different, inner-rationality models. Along these lines, this research also shows that DSGE models can be extended and suited to both, fitting and estimation of long-term yield curve, and to estimating with rich data sets by extending further its inner-mechanism. In the aftermath of the 2008 crises, which struck at the beginning of this research project, and the subsequent, extensive criticism of DSGE models, this research analyses the alternative causes of the crisis. It then focuses on identifying its possible causes, such as yet unknown debt accelerator mechanism and the related, probable model miss-specifications, rational inattention, and as well, a role of institutional policies in both the development of the crisis and its resolution. And finally, in a response to many of the critiques of the, usually monetary policy oriented DSGE models, this research project provides another set of novel extensions to such models, aiming to bring more of Keynesian characteristics suited to a more active, endogenous fiscal policy deemed needed in the aftermath of the crisis. This project, henceforth, extends the NK-Neo-Classical synthesis monetary DSGE models with a novel, endogenous, counter-cyclical fiscal policy rule driven by news and unemployment changes. It then also shows overall benefits of the resulting, mutually active, monetary-fiscal policy for both capital utilisation and overall economic stability." -- Abstract.

We use a calibrated multi-sector DSGE model to analyze the likely impact of oil windfalls on the Ghanaian economy, under alternative fiscal and monetary policy responses. We distinguish between the short-run impact, associated with demand-related pressures, and the medium run impact on competitiveness and growth. The impact on inflation and the real exchange rate could be moderate, especially if the fiscal authorities smooth oil-related spending or increase public spending's import content. However, a policy mix that results in both a fiscal expansion and the simultaneous accumulation of the foreign currency proceeds from oil as international reserves—to offset the real appreciation—would raise demand pressures and crowd-out the private sector. In the medium term, the negative impact on competitiveness—resulting from "Dutch Disease" effects—could be small, provided public spending increases the stock of productive public capital. These findings highlight the role of different policy responses, and their interaction, for the macroeconomic impact of oil proceeds.

The highly prized ability to make financial plans with some certainty about the future comes from the core fields of economics. In recent years the availability of more data, analytical tools of greater precision, and ex post studies of business decisions have increased demand for information about economic forecasting. Volumes 2A and 2B, which follows Nobel laureate Clive Granger's Volume 1 (2006), concentrate on two major subjects. Volume 2A covers innovations in methodologies, specifically

macroforecasting and forecasting financial variables. Volume 2B investigates commercial applications, with sections on forecasters' objectives and methodologies. Experts provide surveys of a large range of literature scattered across applied and theoretical statistics journals as well as econometrics and empirical economics journals. The Handbook of Economic Forecasting Volumes 2A and 2B provide a unique compilation of chapters giving a coherent overview of forecasting theory and applications in one place and with up-to-date accounts of all major conceptual issues. Focuses on innovation in economic forecasting via industry applications Presents coherent summaries of subjects in economic forecasting that stretch from methodologies to applications Makes details about economic forecasting accessible to scholars in fields outside economics

This volume of *Advances in Econometrics* contains articles that examine key topics in the modeling and estimation of dynamic stochastic general equilibrium (DSGE) models. Because DSGE models combine micro- and macroeconomic theory with formal econometric modeling and inference, over the past decade they have become an established framework for analyzing

The outcome of any important macroeconomic policy change is the net effect of forces operating on different parts of the economy. A central challenge facing policy makers is how to assess the relative strength of those forces. Dynamic Stochastic General Equilibrium (DSGE) models are the leading framework that macroeconomists have for dealing with this challenge in an open and transparent manner. This paper reviews the state of DSGE models before the financial crisis and how DSGE modelers responded to the crisis and its aftermath. In addition, we discuss the role of DSGE models in the policy process.

This technical note and manual (TNM) addresses the following issues:

- Evaluating the full implications from the policies adopted to mitigate the impact of the COVID-19 pandemic on the economy requires a well-developed macroeconomic framework. This note illustrates how such frameworks were used to analyze Colombia and Cambodia's shock impact at the beginning of the pandemic.
- The use of macroeconomic frameworks is not to infer general policy conclusions from abstract models or empirical analysis but to help policymakers think through and articulate coherent forecasts, scenarios, and policy responses.
- The two country cases illustrate how to construct a baseline scenario consistent with a COVID-19 shock within structural macroeconomic models. The scenario is built gradually to incorporate the available information, the pandemic's full effects, and the policy responses.
- The results demonstrate the value of combining close attention to the data, near-term forecasting, and model-based analyses to support coherent policies.

Covers the essentials in understanding Dynamic Stochastic General Equilibrium (DSGE) models It begins with a basic Real Business Cycle model and gradually adds: imperfect competition; frictions in prices and wages; habit formation; non-Ricardian agents; adjustment cost in investment; of not using maximum installed capacity; and Government.

Bayesian econometric methods have enjoyed an increase in popularity in recent years. Econometricians, empirical economists, and policymakers are increasingly making use of Bayesian methods. This handbook is a single source for researchers and policymakers wanting to learn about Bayesian methods in specialized fields, and for graduate students

seeking to make the final step from textbook learning to the research frontier. It contains contributions by leading Bayesians on the latest developments in their specific fields of expertise. The volume provides broad coverage of the application of Bayesian econometrics in the major fields of economics and related disciplines, including macroeconomics, microeconomics, finance, and marketing. It reviews the state of the art in Bayesian econometric methodology, with chapters on posterior simulation and Markov chain Monte Carlo methods, Bayesian nonparametric techniques, and the specialized tools used by Bayesian time series econometricians such as state space models and particle filtering. It also includes chapters on Bayesian principles and methodology.

Dynamic stochastic general equilibrium (DSGE) models have become one of the workhorses of modern macroeconomics and are extensively used for academic research as well as forecasting and policy analysis at central banks. This book introduces readers to state-of-the-art computational techniques used in the Bayesian analysis of DSGE models. The book covers Markov chain Monte Carlo techniques for linearized DSGE models, novel sequential Monte Carlo methods that can be used for parameter inference, and the estimation of nonlinear DSGE models based on particle filter approximations of the likelihood function. The theoretical foundations of the algorithms are discussed in depth, and detailed empirical applications and numerical illustrations are provided. The book also gives invaluable advice on how to tailor these algorithms to specific applications and assess the accuracy and reliability of the computations. Bayesian Estimation of DSGE Models is essential reading for graduate students, academic researchers, and practitioners at policy institutions.

A concise but rigorous and thorough introduction to modern macroeconomic theory. This book offers an introduction to modern macroeconomic theory. It is concise but rigorous and broad, covering all major areas in mainstream macroeconomics today and showing how macroeconomic models build on and relate to each other. The self-contained text begins with models of individual decision makers, proceeds to models of general equilibrium without and with friction, and, finally, presents positive and normative theories of economic policy. After a review of the microeconomic foundations of macroeconomics, the book analyzes the household optimization problem, the representative household model, and the overlapping generations model. It examines risk and the implications for household choices and macroeconomic outcomes; equilibrium asset returns, prices, and bubbles; labor supply, growth, and business cycles; and open economy issues. It introduces frictions and analyzes their consequences in the labor market, financial markets, and for investment; studies money as a unit of account, store of value, and medium of exchange; and analyzes price setting in general equilibrium. Turning to government and economic policy, the book covers taxation, debt, social security, and monetary policy; optimal fiscal and monetary policies; and sequential policy choice, with applications in capital income

taxation, sovereign debt and default, politically motivated redistribution, and monetary policy biases. Macroeconomic Analysis can be used by first-year graduate students in economics and students in master's programs, and as a supplemental text for advanced courses.

The 20th NBER Macroeconomics Annual, covering questions at the cutting edge of macroeconomics that are central to current policy debates.

This book is a further development of the theory of parametric control. It includes: numerical methods of testing (verification) of software implementation of mathematical models by assessing the stability of mappings defined by the model; sufficient conditions for the existence of the solutions of some types of problems of dynamic optimization; the existence of continuous dependence of optimal values of criteria on exogenous functions and parameters; and the existence of points of bifurcation of extremals of such problems. It demonstrates that this theory offers a constructive methodology for middle-term forecasting, macroeconomic analysis and estimation of optimal values of economic characteristics on the basis of advanced global mathematical models, namely Computable General Equilibrium (CGE) Model, Dynamic Stochastic General Equilibrium (DSGE) Model, and Hybrid Econometric model. In addition, it includes conditions for the applicability of the computational experiments' results, into practice.

VAR methods suggest that the monetary transmission mechanism may be weak and unreliable in low-income countries (LICs). But are structural VARs identified via short-run restrictions capable of detecting a transmission mechanism when one exists, under research conditions typical of these countries? Using small DSGEs as data-generating processes, we assess the impact on VAR-based inference of short data samples, measurement error, high-frequency supply shocks, and other features of the LIC environment. The impact of these features on finite-sample bias appears to be relatively modest when identification is valid—a strong caveat, especially in LICs. However, many of these features undermine the precision of estimated impulse responses to monetary policy shocks, and cumulatively they suggest that “insignificant” results can be expected even when the underlying transmission mechanism is strong.

Identifies the central themes, issues, questions, and methods of analysis of economics, and discusses how they have been approached in the African context over time. Reviews and document how the study of African societies has contributed to and shaped major fields of the discipline of economics.

The revised edition of the essential resource on macroeconometrics Structural Macroeconometrics provides a thorough overview and in-depth exploration of methodologies, models, and techniques used to analyze forces shaping national economies. In this thoroughly revised second edition, David DeJong and Chetan Dave emphasize time series econometrics and unite theoretical and empirical research, while taking into account important new advances in the field. The authors detail strategies for solving dynamic structural models and present the

full range of methods for characterizing and evaluating empirical implications, including calibration exercises, method-of-moment procedures, and likelihood-based procedures, both classical and Bayesian. The authors look at recent strides that have been made to enhance numerical efficiency, consider the expanded applicability of dynamic factor models, and examine the use of alternative assumptions involving learning and rational inattention on the part of decision makers. The treatment of methodologies for obtaining nonlinear model representations has been expanded, and linear and nonlinear model representations are integrated throughout the text. The book offers a rich array of implementation algorithms, sample empirical applications, and supporting computer code. Structural Macroeconometrics is the ideal textbook for graduate students seeking an introduction to macroeconomics and econometrics, and for advanced students pursuing applied research in macroeconomics. The book's historical perspective, along with its broad presentation of alternative methodologies, makes it an indispensable resource for academics and professionals.

The purpose of this book is to describe the intellectual process by which Real Business Cycle models were developed. The approach taken focuses on the core elements in the development of RBC models: (i) building blocks, (ii) catalysts, and (iii) meta-syntheses. This is done by detailed examination of all available unpublished variorum drafts of the key papers in the RBC story, so as to determine the origins of the ideas. The analysis of the process their discovery is then set out followed by explanations of the evolution and dissemination of the models, from first generation papers through full blown research programs. This is supplemented by interviews and correspondence with the individuals who were at the center of the development of RBC models, such as Kydland, Prescott, Long, Plosser, King, Lucas and Barro, among others. This book gets stright to the heart of the debates surrounding RBC models and as such contributes to a real assessment of their impact on modern macroeconomics. The volume, therefore, will interest all scholars looking at macroeconomics as well as historians of economic thought more generally.

"This book identifies four distinct functions of American higher education that colleges and universities have acquired over the past two hundred years and that are integral to liberal democracy: social mobility, citizenship education, the discovery and communication of knowledge, and the cultivation of a pluralistic society. Each chapter takes up one of these functions to analyze and assess"--

This paper surveys dynamic stochastic general equilibrium models with financial frictions in use by central banks and discusses priorities for future development of such models for the purpose of monetary and financial stability analysis. It highlights the need to develop macrofinancial models which allow analysis of the macroeconomic effects of macroprudential policy tools and to evaluate elements of the Basel III reforms as a priority. The paper also reviews the main approaches to introducing financial frictions into general equilibrium models. Macroeconomics tries to describe and explain the economywide movement of prices, output, and unemployment. The field has been sharply divided among various schools, including Keynesian, monetarist, new classical, and others. It has also been split between theorists and empiricists. Ray Fair is a resolute empiricist, developing and refining methods for testing theories and models. The field cannot advance without the discipline of testing how well the models approximate the data. Using a multicountry econometric model, he examines several important questions, including what causes inflation, how monetary authorities behave and what are their stabilization limits, how large is the wealth effect on aggregate consumption, whether European monetary policy has been too restrictive, and how large are the stabilization costs to Europe of adopting the euro. He finds, among other things, little evidence for the rational expectations hypothesis and for the so-called non-accelerating inflation rate of unemployment (NAIRU) hypothesis. He also shows that the U.S. economy in the last half of the 1990s was not a new age economy.

Read Book Dsge Macroeconomic Models A Critique E Garcia

A unified and comprehensive introduction to the analytical and numerical tools for solving dynamic economic problems; substantially revised for the second edition. This book offers a unified, comprehensive, and up-to-date treatment of analytical and numerical tools for solving dynamic economic problems. The focus is on introducing recursive methods—an important part of every economist's set of tools—and readers will learn to apply recursive methods to a variety of dynamic economic problems. The book is notable for its combination of theoretical foundations and numerical methods. Each topic is first described in theoretical terms, with explicit definitions and rigorous proofs; numerical methods and computer codes to implement these methods follow. Drawing on the latest research, the book covers such cutting-edge topics as asset price bubbles, recursive utility, robust control, policy analysis in dynamic New Keynesian models with the zero lower bound on interest rates, and Bayesian estimation of dynamic stochastic general equilibrium (DSGE) models. This second edition has been substantially updated. Responding to renewed interest in modeling with multiple equilibria, it incorporates new material on this topic throughout. It offers an entirely new chapter on deterministic nonlinear systems, and provides new material on such topics as linear planar systems, chaos, bifurcations, indeterminacy and sunspot solutions, pruning nonlinear solutions, the bandit problem, rational inattention models, bequests, self-fulfilling prophecies, the cyclical behavior of unemployment and vacancies, and the long-run risk model. The exposition of each chapter has been revised and improved, and many new figures, Matlab codes, and exercises have been added. A student solutions manual can be purchased separately.

Greater data availability has been coupled with developments in statistical theory and economic theory to allow more elaborate and complicated models to be entertained. These include factor models, DSGE models, restricted vector autoregressions, and non-linear models. This paper examines the impact of international financial integration on macroeconomic volatility in a large group of industrial and developing economies over the period 1960-99. We report two major results: First, while the volatility of output growth has, on average, declined in the 1990s relative to the three preceding decades, we also document that, on average, the volatility of consumption growth relative to that of income growth has increased for more financially integrated developing economies in the 1990s. Second, increasing financial openness is associated with rising relative volatility of consumption, but only up to a certain threshold. The benefits of financial integration in terms of improved risk-sharing and consumption-smoothing possibilities appear to accrue only beyond this threshold.

Annotation Part 6: Financial Markets and the Macroeconomy. 19. Asset prices, consumption, and the business cycle (J.Y. Campbell). 20. Human behavior and the efficiency of the financial system (R.J. Shiller). 21. The financial accelerator in a quantitative business cycle framework (B. Bernanke, M. Gertler and S. Gilchrist). Part 7: Monetary and Fiscal Policy. 22. Political economics and macroeconomic policy (T. Persson, G. Tabellini). 23. Issues in the design of monetary policy rules (B.T. McCallum). 24. Inflation stabilization and BOP crises in developing countries (G.A. Calvo, C.A. Vegh). 25. Government debt (D.W. Elmendorf, N.G. Mankiw). 26. Optimal fiscal and monetary policy (V.V. Chari, P.J. Kehoe). This book retraces the history of macroeconomics from Keynes's General Theory to the present. Central to it is the contrast between a Keynesian era and a Lucasian - or dynamic stochastic general equilibrium (DSGE) - era, each ruled by distinct methodological standards. In the Keynesian era, the book studies the following theories: Keynesian macroeconomics, monetarism, disequilibrium macro (Patinkin, Leijonhufvud, and Clower) non-Walrasian equilibrium

models, and first-generation new Keynesian models. Three stages are identified in the DSGE era: new classical macro (Lucas), RBC modelling, and second-generation new Keynesian modeling. The book also examines a few selected works aimed at presenting alternatives to Lucasian macro. While not eschewing analytical content, Michel De Vroey focuses on substantive assessments, and the models studied are presented in a pedagogical and vivid yet critical way. The concept of equilibrium is fundamental to economic theory, according to which, it exists when supply and demand are balanced. *Equilibrium Models in Economics* critically examines the major problematic assumptions employed to build equilibrium models. It gives particular attention to the assumptions used to characterize learning, knowledge and expectations. Lawrence Boland here explores whether equilibrium models can provide a realistic explanation of economic events and objects such as prices, market demands and market supplies. He traces how the different perspectives on equilibrium models represented by such creators as Kenneth Arrow, Robert Clower, and George Richardson influenced subsequent developments in economics. A key debate is about the comparative importance of whether equilibrium refers to a state of an actual economy or a property of a formal mathematical model. Another is the extent that the distinction between a model's exogenous vs. endogenous variables involves causality. Also explored are more recent efforts provided by behavioral, evolutionary, and complexity economics-whether they might change how economics is practiced in the future and how they could. *Equilibrium Models in Economics* is a trenchant exploration of how the discipline has grappled with attempts to understand and explain the way information, knowledge, and the expectations of actors participating in the economy influence outcomes and behavior. It presents a realistic, workable theory of knowledge and learning, simulating how decision makers and other actors operate in fast-changing equilibrium conditions.

Exchange Rates and Global Financial Policies brings together research and work done by world-class economist Paul De Grauwe over the past two decades. Drawing inspiration from behavioural finance literature, De Grauwe covers topics such as exchange rate economics, monetary integration (with particular attention on the Eurozone), and international macroeconomics. His work is categorised across three parts. The first part develops new theoretical and empirical approaches to exchange rate modelling. The second part features a collection of papers on the theory and empirical analysis of monetary unions. The final part contains criticism of mainstream macroeconomic models as well as proposed alternative modelling approaches. Contents: Exchange Rate Economics: Chaos in the Dornbusch Model of the Exchange Rate (Paul De Grauwe and Hans Dewachter) Heterogeneity of Agents, Transactions Costs and the Exchange Rate (Paul De Grauwe and Marianna Grimaldi) Exchange Rate Puzzles: A Tale of Switching Attractors (Paul De Grauwe and Marianna Grimaldi) Exchange Rates in Search of Fundamentals: The Case of the Euro–Dollar Rate (Paul De

Grauwe)Exchange Rates and Fundamentals: A Non-Linear Relationship? (Paul De Grauwe and Isabel Vansteenkiste)The Impact of FX Central Bank Intervention in a Noise Trading Framework (Michel Beine, Paul De Grauwe and Marianna Grimaldi)Monetary Integration:Conditions for Monetary Integration: A Geometric Interpretation (Paul De Grauwe)Is Europe an Optimum Currency Area? Evidence from Regional Data (Paul De Grauwe and Wim Vanhaverbeke)Setting Conversion Rates for the Third Stage of EMU (Paul De Grauwe and Luigi Spaventa)The Euro and Financial Crises (Paul De Grauwe)What have We Learnt About Monetary Integration Since the Maastricht Treaty? (Paul De Grauwe)The Governance of a Fragile Eurozone (Paul De Grauwe)Do Asymmetries Matter for European Monetary Policy? (Yunus Aksoy, Paul De Grauwe and Hans Dewachter)Macroeconomics And Monetary Policy:Is Inflation always and Everywhere a Monetary Phenomenon? (Paul De Grauwe and Magdalena Polan)Monetary Policy and the Real Economy (Paul De Grauwe and Cláudia Costa Storti)Lessons from the Banking Crisis: A Return to Narrow Banking (Paul De Grauwe)The Scientific Foundation of Dynamic Stochastic General Equilibrium (DSGE) Models (Paul De Grauwe)Animal Spirits and Monetary Policy (Paul De Grauwe)Booms and Busts in Economic Activity: A Behavioral Explanation (Paul De Grauwe) Readership: Graduate students and researchers in the fields of international economics and international finance. Keywords:Exchange Rate;Financial Policies;Turbulence;Exchange Market;Motenary Union;Macroeconomics;Economic Models;Behaviorial Economics;Monetary Integration;Euro;Financial Crisis;European Monetary Policy;Dynamic Stochastic General EquilibriumauthorKey Features:Cover a wide range of issues in international macroeconomics and international financeUse insights of behavioral economics making it possible to better understand macroeconomic dynamics

Dynamic factor models and dynamic stochastic general equilibrium (DSGE) models are widely used for empirical research in macroeconomics. The empirical factor literature argues that the co-movement of large panels of macroeconomic and financial data can be captured by relatively few common unobserved factors. Similarly, the dynamics in DSGE models are often governed by a handful of state variables and exogenous processes such as preference and/or technology shocks. Boivin and Giannoni(2006) combine a DSGE and a factor model into a data-rich DSGE model, in which DSGE states are factors and factor dynamics are subject to DSGE model implied restrictions. We compare a data-richDSGE model with a standard New Keynesian core to an empirical dynamic factor model by estimating both on a rich panel of U.S. macroeconomic and financial data compiled by Stock and Watson (2008).We find that the spaces spanned by the empirical factors and by the data-rich DSGE model states are very close. This proximity allows us to propagate monetary policy and technology innovations in an otherwise non-structural dynamic factor model to obtain predictions for many more series than just a handful of traditional macro variables, including measures of real

activity, price indices, labor market indicators, interest rate spreads, money and credit stocks, and exchange rates. In *Monetary and Fiscal Policy Through a DSGE Lens*, Harold L. Cole develops and extends versions of a classic quantitative model of economic growth to take on a wide range of topics in monetary and fiscal policy. Bridging the gap between current undergraduate and graduate texts in the field, this comprehensive book covers the basic elements of advanced macroeconomics and equips readers to understand the debate on key policy questions. By using the simple DSGE, or dynamic stochastic general equilibrium, framework to build a series of quantitative models, the book combines a gradual introduction to advanced analytic methods with computer programming and quantitative policy analysis. In a clear discussion of the sophisticated interaction between theory and data, Cole explains how to gauge how well a model captures key elements in the data and how to reverse engineer a model to data. The book covers costs of inflation, optimal monetary policy, the impact of labor and capital taxes, and optimal fiscal policy. It systematically discusses technical material including the new Keynesian liquidity shock models, standard analytic methods, such as Lagrangian methods, and computational methods using Matlab and Python. With a strong computational emphasis, the volume teaches how to program up and solve systems of non-linear equations and develop models to study the macroeconomy. Knowing how to deeply understand and analyze models and develop computational code to evaluate the implications of those models is essential for students of macroeconomics. This book connects the standard undergraduate material to the elaborate models of advanced graduate courses with systematic and logical coverage of the basics of advanced modern macroeconomics.

Introduction to Agent-Based Economics describes the principal elements of agent-based computational economics (ACE). It illustrates ACE's theoretical foundations, which are rooted in the application of the concept of complexity to the social sciences, and it depicts its growth and development from a non-linear out-of-equilibrium approach to a state-of-the-art agent-based macroeconomics. The book helps readers gain a better understanding of the limits and perspectives of the ACE models and their capacity to reproduce economic phenomena and empirical patterns. Reviews the literature of agent-based computational economics Analyzes approaches to agents' expectations Covers one of the few large macroeconomic agent-based models, the Modellaccio Illustrates both analytical and computational methodologies for producing tractable solutions of macro ACE models Describes diffusion and amplification mechanisms Depicts macroeconomic experiments related to ACE implementations

[Copyright: 2bbfc71a392495888f0bfb2b63e06af4](https://www.amazon.com/dp/B089888888)