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Nota di contenuto	Advanced Econometric Theory; Copyright; Contents; List of figures and tables; Preface; 1 Multivariate analysis and the linear regression model; 1.1 Introduction; 1.2 Existence of a solution to the normal equation; 1.3 The concept of wide-sense conditional expectation; 1.4 Conditional expectation with normal variables; 1.5 The relation between wide-sense and strict-sense conditional expectation; 1.6 Conditional means and minimum mean-square error; 1.7 Bayes estimation; 1.8 The relation between Bayes and Gauss-Markov estimation in the case of a single independent variable; 1.9 Exercises 2 Least-squares and Gauss-Markov theory2.1 Least-squares theory; 2.2 Principles of estimation; 2.3 The concept of a generalized inverse of a matrix; 2.4 The matrix Cauchy-Schwarz inequality and an extension; 2.5 Gauss-Markov theory; 2.6 The relation between Gauss-Markov and least-squares estimators; 2.7 Minimum-bias estimation; 2.8 Multicollinearity and the imposition of dummy linear restrictions; 2.9 Specification error; 2.10 Exercises; 3 Multicollinearity and reduced-rank estimation; 3.1 Introduction; 3.2 Singular-value decomposition of a matrix; 3.3 The condition number of a matrix 3.4 The Eckart-Young theorem3.5 Reduced-rank estimation; 3.6

Exercises; 4 The treatment of linear restrictions; 4.1 Estimation subject to linear restrictions; 4.2 Linear aggregation and duality; 4.3 Testing linear restrictions; 4.4 Reduction of mean-square error by imposition of linear restrictions; 4.5 Uncertain linear restrictions; 4.6 Properties of the generalized ridge estimator; 4.7 Comparison of restricted and generalized ridge estimators; 4A Appendix (to Section 4.4): Guide to the computation of percentage points of the noncentral F distribution; 4.8 Exercises; 5 Stein estimation
5.1 Stein's theorem and the regression model5.2 Lemmas underlying the James-Stein theorem; 5.3 Some further developments of Stein estimation; 5.4 Exercises; 6 Autocorrelation of residuals - 1; 6.1 The first-order autoregressive model; 6.2 Efficiency of trend estimation: the ordinary least-squares estimator; 6.3 Efficiency of trend estimation: the Cochrane-Orcutt estimator; 6.4 Efficiency of trend estimation: the Prais-Winsten weighted-difference estimator; 6.5 Efficiency of trend estimation: the Prais-Winsten first-difference estimator; 6.6 Discussion of the literature; 6.7 Exercises
7 Autocorrelation of residuals - 27.1 Anderson models; 7.2 Testing for autocorrelation: Anderson's theorem and the Durbin-Watson test; 7.3 Distribution and beta approximation of the Durbin-Watson statistic; 7.4 Bias in estimation of sampling variances; 7.5 Exercises; 8 Simultaneous-equations estimation; 8.1 The identification problem; 8.2 Anderson and Rubin's "limited-information maximum-likelihood" (LIML) method, 1: the handling of linear restrictions; 8.3 Anderson and Rubin's "limited-information maximum-likelihood" method, 2: constrained maximization of the likelihood function
8.4 The contributions of Basmann and Theil

Sommario/riassunto

When learning econometrics, what better way than to be taught by one of its masters. In this significant new volume, John Chipman, the *eminence grise* of econometrics, presents his classic lectures in econometric theory. Starting with the linear regression model, least squares, Gauss-Markov theory and the first principals of econometrics, this book guides the introductory student to an advanced stage of ability. The text covers multicollinearity and reduced-rank estimation, the treatment of linear restrictions and minimax estimation. Also included are chapters on the autocor
