

Project Proposal

Vismayie Vandanapu

Ankit Kumar

Martin Arienmughare

Project Title

Obvious and hidden gamma in credit derivative land

Names of all group members

Vismayie Vandanapu

Ankit Kumar

Martin Arienmughare

Name and contact information for your mentor

Leon Tatevossian (lt56@nyu.edu)

A two or three sentence statement of the problem

A two or three sentence statement of the approach you intend to take

A two or three sentence statement of your criteria of success

References

1. Correlation Risk Management and Modeling: An applied guide including the Basel III correlation framework with interactive correlation models in Excel/VBA. *Gunter Meissner*. [John Wiley & Sons, 2014]. (Chapters 1, 4 & 5)
2. Options, Futures and Other Derivatives. *John Hull*. [Pearson, 10th Edition]. (Chapters 7, 9, 19, 22, 24, 25, 34)
3. A New Approach For Modelling and Pricing Correlation Swaps. *Sebastien Bossu*. [Dresdner Kleinwort, version of May 2007].
4. Valuation and Hedging of Correlation Swaps. *Mats Draijer*. [September 2017 version].
5. Pricing Credit Default Swap Subject to Counterparty Risk and Collateralization. *Alan White*. [FinPricing].
6. CCP Cleared or Bilateral CSA Trades with Initial/Variation Margins under credit, funding and wrong-way risks: A Unified Approach. [arXiv:401.3994v1].
7. Pricing credit default swaps with bilateral value adjustments. *Alexander Lipton, Ioana Savescu*. [arXiv:1207.6049v1].
8. A structural approach to pricing credit default swaps with credit and debt value adjustments. *Alexander Lipton, Ioana Savescu*. [arXiv:1206.3104v1].
9. A CB (corporate bond) pricing probabilities and recovery rates model for deriving default probabilities and recovery rates. *Takeaki Kariya*. [arXiv:1206.4766v2].
10. Correlation breakdown, copula credit default models and arbitrage. *Rodanthy Tzani*. [arXiv:0908.4299v1].
11. One math geek's plan to reform Wall Street. *Matthew Philips*. [Newsweek, May 5, 2009 8PM EDT]
12. Counterparty Risk and Counterparty Choice in the Credit Default Swap Market. *Wenxin Du Salil, Gadgil, Michael B. Gordy, Clara Vega*. []
13. Variance Dispersion and Correlation Swaps. *A. Jacquier, S. Slaoui*. [arXiv:1004.0125v1].
14. Constant Maturity Credit Default Swap Pricing with Market Models. *Damiano Brigo*. [arXiv:0812.4159v1].
15. Bilateral counterparty risk valuation with stochastic dynamical models and application to Credit Default Swaps. *Damiano Brigo*. [arXiv:0812.3705v4]
16. Valuation of Credit Default Swap with Counterparty Default Risk by Structural Model. *Jin Liang, Peng Zhou, Yujing Zhou, Junmei Ma*. [Applied Mathematics, 2011, 2, 106-117]
17. Counterparty Credit Risk in OTC Derivatives under Basel III. *Mabelle Sayah*. [Journal of Mathematical Finance, 2017, 7, 1-38]
18. Pricing of Swaps with Default Risk. *Haitao Li*. [Review of Derivatives Research, 2, 231-250(1998)].
19. An Empirical Comparison of Credit Spreads between the Bond Market and the Credit Default Swap Market. *Haibin Zhu*. [J Finan Serv Res (2006) 29: 211-235]
20. Credit Risk Management for Derivatives. *I. Zelenko*. [DOI 10.1007/978-3-319-57975-7_2]. (Chapter: Outlining Counterparty Credit Risk Exposure)
21. The Credit Spread Puzzle. *Jeffery D Amato, Eli M Remolona*. [BIS Quarterly Review, December 2003]
22. A value at risk analysis of credit default swaps. *Burkhard Raunig, Martin Scheicher*. []
23. Wrong-way-risk in tails. *Janis Muller, Peter N. Posch*. [J Asset Manag (2018) 19: 205]