



METADATA

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Abstract

The book is divided into four main sections. The first section introduces the Gretl econometric program, presenting information on the program's basic features (installation, navigation, data entry, command information, and session storage). The second section presents the basic estimation models and their limitations with the corresponding theoretical documentation. This is followed by an analysis of different functional forms of regression covering a range of fields (economic, social) and data (time series, cross-sectional data) and using qualitative variables in the regression models. The third section critically examines the assumptions of the classical linear model, the extent to which these assumptions may vary, and at what cost.

Different diagnostic tests of regression models are presented for both cross-sectional data and time series models. The problem of "correct functional form" is also discussed. The fourth part deals with prominent issues of cross-sectional and time series data and their combination (panels). For cross-sectional data, the discrete choice models, which are widely used in the social sciences as well as in other fields (education, psychology, political science) are analyzed. For time series, topics such as stationarity, cointegration, and ARCH-GARCH models for cases of changing variation are presented, which concern the fields of economics, finance, and other social sciences. Finally, estimation models with panel data are presented.

