Record Nr. UNINA9910145905103321 Autore Kariya Takeaki Titolo Generalized least squares [[electronic resource] /] / Takeaki Kariya, Hiroshi Kurata Chichester, West Sussex, England; ; Hoboken, NJ, : Wiley, c2004 Pubbl/distr/stampa **ISBN** 1-280-27206-6 9786610272068 0-470-29876-6 0-470-86698-5 0-470-86699-3 1 online resource (313 p.) Descrizione fisica Collana Wiley series in probability and statistics Altri autori (Persone) KurataHiroshi <1967-> 511 Disciplina 511.42 511/.42 Soggetti Least squares Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references (p. 281-286) and index. Nota di contenuto Contents; Preface; 1 Preliminaries; 1.1 Overview; 1.2 Multivariate Normal and Wishart Distributions; 1.3 Elliptically Symmetric Distributions; 1.4 Group Invariance; 1.5 Problems; 2 Generalized Least Squares Estimators; 2.1 Overview; 2.2 General Linear Regression Model; 2.3 Generalized Least Squares Estimators; 2.4 Finiteness of Moments and Typical GLSEs; 2.5 Empirical Example: CO[sub(2)] Emission Data; 2.6 Empirical Example: Bond Price Data; 2.7 Problems; 3 Nonlinear Versions of the Gauss-Markov Theorem; 3.1 Overview; 3.2 Generalized **Least Squares Predictors** 3.3 A Nonlinear Version of the Gauss-Markov Theorem in Prediction 3.4 A Nonlinear Version of the Gauss-Markov Theorem in Estimation: 3.5 An Application to GLSEs with Iterated Residuals; 3.6 Problems; 4 SUR and Heteroscedastic Models; 4.1 Overview; 4.2 GLSEs with a Simple Covariance Structure; 4.3 Upper Bound for the Covariance Matrix of a GLSE; 4.4 Upper Bound Problem for the UZE in an SUR Model; 4.5 Upper

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## Sommario/riassunto

Generalised Least Squares adopts a concise and mathematically rigorous approach. It will provide an up-to-date self-contained introduction to the unified theory of generalized least squares estimations, adopting a concise and mathematically rigorous approach. The book covers in depth the 'lower and upper bounds approach', pioneered by the first author, which is widely regarded as a very powerful and useful tool for generalized least squares estimation, helping the reader develop their understanding of the theory. The book also contains exercises at the end of each chapter and applicati