Record Nr.	UNINA9910876825903321
Autore	Pankratz Alan <1944->
Titolo	Forecasting with dynamic regression models / / Alan Pankratz
Pubbl/distr/stampa	New York, : John Wiley & Sons, 1991
ISBN	1-283-44612-X 9786613446121 1-118-15052-X 1-118-15078-3
Descrizione fisica	1 online resource (410 p.)
Collana	Wiley series in probability and mathematical statistics. Applied probability and statistics, , 0271-6356
Disciplina	519.5/5
Soggetti	Time-series analysis
	Regression analysis
	Prediction theory
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"A Wiley-Interscience publication."
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Forecasting with Dynamic Regression Models; Contents; Preface; Chapter 1 Introduction and Overview; 1.1 Related Time Series; 1.2 Overview: Dynamic Regression Models; 1.3 Box and Jenkins' Modeling Strategy; 1.4 Correlation; 1.5 Layout of the Book; Questions and Problems; Chapter 2 A Primer on ARIMA Models; 2.1 Introduction; 2.2 Stationary Variance and Mean; 2.3 Autocorrelation; 2.4 Five Stationary ARIMA Processes; 2.5 ARIMA Modeling in Practice; 2.6 Backshift Notation; 2.7 Seasonal Models; 2.8 Combined Nonseasonal and Seasonal Processes; 2.9 Forecasting; 2.10 Extended Autocorrelation Function 2.11 Interpreting ARIMA Model ForecastsQuestions and Problems; Case 1 Federal Government Receipts (ARIMA); Chapter 3 A Primer on Regression Models; 3.1 Two Types of Data; 3.2 The Population Regression Function (PRF) with One Input; 3.3 The Sample Regression Function (SRF) with One Input; 3.4 Properties of the Least-Squares Estimators; 3.5 Goodness of Fit (R2); 3.6 Statistical Inference; 3.7 Multiple Regression; 3.8 Selected Issues in Regression; 3.9 Application to Time Series Data; Questions and Problems; Case 2 Federal

1.

	Government Receipts (Dynamic Regression); Case 3 Kilowatt-Hours Used Chapter 4 Rational Distributed Lag Models4.1 Linear Distributed Lag Transfer Functions; 4.2 A Special Case: The Koyck Model; 4.3 Rational Distributed Lags; 4.4 The Complete Rational Form DR Model and Some Special Cases 163; Questions and Problems; Chapter 5 Building Dynamic Regression Models: Model Identification; 5.1 Overview; 5.2 Preliminary Modeling Steps; 5.3 The Linear Transfer Function (LTF) Identification Method; 5.4 Rules for Identifying Rational Distributed Lag Transfer Functions; Questions and Problems; Appendix 5A The Corner
	Appendix 5B Transfer Function Identification Using Prewhitening and Cross CorrelationsChapter 6 Building Dynamic Regression Models: Model Checking, Reformulation and Evaluation; 6.1 Diagnostic Checking and Model Reformulation; 6.2 Evaluating Estimation Stage Results; Questions and Problems; Case 4 Housing Starts and Sales; Case 5 Industrial Production, Stock Prices, and Vendor Performance; Chapter 7 Intervention Analysis; 7.1 Introduction; 7.2 Pulse Interventions; 7.3 Step Interventions; 7.4 Building Intervention Models; 7.5 Multiple and Compound Interventions; Questions and Problems Case 6 Year-End LoadingChapter 8 Intervention and Outlier Detection and Treatment; 8.1 The Rationale for Intervention and Outlier Detection; 8.2 Models for Intervention and Outlier Detection; 8.3 Likelihood Ratio Criteria; 8.4 An Iterative Detection Procedure; 8.5 Application; 8.6 Detected Events Near the End of a Series; Questions and Problems; Appendix 8A BASIC Program to Detect AO, LS, and IO Events; Appendix 8B Specifying IO Events in the SCA System; Chapter 9 Estimation and Forecasting; 9.1 DR Model Estimation; 9.2 Forecasting; Questions and Problems Appendix 9A A BASIC Routine for Computing the Nonbiasing Factor in (9.2.24)
Sommario/riassunto	One of the most widely used tools in statistical forecasting, single equation regression models is examined here. A companion to the author's earlier work, Forecasting with Univariate Box-Jenkins Models: Concepts and Cases, the present text pulls together recent time series ideas and gives special attention to possible intertemporal patterns, distributed lag responses of output to input series and the auto correlation patterns of regression disturbance. It also includes six case studies.