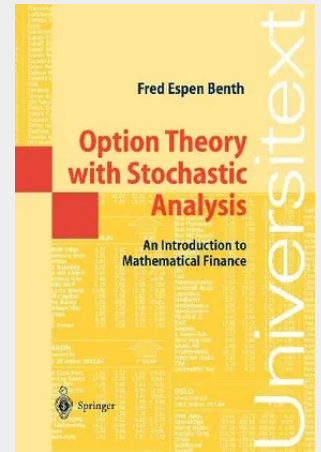


Option Theory with Stochastic Analysis

An Introduction to Mathematical Finance

Since 1972 and the appearance of the famous Black & Scholes option pricing formula, derivatives have become an integrated part of everyday life in the financial industry. Options and derivatives are tools to control risk exposure, and used in the strategies of investors speculating in markets like fixed-income, stocks, currencies, commodities and energy. A combination of mathematical and economical reasoning is used to find the price of a derivatives contract. This book gives an introduction to the theory of mathematical finance, which is the modern approach to analyse options and derivatives. Roughly speaking, we can divide mathematical finance into three main directions. In stochastic finance the purpose is to use economic theory with stochastic analysis to derive fair prices for options and derivatives. The results are based on stochastic modelling of financial assets, which is the field of empirical finance. Numerical approaches for finding prices of options are studied in computational finance. All three directions are presented in this book. Algorithms and code for Visual Basic functions are included in the numerical chapter to inspire the reader to test out the theory in practice. The objective of the book is not to give a complete account of option theory, but rather relax the mathematical rigour to focus on the ideas and techniques.

Since 1972 and the appearance of the famous Black & Scholes option pricing formula, derivatives have become an integrated part of everyday life in the financial industry. Options and derivatives are tools to control risk exposure, and used in the strategies of investors speculating in markets like fixed-income, stocks, currencies, commodities and energy. A combination of mathematical and economical reasoning is used to find the price of a derivatives contract. This book gives an introduction to the theory of mathematical finance, which is the modern approach to analyse options and derivatives. Roughly speaking, we can divide mathematical finance into three main directions. In stochastic finance the purpose is to use economic theory with stochastic analysis to derive fair prices for options and derivatives. The results are based on stochastic modelling of financial assets, which is the field of empirical finance. Numerical approaches for finding prices of options are studied in computational finance. All three directions are presented in this book. Algorithms and code for Visual Basic functions are included in the numerical chapter to inspire the reader to test out the theory in practice. The objective of the book is not to give a complete account of option theory, but rather relax the mathematical rigour to focus on the ideas and techniques.



64,19 €

59,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783540405023

Medium: Buch

ISBN: 978-3-540-40502-3

Verlag: Springer

Erscheinungstermin: 26.11.2003

Sprache(n): Englisch

Auflage: 1. Auflage 2003

Serie: Universitext

Produktform: Kartoniert

Gewicht: 283 g

Seiten: 162

Format (B x H): 155 x 235 mm

