Discussion of "Mortgage Brokers, Technology, and Credit Supply: Evidence from MERS" Stefan Lewellen and Emily Williams

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New Frontiers in Banking: From Corporate Governance to Risk Management March 2019

Big Picture

Two views on the rise of securitization and mortgage lending: supply vs demand

- Supply view:
 - Financial intermediaries relaxed lending to (riskier) households. (Mian-Sufi 2009)
 - Increased credit supply induced boom-bust cycle. (Favara-Imbs 2015, Di Maggio-Kermani 2016)
- Demand view:
 - Expectations of future house prices is at the core.
 - All kinds of households like to consume from the future value of their home and therefore all kinds of households increase their leverage. (Adelino-Schoar-Severino 2015)
- These views are not mutually exclusive (I view them as complements).
- This paper pinpoints a very specific factor contributing to the rise of credit supply: Mortgage Electronic Registration System (MERS)
- Previously documented factors on the supply side: deregulation, rating agencies behavior, demand for safe assets, ...

Main findings of the paper

- Following a mortgage buyer adoption of MERS, mortgage originations of lenders associated with the mortgage buyer increased by 12%.
- This increase in originations is concentrated within non-bank lenders and is stronger in lower income areas.
- MERS affiliated mortgages also had higher foreclosure rates.
- Census tracts with higher MERS adoption experienced an increase in total mortgage amount.

What is MERS and what are the benefits?

- Facilitates the transfer of the mortgage documents and deed records between different players in the securitization pipeline.
- Lenders saved \$20-\$50 on registration fees.
- It also facilitates transfer of servicing rights (servicing rights of MERS-registered mortgages had ~ \$30 premium)



How much does it cost to become a MERS member?

- There is a fixed cost plus a cost per mortgage.
- For an average correspondent lender, the fixed cost translates to ~\$1 per mortgage.
- It seems to be the highest return investment for any correspondent lender.
- Main question: why were some lenders not members of MERS?
- Aren't the low barriers to becoming a MERS member a threat to identification?

Tier	The Greater of	Annual Production Volume	OR	Size of Servicing Portfolio	Annual Membership Fee
1		under \$250 million		under \$2 billion	\$500
2		\$250 million - \$1 billion		\$2 billion - \$10 billion	\$2,000
3		> \$1 billion - \$10 billion		> \$10 billion - \$50 billion	\$5,500
4		> \$10 billion		> \$50 billion	\$7,500
Lite		N/A		N/A	\$264
Patron		N/A		N/A	\$1,000

MERS® Lite Member

Registration (see below for definition of terms)	\$ 3.95 per loan
Seasoned Servicing Transfer	\$8.50 per loan
Intracompany Transfer	\$1.25 per loan
Transfer to Non-MERS Member	\$1.00 per loan

Investigation of the identification strategy

What authors (correctly) do not do

- Let's assume lender A and lender B are in the business of lending to prime borrowers.
- In year t lender A, due to high demand for subprime loans, decides to get into subprime lending business as well and becomes a MERS member facilitate subprime lending.
- There is a time varying demand shock that is correlated with joining MERS.

Further investigation of the identification strategy

The authors instead focus on the event of a correspondent lender becoming a MERS member.

- Main idea: The correspondent lender decision is not affected by brokers' endogenous decision.
- Threat to identification:
 - Now let's assume your correspondent lender decides to get into the business of subprime lending and therefore joins MERS.
 - There is more saving if both the broker and the correspondent lender are MERS members.
 - So most of their additional demand for subprime loans will come from brokers who are MERS members.
 - There is a demand shock that affects MERS and non-MERS brokers differently and it is correlated with correspondent lender joining MERS.
 - Also, what prevents the non-MERS broker from becoming a MERS member?
 Kermani (UC Berkeley & NBER)

Slightly modified identification strategy

- At the end of the day, the main problem stems from the ease of joining MERS and the low \$500-\$2000 cost.
- So an event study that merely relies on assignee joining MERS can be less than fully satisfactory.
- An idea: use identification based on network of mortgage buyers.
 - E.g.: Mortgage buyers A and B are competing with each other in region X, but not in region Y.
 - Mortgage buyer A joins MERS. This induces mortgage buyer B to join MERS.
 Compare the lending activities of MERS and non-MERS brokers working with buyer B in region Y.
 - See Caldwell and Harmon (2019) for an example of this in the labor market.

Can we distinguish between increase in supply and substitution between brokers?

- Given the complementarities between the broker and mortgage buyer MERS memberships, it is very natural that after the buyer joins MERS, they do more business with the MERS member brokers.
- The result aggregated at the census tract suggests that there was an aggregate increase in credit supply. But a simultaneity in joining MERS and the rise of demand for securitized products can cause problem.

Dependent Variable	Log (Total Origination)	Log (No. Mortgages)	Log (Total Origination)	Log (No. Mortgages)
Post x MERS Active	0.127^{***} (0.0206)	0.101^{**} (0.0357)	$\begin{array}{c} 0.000354 \\ (0.0150) \end{array}$	-0.00836 (0.0314)
Post x MERS Active x Non-Bank			0.194*** (0.0370)	0.200*** (0.0349)
Post x Non-Bank			-0.175*** (0.0332)	(0.0379)
Assignee x Year Fixed Effects Relationship Fixed Effects Zip Code x Year Fixed Effects	Y Y Y	Y Y Y	Y Y Y	Y Y Y
Observations <u>R</u> -squared *** p<0.01, ** p<0.05, * p<0.1	203,758 0.367	204,152 0.411	203,758 0.367	204,152 0.411

An idea to distinguish between substitution and change in total lending

- What if we compare broker A and B who are both non-MERS, but work with different assignee and one of the assignees change its MERS membership status?
- Of course the caveat is that we cannot control for Assignee x Year FE.
- To the extent that joining MERS is associated with more activity by the assignee, lack of control for assignee x year FE works against substitution.
- And of course one can always do some matching based on pre-period characteristics.

Other Comments

- How many assignees changed their MERS status? Shouldn't the result be clustered at the assignee level?
- Distinguish between the effect of being bank vs. non-bank lenders and the number of lender loan buyer relations.
 - Brokers are more likely to rely on one correspondent lender.
- Why did MERS usage not pick up before 2003? MERS existed as early as mid-90s. It seems that the technology that facilitates mortgage transactions was there, but it was not used extensively until demand for securitized products increased.

Conclusion

- This paper does a massive data work and identifies a very interesting and new source of the rise of subprime/ Alt-A lending.
- Main challenge is how to deal with a relatively low barriers to joining MERS.
- Has very important implications for the data-infrastructure design of the credit bureaus.