Bootstrap For Panel Data Models

This book surveys the state-of-the-art in efficiency and productivity analysis, examining advances in the analytical foundations and empirical applications. The analytical techniques developed in this book for efficiency provide alternative ways of defining optimum outcome sets, typically as a (technical) production frontier or as an (economic) cost, revenue or profit frontier, and alternative ways of measuring efficiency relative to an appropriate frontier. Simultaneously, the analytical techniques developed for efficiency analysis extend directly to productivity analysis, thereby providing alternative methods for estimating productivity levels, and productivity change through time or productivity variation across producers. This book includes chapters using data envelopment analysis (DEA) or stochastic frontier analysis (SFA) as quantitative techniques capable of measuring efficiency and productivity. Across the book's 15 chapters, it broadly extends into popular application areas including agriculture, banking and finance, and municipal performance, and relatively new application areas including corporate social responsibility, the value of intangible assets, land consolidation, and the measurement of economic well-being. The chapters also cover topics such as permutation tests for production frontier shifts, new indices of total factor productivity, and also randomized controlled trials and production frontiers.

This book presents the state of the art in multilevel analysis, with an emphasis on more advanced topics. These topics are discussed conceptually, analyzed mathematically, and illustrated by empirical examples. Multilevel analysis is the statistical analysis of hierarchically and non-hierarchically nested data. The simplest example is clustered data, such as a sample of students clustered within schools. Multilevel data are especially prevalent in the social and behavioral sciences and in the biomedical sciences. The chapter

authors are all leading experts in the field. Given the omnipresence of multilevel data in the social, behavioral, and biomedical sciences, this book is essential for empirical researchers in these fields. It is well known that the impacts of climate change are tangible and hence there can be no debate about the need for appropriate adaptation measures, on a priority basis. However, it is equally important to recognize the fact that adaptation measures actually represent a dynamic synthesis of interventions pertaining to multiple systems. These are particularly of water, soil characteristics, genotypic and phenotypic variations and their expressions, age-correlated biochemical changes aligned with planting schedules and favorable weather/climate conditions. Nutrients, occurrence and distribution of associated vegetation including crop mixes also influence productivity. The overarching aspect of farming practice wields significant influence on the outcome and hence it is important to be clear about the particular focus of the investigations being carried out and reported in a suitable manner. It is essential to recognize that scientific research in agriculture in India has always produced valuable results of direct relevance to her people. Importantly, preparedness to tackle disasters due to inclement weather system has prominently featured on the agenda. The recent focus on climate change and impacts has provided the necessary impetus to reorganize the framework of investigation to capture the specifics of such impacts. In this context, the importance of micro climate variations too viz-a-viz the larger scales of impacts cannot be overemphasized. It will be useful to also help characterize natural variations versus artificially induced variations, helping us understand the complexities of individual and synergistic impacts too. Obviously, the limits and limitations of models could determine the spread and depth of the outcomes of investigations. Empirical evidences to reinforce assumptions have to also be documented with utmost care; guided by an understanding of the limits of tolerance, limiting factors, and the precautionary principle especially in the public policy interface. The present volume therefore, showcases these strands

with the fond hope that they will stimulate further thinking and enable appropriate action.

Economic agents interact in structural relationships through time and space. This work starts from the empirical observation that all three dimensions, namely time, space, and structural functional forms, are important for an integrative framework of modern empirical analysis in regional science. The work thus aims at combining up-to-date econometric tools from the fields of spatial econometrics, panel time-series analysis and structural simultaneous equation modelling to analysis the different research questions at hand. Most of the topics dealt within this work start from a concrete empirical problem, while problem solving also aims at generating some new knowledge in a methodological way, e.g. by the complementary use of Monte Carlo simulation studies to compare the empirical performance of different estimators for specific data samples. Following a first introductory chapter, the work is structured in three parts addressing major issues in building up a stylized regional economic model such as interregional migration, factor and final demand estimation. All empirical applications use German regional data.

Behavioral Predictive Modeling in Economics

Exact Statistical Methods for Data Analysis

Festschrift in Honor of Peter Schmidt

Bootstrap Tests for Regression Models

The Economics and Econometrics of the Energy-Growth Nexus

This book is concerned with recent developments in time series and panel data techniques for the analysis of macroeconomic and financial data. It provides a rigorous, nevertheless user-friendly, account of the time series techniques dealing with univariate and multivariate time series models, as well as panel data models. It is distinct from other time series texts in the sense that it also covers panel data models and attempts at a more coherent integration of time series, multivariate analysis, and panel data models.

It builds on the author's extensive research in the areas of time series and panel data analysis and covers a wide variety of topics in one volume. Different parts of the book can be used as teaching material for a variety of courses in econometrics. It can also be used as reference manual. It begins with an overview of basic econometric and statistical techniques, and provides an account of stochastic processes, univariate and multivariate time series, tests for unit roots, cointegration, impulse response analysis, autoregressive conditional heteroskedasticity models, simultaneous equation models, vector autoregressions, causality, forecasting, multivariate volatility models, panel data models, aggregation and global vector autoregressive models (GVAR). The techniques are illustrated using Microfit 5 (Pesaran and Pesaran, 2009, OUP) with applications to real output, inflation, interest rates, exchange rates, and stock prices. The book is oriented to the practitioner.

The Economics and Econometrics of the Energy-Growth Nexus recognizes that research in the energy-growth nexus field is heterogeneous and controversial. To make studies in the field as comparable as possible, chapters cover aggregate energy and disaggregate energy consumption and single country and multiple country analysis. As a foundational resource that helps researchers answer fundamental questions about their energy-growth projects, it combines theory and practice to classify and summarize the literature and explain the econometrics of the energy-growth nexus. The book provides order and guidance, enabling researchers to feel confident that they are adhering to widely accepted assumptions and procedures. Provides guidance about selecting and implementing econometric tools and interpreting empirical findings Equips researchers to get clearer pictures of the most robust relationships between variables Covers up-to-date empirical and econometric methods Combines theory and practice to classify and summarize the literature and explain the econometrics of the energy-growth nexus

This restructured, updated Third Edition provides a general overview of the econometrics of panel data,

from both theoretical and applied viewpoints. Readers discover how econometric tools are used to study organizational and household behaviors as well as other macroeconomic phenomena such as economic growth. The book contains sixteen entirely new chapters; all other chapters have been revised to account for recent developments. With contributions from well known specialists in the field, this handbook is a standard reference for all those involved in the use of panel data in econometrics.

Applications using SAS®

Time Series and Panel Data Econometrics

On Bootstrap Standard Errors in Dynamic Panel Data Models

Panel Modeling, Micro Applications, and Econometric Methodology

The AGM in Europe

This monograph deals with spatially dependent nonstationary time series in a way accessible to both time series econometricians wanting to understand spatial economics, and spatial econometricians lacking a grounding in time series analysis. After charting key concepts in both time series and spatial econometrics, the book discusses how the spatial connectivity matrix can be estimated using spatial panel data instead of assuming it to be exogenously fixed. This is followed by a discussion of spatial nonstationarity in spatial cross-section data, and a full exposition of non-stationarity in both single and multi-equation contexts, including the estimation and simulation of spatial vector autoregression (VAR) models

and spatial error correction (ECM) models. The book reviews the literature on panel unit root tests and panel cointegration tests for spatially independent data, and for data that are strongly spatially dependent. It provides for the first time critical values for panel unit root tests and panel cointegration tests when the spatial panel data are weakly or spatially dependent. The volume concludes with a discussion of incorporating strong and weak spatial dependence in non-stationary panel data models. All discussions are accompanied by empirical testing based on a spatial panel data of house prices in Israel.
This book presents the econometric foundations and applications of multi-dimensional panels, including modern methods of big data analysis. The last two decades or so, the use of panel data has become a standard in many areas of economic analysis. The available models formulations became more complex, the estimation and hypothesis testing methods more sophisticated. The interaction between economics and econometrics resulted in a huge publication output, deepening and widening immensely our knowledge and understanding in both. The traditional panel data, by nature, are two-dimensional. Lately, however, as part of the big data revolution, there has been a rapid emergence of three, four and even higher

dimensional panel data sets. These have started to be used to study the flow of goods, capital, and services, but also some other economic phenomena that can be better understood in higher dimensions. Oddly, applications rushed ahead of theory in this field. This book is aimed at filling this widening gap. The first theoretical part of the volume is providing the econometric foundations to deal with these new high-dimensional panel data sets. It not only synthesizes our current knowledge, but mostly, presents new research results. The second empirical part of the book provides insight into the most relevant applications in this area. These chapters are a mixture of surveys and new results, always focusing on the econometric problems and feasible solutions.

This book covers a broad range of topics about multilevel modeling. The goal is to help readers to understand the basic concepts, theoretical frameworks, and application methods of multilevel modeling. It is at a level also accessible to non-mathematicians, focusing on the methods and applications of various multilevel models and using the widely used statistical software SAS®. Examples are drawn from analysis of real-world research data.

The Handbook is a definitive reference source and teaching aid for

econometricians. It examines models, estimation theory, data analysis and field applications in econometrics. Comprehensive surveys, written by experts, discuss recent developments at a level suitable for professional use by economists, econometricians, statisticians, and in advanced graduate econometrics courses. For more information on the Handbooks in Economics series, please see our home page on http://www.elsevier.nl/locate/hes
Handbook of Multilevel Analysis
The Econometrics of Panel Data
Estimation and Testing in Dynamic, Nonlinear Panel Data Models
Nonseparable Panel Data Models Identification, Estimation and Testing
Essays in Honor of Aman Ullah
From Robin Sickles: As I indicated to you some months ago Professor William Horrace and I would like Springer to publish a Festschrift in Honor of Peter Schmidt, our professor. Peter's accomplishments are legendary among his students and the profession. I have a bit of that student perspective in my introductory and closing remarks on the website for the conference we had in his honor this last July. I have attached the conference program from which selected papers will come (as well as from students who were unable to attend). You will also find the names of his students

(40) on the website. A top twenty economics department could be started up from those 40 students. Papers from some festschrifts have a thematic link among the papers based on subject material. What I think is unique to this festschrift is that the theme running through the papers will be Peter's remarkable legacy left to his students to frame a problem and then analyze and examine it in depth using rigorous techniques but rarely just for the purpose of showcasing technical refinements per se. I think this would be a book that graduate students would find invaluable in their early research careers and seasoned scholars would find invaluable in both their and their students' research.

This book presents both methodological papers on and examples of applying behavioral predictive models to specific economic problems, with a focus on how to take into account people's behavior when making economic predictions. This is an important issue, since traditional economic models assumed that people make wise economic decisions based on a detailed rational analysis of all the relevant aspects. However, in reality – as Nobel Prize-winning research has shown – people have a limited ability to process information and, as a result, their decisions are not always optimal. Discussing the need for prediction-oriented statistical techniques, since many statistical methods currently used in economics focus more on model fitting and do not always lead to good predictions, the book is a valuable resource for researchers and students interested in the latest results and challenges and for practitioners wanting to

learn how to use state-of-the-art techniques.

This collection of panel data papers, both theoretical and applied, were solicited from the 10th International conference on panel data, whcich was held at the Academy of Sciences in Berlin in July of 2002. The book included submissions from the conference that were successful in going thorugh the review process along with a selection of panel data papers published in Empirical Economics during the period 2002-2004. Theroetical topics include methodology papers on panel data probit models by William Greene, treatment models by Jaap H. Abring and Gerard J. van den Berg, error component models with an ARMA process on th e time specific effects by Sune Karlsson and Jimmy Skoglund, asymptotic tests for poolability and their bootstrapped versions by Maurice J.G. Bun, confidence intervals for a doubly heteroskedastic stochastic production frontiers by K. Hadri, C. Guermat and J Whittaker, estimation of semi-parametric dynamic panel data models by Thomas J. Kniesner and Qi Li and a review of survey attrition and non-response in the European Community Household Panel by Franco Peracchi.

Now available in paperback, this book covers some recent developments in statistical inference. It provides methods applicable in problems involving nuisance parameters such as those encountered in comparing two exponential distributions or in ANOVA without the assumption of equal error variances. The generalized procedures are shown to be more powerful in detecting significant experimental results and in avoiding

misleading conclusions.
Common Errors in Statistics
Bootstrapping Autoregressions with Conditional Heteroskedasticity of Unknown Form
Theory and Practice of Shareholder Behaviour
Essays on Bootstrap in Econometrics
Econometric Analysis of Panel Data

An accessible discussion examining computationally-intensive
techniques and bootstrap methods, providing ways to improve the
finite-sample performance of well-known asymptotic tests for
regression models. This book uses the linear regression model as
a framework for introducing simulation-based tests to help
perform econometric analyses.
As conceived by the founders of the Econometric Society,
econometrics is a field that uses economic theory and
statistical methods to address empirical problems in economics.
It is a tool for empirical discovery and policy analysis. The
chapters in this volume embody this vision and either implement
it directly or provide the tools for doing so. This vision is
not shared by those who view econometrics as a branch of
statistics rather than as a distinct field of knowledge that

designs methods of inference from data based on models of human
choice behavior and social interactions. All of the essays in
this volume and its companion volume 6B offer guidance to the
practitioner on how to apply the methods they discuss to
interpret economic data. The authors of the chapters are all
leading scholars in the fields they survey and extend. *Part of
the renowned Handbooks in Economics Series *Updates and expands
the exisiting Handbook of Econometrics volumes *An invaluable
reference written by some of the world's leading
econometricians.
Conditional heteroskedasticity is an important feature of many
macroeconomic andBedingte Heteroskedastizität ist eine wichtige
Eigenschaft von vielen Daten über.
A guide to choosing and using the right techniques High-speed
computers and prepackaged statistical routines would seem to
take much of the guesswork out of statistical analysis and lend
its applications readily accessible to all. Yet, as Phillip Good
and James Hardin persuasively argue, statistical software no
more makes one a statistician than a scalpel makes one a
surgeon. Choosing the proper technique and understanding the

analytical context is of paramount importance to the proper application of statistics. The highly readable Common Errors in Statistics (and How to Avoid Them) provides both newly minted academics and professionals who use statistics in their work with a handy field guide to statistical problems and solutions. Good and Hardin begin their handbook by establishing a mathematically rigorous but readily accessible foundation for statistical procedures. They focus on debunking popular myths, analyzing common mistakes, and instructing readers on how to choose the appropriate statistical technique to address their specific task. A handy checklist is provided to summarize the necessary steps. Topics covered include: * Creating a research plan * Formulating a hypothesis * Specifying sample size * Checking assumptions * Interpreting p-values and confidence intervals * Building a model * Data mining * Bayes' Theorem, the bootstrap, and many others Common Errors in Statistics (and How to Avoid Them) also contains reprints of classic articles from statistical literature to re-examine such bedrock subjects as linear regression, the analysis of variance, maximum likelihood, meta-analysis, and the bootstrap. With a final emphasis on

finding solutions and on the great value of statistics when
applied in the proper context, this book will prove eminently
useful to students and professionals in the fields of research,
industry, medicine, and government.
Empirical Modelling in Regional Science
Econometrics
Climate Change Modelling, Planning and Policy for Agriculture
(and How to Avoid Them)
Bootstrap for Panel Data Models with an Application to the
Evaluation of Public Policies

The most authoritative and up-to-date core econometrics textbook available
Econometrics is the quantitative language of economic theory, analysis, and
empirical work, and it has become a cornerstone of graduate economics programs.
Econometrics provides graduate and PhD students with an essential introduction to
this foundational subject in economics and serves as an invaluable reference for
researchers and practitioners. This comprehensive textbook teaches fundamental
concepts, emphasizes modern, real-world applications, and gives students an
intuitive understanding of econometrics. Covers the full breadth of econometric
theory and methods with mathematical rigor while emphasizing intuitive
explanations that are accessible to students of all backgrounds Draws on
integrated, research-level datasets, provided on an accompanying website

Discusses linear econometrics, time series, panel data, nonparametric methods, nonlinear econometric models, and modern machine learning Features hundreds of exercises that enable students to learn by doing Includes in-depth appendices on matrix algebra and useful inequalities and a wealth of real-world examples Can serve as a core textbook for a first-year PhD course in econometrics and as a follow-up to Bruce E. Hansen's Probability and Statistics for Economists
"This paper shows how to bootstrap hypothesis tests in the context of the Parks (1967) estimator. It then demonstrates that the bootstrap outperforms Parks's top competitor. The Parks estimator has been a workhorse for the analysis of panel data and seemingly unrelated regression equation systems because it allows the incorporation of cross-sectional correlation together with heteroskedasticity and serial correlation. Unfortunately, the associated, asymptotic standard error estimates are biased downward, often severely. To address this problem, Beck and Katz (1995) developed an approach that uses the Prais-Winsten estimator together with "panel corrected standard errors" (PCSE). While PCSE produces standard error estimates that are less biased than Parks, it forces the user to sacrifice efficiency for accuracy in hypothesis testing. The PCSE approach has been, and continues to be, widely used. This paper develops an alternative: a nonparametric bootstrapping procedure to be used in conjunction with the Parks estimator. We demonstrate its effectiveness using an innovative experimental approach that creates artificial panel datasets modelled after actual panel datasets. Our approach provides a Pareto-improving option by allowing researchers to retain the

efficiency of the Parks estimator while producing more accurate hypothesis test results than the PCSE. Keywords: Parks model, PCSE, SUR, panel data, cross-sectional correlation, bootstrap, Monte Carlo, simulation"--Page [ii].
The Handbook of Financial Econometrics and Statistics provides, in four volumes and over 100 chapters, a comprehensive overview of the primary methodologies in econometrics and statistics as applied to financial research. Including overviews of key concepts by the editors and in-depth contributions from leading scholars around the world, the Handbook is the definitive resource for both classic and cutting-edge theories, policies, and analytical techniques in the field. Volume 1 (Parts I and II) covers all of the essential theoretical and empirical approaches. Volumes 2, 3, and 4 feature contributed entries that showcase the application of financial econometrics and statistics to such topics as asset pricing, investment and portfolio research, option pricing, mutual funds, and financial accounting research. Throughout, the Handbook offers illustrative case examples and applications, worked equations, and extensive references, and includes both subject and author indices.
The Handbook is a definitive reference source and teaching aid for econometricians. It examines models, estimation theory, data analysis and field applications in econometrics. Comprehensive surveys, written by experts, discuss recent developments at a level suitable for professional use by economists, econometricians, statisticians, and in advanced graduate econometrics courses. For more information on the Handbooks in Economics series, please see our home

page on http://www.elsevier.nl/locate/hes.
Panel Data Econometrics
Econometric Methods and Applications
ECONOMETRIC MODELS WITH PANEL DATA. APPLICATIONS WITH STATA
The Econometrics of Multi-dimensional Panels
Bootstrap Methods for Inference with Cluster-sample IV Models
Panel Data Econometrics: Theory introduces econometric modelling. Written by experts from diverse disciplines, the volume uses longitudinal datasets to illuminate applications for a variety of fields, such as banking, financial markets, tourism and transportation, auctions, and experimental economics. Contributors emphasize techniques and applications, and they accompany their explanations with case studies, empirical exercises and supplementary code in R. They also address panel data analysis in the context of productivity and efficiency analysis, where some of the most interesting applications and advancements have recently been made. Provides a vast array of empirical applications useful to practitioners from different application environments

Accompanied by extensive case studies and empirical exercises Includes empirical chapters accompanied by supplementary code in R, helping researchers replicate findings Represents an accessible resource for diverse industries, including health, transportation, tourism, economic growth, and banking, where researchers are not always econometrics experts

Anne Lafarre combines wide ranging empirical legal and economic research to analyse and understand the real role of the AGM in the European businesses and corporate governance frameworks today.

Microeconomic panel data, also known as longitudinal data or repeated measures, allow the researcher to observe the same individual across time. One of the advantages of panel data is that they allow the researcher to control for unobservable individual heterogeneity. The linear fixed effects model is the most commonly used method in empirical work to control for unobservable heterogeneity. Chapter 1 reviews the special features of the linear fixed effects

model in detail, giving special attention to the definition of fixed effects and correlated random effects. It discusses the issues that arise when we move from a linear model to fully nonseparable models and reviews the two strands of the literature that are relevant for this dissertation: (1) the literature on nonlinear parametric panel data models with fixed effects, (2) the literature on nonparametric identification in nonseparable panel data models. Chapter 2 falls under the parametric nonlinear panel data models with fixed effects. Nonlinear panel data models with fixed effects are an important example in econometrics where the incidental parameter problem arises and the maximum likelihood estimator (MLE) is asymptotically biased. Bias correction of the MLE achieves consistency without increasing the asymptotic variance. Chapter 2 proposes a shrinkage estimator that combines that is shown to lead to a higher-order mean-square error improvement over the analytical bias-corrected estimator. Chapter 3 falls under the literature on nonparametric identification in

nonseparable panel data models. Starting from a general DGP that exhibits nonseparability of the structural function, arbitrary individual and time heterogeneity, I give a necessary and sufficient condition for the point-identification of the APE for a subpopulation. This condition is then used to characterize the trade-off between assumptions on unobservable heterogeneity and the structural function that achieve identification. The identifying assumptions here have clear testable implications on the distribution of observables. I hence propose bootstrap-adjusted Kolmogorv-Smirnov and Cramer-von-Mises statistics to test these implications. Chapter 4 is an empirical paper that studies the issue of manipulation of air pollution data by Chinese cities. It applies tests similar in spirit to the tests proposed in Chapter 3 to test the presence of manipulation.

The majority of empirical research in economics ignores the potential benefits of nonparametric methods, while the majority of advances in nonparametric theory ignores the

*problems faced in applied econometrics. This book helps
bridge this gap between applied economists and theoretical
nonparametric econometricians. It discusses in depth, and in
terms that someone with only one year of graduate
econometrics can understand, basic to advanced nonparametric
methods. The analysis starts with density estimation and
motivates the procedures through methods that should be
familiar to the reader. It then moves on to kernel
regression, estimation with discrete data, and advanced
methods such as estimation with panel data and instrumental
variables models. The book pays close attention to the
issues that arise with programming, computing speed, and
application. In each chapter, the methods discussed are
applied to actual data, paying attention to presentation of
results and potential pitfalls.
With an Application to an Oligopoly Model of Cooperative R&D
Applied Nonparametric Econometrics
Methods and Applications
Multilevel Models*

Towards a Global Time-Space-Structural Analysis

Volume 36 of Advances in Econometrics recognizes Aman Ullah's significant contributions in many areas of econometrics and celebrates his long productive career.

Written by one of the world's leading researchers and writers in the field, Econometric Analysis of Panel Data has become established as the leading textbook for postgraduate courses in panel data. This new edition reflects the rapid developments in the field covering the vast research that has been conducted on panel data since its initial publication. Featuring the most recent empirical examples from panel data literature, data sets are also provided as well as the programs to implement the estimation and testing procedures described in the book. These programs will be made available via an accompanying website which will also contain solutions to end of chapter exercises that will appear in the book. The text has been fully updated with new material on dynamic panel data models and recent results on non-linear panel models and in particular work on limited dependent variables panel data models.

The data panels are a special type of samples in which the behavior of a certain number of economic agents is followed over time. In this way, the researcher can perform economic analysis and specify models with the data of cross section that are obtained when all operators are considered in an instant of time. Different patterns of behaviour of all agents together studied in the different temporal moments may thus be assessed. Alternatively, you can perform the same analysis considering time series given by the evolution of each economic agent throughout all the periods of the sample. This book explores the panel data econometrics through STATA. The most important topics are the following: Linear regression estimators in panel data models, fixed and random effects, heteroskedasticity and

autocorrelation in panel data models, instrumental variables and two stage least squares in panel data models, dynamic panel data models, logit and probit panel data models, censored panel data models, count panel data models, Tobit panel data models, Poisson panel data models, negative binomial panel data models and others models with panel data.

The second edition of a comprehensive state-of-the-art graduate level text on microeconometric methods, substantially revised and updated. The second edition of this acclaimed graduate text provides a unified treatment of two methods used in contemporary econometric research, cross section and data panel methods. By focusing on assumptions that can be given behavioral content, the book maintains an appropriate level of rigor while emphasizing intuitive thinking. The analysis covers both linear and nonlinear models, including models with dynamics and/or individual heterogeneity. In addition to general estimation frameworks (particular methods of moments and maximum likelihood), specific linear and nonlinear methods are covered in detail, including probit and logit models and their multivariate, Tobit models, models for count data, censored and missing data schemes, causal (or treatment) effects, and duration analysis. Econometric Analysis of Cross Section and Panel Data was the first graduate econometrics text to focus on microeconomic data structures, allowing assumptions to be separated into population and sampling assumptions. This second edition has been substantially updated and revised. Improvements include a broader class of models for missing data problems; more detailed treatment of cluster problems, an important topic for empirical researchers; expanded discussion of "generalized instrumental variables" (GIV) estimation; new coverage (based on the author's own recent research) of inverse probability weighting; a more complete framework for estimating treatment effects with panel

data, and a firmly established link between econometric approaches to nonlinear panel data and the "generalized estimating equation" literature popular in statistics and other fields. New attention is given to explaining when particular econometric methods can be applied; the goal is not only to tell readers what does work, but why certain "obvious" procedures do not. The numerous included exercises, both theoretical and computer-based, allow the reader to extend methods covered in the text and discover new insights.

Microeconometrics

Essays in Honor of M. Hashem Pesaran

The Econometric Analysis of Non-Stationary Spatial Panel Data

Advances in Efficiency and Productivity II

Theory and Applications

The collection of chapters in Volume 43 Part B of Advances in Econometrics serves as a tribute to one of the most innovative, influential, and productive econometricians of generation, Professor M. Hashem Pesaran.

Written in a comprehensive yet accessible style, this Handbook introduces readers to range of modern empirical methods with applications in microeconomics, illustrating how to use two of the most popular software packages, Stata and R, in microeconometric applications.

Generalized method of moments (GMM) estimation of nonlinear systems has two important advantages over conventional maximum likelihood (ML) estimation: GMM estimation usually requires less restrictive distributional assumptions and remains

computationally attractive when ML estimation becomes burdensome or even impossible. This book presents an in-depth treatment of the conditional moment approach to GMM estimation of models frequently encountered in applied microeconometrics. It covers both large sample and small sample properties of conditional moment estimators and provides an application to empirical industrial organization. With its comprehensive and up-to-date coverage of the subject which includes topics like bootstrapping and empirical likelihood techniques, the book addresses scientists, graduate students and professionals in applied econometrics.
Econometric Analysis of Cross Section and Panel Data, second edition
Die Erfassung der langfristigen Absatzmöglichkeiten mit Hilfe des Lebenszyklus eines Produktes
Conditional Moment Estimation of Nonlinear Equation Systems
Theory
Handbook of Financial Econometrics and Statistics