

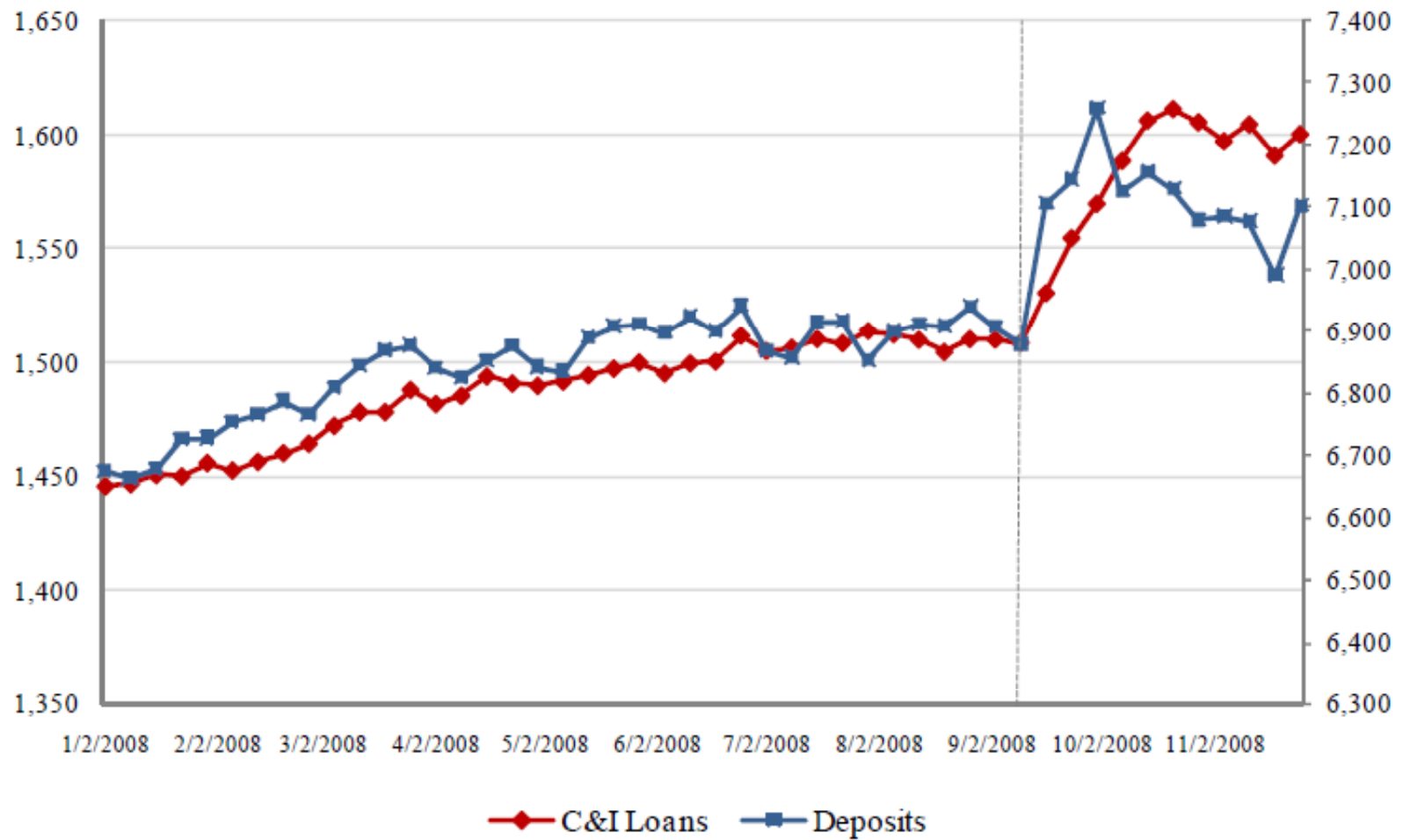
Moody's and NYU Credit Risk Conference

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Overview



Overview

- “Liar’s Loan: Effects of Origination and Information Falsification on Delinquency”
 - Jiang et al. [2010a]
- Tie to work on securitization
 - Keys et al. [2010a,b]
 - Jiang et al. [2010b]
 - Krainer Lainerman [2009]

Questions

- Do lenders use soft information in mortgage origination decisions?
 - Are the magnitudes large?
- Is it priced?

Results

- Soft information important in origination
 - Heterogeneity in quality
 - (1) Broker vs. bank and (2) Low vs. full doc loans
- Magnitudes are large
 - Broker originated loans perform worse (50%)
 - Observables: $\frac{3}{4}$ and unobservables: $\frac{1}{4}$
 - Low doc loans perform worse
 - Unobservables: 100%
- Information Falsification
 - Income exaggeration to extent of 20%
- Pricing
 - Not adequate

Contribution (1/2)

- Comprehensive analysis with perhaps as impressive a dataset one is going to find

Interpretation and Questions

- Broker originated loans perform worse
 - Agency problem
 - Banks face adverse selection
- But why not fix with output sensitive contract?
 - Exploit variation in broker laws [state level data]
- Why does broker reputation not work?
 - Competition [data?]

Interpretation and Questions

- Low doc loans perform worse than full doc
 - Bank faces adverse selection
- Soft information hard to codify: Petersen [04]
 - Meaning of hard information variables changes
 - Predictability of variables in default regression
- But why not fix with by asking for more information?
 - Tradeoff between volume and accuracy

Interpretation and Questions

- What about regulation?
 - Data from a top 5 subprime lender
 - Not a depository institution
 - Broker originated loans perform worse (30%)
 - Observables: 2/3 and unobservables: 1/3
 - Low doc loans perform worse
 - Largely unobservables (90%)
 - Deliberate vs. honest
 - Soft information magnitudes large

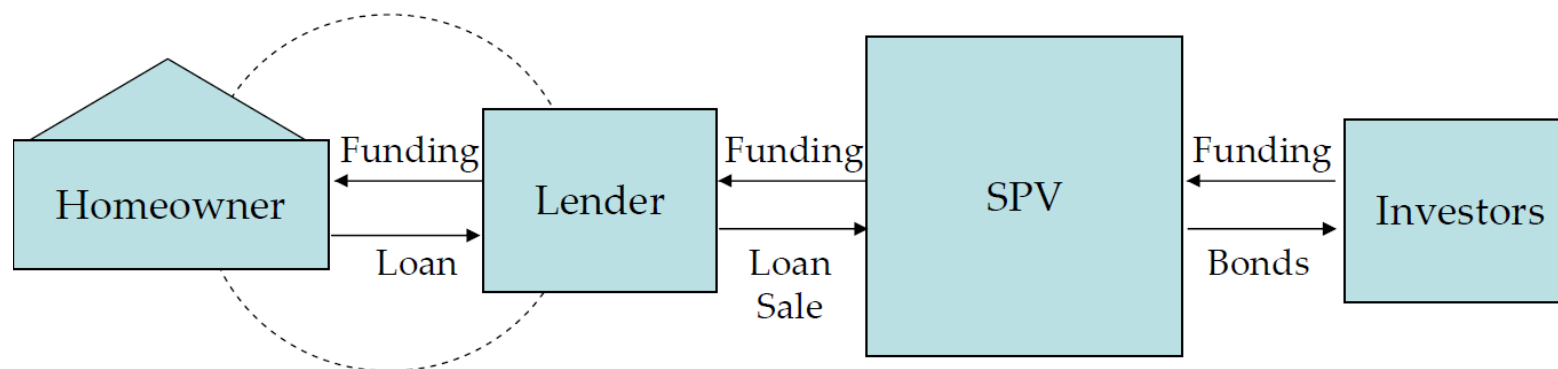
Contribution (2/2)

- Comprehensive analysis with perhaps as impressive a dataset one is going to find
- Magnitudes
 - Decomposition of effects to observables and unobservables
- Income Falsification Analysis
 - $E[\text{Income}|X, \text{Lowdoc}] < E[\text{Income}|X, \text{Full doc}]$
 - How many self-employed [Census to zip]?

Interpretation and Questions

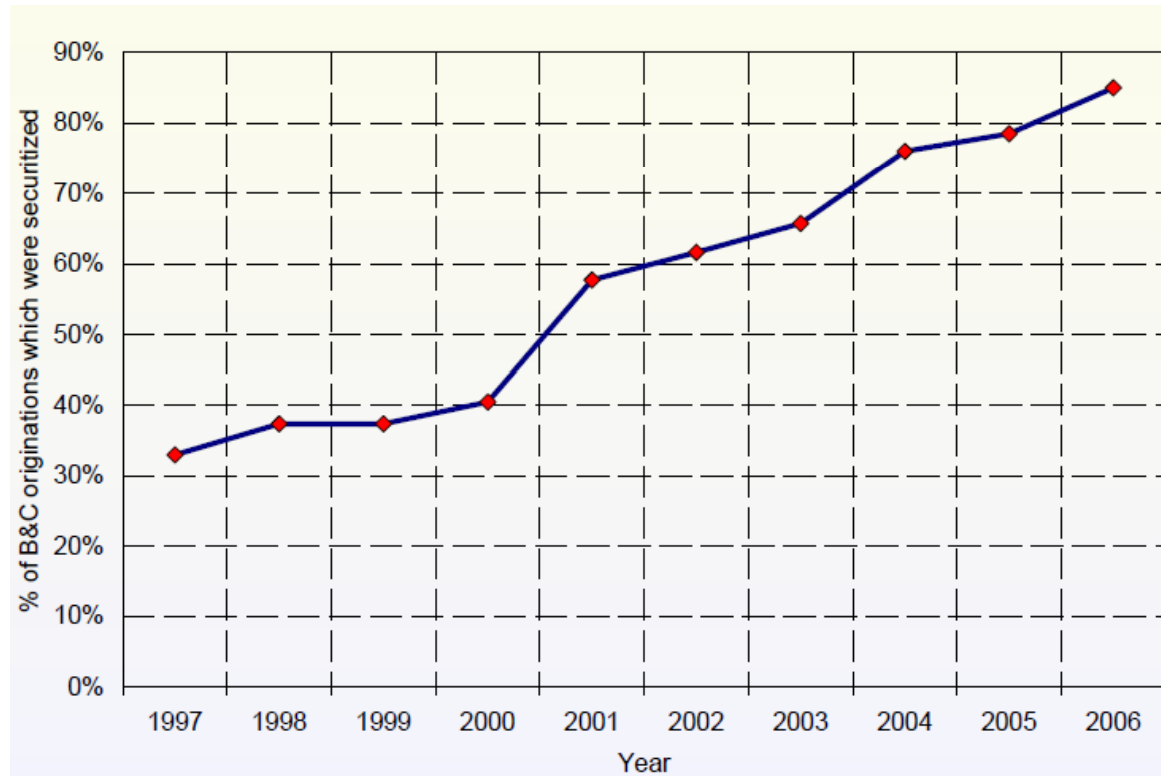
- How much adverse selection is priced?
 - Model mapping
 - Interest rates vs. investor prices
 - Assumptions on bargaining
 - Ratings of MBS pools dominated by assets with high adverse selection?
- Why do banks do it?
 - MM does not hold
 - Securitization

Broad Issue



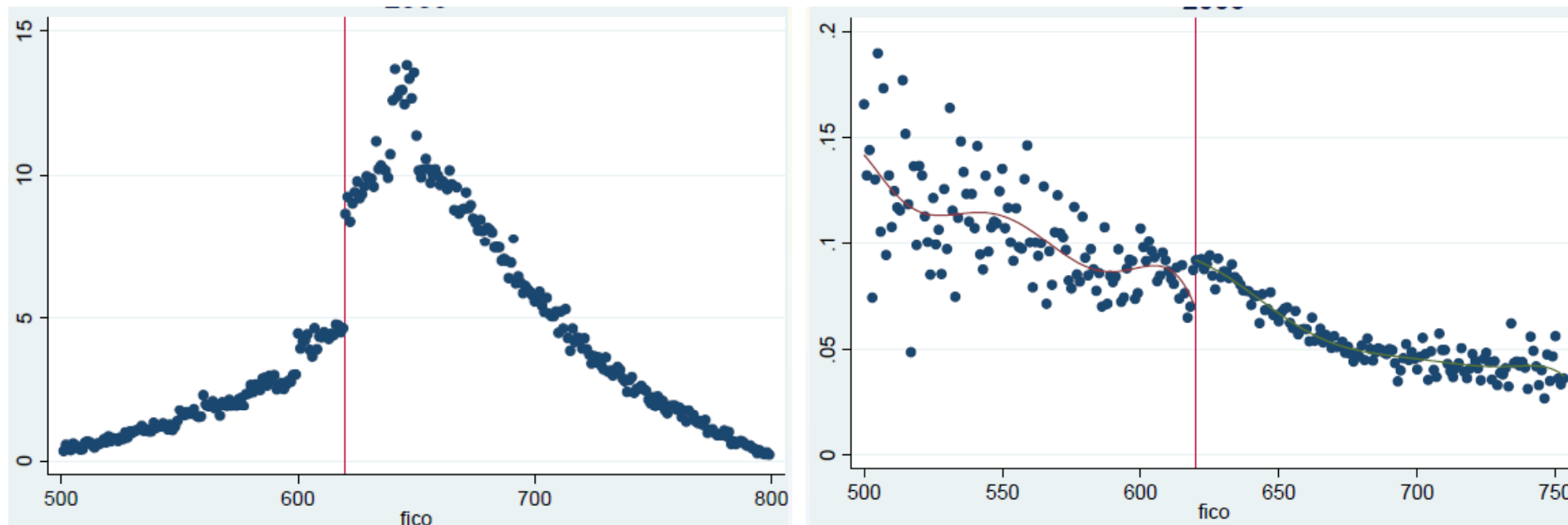
- Are agents responding to incentives?
 - Information collection for screening
- Contracting on hard vs. soft Information: Petersen and Rajan [95], Petersen [04]
 - Loans where banks add value
 - Low vs. Full doc
 - Distance should matter
 - Broker vs. Bank originated

What changed?



- Did securitization impact screening incentives?
 - Heterogeneity

Did securitization change incentives?

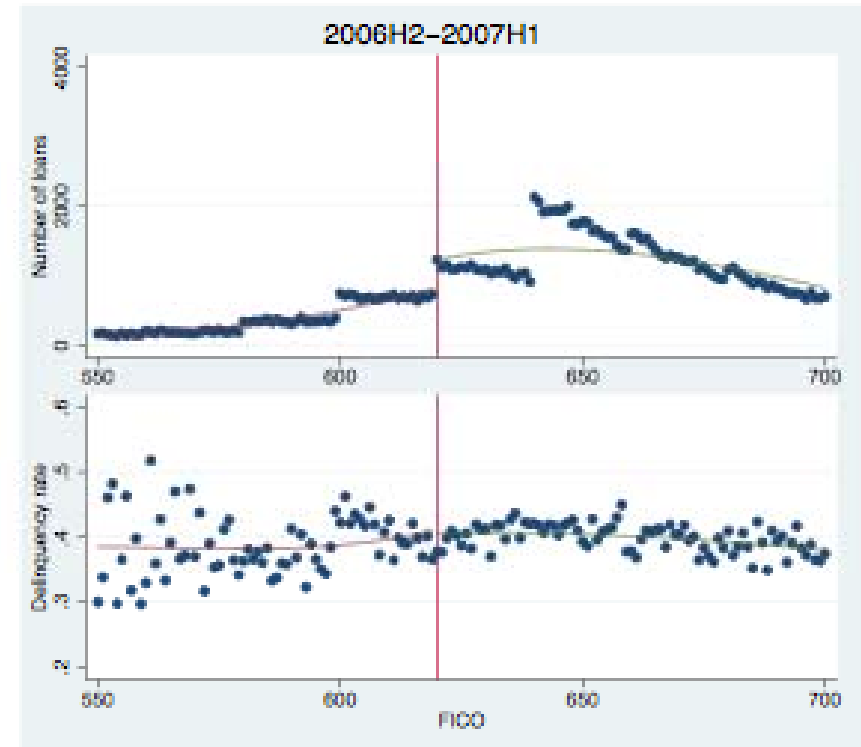
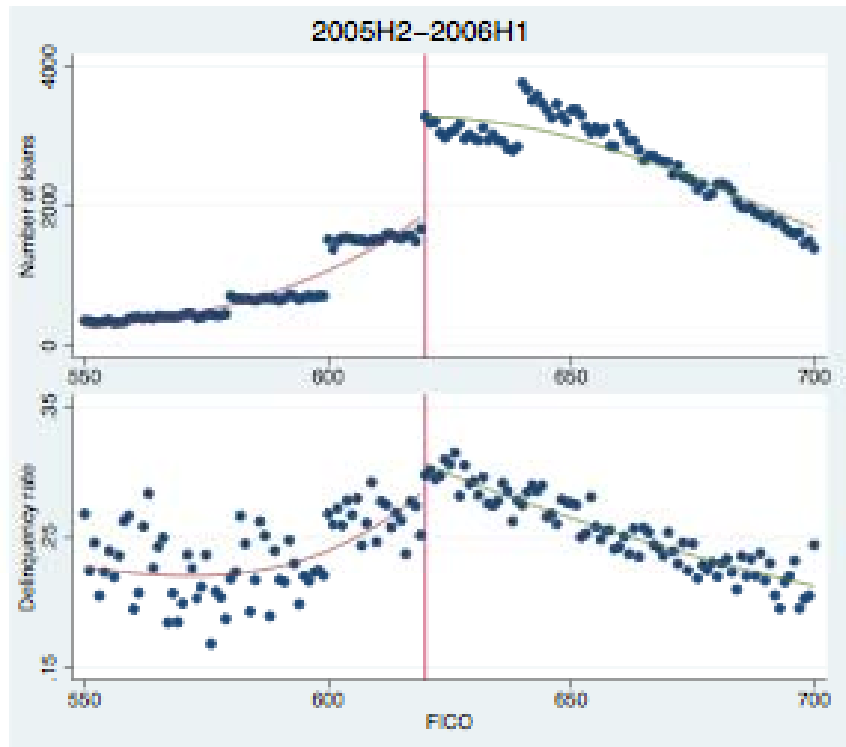


- Exogenous variation in “ease of securitization” in the Low documentation subprime market
 - Defaults higher precisely at the same point where ease higher

Did securitization change incentives?

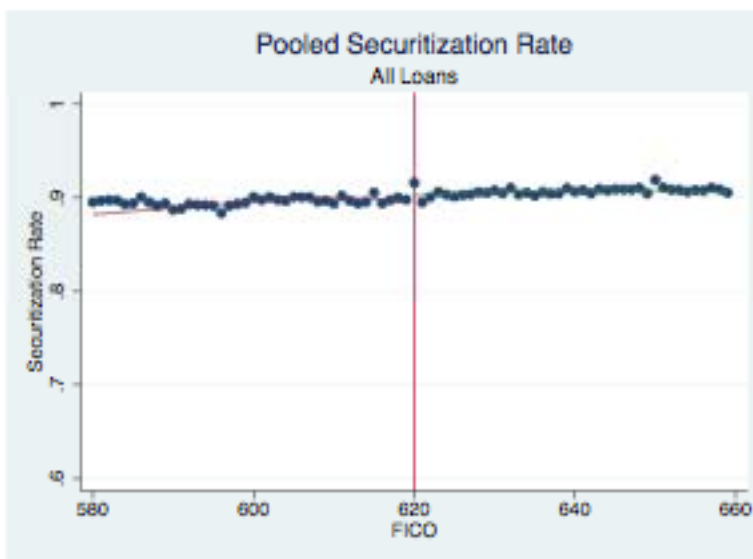
- Exogenous variation in “ease of securitization”
 - $P(S=1) = \text{Acceptance Rate} * \text{Securitization Rate}$
 - Ease of securitization
 - Conditional securitization rate
 - Time to securitize
 - Post-sale audits
- How do we know variation coming from securitization?
 - Time series evidence
 - Get micro data on three components
 - Get lender level data

Time Series Evidence

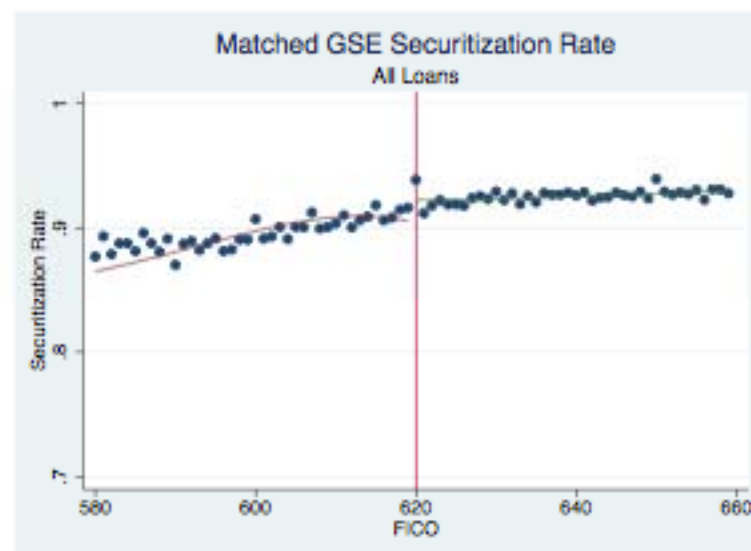


- Similar evidence during run up to the market (1997-2000 vs. 2001-2003)
 - and during vs. after passage of anti-predatory laws that made securitization harder

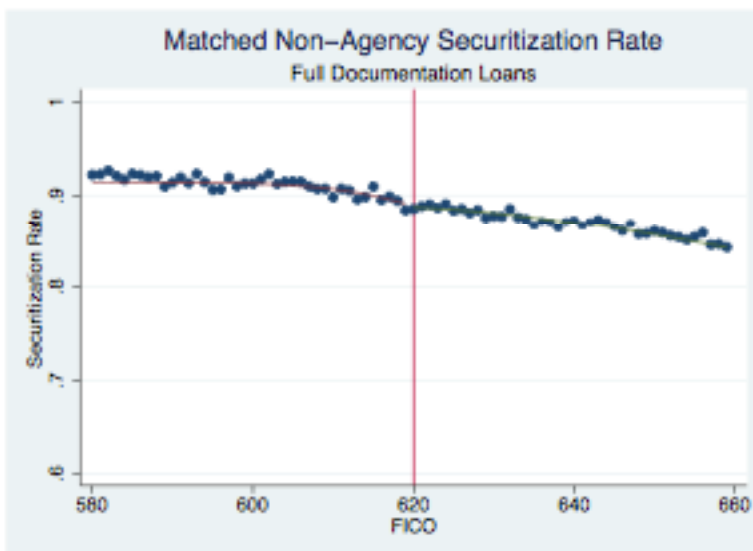
Components: Conditional Securitization Rate



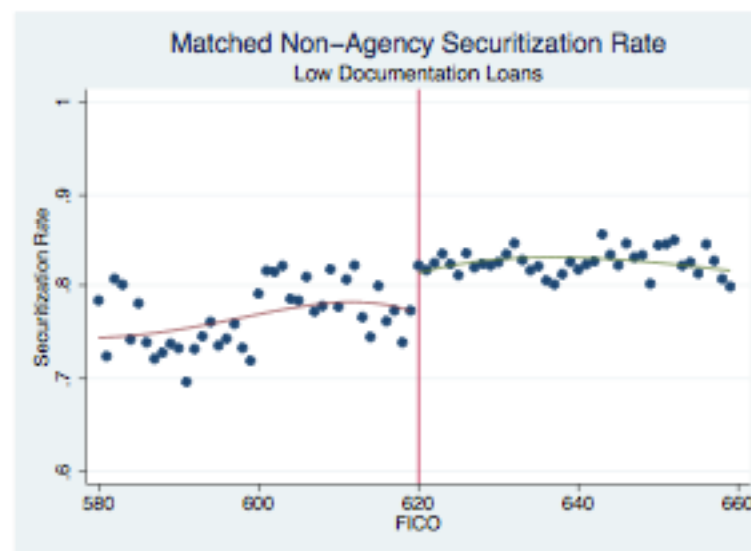
3a



3b

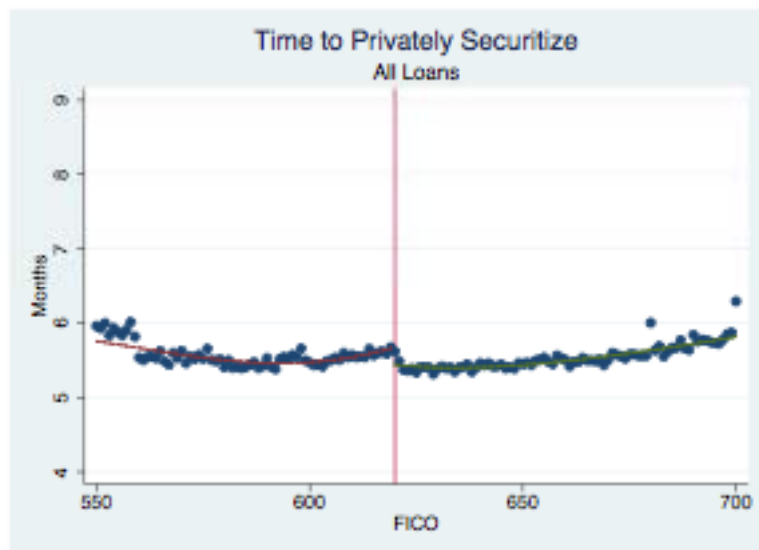


3c

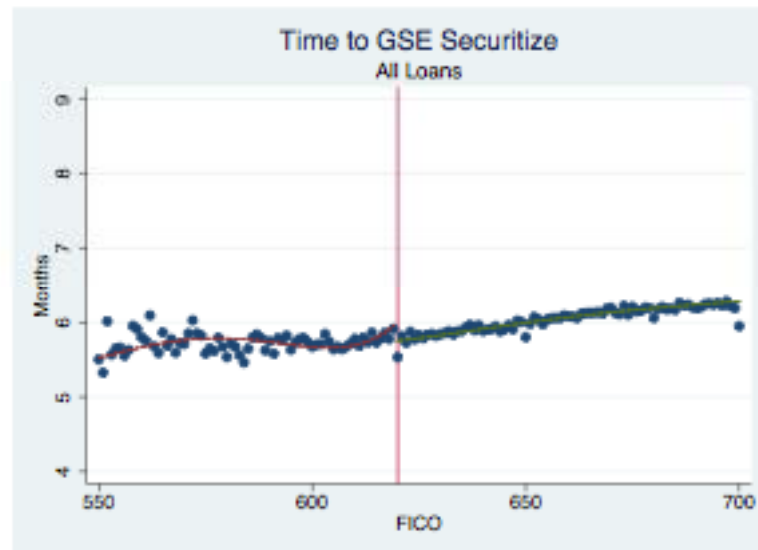


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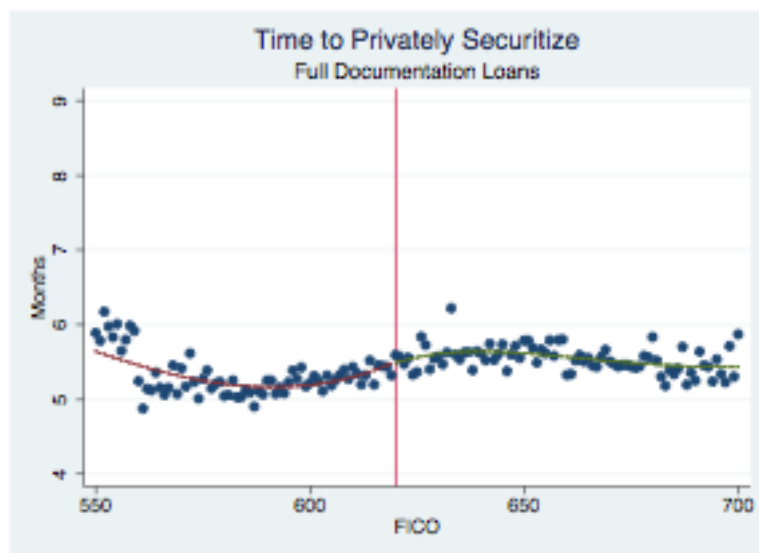
Components: Time to Securitize



14a



14b

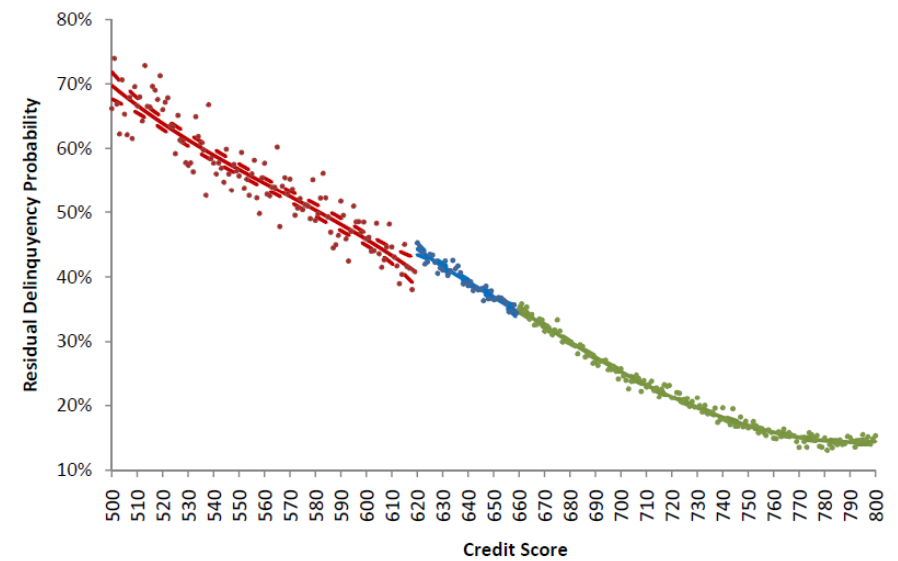
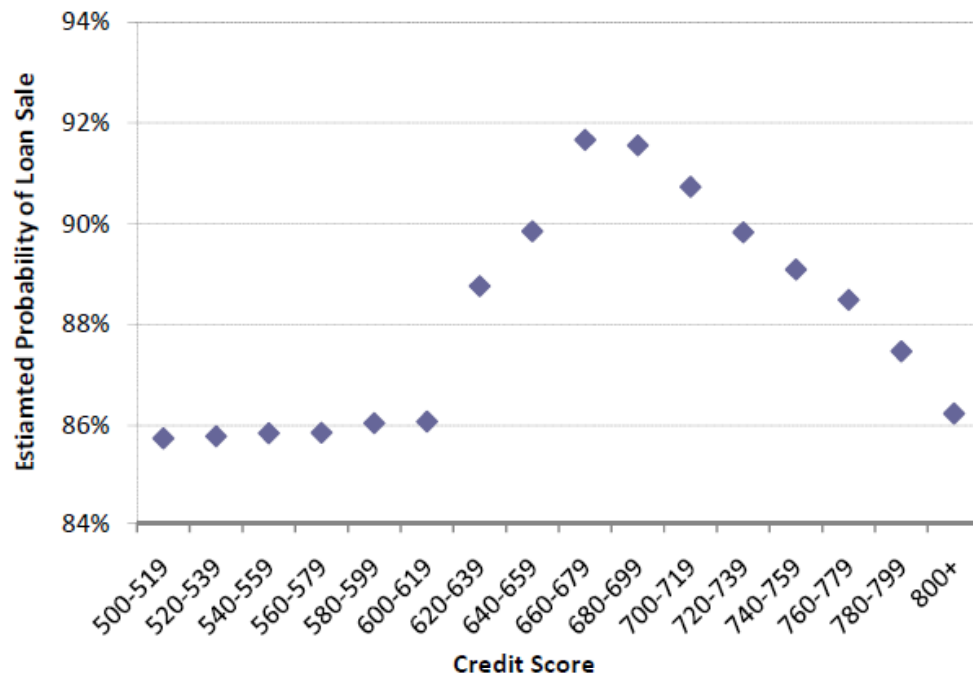


14c



14d

Lender Data



- Jiang et al [2010b]

Timing of Sale and Inventory Risk

- Loans originated with intent to securitize
 - Sold months after origination
 - GSE inventory risk lower
 - Non-GSE inventory risk higher
- What gets stuck on the balance sheet?
 - Loans delinquent or with falling house prices
 - Cannot naively compare ex post outcomes
 - Bank held loans ex post are worse [not surprisingly]
 - These are the ones banks got stuck with
 - Tradeoff for the bank
- Jiang et al ['10b] vs. Krainer Lainerman ['09]

Conclusion

- Some sense of costs of securitization
 - Soft vs. Hard Information is important
 - Nature of assets is important
 - Low doc vs. full doc subprime
 - Structure is important
 - GSE vs. non-GSE securitization
 - Credit card/auto vs. subprime securitization
- How large are the benefits?
- What activities should be done inside vs. outside the banks
 - Can banks be incentivized to collect soft info?
 - Pricing vs. Regulatory Arbitrage margin