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| Altri autori (Persone)  | MaloneSamuel W   |
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| Livello bibliografico   | Monografia   |
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| Nota di bibliografia    | Includes bibliographical references and index.   |
| Nota di contenuto       | Macrofinancial Risk Analysis; Contents; Foreword; Preface; 1 Introduction; PART I OVERVIEW OF FINANCE, MACROECONOMICS, AND RISK CONCEPTS; 2 An Overview of Macroeconomics, and Why the Theory of Asset Pricing and Contingent Claims Should Shape its Future; 2.1 An overview of macroeconomics; 2.2 How uncertainty is incorporated into macroeconomic models; 2.3 Missing components in macro models: balance sheets with risk, default, and (nonlinear) risk exposures; 2.4 Asset-pricing theory, financial derivatives pricing, and contingent claims analysis<br>2.5 Autoregression in economics vs. random walks in finance 2.6 Asset price process related to a threshold or barrier; 2.7 Relating finance models and risk analytics to macroeconomic models; 2.8 Toward macrofinancial engineering; 2.9 Summary; References; 3 Macroeconomic Models; 3.1 The Hicks-Hansen IS-LM model of a closed economy; 3.2 The Mundell-Fleming model of an open economy; 3.3 A dynamic, stochastic, five-equation, small open economy macro model; 3.4 Summary; References; 4 Stochastic Processes, Asset Pricing, and Option Pricing; 4.1 Stochastic processes; 4.2 Ito's lemma |

4.3 Asset pricing: Arrow-Debreu securities and the replicating portfolio  
4.4 Put and call option values; 4.5 Pricing the options using the Black-Scholes-Merton formula; 4.6 Market price of risk; 4.7 Implications of incomplete markets for pricing; 4.8 Summary; Appendix 4A Primer on relationship of put, call, and exchange options; Appendix 4B Physics, Feynman, and finance; References; 5 Balance Sheets, Implicit Options, and Contingent Claims Analysis; 5.1 Uncertain assets and probability of distress or default on debt; 5.2 Probability of distress or default  
5.3 Debt and equity as contingent claims  
5.4 Payoff diagrams for contingent claims; 5.5 Understanding why an implicit put option equals expected loss; 5.6 Using the Merton model and Black-Scholes-Merton formula to value contingent claims; 5.7 Measuring asset values and volatilities; 5.8 Estimating implied asset value and asset volatility from equity or junior claims; 5.9 Risk measures; 5.10 Summary; References; 6 Further Extensions and Applications of Contingent Claims Analysis; 6.1 Extensions of the Merton model  
6.2 Applications of CCA with different types of distress barriers and liability structures  
6.3 Risk-adjusted and actual probabilities using the market price of risk, Sharpe ratios, and recovery rates; 6.4 Moody's-KMV approach; 6.5 CCA using skewed asset distributions modeled with a mixture of lognormals; 6.6 Maximum likelihood methods; 6.7 Incorporating stochastic interest rates and interest rate term structures into structural CCA balance sheet models; 6.8 Other structural models with stochastic interest rates; 6.9 Summary; Appendix 6A Calculating parameters in the Vasicek model; References

## PART II THE MACROFINANCE MODELING FRAMEWORK

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### Sommario/riassunto

Macrofinancial risk analysis Dale Gray and Samuel Malone  
Macrofinancial Risk Analysis provides a new and powerful framework with which policymakers and investors can analyze risk and vulnerability in economies, both emerging market and industrial. Using modern risk management and financial engineering techniques applied to the macroeconomy, an economic value can be placed on the risks posed by inter-linkages between sectors, the risk of default of different sectors on their outstanding debt obligations quantified, and the value ex-ante of guarantees to private sector enti

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