1. Record Nr. UNINA9910141249603321 Autore **Dubil Robert** Titolo Financial engineering and arbitrage in the financial markets / / Robert Dubil Chichester, West Sussex, UK; Hoboken, NJ, John Wiley, 2011 Pubbl/distr/stampa **ISBN** 1-283-29889-9 9786613298898 1-118-46734-5 1-119-95062-7 Edizione [2nd edition.] Descrizione fisica 1 online resource (xii, 367 pages) Collana Wiley finance Disciplina 332.041 600 Soggetti Financial engineering Arbitrage Capital market Investments - Mathematics 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. Nota di contenuto Financial Engineering and Arbitragein the Financial Markets; Contents; Introduction; 1 Purpose and Structure of Financial Markets; 1.1 Overview of Financial Markets; 1.2 Risk Sharing; 1.3 Transactional Structure of Financial Markets; 1.4 Arbitrage: Pure Versus Relative Value; 1.5 Financial Institutions: Transforming Intermediaries vs Broker-Dealers: 1.6 Primary (Issuance) and Secondary (Resale) Markets: 1.7 Market Players: Hedgers vs Speculators; 1.8 Preview of the Book; PART I RELATIVE VALUE BUILDING BLOCKS; 2 Spot Markets; 2.1 Bonds and Annual Bond Math; 2.1.1 Zero-Coupon Bond

1.7 Market Players: Hedgers vs Speculators; 1.8 Preview of the Book; PART I RELATIVE VALUE BUILDING BLOCKS; 2 Spot Markets; 2.1 Bonds and Annual Bond Math; 2.1.1 Zero-Coupon Bond 2.1.2 Coupon Bond 2.1.3 Amortizing Bond; 2.1.4 Floating Rate Bond; 2.2 Intra-Year Compounding and Day-Count; 2.2.1 Intra-Year Compounding; 2.2.2 Day-Count; 2.2.3 Accrued Interest; 2.3 Term Structure of Interest Rates and the Discount Factor Bootstrap; 2.3.1 Term Structure; 2.3.2 Discount Factor Bootstrap; 2.3.3 Valuation of an Arbitrary Bond; 2.4 Interest Rate Risk: Duration and Convexity; 2.4.1 Duration; 2.4.2 Portfolio Duration; 2.4.3 Convexity; 2.4.4 Other Risk

Measures; 2.5 Equity, Commodity, and Currency Math; 2.5.1 Equities; 2.5.2 Currencies; 2.6 Short Selling; 2.6.1 Buying on Margin 2.6.2 Short Selling in a Margin Account 2.6.3 Short Selling of Bonds; 3 Futures Markets; 3.1 Fundamentals of Futures and Forwards; 3.2 Futures Mechanics; 3.2.1 Physical Commodity Futures; 3.2.2 Interest Rate Futures; 3.2.3 Stock Index Futures; 3.2.4 Currency Futures and Forwards; 3.3 Cash-and-Carry Arbitrage; 3.3.1 Commodities; 3.3.2 Stock Indexes; 3.3.3 Currencies; 3.4 Futures Not Subject to Cash-and-Carry; 3.5 Yield Curve Construction with Interest Rate Futures; 3.5.1 Certainty Equivalence of Eurodollar Futures; 3.5.2 Forward Rate Agreements; 3.5.3 Building Spot Zeros 3.5.4 Recovering the Forwards 3.5.5 Including Repo Rates in the Calculation of the Forwards; 4 Swap Markets; 4.1 Fundamentals of

3.5.4 Recovering the Forwards 3.5.5 Including Repo Rates in the Calculation of the Forwards; 4 Swap Markets; 4.1 Fundamentals of Swaps; 4.1.1 The Dual Nature of Swaps; 4.1.2 Implication for Pricing and Hedging; 4.2 Interest Rate Swaps; 4.2.1 Definition of an Interest Rate Swap; 4.2.2 Valuation of Interest Rate Swaps; 4.2.3 Hedging of Interest Rate Swaps; 4.3 Cross-Currency Swaps; 4.3.1 Definition of a Fixed-for-Fixed Cross-Currency Swap; 4.3.2 Valuation and Settlement of Cross-Currency Swaps; 4.3.3 Cross-Currency Swaps as Packages of Off-Market FX Forwards

4.3.4 Multi-currency and Combination Cross-Currency Swaps 4.4 Equity, Commodity, and Exotic Swaps; 4.4.1 Equity Swaps; 4.4.2 Commodity Swaps; 4.4.3 Volatility Swaps; 4.4.4 Index Principal Swaps; 5 Options on Prices and Hedge-Based Valuation; 5.1 Call and Put Payoffs at Expiry; 5.2 Composite Payoffs at Expiry; 5.2.1 Straddles and Strangles; 5.2.2 Spreads and Combinations; 5.3 Option Values Prior to Expiry; 5.4 Options and Forwards, Risk Sharing and Put-Call Parity; 5.5 Currency Options; 5.6 Binomial Option Pricing; 5.6.1 One-Step Examples; 5.7 Black-Scholes Model and Extensions 5.7.1 Black-Scholes with No Dividends

Sommario/riassunto

A whole is worth the sum of its parts. Even the most complex structured bond, credit arbitrage strategy or hedge trade can be broken down into its component parts, and if we understand the elemental components, we can then value the whole as the sum of its parts. We can quantify the risk that is hedged and the risk that is left as the residual exposure. If we learn to view all financial trades and securities as engineered packages of building blocks, then we can analyze in which structures some parts may be cheap and some may be rich.