1. Record Nr. UNINA9910784438003321 Autore Frees Edward W. Titolo Longitudinal and panel data: analysis and applications in the social sciences / / Edward W. Frees Cambridge:,: Cambridge University Press,, 2004 Pubbl/distr/stampa 1-107-14754-9 **ISBN** 1-280-54050-8 0-511-79092-9 0-511-21527-4 0-511-21706-4 0-511-21169-4 0-511-31569-4 0-511-21346-8 Descrizione fisica 1 online resource (xvi, 467 pages): illustrations; digital, PDF file(s) Disciplina 300/.72/7 Soggetti Social sciences - Research - Statistical methods Longitudinal method Panel analysis Social sciences - Mathematical models Social sciences - Statistical methods Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliography and index. Nota di contenuto Cover; Half-title; Title; Copyright; Contents; Preface; 1 Introduction; 2 Fixed-Effects Models; 3 Models with Random Effects; 4 Prediction and Bayesian Inference: 5 Multilevel Models: 6 Stochastic Regressors: 7 Modeling Issues; 8 Dynamic Models; 9 Binary Dependent Variables; 10 Generalized Linear Models; 11 Categorical Dependent Variables and Survival Models: Appendix A Elements of Matrix Algebra: Appendix B Normal Distribution; Appendix C Likelihood-Based Inference; Appendix D State Space Model and the Kalman Filter; Appendix E Symbols and Notation: Appendix F Selected Longitudinal and Panel Data Sets: References; Index

Sommario/riassunto

This focuses on models and data that arise from repeated observations

of a cross-section of individuals, households or companies. These models have found important applications within business, economics, education, political science and other social science disciplines. The author introduces the foundations of longitudinal and panel data analysis at a level suitable for quantitatively oriented graduate social science students as well as individual researchers. He emphasizes mathematical and statistical fundamentals but also describes substantive applications from across the social sciences, showing the breadth and scope that these models enjoy. The applications are enhanced by real-world data sets and software programs in SAS and Stata.