1. Record Nr.   UNINA9910734827403321

Autore   Macedo Pedro

Titolo   Advanced Mathematical Methods for Economic Efficiency Analysis : Theory and Empirical Applications / / edited by Pedro Macedo, Victor Moutinho, Mara Madaleno

Pubbl/distr/stampa   Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023

ISBN   9783031295836
3031295838

Edizione   [1st ed. 2023.]

Descrizione fisica   1 online resource (267 pages)

Collana   Lecture Notes in Economics and Mathematical Systems, , 2196-9957 ; ; 692

Altri autori (Persone)   MoutinhoVictor
MadalenoMara <1981->

Disciplina   330.0151

Soggetti   Econometrics
Social sciences - Mathematics
Power resources
Environmental economics
Quantitative Economics
Mathematics in Business, Economics and Finance
Resource and Environmental Economics

Lingua di pubblicazione   Inglese

Formato   Materiale a stampa

Livello bibliografico   Monografia

Nota di contenuto   Chapter 1. Introduction -- Part I -- Chapter 2. Production Economics and Economic Efficiency (Mónica Meireles) -- Chapter 3. Data Envelopment Analysis: A Review and Synthesis (Ana S. Camanho) -- Chapter 4. Stochastic Frontier Analysis: A Review and Synthesis (Mara Madaleno) -- Part II -- Chapter 5. Combining Directional Distances and ELECTRE Multicriteria Decision Analysis for Preferable Assessments of Efficiency (Thyago Nepomuceno) -- Chapter 6. Benefit-of-the-Doubt Composite Indicators and use of Weight Restrictions (Ana S. Camanho) -- Chapter 7. Multidirectional Dynamic Inefficiency Analysis: An Extension to Include Corporate Social Responsibility (Magdalena Kapelko) -- Chapter 8. Stochastic DEA (Samah Jradi) -- Chapter 9. Internal Benchmarking for Efficiency Evaluations using Data

Envelopment Analysis: A Review of Applications and Directions for Future Research (Fabio Sartori Piran) -- Part III -- Chapter 10. Recent Advances in the Construction of Nonparametric Stochastic Frontier Models (Christopher F. Parmeter) -- Chapter 11. A Hierarchical Panel Data Model for the Estimation of Stochastic Metafrontiers: Computational Issues and an Empirical Application (Christine Amsler) -- Chapter 12. Robustness in Stochastic Frontier Analysis (Alexander D. Stead) -- Chapter 13. Is it MOLS or COLS? (Christopher F. Parmeter) -- Chapter 14. Stochastic Frontier Analysis with Maximum Entropy Estimation (Pedro Macedo).

Sommario/riassunto	Economic efficiency analysis has received considerable worldwide attention in the last few decades, with Stochastic Frontier Analysis (SFA) and Data Envelopment Analysis (DEA) establishing themselves as the two dominant approaches in the literature. This book, by combining cutting-edge theoretical research on DEA and SFA with attractive real-world applications, offers a valuable asset for professors, students, researchers, and professionals working in all branches of economic efficiency analysis, as well as those concerned with the corresponding economic policies. The book is divided into three parts, the first of which is devoted to basic concepts, making the content self-contained. The second is devoted to DEA, and the third to SFA. The topics covered in Part 2 range from stochastic DEA to multidirectional dynamic inefficiency analysis, including directional distance functions, the elimination and choice translating algorithm, benefit-of-the-doubt composite indicators, and internal benchmarking for efficiency evaluations. Part 3 also includes exciting and cutting-edge theoretical research on e.g. robustness, nonparametric stochastic frontier models, hierarchical panel data models, and estimation methods like corrected ordinary least squares and maximum entropy.