

Foreword

COMMENTS CUM ENDORSEMENTS BY DISTINGUISHED ECONOMETRICIANS

The following are in alphabetical order by the last name of distinguished professors, who are all Fellows of the Journal of Econometrics.

Professor William A. Barnett, Oswald Distinguished Professor of Macroeconomics, University of Kansas, USA

This book provides a unified and broadly accessible presentation of modern econometrics, with emphasis on application and computing.

Professor Jean-Marie Dufour, William Dow Professor of Economics, McGill University, Canada

This book is a beautiful and highly accessible introduction to modern econometric methods tailored to the needs of those who wish to apply them. The main theoretical concepts are clearly explained in a non-technical way and the link with economic theory is underscored. Hrishikesh Vinod also undertook to show how the methods can be programmed with the powerful (and free) R software, which has become the reference language of statisticians for both statistical computing and graphics.

Students of this book can thus, quickly apply and modify the methods explained in the book, and they will also be able to draw from a wide stock of freely available code to pursue their own projects.

This book is a major addition to applied econometrics, which should prove useful to students and researchers all over the world. It should also contribute to bridge the gap between econometricians and statisticians. I strongly recommend this book to students and applied researchers, and will certainly do so for my own students.

Professor Subal C. Kumbhakar, University (distinguished) Professor, State University of New York, Binghamton

The learning of econometrics is never complete without some ‘hands-on’ experience. One way to accomplish this is to work on replicating previously published results. This is much easier today than it was 50 years ago thanks to the recent trend in transparency of applied econometric research. Many reputed journals now require that data and software be available for others to replicate results. This gives researchers, young and old, an opportunity to test their modeling and estimation skills.

Recognizing the importance of this hands-on work, many textbook writers provide data sets from published papers on a CD and add problem sets to verify and extend results. Since all of these involve the use of some software, some books today come bundled with a student or full version of it. These ‘tailored’ versions of the software most often have limited capacity in terms of what they can do.

Vinod has done a great service by writing a book utilizing R software that can supplement the standard econometrics textbook in an advanced undergraduate and applied graduate econometrics course. Although the book does not cover all the standard topics in an econometrics textbook, it gives a much deeper understanding in terms of economic theory and econometric models and explains in detail how to use the R software on the topics covered. R is open source software that is as powerful as commercial software. Vinod utilizes the software to teach econometrics by providing interesting examples and actual data applied to important policy issues. This helps the reader to choose the best method from a wide array of tools and packages available. The data used in the examples along with R program snippets illustrate economic theory and sophisticated statistical methods that go beyond the usual regression.

The R program snippets are not merely given as black boxes, but include detailed comments which help the reader better understand the software steps and use them as templates for possible extension and modification. Readers of this book, be they students of econometrics or applied economists, will benefit from the hands-on experience either by using the R snippets in replicating published results or by customizing them for their own research.

Professor Peter C. B. Phillips, Sterling Professor of Economics & Professor of Statistics, Yale University, USA

Modern approaches to econometrics education acknowledge the importance of practical implementation even in introductory courses. The R software package provides an open source statistical and graphics engine, that facilitates this learning process, empowering students and researchers to integrate theory and practice. Rick Vinod's book is an outstanding tool in this educational process, gently nursing its readers through simple examples on a vast range of topics that illustrate the practical side of econometric work, forcing economic ideas to face the reality of observation.

Professor Jean-François Richard, University (distinguished) Professor, University of Pittsburgh, USA

This book embraces R as a powerful tool to promote hands-on learning of econometric methods. It covers a wide range of commonly used techniques with emphasis on problems faced by practitioners. It does so in a way, that allows readers to initially reproduce by themselves several substantive illustrations presented in the book and to subsequently develop their own applications. It also emphasizes often overlooked careful data analysis prior to model specification. All together, this book presents a very convincing case and I definitely intend to recommend it as supplemental textbook to my graduate students, especially those with empirical interests.

Professor Aman Ullah, Chair, Economics Department, University of California, Riverside, USA

Econometrics applies statistical methods to study economic and financial data. The data used can be in the form of a cross-section (micro), or a time-series (macro), or panel with discrete, continuous, bounded, truncated, or censored variables related simultaneously or dynamically. Econometric models include linear and non-linear regression models, ARMA time-series models, vector autoregressive models, limited dependent variable models among others. Most econometrics texts concentrate on discussing model selection, statistical estimation and hypothesis testing for all such models.

Vinod's book is a superb work and it is unique in various respects. First, it provides a solid introduction to important topics in both micro/macro Economics and Finance in a simple way. Second, it integrates econometrics

methods with economic models in producer and consumer theories, labor economics, and financial econometrics. Third, each chapter is accompanied with empirical illustrations in the software R. Fourth, the hands-on approach provides the implementation of all the results in the book easily by anyone and anywhere. It is eminently appealing to the new generation of economists and econometricians.

I am sure this book will be greatly used outside the econometrics field by many readers from other applied sciences. For example, readers in applied statistics, engineering, sociology, and psychology would enjoy learning some clever modeling tricks and graphics in R.

Rick Vinod is a distinguished econometrician with great width, depth and originality in his published work and what impressed me greatly was the ease with which this has been communicated in the book as hands-on examples. It is a very user-friendly book and I forecast that this new kind of book will be extensively used by students, faculty and applied researchers.