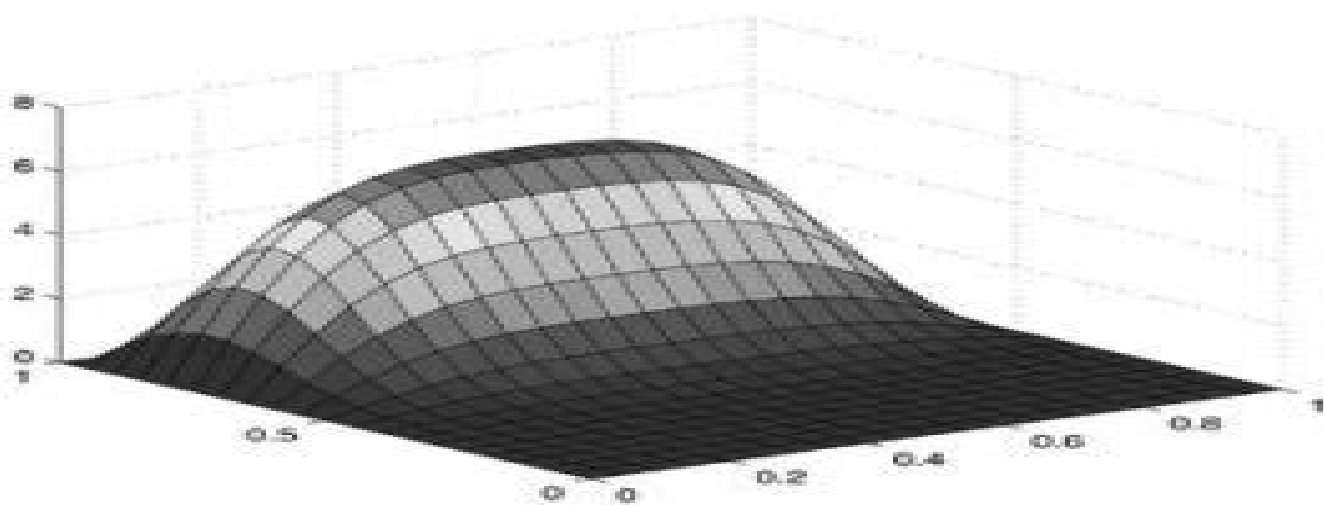


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Numerical Methods in Economics Kenneth L. Judd, 1991      *Special issue Numerical methods in economics and finance*  
Seth A. Greenblatt, 1998      *Economic Growth* Alfonso Novales, Esther Fernández, Jesús Ruiz, 2014-07-02 This is a book on deterministic and stochastic Growth Theory and the computational methods needed to produce numerical solutions Exogenous and endogenous growth models are thoroughly reviewed Special attention is paid to the use of these models for fiscal and monetary policy analysis Modern Business Cycle Theory the New Keynesian Macroeconomics the class of Dynamic Stochastic General Equilibrium models can be all considered as special cases of models of economic growth and they can be analyzed by the theoretical and numerical procedures provided in the textbook Analytical discussions are presented in full detail The book is self contained and it is designed so that the student advances in the theoretical and the computational issues in parallel EXCEL and Matlab files are provided on an accompanying website see Preface to the Second Edition to illustrate theoretical results as well as to simulate the effects of economic policy interventions The structure of these program files is described in Numerical exercise type of sections where the output of these programs is also interpreted The second edition corrects a few typographical errors and improves some notation      *Applications of Numerical Methods in Economics and Finance* Sule Alan, 2001      **Numerical Methods in Finance and Economics** Paolo

Brandimarte, 2013-06-06 A state of the art introduction to the powerful mathematical and statistical tools used in the field of finance The use of mathematical models and numerical techniques is a practice employed by a growing number of applied mathematicians working on applications in finance Reflecting this development Numerical Methods in Finance and Economics A MATLAB Based Introduction Second Edition bridges the gap between financial theory and computational practice while showing readers how to utilize MATLAB the powerful numerical computing environment for financial applications The author provides an essential foundation in finance and numerical analysis in addition to background material for students from both engineering and economics perspectives A wide range of topics is covered including standard

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[Economic Dynamics in Discrete Time, second edition](#) Jianjun Miao, 2020-03-03 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.

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Economic Dynamics with Memory Vasily E. Tarasov, Valentina V. Tarasova, 2021-01-18 This book presents the applications of fractional calculus fractional operators of non integer orders and fractional differential equations in describing economic dynamics with long memory Generalizations of basic economic concepts notions and methods for the economic processes with memory are suggested New micro and macroeconomic models with continuous time are proposed to describe the fractional economic dynamics with long memory as well

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*Frontiers in Applied General Equilibrium Modeling* Timothy J. Kehoe, T. N. Srinivasan, John Whalley, 2005-01-17 This 2005 volume brings together twelve papers by many of the most prominent applied general equilibrium modelers honoring Herbert Scarf the father of equilibrium computation in economics It deals with developments in applied general equilibrium a field which has broadened greatly since the 1980s The contributors discuss some traditional as well as some modern topics in the field including non convexities in economy wide models tax policy developmental modeling and energy modeling The book also covers a range of distinct approaches conceptual issues and computational algorithms such as calibration and areas of application such as macroeconomics of real business cycles and finance An introductory chapter written by the editors maps out issues and scenarios for the future evolution of applied general equilibrium

**Introduction to Quantitative Macroeconomics Using Julia** Petre Caraiani, 2018-08-29 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 New Palgrave Dictionary of Economics*, 2016-05-18 The award winning The New Palgrave Dictionary of Economics 2nd edition is now available as a dynamic online resource Consisting of over 1 900 articles written by leading figures in the field including Nobel prize winners this is the definitive scholarly reference work for a new generation of economists Regularly updated This product is a subscription based product

**Optimization in Economics and Finance** Bruce D. Craven, Sardar M. N. Islam, 2005  
 Extends the optimization techniques in a form that may be adopted for modeling social choice problems The models in this book provide possible models for a society's social choice for an allocation that maximizes welfare and utilization of resources A computer program SCOM is presented here for computing social choice models by optimal control

**Post Walrasian Macroeconomics** David Colander, 2006-07-17 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

*Advances in Economics and Econometrics* Econometric Society. World Congress, 2003-01-20 Sample Text      *Handbook of Computational Economics* Karl Schmedders, Kenneth L. Judd, 2013-12-31  
 Handbook of Computational Economics summarizes recent advances in economic thought revealing some of the potential offered by modern computational methods With computational power increasing in hardware and algorithms many economists are closing the gap between economic practice and the frontiers of computational mathematics In their efforts to accelerate the incorporation of computational power into mainstream research contributors to this volume update the improvements in algorithms that have sharpened econometric tools solution methods for dynamic optimization and equilibrium models and applications to public finance macroeconomics and auctions They also cover the switch to massive parallelism in the creation of more powerful computers with advances in the development of high power and high throughput computing Much more can be done to expand the value of computational modeling in economics In conjunction with volume one 1996 and volume two 2006 this volume offers a remarkable picture of the recent development of economics as a science as well as an exciting preview of its future potential Samples different styles and approaches reflecting the breadth of computational economics as practiced today Focuses on problems with few well developed solutions in the literature of other disciplines Emphasizes the potential for increasing the value of computational modeling in economics



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