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Disciplina 005.54

Soggetti Electronic spreadsheets - Computer programs

Finance - Data processing Finance - Statistical methods

Python (Computer program language)

**Finances** 

Estadística matemàtica Processament de dades

Python (Llenguatge de programació) R (Llenguatge de programació)

Llibres electrònics

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Nota di bibliografia Includes bibliographical references.

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and Yahoo Finance -- Chapter 3. Histograms and the Rate of Returns of JPM and JNJ -- Chapter 4. Numerical Summary Measures on Stock Rates

of Return and Market Rates of Return -- Chapter 5. Probability

Concepts and their Analysis -- Chapter 6. Discrete Random Variables and Probability Distributions -- Chapter 7. The Normal and Lognormal Distributions -- Chapter 8. Sampling Distributions and Central Limit Theorem -- Chapter 9. Other Continuous Distributions -- Chapter 10. Estimation -- Chapter 11. Hypothesis Testing -- Chapter 12. Analysis of Variance and Chi-Square Tests -- Chapter 13. Simple Linear

Regression and the Correlation Coefficient -- Chapter 14. Simple Linear Regression and Correlation: Analyses and Applications -- Chapter 15.

Multiple Linear Regression -- Chapter 16. Residual and Regression Assumption Analysis -- Chapter 17. Nonparametric Statistics -- Chapter 18. Time Series: Analysis, Model, and Forecasting -- Chapter 19. Index Numbers and Stock Market Indexes -- Chapter 20. Sampling Surveys: Methods and Applications -- Chapter 21. Statistical Decision Theory -- Chapter 22. Sources of Risks and their Determination -- Chapter 23. Risk-Aversion, Capital Asset Allocation, and Markowitz Portfolio Selection Model -- Chapter 24. Capital Asset Pricing Model and Beta Forecasting -- Chapter 25. Single-Index Models for Portfolio Selection -- Chapter 26. Sharpe Performance Measure and Treynor Performance Measure Approach to Portfolio Analysis.

## Sommario/riassunto

This advanced textbook for business statistics teaches statistical analyses and research methods utilizing business case studies and financial data, with the applications of Excel VBA, Python and R. Each chapter engages the reader with sample data drawn from individual stocks, stock indices, options, and futures. Now in its second edition, it has been expanded into two volumes, each of which is devoted to specific parts of the business analytics curriculum. To reflect the current age of data science and machine learning, the used applications have been updated from Minitab and SAS to Python and R, so that readers will be better prepared for the current industry. This first volume is designed for advanced courses in financial statistics, investment analysis and portfolio management. It is also a comprehensive reference for active statistical finance scholars and business analysts who are looking to upgrade their toolkits. Readers can look to the second volume for dedicated content on financial derivatives, risk management, and machine learning.