

|                         |  |
|-------------------------|--|
| 1. Record Nr.           | UNINA9910480819503321  |
| Titolo                  | Stochastic optimization models in finance // edited by W. T. Ziemba, R. G. Vickson   |
| Pubbl/distr/stampa      | New York, New York ; ; London, [England] : , : Academic Press, , 1975<br>©1975   |
| ISBN                    | 1-4832-7399-7  |
| Descrizione fisica      | 1 online resource (736 p.)   |
| Collana                 | Economic Theory and Mathematical Economics   |
| Disciplina              | 332.01/51922<br>332.0151922  |
| Soggetti                | Finance<br>Mathematical optimization<br>Stochastic processes<br>Electronic books.  |
| 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 at the end of each chapters.   |
| Nota di contenuto       | Front Cover; Stochastic Optimization Models in Finance; Copyright Page; Dedication; Table of Contents; PREFACE; ACKNOWLEDGMENTS; Part I: Mathematical Tools; INTRODUCTION; I. Expected Utility Theory; II. Convexity and the Kuhn-Tucker Conditions; III. Dynamic Programming; SECTION1: EXPECTED UTILITY THEORY; CHAPTER 1. A GENERAL THEORY OF SUBJECTIVE PROBABILITIESAND EXPECTED UTILITIES; 1.Introduction; 2. Definitions andnotation; 3. Axioms and summarytheorem; 4.Theorems; 5. Proof of Theorem3; 6. Proof of Theorem4; SECTION2: CONVEXITY AND THE KUHN-TUCKERCONDITIONS; CHAPTER2. PSEUDO-CONVEX FUNCTIONS Abstract1.Introduction; 2. Properties of pseudo-convex functions andapplications; 3. Remarks on pseudo-convexfunctions; 4. Acknowledgement; CHAPTER3. CONVEXITY, PSEUDO-CONVEXITY AND QUASI-CONVEXITY OF COMPOSITE FUNCTIONS; ABSTRACT; Preliminaries; Principal result; Applications; SECTION3: DYNAMIC PROGRAMMING; Chapter4. Introduction to Dynamic Programming; I. Introduction; II. Sequential Decision Processes; III. Terminating Process; |

IV. The Main Theorem and an Algorithm; V. Nonterminating Processes;  
ACKNOWLEDGMENT; REFERENCES; CHAPTER5. COMPUTATIONAL AND  
REVIEW EXERCISES; Exercise Source Notes  
CHAPTER6. MIND-EXPANDING EXERCISESExercise Source Notes; Part II:  
Qualitative Economic Results; INTRODUCTION; I. Stochastic Dominance;  
II. Measures of Risk Aversion; III. Separation Theorems; IV. Additional  
Reading Material; SECTION1: STOCHASTIC DOMINANCE; Chapter 1. The  
Efficiency Analysis of ChoicesInvolvingRisk; I. INTRODUCTION; II.  
UNRESTRICTED UTILITY-THE GENERALEFFICIENCY CRITERION; III.  
EFFICIENCY IN THE FACE OF RISK AVERSION; IV. THE LIMITATIONS OF  
THE MEAN-VARIANCEEFFICIENCY CRITERION; V. CONCLUSION;  
REFERENCES; Chapter 2. A Unified Approach to Stochastic Dominance  
I. Introduction to Stochastic DominanceII. Examples of Stochastic  
Dominance Relations; III. Probabilistic Content of Stochastic  
Dominance; REFERENCES; SECTION2: MEASURES OF RISK AVERSION;  
CHAPTER3. RISK AVERSION IN THE SMALL AND IN THE LARGE; 1.  
SUMMARY AND INTRODUCTION; 2. THE RISK PREMIUM; 3. LOCAL RISK  
AVERSION; 4. CONCAVITY; 5. COMPARATIVE RISK AVERSION; 6.  
CONSTANT RISK AVERSION; 7. INCREASING AND DECREASING RISK  
AVERSION; 8. OPERATIONS WHICH PRESERVE DECREASING RISK  
AVERSION; 9. EXAMPLES; 10. PROPORTIONAL RISK AVERSION; 11.  
CONSTANT PROPORTIONAL RISK AVERSION  
12. INCREASING AND DECREASING PROPORTIONAL RISK AVERSION13.  
RELATED WORK OF ARROW; ADDENDUM; SECTION3: SEPARATION  
THEOREMS; CHAPTER 4. THE VALUATION OF RISK ASSETS AND THE  
SELECTION OF RISKY INVESTMENTS IN STOCKPORTFOLIOS AND CAPITAL  
BUDGETS; Introduction and Preview of Some Conclusions; I - Portfolio  
Selection for an Individual Investor:The Separation Theorem; II -  
Portfolio Selection: TheOptimal Stock Mix; III Risk Premiums and Other  
Properties of Stocks Held Long or Shortin Optimal Portfolios  
IV - Market Prices of Shares Implied by Shareholder Optimization in  
Purely Competitive MarketsUnder Idealized Uncertainty

Sommario/riassunto

Stochastic Optimization Models in Finance