The impact of the originate-to-distribute model on banks before and during the financial crisis

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OTD model provides flexibility to banks - they can scale up or down their operations rapidly using this model.

Banks used this flexibility to scale up their refinancing business during the lending boom.

This was profitable during the refi boom, but the resulting loan portfolio was risky as well.

These banks lost a lot of value during the downturn.

The paper is obviously attacking an important problem.
Finding 1: Pipeline Risk

- First the author computes the pipeline time, i.e., time between origination to sale of mortgage based on HMDA data.
- Estimated to be about 40 days.
- Interesting exercise: can be helpful in analyzing the role of inventory risk on bank performance.
- Some refinements
  - What happens to mortgages sold several months and years after origination?
  - Any cyclicality in mortgage sale (say due to accounting considerations)?
  - Pipeline risk heterogeneity should be exploited more in later tests.
Finding 2: OTD Mortgages → High Mortgage on B/S

- Banks that use OTD model of lending end up with higher mortgage on their balance sheet as well.
- Pipeline holding effect.
- Suggestions:
  - Can you estimate the regressions in log(volume) to get at the scaling up effect that you are really after?
  - I would suggest clustering the standard errors at bank level.
Finding 3: OTD Mortgages $\rightarrow$ Higher Profits

- Model:

$$
\Delta Profit_{it-1, it} = \alpha + \beta \cdot \Delta OTD_{it} + \gamma \cdot Profit_{it-1} + \epsilon_{it} \quad (1)
$$

- I am uncomfortable with the use of lagged dependent variable here.

- Errors are very likely to be autocorrelated at bank level over time.

- First differencing is a good approach, but then you add the lagged dependent to the model which is very likely to re-introduce correlations.
Finding 4: OTD Mortgages → Higher Risk

- Refi OTD loans seem to increase borrower risk.
- It will be nice to see the overall effect, not only the effect on the sample of top 10% OTD banks.
- Not sure why risk is measured as the standard deviation of price (not returns).
- Suggestion: It maybe helpful to provide more descriptive stats on refi OTDs versus the rest of loans on dimensions such as Loan-to-Income Ratio, median income, and acceptance/denial rate.
- Are refi OTDs more likely to be accepted by a bank conditional on lower income and/or higher loan-to-income ratio?
More on Refinancing Loans

- Main results come from refinancing loans.
- Are these loans risky ex-ante?
- Are banks with more aggressive refinancing acceptance ratio performing much worse later?
- How different are the refi loans that are held versus sold?
- How does high pipeline velocity relate to refi quality?
Finding 5: Refi Boom $\rightarrow$ Higher refi OTD

- I worry about a mechanical effect here. Refi boom is computed using aggregate refinancing loans as a fraction of all loans in year $t$.
- When this ratio is high, I expect the refi OTD to be high as my null hypothesis.
- Can you come up with some instrument of refi boom that is not directly related to refi mortgages? For example, are refi OTDs higher when interest rates are too low?
Conclusion

- Nice paper.
- Some tightening of the empirical work can make it very interesting.
- I highly recommend it.