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Discussion
Bank and FinTech Lenders

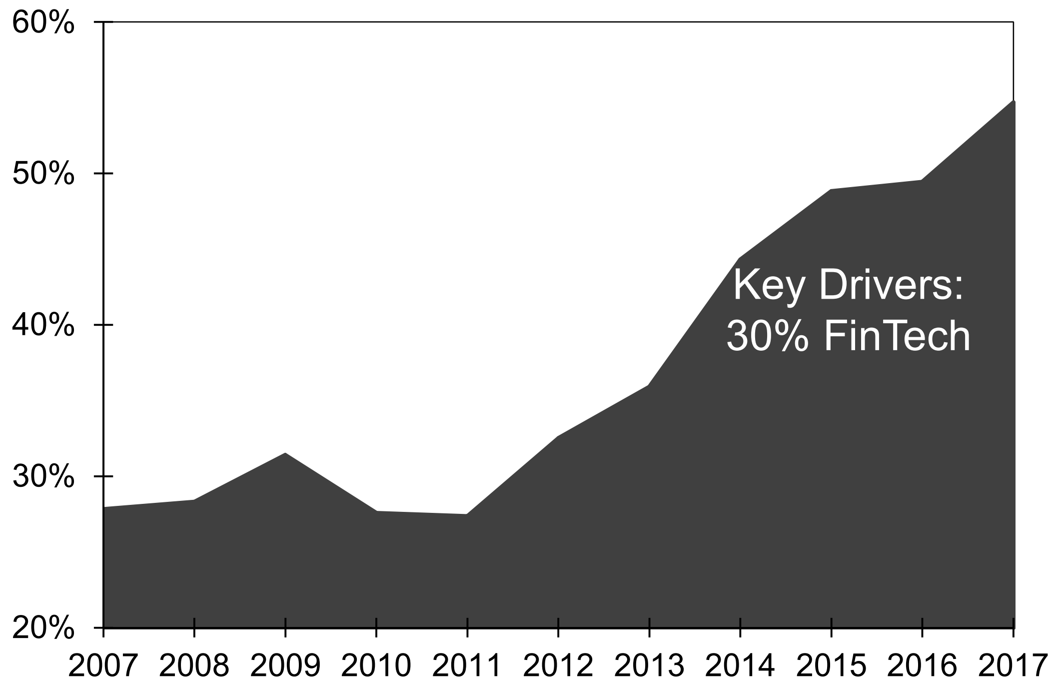
Tomasz Piskorski

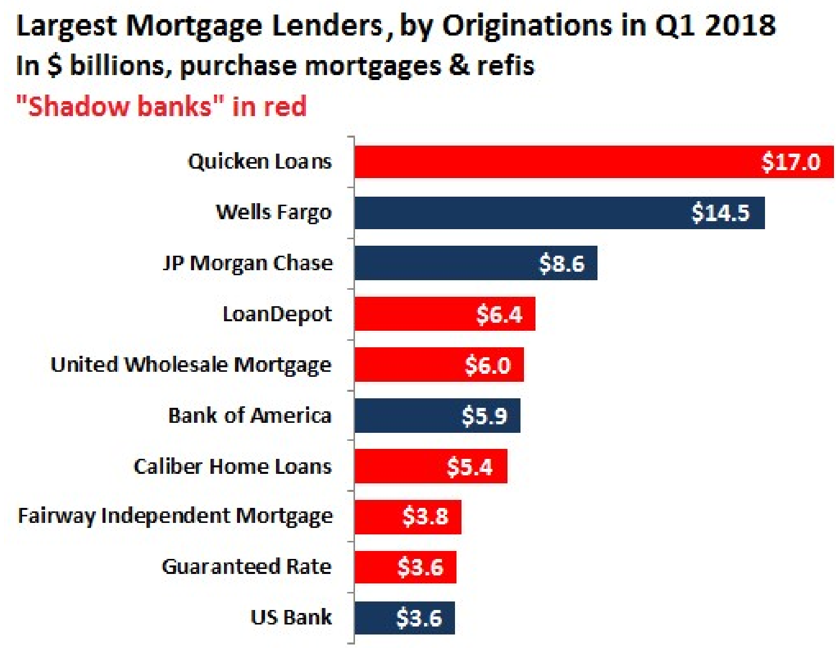
Last Decade: Dramatic Change in Lending Landscape

- Rise of shadow banks (SBs) in the lending market
- Fintech lenders important part of this broader trend
  - Shadow banks early adopters of fintech technology

ROCKET MORTGAGE by Quicken Loans

Shadow bank share in the $10 trillion US mortgage market





Source: Buchak, Matvos, Piskorski, and Seru (2018a)

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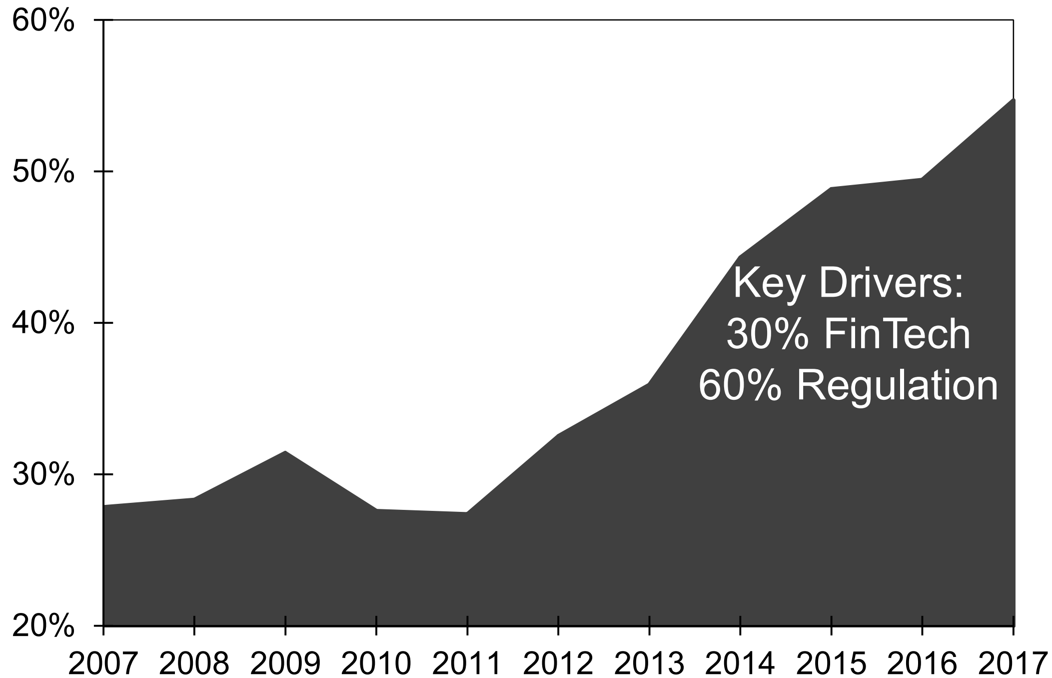
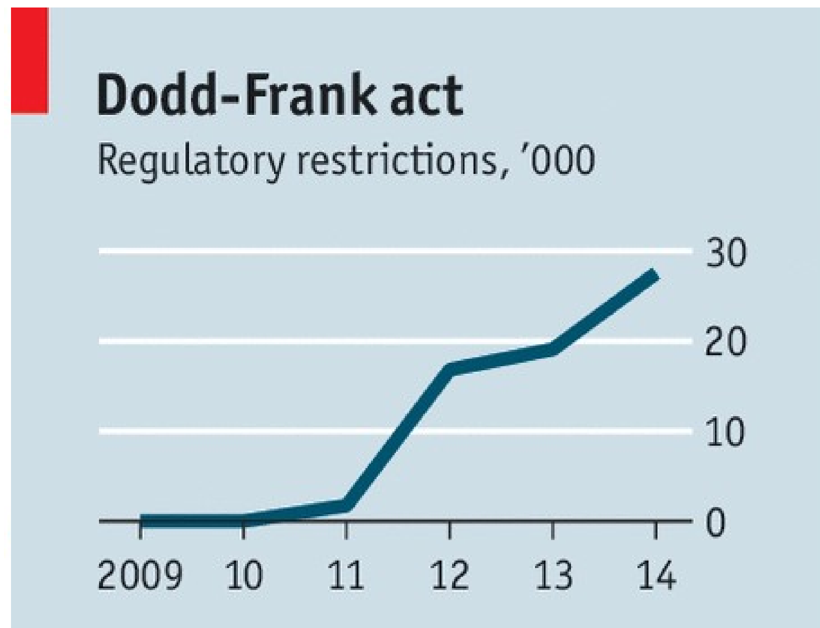




Economist.com

Source: Buchak, Matvos, Piskorski, and Seru (2018a)

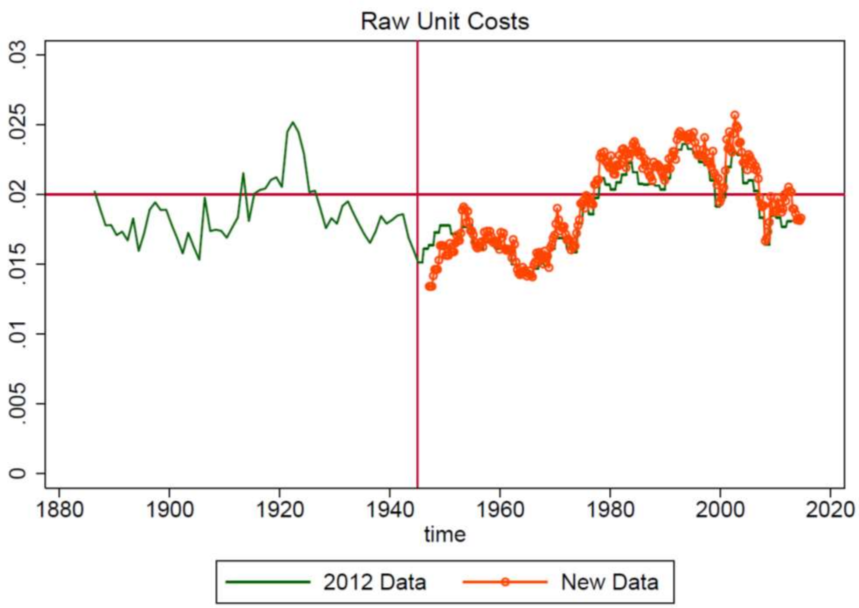
Rise of Fintech & Shadow Banks: Key Questions

- Key drivers of shadow bank expansion
  - Post-crisis regulatory changes vs financial technology
- Impact on consumers
  - E.g., access/distribution/pricing of credit/financial services
- Impact on the structure of lending market
  - Including impact of incumbents (e.g, traditional banks)
- Broader welfare consequences
  - Would hope new technologies would make us better off
  - There could be winners and losers in the transition period
- Implications for financial stability and regulation
  - Need to rethink current regulatory framework?

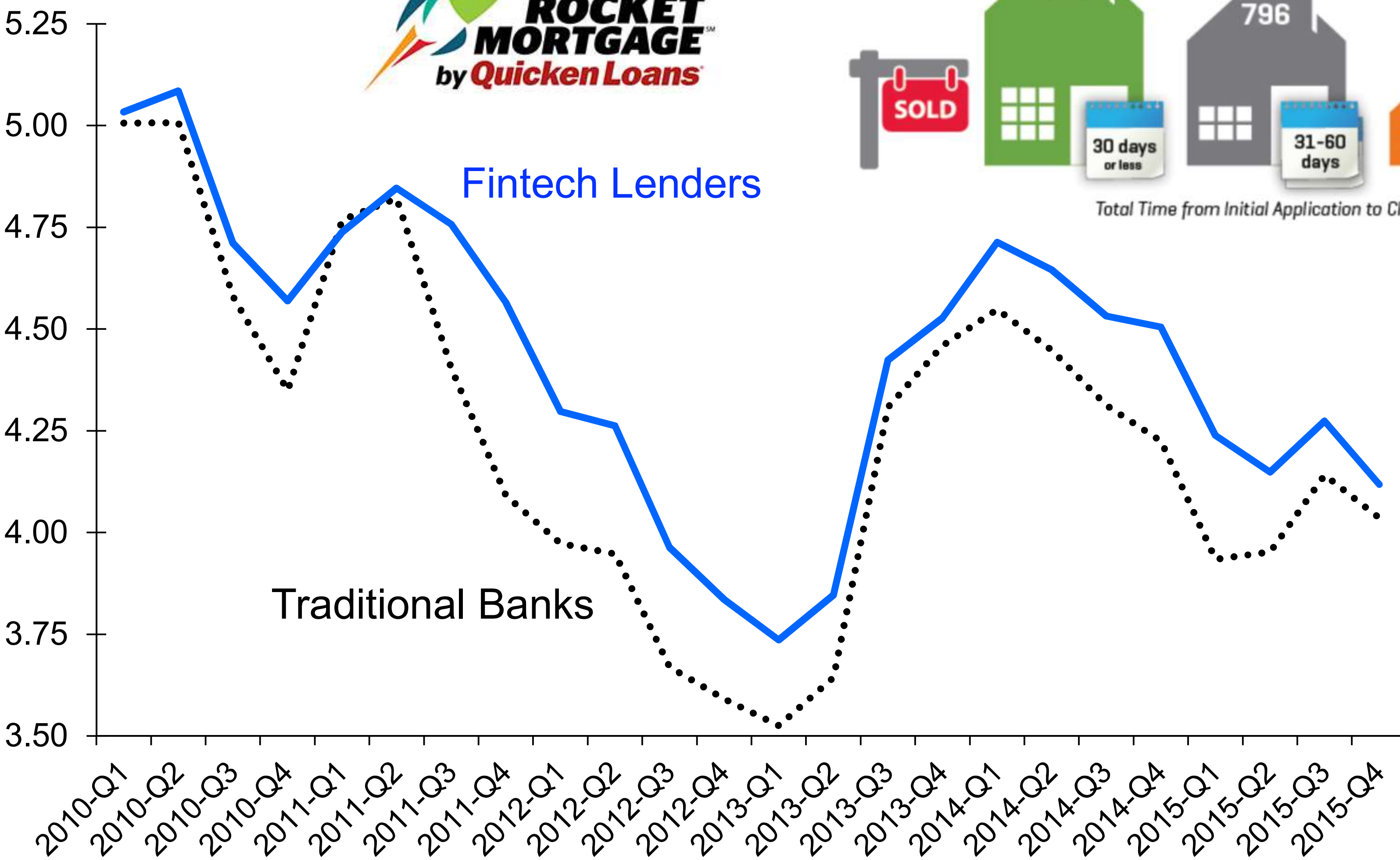
1st Paper: Philippon (2018)

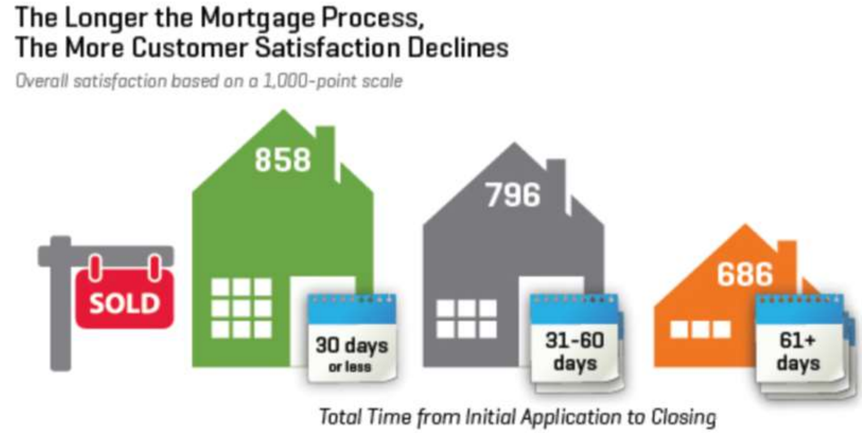
- Focus: Assessment of fintech potential
- Can fintech bring down costs of financial intermediation?
- Impact of fintech on financial stability?
  - Leverage, narrow vs broader banking, systemic risk
  - Regulatory challenges due to new financial models/strategies

Figure 2: Unit Cost of Financial Intermediation



Fintech Premium: Fintech vs Bank Mortgage Rates





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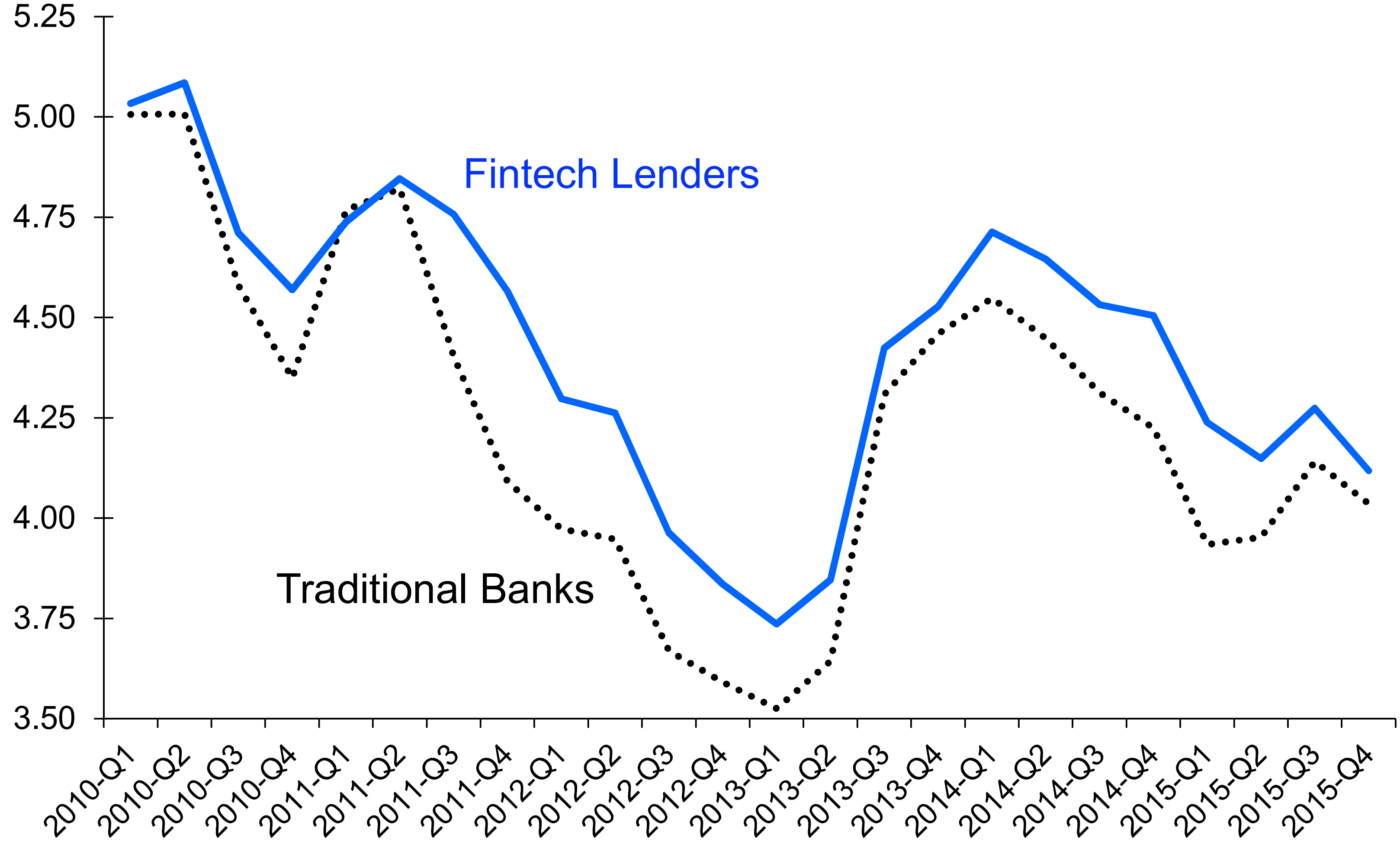
Source: Buchak, Matvos, Piskorski, and Seru (2018a)

Fintech Premium: Fintech vs Bank Mortgage Rates

- Fintech can offer borrowers convenience rather than costs savings
  - Such benefits harder to capture in simple cost intermediation metrics



Source: Buchak, Matvos, Piskorski, and Seru (2018a)

2nd Paper: Di Maggio and Yao (2018)

- Focus: Fintech borrowers in personal loan market
  - Great data: Credit bureau panel of fintech and non-fintech borrowers
- Main findings:
  - Fintech borrowers are quite creditworthy
  - Fintech borrowers: lower credit outcomes after loan origination
  - Seem to have immediate consumption needs (suggestive of present-bias)
- Going forward more work on
  - What would happen in the absence of fintech lenders?
  - More assessment of welfare consequences
    - What fraction of fintech borrowers seem "present-biased"?
- Evidence on fintech consumers broadly consistent with other markets
  - E.g., Relatively more creditworthy fintech borrowers in the mortgage market
    - Buchak, Matvos, Piskorski, and Seru (2018a)

3rd Paper: Cornaggia, Wolfe, Yoo (2018)

- Focus: Impact of P2P fintech lenders on traditional banks
- Main findings (unsecured consumer credit market)
  - Suggestive of higher risk fintech loans substituting for bank loans
  - Fintech entry expansionary for lower risk loans

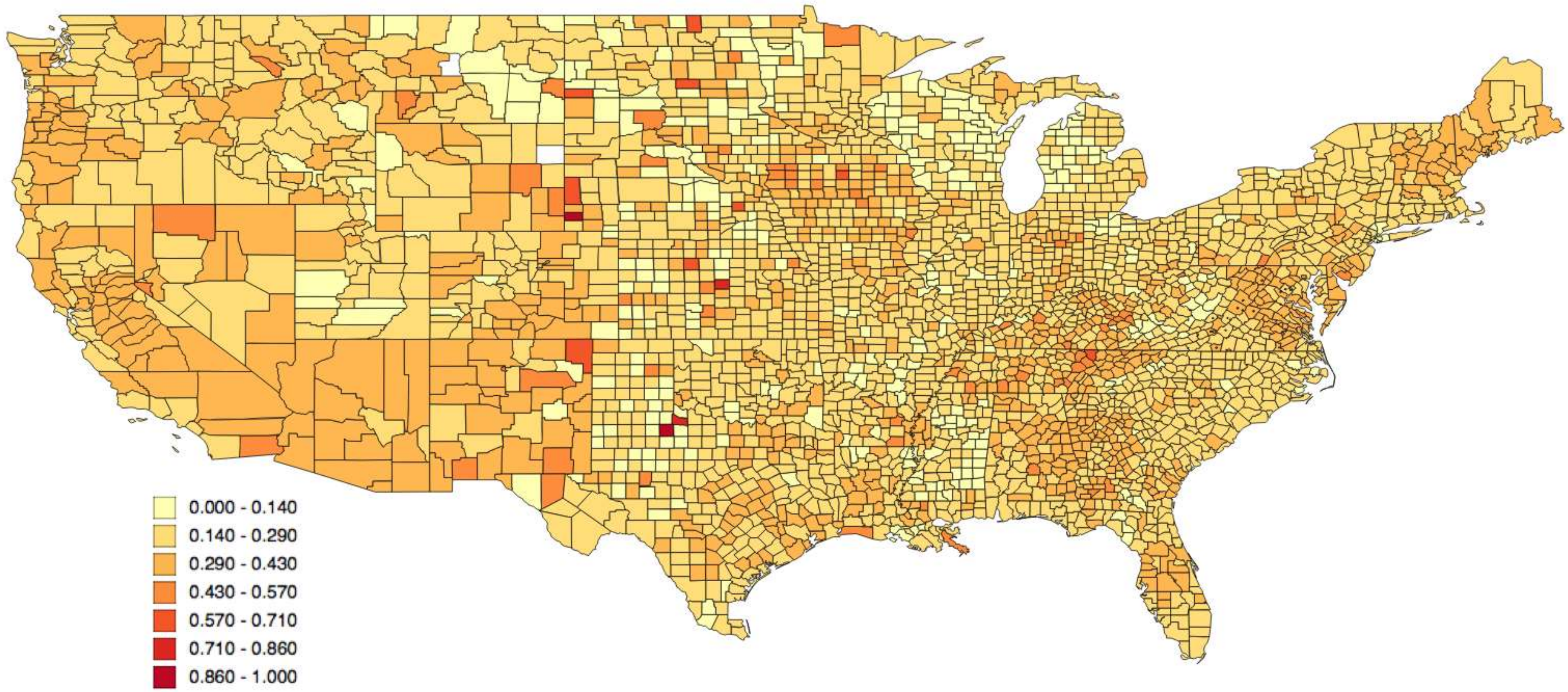
- Comments
  - Patterns also consistent with the effects of ↑ bank regulatory burden
    - Bank partly exit, especially riskier segment, due to increased burden
    - Non-bank fintech lenders partly fill this gap
    - Fintech comparative advantage: Lower regulatory burden & technology
  - Identifying causal effect of P2P entry challenging
    - Authors: IV strategy exploiting local variation in P2P funding availability
  - Relative contribution of technology vs regulation in this market?

4th Paper: Braggion, Manconi, Zhu (2019)

- Focus: Bank regulation and fintech lending
- Context: LTV caps in the Chinese mortgage market
  - Meant among others to "cool" the housing market
- Main findings
  - P2P lenders helped households to borrow alleviating the impact of caps
  - Impact on effectiveness of policy to slow house price growth?
- Broadly consistent with US evidence
  - Increase in bank regulatory burden crucial factor in shadow bank expansion
    - Buchak, Matvos, Piskorski, and Seru (2018a)

Shadow Bank Expansion in the Residential Mortgage Market

2008



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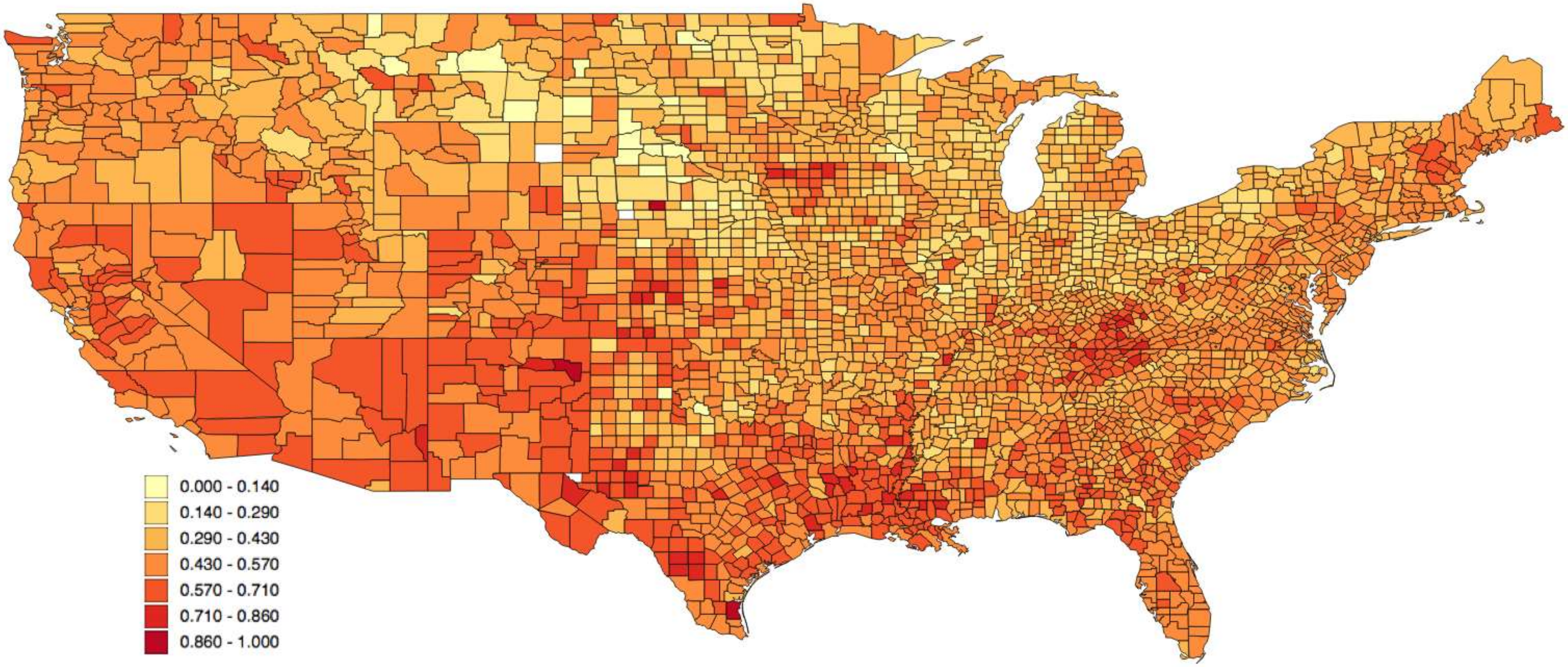
Shadow Bank Expansion in the Residential Mortgage Market

2015

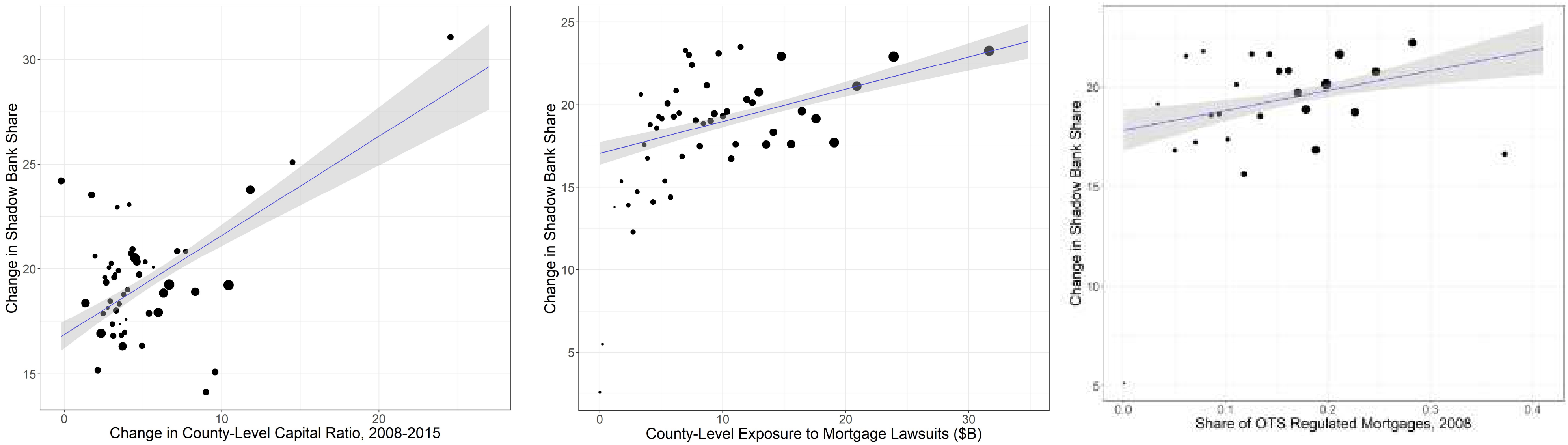


Source: Buchak, Matvos, Piskorski, and Seru (2018a)

Shadow Bank Entry in the US Residential Mortgage Market

- Asses shadow expansion in response to bank regulatory burden
  - Shocks to Regulatory Burden (BMPS 2017)
  - Banks retreated and shadow banks expanded where regulatory burden ↑

Role of Regulation in Shadow Bank Expansion



$$\boldsymbol{\Delta Shadow\ Bank\ Lending\ Share_c} = \beta_0 + \beta_1 \boldsymbol{\Delta Regulatory\ Burden_c} + X_c'\Gamma + \epsilon_c$$

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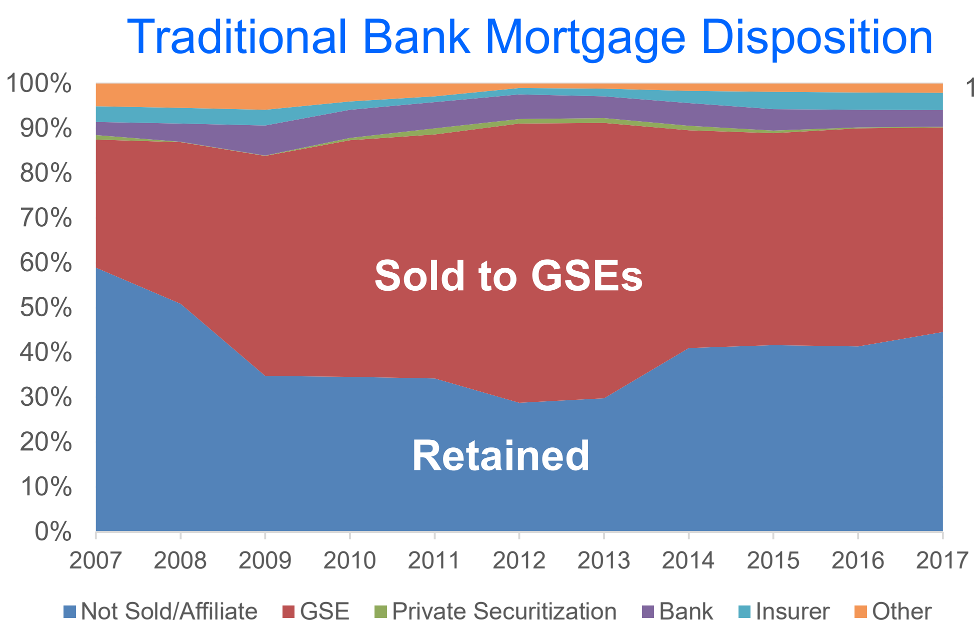
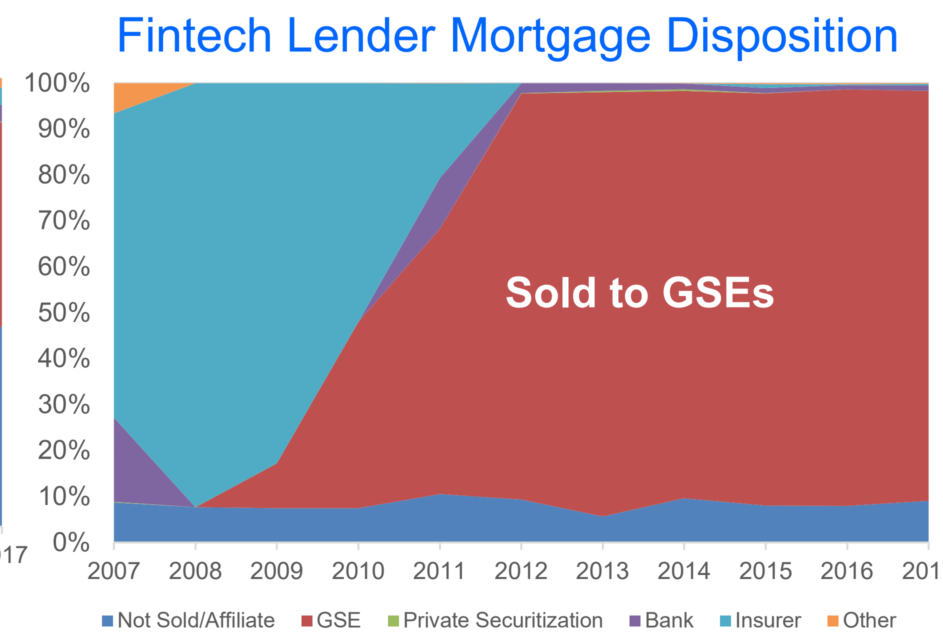
Source: Buchak, Matvos, Piskorski, and Seru (2018a)

Rise of Fintech & Shadow Banks: Broader Implications

- Implications for Financial Stability
  - SBs have no deposit funding base, limited balance sheet capacity
  - Dependent on ability to sell loans/warehouse lines/GSEs/crowdfunding





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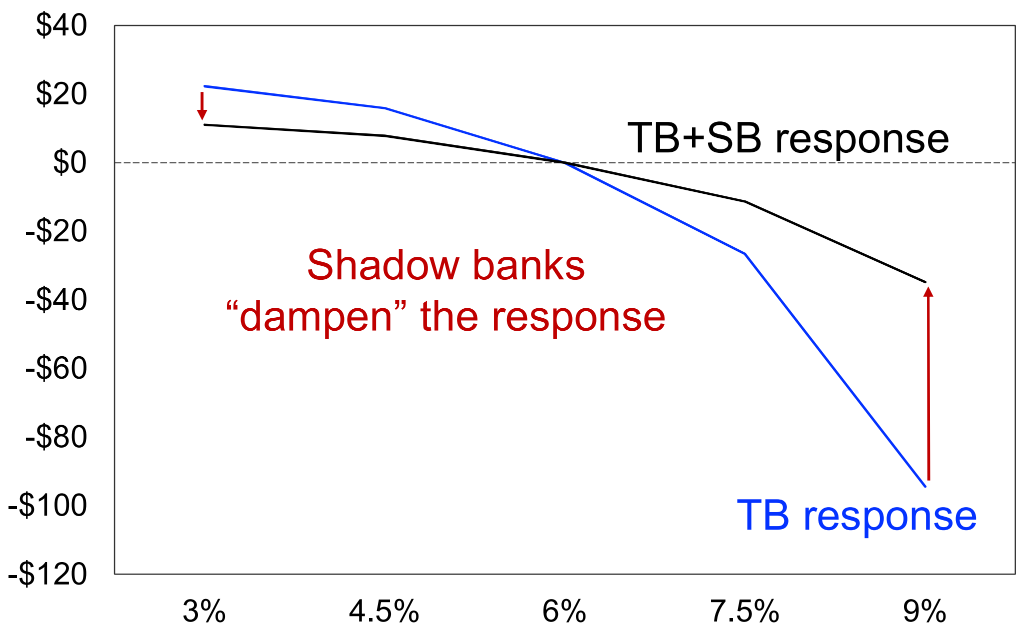
  - SBs can quickly shutdown in the face of funding problems like in 2007
    - Mortgage market shadow bank share: 2007 ≈ 25% vs Now > 50%
  - New lending models have not been tested during downturn
  - In case of the shutdown of fintech/SB lenders who will pick up the slack?
    - Traditional banks (TB) may be unable due to limited experience/market presence

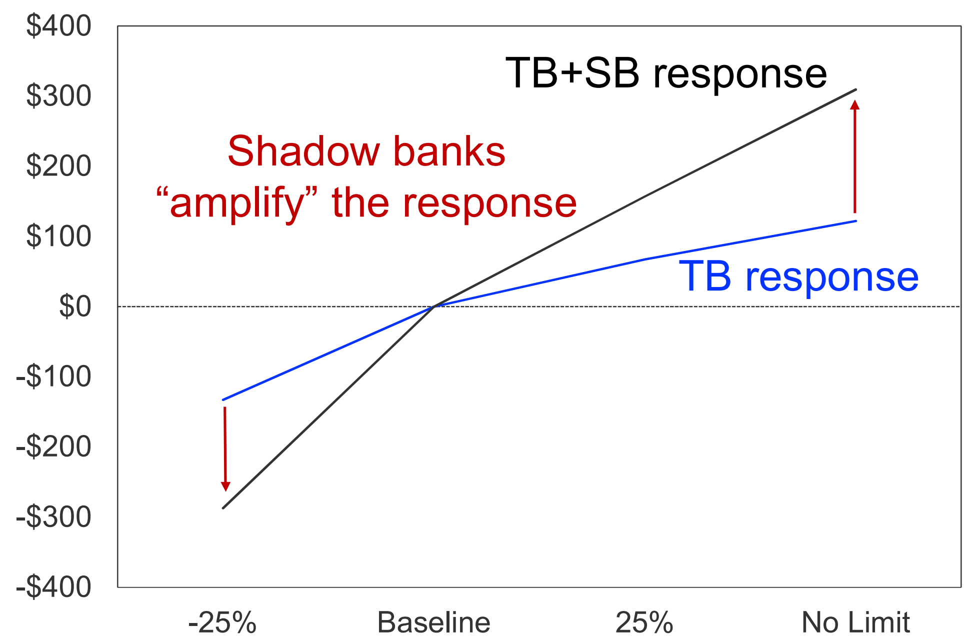
Rise of Fintech & Shadow Banks: Broader Implications

- Implications for Regulatory Framework
  - Need to recognize important role of shadow banks
  - SBs can significantly affect transmission of various polices
    - Quantity, pricing, distribution of credit, bank stability

Mortgage Lending Change ($B) and Capital Ratios



Mortgage Lending Change ($B) and Conforming Limit



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Source: Buchak, Matvos, Piskorski, and Seru (2018b)

Rise of Fintech & Shadow Banks: Broader Implications

- Taxpayer Exposure
  - No direct FDIC exposure…but GSE exposure in the mortgage market
    - Increased taxpayer risk due to limited regulation and GSE guarantees?
    - Can make scaling down the role of GSEs even harder
- Consumer Welfare
  - Need more work on it
  - Use of big data/credit scoring algorithms create regulatory challenges
- Traditional Bank Response
  - Shadow banks were early adopters of new technologies
    - Less concern about regulatory implications, no legacy investments/systems
  - Traditional banks are catching up
    - Evolving market structure can create further regulatory challenges

References

- Buchak, G., G. Matvos, T. Piskorski, A, Seru, 2018a, "Fintech, Regulatory Arbitrage, and the Rise of Shadow Banks", *Journal of Financial Economics* 130, 453-483.

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- Buchak, G., G. Matvos, T. Piskorski, A, Seru, 2018b, "The Limits of Shadow Banks", *National Bureau of Economic Research Working Paper* 25149.

  Available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3260434