1. Record Nr. UNINA9910139058703321 Autore Brigo Damiano Titolo Counterparty credit risk, collateral and funding: with pricing cases for all asset classes / / Damiano Brigo, Massimo Morini, Andrea Pallavicini Chichester, England, : Wiley, c2013 Pubbl/distr/stampa **ISBN** 1-118-81858-X 0-470-66167-4 0-470-66178-X 1-299-31589-5 0-470-66249-2 Edizione [1st ed.] Descrizione fisica 1 online resource (465 p.) Collana Wiley Finance Altri autori (Persone) PallaviciniAndrea MoriniMassimo Disciplina 332.701/5195 Soggetti Finance - Mathematical models Credit - Mathematical models Credit derivatives - Mathematical models Financial risk - Mathematical models Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Counterparty Credit Risk, Collateral and Funding; Contents; Ignition; Abbreviations and Notation; PART I COUNTERPARTY CREDIT RISK, COLLATERAL AND FUNDING; 1 Introduction; 1.1 A Dialogue on CVA; 1.2 Risk Measurement: Credit VaR; 1.3 Exposure, CE, PFE, EPE, EE, EAD; 1.4 Exposure and Credit VaR; 1.5 Interlude: P and Q; 1.6 Basel; 1.7 CVA and Model Dependence; 1.8 Input and Data Issues on CVA; 1.9 Emerging Asset Classes: Longevity Risk; 1.10 CVA and Wrong Way Risk; 1.11 Basel III: VaR of CVA and Wrong Way Risk; 1.12 Discrepancies in CVA Valuation: Model Risk and Payoff Risk 1.13 Bilateral Counterparty Risk: CVA and DVA1.14 First-to-Default in CVA and DVA; 1.15 DVA Mark-to-Market and DVA Hedging; 1.16 Impact of Close-Out in CVA and DVA; 1.17 Close-Out Contagion; 1.18 Collateral Modelling in CVA and DVA; 1.19 Re-Hypothecation; 1.20 Netting; 1.21 Funding; 1.22 Hedging Counterparty Risk: CCDS; 1.23

Restructuring Counterparty Risk: CVA-CDOs and Margin Lending; 2

Context; 2.1 Definition of Default: Six Basic Cases; 2.2 Definition of Exposures; 2.3 Definition of Credit Valuation Adjustment (CVA); 2.4 Counterparty Risk Mitigants: Netting

2.5 Counterparty Risk Mitigants: Collateral2.5.1 The Credit Support Annex (CSA); 2.5.2 The ISDA Proposal for a New Standard CSA; 2.5.3 Collateral Effectiveness as a Mitigant; 2.6 Funding; 2.6.1 A First Attack on Funding Cost Modelling; 2.6.2 The General Funding Theory and its Recursive Nature; 2.7 Value at Risk (VaR) and Expected Shortfall (ES) of CVA; 2.8 The Dilemma of Regulators and Basel III; 3 Modelling the Counterparty Default; 3.1 Firm Value (or Structural) Models; 3.1.1 The Geometric Brownian Assumption; 3.1.2 Merton's Model; 3.1.3 Black and Cox's (1976) Model

3.1.4 Credit Default Swaps and Default Probabilities3.1.5 Black and Cox (B&C) Model Calibration to CDS: Problems; 3.1.6 The AT1P Model; 3.1.7 A Case Study with AT1P: Lehman Brothers Default History; 3.1.8 Comments; 3.1.9 SBTV Model; 3.1.10 A Case Study with SBTV: Lehman Brothers Default History; 3.1.11 Comments; 3.2 Firm Value Models: Hints at the Multiname Picture; 3.3 Reduced Form (Intensity) Models; 3.3.1 CDS Calibration and Intensity Models; 3.3.2 A Simpler Formula for Calibrating Intensity to a Single CDS; 3.3.3 Stochastic Intensity: The CIR Family

3.3.4 The Cox-Ingersoll-Ross Model (CIR) Short-Rate Model for r3.3.5 Time-Inhomogeneous Case: CIR++ Model; 3.3.6 Stochastic Diffusion Intensity is Not Enough: Adding Jumps. The JCIR(++) Model; 3.3.7 The Jump-Diffusion CIR Model (JCIR); 3.3.8 Market Incompleteness and Default Unpredictability; 3.3.9 Further Models; 3.4 Intensity Models: The Multiname Picture; 3.4.1 Choice of Variables for the Dependence Structure; 3.4.2 Firm Value Models?; 3.4.3 Copula Functions; 3.4.4 Copula Calibration, CDOs and Criticism of Copula Functions; PART II PRICING COUNTERPARTY RISK: UNILATERAL CVA 4 Unilateral CVA and Netting for Interest Rate Products

Sommario/riassunto

The book's content is focused on rigorous and advanced quantitative methods for the pricing and hedging of counterparty credit and funding risk. The new general theory that is required for this methodology is developed from scratch, leading to a consistent and comprehensive framework for counterparty credit and funding risk, inclusive of collateral, netting rules, possible debit valuation adjustments, re-hypothecation and closeout rules. The book however also looks at quite practical problems, linking particular models to particular 'concrete' financial situations across asset classes, incl