



Numerical Methods in Economics (MIT Press)

By *Kenneth L. Judd*

Download now

Read Online →

Numerical Methods in Economics (MIT Press) By Kenneth L. Judd

To harness the full power of computer technology, economists need to use a broad range of mathematical techniques. In this book, Kenneth Judd presents techniques from the numerical analysis and applied mathematics literatures and shows how to use them in economic analyses. The book is divided into five parts. Part I provides a general introduction. Part II presents basics from numerical analysis on \mathbb{R}^n , including linear equations, iterative methods, optimization, nonlinear equations, approximation methods, numerical integration and differentiation, and Monte Carlo methods. Part III covers methods for dynamic problems, including finite difference methods, projection methods, and numerical dynamic programming. Part IV covers perturbation and asymptotic solution methods. Finally, Part V covers applications to dynamic equilibrium analysis, including solution methods for perfect foresight models and rational expectation models. A website contains supplementary material including programs and answers to exercises.

↓ [Download Numerical Methods in Economics \(MIT Press\) ...pdf](#)

📄 [Read Online Numerical Methods in Economics \(MIT Press\) ...pdf](#)

Numerical Methods in Economics (MIT Press)

By Kenneth L. Judd

Numerical Methods in Economics (MIT Press) By Kenneth L. Judd

To harness the full power of computer technology, economists need to use a broad range of mathematical techniques. In this book, Kenneth Judd presents techniques from the numerical analysis and applied mathematics literatures and shows how to use them in economic analyses. The book is divided into five parts. Part I provides a general introduction. Part II presents basics from numerical analysis on R^n , including linear equations, iterative methods, optimization, nonlinear equations, approximation methods, numerical integration and differentiation, and Monte Carlo methods. Part III covers methods for dynamic problems, including finite difference methods, projection methods, and numerical dynamic programming. Part IV covers perturbation and asymptotic solution methods. Finally, Part V covers applications to dynamic equilibrium analysis, including solution methods for perfect foresight models and rational expectation models. A website contains supplementary material including programs and answers to exercises.

Numerical Methods in Economics (MIT Press) By Kenneth L. Judd Bibliography

- Sales Rank: #823067 in Books
- Brand: imusti
- Published on: 1998-10-27
- Original language: English
- Number of items: 1
- Dimensions: 9.00" h x .88" w x 7.00" l, 2.37 pounds
- Binding: Hardcover
- 633 pages

 [Download Numerical Methods in Economics \(MIT Press\) ...pdf](#)

 [Read Online Numerical Methods in Economics \(MIT Press\) ...pdf](#)

Editorial Review

Review

Judd's book is a masterpiece which will help transform the way economic theory is done. It harnesses the computer revolution in the service of economic theory by collecting together a whole array of numerical methods to simulate and quantify models that used to be purely algebraic and qualitative.

(Avinash K. Dixit, Princeton University)

Deductive economic theory is dead! Long live computational economic theory. Ken Judd's book is a brilliant exposition of how we can do theory without theorems in economics.

(Jean Charles Rochet, Professor of Mathematics and Economics, Institut D'économie Industrielle, Toulouse, France)

This book is a masterwork written by a giant in the field. Here are very fast computational methods tailor-made by Judd for economics. These methods will enable researchers to dispense with artificial assumptions which have been made in the past in order to purchase analytical tractability. The power of the methods is illustrated by many examples. This book may have the same impact on the practice of economic theorizing as computational methods have had upon statistical inference.

(W. A. Brock, Department of Economics, University of Wisconsin)

Recent advances in computer power have permitted enormous progress in the numerical solution and analysis of complex economic model. *Numerical Methods in Economics* clearly presents a vast range of materials on this topic, from background mathematics through numerical algorithms to economic applications. Students will find this volume an accessible introduction to the field; experienced practitioners will find it a perennial reference.

(James M. Poterba, Mitsui Professor of Economics, MIT)

Kenneth Judd's book is a landmark that will establish him as one of the founding fathers of the nascent field of computational economics. The book is an impressive contribution not only for its breadth, but also for its mathematical depth and sophistication. But in the final analysis *Numerical Methods in Economics* is an eminently practical 'cookbook' filled with many clearly described recipes for solving a broad variety of models in fields ranging from economic theory, macroeconomics, to public economics. I would recommend that any serious economist have a copy of this book on their desk, regardless of whether their interest in theory or in applications. An understanding of effective numerical methods is quickly becoming an indispensable for doing any sort of high level work in economics.

(John Rust, Department of Economics, Yale University)

About the Author

Kenneth L. Judd is a Senior Fellow at the Hoover Institution.

Users Review

From reader reviews:

Jose Brummitt:

This Numerical Methods in Economics (MIT Press) book is absolutely not ordinary book, you have after that it the world is in your hands. The benefit you will get by reading this book is information inside this reserve incredible fresh, you will get info which is getting deeper an individual read a lot of information you will get. This specific Numerical Methods in Economics (MIT Press) without we comprehend teach the one who looking at it become critical in contemplating and analyzing. Don't possibly be worry Numerical Methods in Economics (MIT Press) can bring whenever you are and not make your case space or bookshelves' grow to be full because you can have it in the lovely laptop even mobile phone. This Numerical Methods in Economics (MIT Press) having good arrangement in word and also layout, so you will not sense uninterested in reading.

Cari Sexton:

Information is provisions for anyone to get better life, information these days can get by anyone in everywhere. The information can be a information or any news even an issue. What people must be consider when those information which is from the former life are challenging to be find than now's taking seriously which one is appropriate to believe or which one the resource are convinced. If you find the unstable resource then you obtain it as your main information we will see huge disadvantage for you. All those possibilities will not happen inside you if you take Numerical Methods in Economics (MIT Press) as the daily resource information.

Melanie Young:

Reading a book for being new life style in this calendar year; every people loves to study a book. When you learn a book you can get a wide range of benefit. When you read ebooks, you can improve your knowledge, since book has a lot of information in it. The information that you will get depend on what types of book that you have read. If you would like get information about your analysis, you can read education books, but if you want to entertain yourself look for a fiction books, these kinds of us novel, comics, and soon. The Numerical Methods in Economics (MIT Press) will give you new experience in examining a book.

Tia Rosario:

In this particular era which is the greater man or who has ability to do something more are more valuable than other. Do you want to become one among it? It is just simple solution to have that. What you have to do is just spending your time very little but quite enough to get a look at some books. Among the books in the top listing in your reading list is usually Numerical Methods in Economics (MIT Press). This book that is certainly qualified as The Hungry Hills can get you closer in turning out to be precious person. By looking upward and review this guide you can get many advantages.

Download and Read Online Numerical Methods in Economics (MIT Press) By Kenneth L. Judd #96KFL8JGCAR

Read Numerical Methods in Economics (MIT Press) By Kenneth L. Judd for online ebook

Numerical Methods in Economics (MIT Press) By Kenneth L. Judd Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Numerical Methods in Economics (MIT Press) By Kenneth L. Judd books to read online.

Online Numerical Methods in Economics (MIT Press) By Kenneth L. Judd ebook PDF download

Numerical Methods in Economics (MIT Press) By Kenneth L. Judd Doc

Numerical Methods in Economics (MIT Press) By Kenneth L. Judd Mobipocket

Numerical Methods in Economics (MIT Press) By Kenneth L. Judd EPub