1. Record Nr. UNINA9910364956303321 Autore Miyawaki Koji Titolo Bayesian Analysis of Demand Under Block Rate Pricing [[electronic resource] /] / by Koji Miyawaki Singapore:,: Springer Singapore:,: Imprint: Springer,, 2019 Pubbl/distr/stampa **ISBN** 981-15-1857-2 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (120 pages) Collana JSS Research Series in Statistics, , 2364-0057 Disciplina 519.542 Soggetti **Statistics** Financial engineering Economic policy Statistics for Business, Management, Economics, Finance, Insurance Statistical Theory and Methods **Bayesian Inference** Financial Engineering R & D/Technology Policy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. 1. Introduction -- 2. Demand under Increasing Block Rate Pricing -- 3. Nota di contenuto Demand under Decreasing Block Rate Pricing -- 4. Extensions to Panel Data -- 5. Extensions to Areal Data -- 6. Block Normal Simulator. Sommario/riassunto This book focuses on the structural analysis of demand under block rate pricing, a type of nonlinear pricing used mainly in public utility services. In this price system, consumers are presented with several unit prices, which makes a naive analysis biased. However, the response to the price schedule is often of interest in economics and plays an important role in policymaking. To address this issue, the book adopts a structural approach, referred to as the discrete/continuous choice approach in the literature, to develop corresponding statistical models for analysis. The resulting models are extensions of the Tobit model, a well-known statistical model in econometrics, and their hierarchical structure fits well in Bayesian methodology. Thus, the book takes the Bayesian approach and

develops the Markov chain Monte Carlo method to conduct statistical

inferences. The methodology derived is then applied to real-world datasets, microdata collected in Tokyo and the neighboring Chiba Prefecture, as a useful empirical analysis for prediction as well as policymaking.