

Discussion: "The Role of Technology in Mortgage Lending"
By Andreas Fuster, Matthew Plosser, Philipp Schnabl, James
Vickery

Sudheer Chava



2017 FEDERAL RESERVE BANK OF ATLANTA & GEORGIA STATE
UNIVERSITY REAL ESTATE FINANCE CONFERENCE

Key Research Questions

- Do FinTech lenders process mortgage applications more quickly than traditional lenders? (**efficiency**)
- Are FinTech lenders better able to accommodate variation in mortgage demand relative to traditional lenders which face short-run capacity constraints due to reliance on physical branches and labor intensive processes? (**more elastic lending?**)
- Are FinTech lenders preferred by certain consumers with a high demand for online services, including younger and more educated borrowers, borrowers with high-quality internet access, or borrowers located far from physical bank branches? (**who borrows from Fintech lenders?**)
- By reducing frictions in the mortgage application process, does the presence of FinTech lenders help reduce inefficiencies in mortgage refinancing by households? (**better decisions?**)

Main insights from the paper

Punchline: Evidence seems to support view that technological change is improving the efficiency of the mortgage market.

1. Faster mortgage processing
2. Lower defaults
3. More elastic processing speeds (reduce bottlenecks)
4. Faster refinancing (reduce refi errors)
5. Mixed evidence of expanding access to underserved borrowers.

Why do we care about FinTech Lenders?

Rank	Lender Name	Volume (\$mm)	Market Share (%)
1	WELLS FARGO BK NA	109,415	7.28
2	QUICKEN LOANS, INC.	67,993	4.52
3	JPMORGAN CHASE BK NA	56,461	3.75
4	BANK OF AMER NA	47,878	3.18
5	US BK NA	24,490	1.63
6	LOANDEPOT.COM	23,839	1.59
7	FLAGSTAR BK FSB	23,068	1.53
8	CITIBANK NA	21,192	1.41
9	FREEDOM MORTGAGE CORPORATION	19,042	1.27
10	CALIBER HOME LOANS, INC.	16,909	1.12
11	STEARNS LENDING, INC.	14,546	0.97
12	GUARANTEED RATE INC.	12,273	0.82
13	UNITED SHORE FINANCIAL SERVICE	11,907	0.79
14	PRIMELENDING A PLAINSCAPITAL C	11,751	0.78
15	GUILD MORTGAGE COMPANY	11,394	0.76
16	NAVY FCU	11,196	0.74
17	SUNTRUST MTG	10,538	0.70
18	PNC BK NA	10,512	0.70
19	NATIONSTAR MORTGAGE LLC	9,726	0.65
20	FAIRWAY INDP MORTGAGE CORP	9,661	0.64
21	BROKER SOLUTIONS, INC	8,558	0.57
22	BRANCH BKG&TC	8,124	0.54
23	USAA FSB	8,050	0.54
24	PROSPECT MORTGAGE, LLC	7,969	0.53
25	ACADEMY MORTGAGE CORPORATION	7,950	0.53



Buchak, Matvos, Piskorski and Seru (2017)

Panel A: Loan types based on 2007-2015 HMDA

	All Lenders	Traditional Banks	Shadow Banks	Shadow Banks	
				Non-Fintech	Fintech
<i>% Conventional</i>	76.9%	83.2%	64.31%	62.0%	74.3%
<i>% FHA</i>	15.8%	11.0%	25.33%	26.9%	18.7%
<i>% Other</i>	7.3%	5.8%	10.36%	11.1%	7.0%
<i>Count</i>	46,431,132	30,943,694	15,487,438	12,575,694	2,911,744

Panel B: Loan disposition based on 2007-2015 HMDA

	All Lenders	Traditional Banks	Shadow Banks	Shadow Banks	
				Non-Fintech	Fintech
<i>Not Sold</i>	23.32%	31.15%	7.50%	6.80%	10.53%
<i>Sold To:</i>					
<i>Fannie Mae</i>	23.37%	23.68%	22.80%	20.25%	33.85%
<i>Freddie Mac</i>	14.63%	17.58%	8.84%	8.25%	11.35%
<i>Ginnie Mae</i>	10.55%	9.12%	13.47%	13.19%	14.66%
<i>Private Securitization</i>	0.68%	0.76%	0.49%	0.57%	0.15%
<i>Commercial Bank</i>	9.50%	5.38%	17.71%	19.19%	11.29%
<i>Ins/CU/Mortgage Bank</i>	5.93%	2.44%	12.89%	12.34%	15.26%
<i>Affiliate Institution</i>	4.75%	6.70%	0.88%	0.99%	0.44%
<i>Other</i>	7.26%	3.19%	15.43%	18.42%	2.49%
<i>Count</i>	46,431,132	30,943,694	15,487,438	12,575,694	2,911,744

Establish incremental contribution over Buchak et al

- study the rise of shadow banks and fintech lenders in originating residential mortgages
- traditional banks contracted origination activity in markets in which they faced **more capital and regulatory constraints**
- Shadow banks with predominately online mortgage application process, fintech lenders, accounted for roughly a quarter of shadow bank loan originations by 2015.
- Relative to non-fintech shadow banks, fintech lenders serve **more creditworthy borrowers** and are more active in the **refinancing market**
- They appear to use different information in setting interest rates, consistent with a big data component of technology, and charge a convenience premium of 14-16 basis points.
- increasing **regulatory burden** faced by traditional banks and growth of financial technology can account, respectively, for about 70% and **30%** of the recent shadow bank growth.

Comments: Focus of the paper

- attempts to address a number of questions (too many?)
- may be focus and address in more detail
 - Do FinTech lenders process mortgage applications more quickly than traditional lenders? (**efficiency**)
 - Are FinTech lenders better able to accommodate variation in mortgage demand relative to traditional lenders which face short-run capacity constraints due to reliance on physical branches and labor intensive processes? (**more elastic lending?**)

Comments: Empirical Analysis

- comparison with shadow banks / mortgage banks and FinTech lenders may be more appropriate comparison
- efficiency through the complete mortgage OTD model
- capacity constraints can be due to
 - personnel
 - capital
 - regulatory constraints
- loan risk analysis - short time period, improving housing market
- **critical**: more analysis to address **matching** and **selection**

Summary of Comments

- Try to differentiate more from Buchak, Matvos, Piskorski and Seru (2017)
- Focus on a couple of questions: may be, **efficiency** and **elastic supply**
- Empirical Methodology
 - **Matching** and **Selection** need to be addressed in more depth
 - comparison with Shadow banks or non-banks

Conclusion

- Interesting research question
- Topical and important
- Enjoyed reading it