

# Discussion of “Structural Modeling of Loan Pool Choice in the CMBS Market,” by Sean Chu

Ron Borzekowski  
Office of Research

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# Background

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## *Empirical Fact*

- Commercial Real Estate (CRE) loans in securitizations underwritten by the loan originator perform better, ceterus paribus, than loans sold and then securitized by a third party.

## *Question*

- Is this a case of adverse selection where the originator takes advantage of private information and sells 'bad' loans to others?

## *Thoughts*

- This was the 'obvious' answer to many before the crisis.
- However, not to economists – for better or worse.
- In this paper, goal is to disentangle different effects: unobservable ex ante loan quality vs. some ex-post action by originator
- Note: All loans in this study are securitized!

# Approach

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## *Estimation*

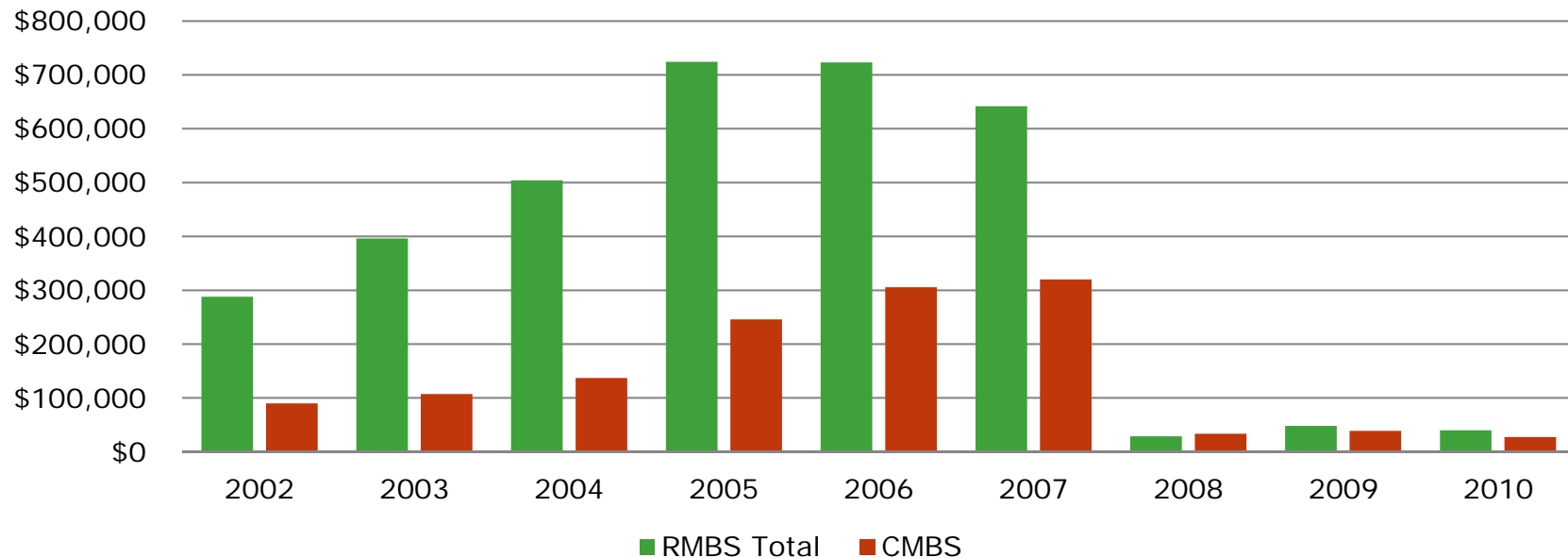
- Estimate hazard function for default of each loan assuming unobserved quality
- Use time to default for each loan to model returns for each deal (collection of loans) as function of unobserved quality
- Structural model: Identify parameters of interest by assuming that adding or subtracting a deal is profit reducing. Do this under two information sets, one with no private information, the other where originator's valuation and buyer's diverge.

## *Results*

- Ex-post value to loans originated by the securitizing firm.
- However, it appears that the ex-ante quality of these loans is weaker
  - ⇒ Hold them for diversification reasons
  - ⇒ Couldn't sell em'

# CMBS market and the crisis

## *Bubble and Collapse*



## *Patterns*

- More deals, bigger deals, more complex deals, weaker covenants, less subordination etc.

## *Secondary market*

- CMBS CDOs and the issue of credit risk

*Aftermath – Bear Stearns and Hilton; Lehman and Archstone*

# Discussion

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## *Model*

- Simplified but not simple.
- Very rich in many dimensions – can capture salient market features

## *Nature of the Firm*

- Are vertically integrated really integrated e.g. Citigroup

## *Drivers of Default*

- Vintage and region – are these adequate controls

## *Secondary Market Changes and Identification*

- The market changed as the crisis neared
- Spreads narrowed, particularly in the lower tranches e.g. Merrill
- Holders of lower rated tranches changed – correlation trade
- Hold vs. buy decisions changed e.g. Wamu