Comments on Stephens & Thompson:
CDS as Insurance

Craig Pirrong

Bauer College of Business

University of Houston

Overview

- Paper examines economics of a derivatives market with heterogeneous "banks" and "insurers"
  - Paper refers to CDS, but analysis applicable to other hedging instruments
 - Different information environments

Agents

- "Banks" incur a cost Z with probability 1-p

- Banks can hedge this risk with an "insurer"

- Insurers are of two types—good and bad

- Both types of insurers have portfolios with identical payoff distributions

- Good insurers invest the premiums in a riskless asset that is fully pledgeable

- Bad insurers invest premiums invest premiums in a higher yielding asset (r) that is not pledgeable

Different Information Assumptions

- Insurer types observable, homogeneous banks
- Competition (by adding a half-good, half-bad insurer)
- Insurer types not observable
- Banks have different Z, but Zs and insurer types are observable
- Bank assets have different risks that are private information
- Central counterparties
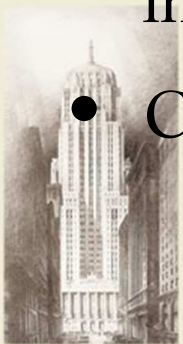
Most Interesting Results

- Many (too many?) results in the paper, so I'll just mention the most interesting (to me)

- With known insurer types, good or bad insurer may dominate, depending on r and Z

- Competition causes increases in counterparty risk

- Counterparty risk higher when insurer type is not known

- Central clearing tends to increase counterparty risk
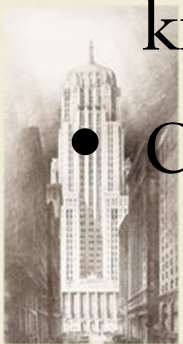
Comments

- Difference in insurer types (differences in premium investment technologies) is artificial

- More natural difference: portfolios have different risks

- Authors recognize this, and conjecture that results would hold in such a framework (i.e., insurers with riskier portfolios would choose to invest in non-pledgeable technology)—better to show than conjecture

- Would also be interesting to focus just on the effects of different portfolio risk in the presence of private information about this risk

Comments (II)

- Counterparty risk not the relevant criteria to evaluate market quality

- Tradeoff between counterparty risk and investment returns

- Is total surplus maximized in equilibrium? Does this depend on information environment?

Comments (III)

- Paper needs more focus: I would concentrate on asymmetric information in insurer type

- Authors claim the low Z, high Z model sheds light on speculation, and the desirability of eliminating speculation, but this isn't quite correct: low Z traders are still hedgers, not speculators

Comments (IV)

- Central clearing result is most intriguing, especially in light of ongoing developments in OTC derivatives markets

- Pirrong (2010) also presents the "tragedy of the commons" argument ("balance sheets become public goods")

- Clearing model makes many simplifying assumptions: a paper focused on this issue, with fewer shortcuts, would be quite valuable

- I think the result is right, but the model is not formally tight or persuasive

Comments (V)

- With CCP, why is there competition within insurer type?

- To "banks", with clearing, all insurers pose identical counterparty risk, so good and bad insurers all compete

- Need more thorough and careful analysis of payoffs to the banks that contract with a CCP