

Due date of Homework One and Summary: March 2, 05 (Wednesday)

Write a summary up to three hand-written pages on either one of the two papers. Please address the discussion points outlined below. You are welcomed to add more of your opinions on the papers. If you are sufficiently interested, you may work on both papers.

Synthetic CDOs: An introduction

1. What are the key differences between CDOs and synthetic CDOs? What are the major disadvantages of CDOs? Give more details other than those points listed in Section 5 of the paper, or at least give your interpretation of the claims made by the author. For example, why there is no interest rate risk for synthetic CDOs?
2. Write down your understanding on regulatory arbitrage achieved by the synthetic CDO structure. What are the roles played by the credit default swaps (junior and senior) in achieving regulatory arbitrage?
3. Why the partially funded CDOs achieve favorable funding compared to their fully funded counterparts (see Exhibit 6)?
4. Give your comments on disclosure of credit events and market discipline (Section 4). Describe the nature of moral hazard problem to a layman.
5. What is your understanding on hedging transactions and arbitrage transactions?

Risk and valuation of collateralized debt obligations

1. How do CDOs address the issues of market imperfections?
2. What are the basic assumptions of the valuation model? List the types of risks that are modeled in the pricing model. Comment on their justification and limitations.
3. How do the authors model the features of correlation and prioritization. Summarize their effects on valuation.
4. Provide the details on deriving Eq. (28).
5. Comment on Moody's diversity score calculations. What are the rationales behind these calculations? Provide some details on the derivation of Eq. (B.4) on p.58.
6. What types of improvement over their model that you can think of?