

1. Record Nr.	UNISA996508570103316
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Titolo	Essentials of Excel VBA, Python, and R . Volume I Financial Statistics and Portfolio Analysis / / John Lee and Cheng-Few Lee
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2022] ©2022
ISBN	3-031-14236-5
Edizione	[Second edition.]
Descrizione fisica	1 online resource (XVI, 696 p. 1113 illus., 1005 illus. in color.)
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.
Nota di contenuto	Chapter 1. Introduction -- Chapter 2. Data Collection, Presentation, 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.

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### 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.

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