“Fintech, Regulatory Arbitrage, and the Rise of Shadow Banks”

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New Developments in Consumer Finance
Figure 1: Shadow Bank Origination Shares

Panel A shows shadow bank origination shares as a fraction of total originations for all mortgages in HMDA between 2007 and 2015. Panel B shows shadow bank origination shares among conforming mortgages. Panel C shows the shadow bank origination share among FHA mortgages.

(a) All loans
Startling Facts

1. Majority of U.S. mortgages now originated by non-banks

2. Shadow bank market share: 14 ➔ 38% (‘07-15)

3. Fintech market share: 4 ➔ 13% (’07-15)
Mortgage and Deposit Flows

Source: FRB Flow of Funds
Paper Summary

• Goal: who/what/where/when/why/how
  1. Explain increase in shadow banks and Fintech
  2. Characterize differences with traditional banks
• Is this an end-run around new regulations?
• An application of new technologies?
• Yes, regulatory pressure + technology explains 90% of growth in non-bank lenders
What is a Shadow Bank?

A. A lender who does not have deposits
B. A buyer in a repo trade
C. An Independent Mortgage Company
D. A mortgage REIT
E. A correspondent lender
F. Any non-bank lender
G. A bank with operations in Gotham
# Zillow Mortgage Offers

<table>
<thead>
<tr>
<th>Bank Name</th>
<th>Rating</th>
<th>Reviews</th>
<th>Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Point Financial</td>
<td>4.95/5</td>
<td>884</td>
<td>3.794% APR</td>
</tr>
<tr>
<td>BNC National Bank</td>
<td>4.65/5</td>
<td>1,329</td>
<td>3.875% APR</td>
</tr>
<tr>
<td>goodmortgage.com</td>
<td>4.74/5</td>
<td>619</td>
<td>3.875% APR</td>
</tr>
</tbody>
</table>

- **Home Point Financial**
  - 884 Reviews
  - 3.794% APR
  - 30 year fixed
  - 3.750% Rate · $1,852/mo · $2,154 in...
  - Lowest APR (30yr)

- **BNC National Bank**
  - 1,329 Reviews
  - 3.875% APR
  - 30 year fixed
  - 3.875% Rate · $1,881/mo · $1 in fees

- **goodmortgage.com**
  - 619 Reviews
  - 3.875% APR
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What is Fintech?

A. Bitcoin
B. Peer-to-peer lending
C. Crowdfunding investments
D. Lenders using Big Data Analytics to improve $R^2$
E. Smartphone apps for personal finance
F. Non-bank lenders with an online focus
Reasons to care

✓ If we think regulations were purposeful, leakage undermines efficacy
✓ Still TBTF systemic risk/fragility from “bank” specialness, just more opaque
✓ If we care about level playing fields (Di Maggio, Kermani, Korgaonkar, 2017)
✓ Shadow banks write taxpayer insured policies
✓ Fintech moving to mortgages
✓ Shadow banks originate more to minorities
✓ Young Fintech model not yet cycle tested
Empirical Findings

1. Shadow banks GSE securitize more quickly
2. SBs specialize lower income/FICO + high unemployment rate + high minority share
3. Shadow bank market share is higher where banks with high local market share have:
   – Low capital ratios
   – Many lawsuits
   – Many enforcement actions
4. Fintech mortgages are 2.5% more expensive
5. Shadow bank mortgages prepay faster
Alternative Hypotheses

• Is this all about securitization? (Kamdar, 2017)
• Is this all about credit demand? (push vs. pull)
• Is this all about loser banks?
• Is this all about competition? $Q^{monopoly} < Q^*$
• Is this all about bank size? Small banks specialize
• Is this all about adverse selection in TBA market? (Downing Stanton Wallace 2009)
Securitization Channel (Kamdar, 2017)

- Some areas, some lenders just securitize more
- National securitization recovery loads onto those areas more
  - Kamdar: Securitization-happy counties react 25% more to changes in MBS yields!
- Those securitizing have no downside to churn
- Lender market power (i.e. because of costly search)
- Persuasive advertising leads to rents for lenders
- Nothing special about shadow banks per se
Reg. Arbitrage: Broader Fintech Issue

• Lending Club as a case study: no banking charter
• Uses WebBank, a Utah-based industrial bank with $200m assets to originate (not screen)
• Utah has no usury laws, probably preempts local usury laws
• Investors do not receive title to loan notes, only unsecured debt issued by Lending Club
• As of 2016, LC requires WebBank risk retention
Lending Club Disclosed Risk

“The Lending Club platform is a novel approach to borrowing that may fail to comply with borrower protection laws such as state usury laws, other interest rate limitations or federal and state consumer protection laws such as the Truth in Lending Act, the Equal Credit Opportunity Act, the Fair Credit Reporting Act and the Fair Debt Collection Practices Act and their state counterparts...”
Minor Points

✧ If all of the non-bank lenders are just extensions of traditional banks, does that change our interpretation?

• Address data selection from not having small lenders (either not disclosed by GSEs or not subject to HMDA) and mostly conventional loans

• Community banks also exempt from most new regulations. Useful contrast?

• Stanton, Walden, Wallace (2014, 2017) important here to understand networks and fragility
Conclusion

• Important topic for a dozen reasons (could stress)
• Useful to flesh out consequences even if no direct evidence
• Main finding: geographic variation in rise in shadow banks correlated with market share of struggling banks, perhaps due to regulation
• But many alternative hypotheses at this stage: struggling banks and areas in which they’re dominant may be different in many ways!
• Fintech seems to thrive on churn + search frictions