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| Record Nr. | UNINA9910438030503321 |
| Autore | Kharin Yuriy |
| Titolo | Robustness in statistical forecasting [[electronic resource] /] / by Yuriy Kharin |
| Pubbl/distr/stampa | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2013 |
| ISBN | 3-319-00840-4 |
| Edizione | [1st ed. 2013.] |
| Descrizione fisica | 1 online resource (369 p.) |
| Disciplina | 330.015195 519 519.2 519.5 |
| Soggetti | Statistics Probabilities Applied mathematics Engineering mathematics Statistical Theory and Methods Probability Theory and Stochastic Processes Statistics for Business, Management, Economics, Finance, Insurance Statistics for Engineering, Physics, Computer Science, Chemistry and Earth Sciences Mathematical and Computational Engineering |
| 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 and index. |
| Nota di contenuto | Preface -- Symbols and Abbreviations -- Introduction -- A Decision-Theoretic Approach to Forecasting -- Time Series Models of Statistical Forecasting -- Performance and Robustness Characteristics in Statistical Forecasting -- Forecasting under Regression Models of Time Series -- Robustness of Time Series Forecasting Based on Regression Models -- Optimality and Robustness of ARIMA Forecasting -- Optimality and Robustness of Vector Autoregression Forecasting under Missing Values -- Robustness of Multivariate Time Series Forecasting Based on Systems of Simultaneous Equations -- Forecasting of Discrete Time Series -- Index. |

Sommario/riassunto

Traditional procedures in the statistical forecasting of time series, which are proved to be optimal under the hypothetical model, are often not robust under relatively small distortions (misspecification, outliers, missing values, etc.), leading to actual forecast risks (mean square errors of prediction) that are much higher than the theoretical values. This monograph fills a gap in the literature on robustness in statistical forecasting, offering solutions to the following topical problems: - developing mathematical models and descriptions of typical distortions in applied forecasting problems; - evaluating the robustness for traditional forecasting procedures under distortions; - obtaining the maximal distortion levels that allow the "safe" use of the traditional forecasting algorithms; - creating new robust forecasting procedures to arrive at risks that are less sensitive to definite distortion types.   .