

Cross-Sectional Variation of Title Insurance Premiums

Michael D. Eriksen
University of Cincinnati

Hamilton Fout*
Fannie Mae

Steve Slezak
University of Cincinnati

**The authors are solely responsible for the contents, findings, and views expressed in this paper, which do not necessarily reflect the opinions of their respective employers.*

Homer Hoyt Conference

January 18, 2019

What is Title Insurance?

Purpose:

- Ensures Buyer/Lender that Seller has the right to transfer property free and clear of encumbrances (lenders, mechanics, heirs)
- Title Assurance Evolved to Title Insurance

Benefits of Title Insurance

- Increased Property Rights and Values
- Increased Liquidity of Asset & Mortgage Loan

Overview of Title Insurance Industry

- \$14.5b in Residential Fees in 2017

Title Insurance Eriksen et al (2017)

2

Title Insurance in the News

Spitzer Strikes Deal With Title Insurance Companies

BY WRITER MAY 24, 2006 7:51 AM

Title insurance is a scam and it's time for a government takeover

Iowa's state-run system is by far the cheapest in the nation—and the most effective

By Jeff Andrews | Feb 26, 2018, 4:35pm EST

FBI investigation: Ex-Ohio Speaker Cliff Rosenberger suspected of bribery, extortion

Jessie Balmert and James Pilcher, Cincinnati Enquirer Published 9:40 a.m. ET Aug. 27, 2018 | Updated 11:10 a.m. ET Aug. 28, 2018

Title Insurance Eriksen et al (2017)

3

Title Insurance in the News

5,221 Views | Jun 22, 2018, 08:30am

Will The Power Of Blockchain Mean The End Of Title Insurance Companies In 20 Years?

Marc Shaw Forbes Council
Forbes Real Estate Council CommunityVoice
Real Estate



INVESTMENTS LENDING TECHNOLOGY

First American, Old Republic Title bringing blockchain to title insurance

Old Republic will use First American-designed blockchain solution

November 28, 2018 Ben Lane

Title Insurance Eriksen, Fout, and Slezak (2019)

4

Impact of Blockchain

Create More Secure Chain of Title

- Easier to Identify Owners (w/ Password)
- Encumbrances Still Possible without Torrens

Reduced Labor Costs for Insurers

- Easier to Validate Chain of Title
- Estimated 20% Reduction in Expenses
- Unclear How Much Consumers will Actually Gain from Technology Gains if Industry is not Competitive

Research Question

What Explains Cross-Sectional Variation in Title Insurance Premiums?

- Effect of State Regulation and Laws
- Market Power at State, Local, & Lender Level

Data:

- Closing Fees for 1m Loans from Fannie Mae
- State Aggregated Losses and Net Premiums from National Association of Insurance Commissioners' (NAIC)

Important Caveats to Disclose

Outline of Presentation

I. Real Property Transfers in US

II. Policy Coverage and NAIC Claims

III. Overview of UCD Data

IV. Results

- State Regulation & Restrictions
- Market Power at State and Local Level

V. Unclear Promise of Blockchain

Real Property Transfers in US

Predominant System is Recording

- Local Government Records All Conveyances
- Courts Determine Rightful Chain of Title
- Past and Future Encumbrances Do Not Need to Be Recorded in Order to be Valid
- Private Insurers Investigate & Validate Transfer

Alternative System is Torrens

- Must Register Conveyance w/ Gov't
- Gov't Determines Validity; Sometimes Insures
- 10 States Allow; Most Common in MN

Real Property Transfers in US

Advantages of Recording System

- Less Burden on Local Gov't and Courts
- Profit Motives Improve Accuracy

Disadvantages of Recording System

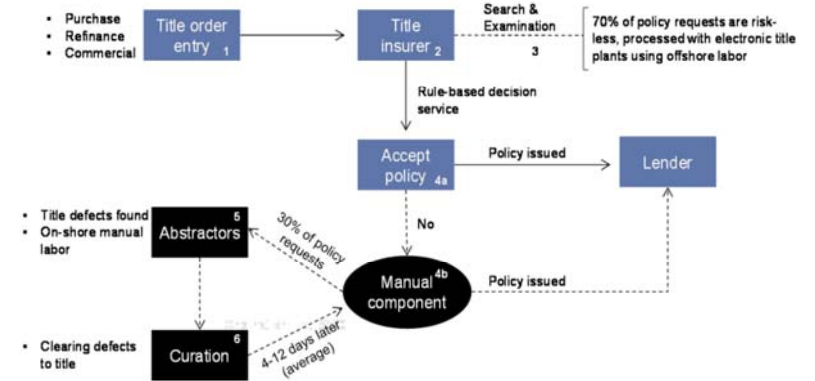
- Easier to Commit Fraud
- Title Abstracts Prone to Typographical Errors

Disadvantages of Torrens System

- Fixed Costs of Initial Registration of Property
- GSEs still Require Title Insurance

Title Search Process

Exhibit 31: Title search is a manually intensive process, as abstractors and curators must process and clear paper-based property records – 30% of which are found defective at the time of the proposed transaction (sale/refinancing)
Title search process



Source: Goldman Sachs Global Investment Research.

TI Policy Coverage

Covers Defects in

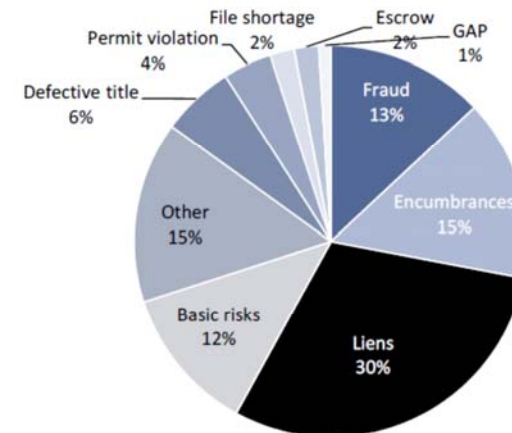
- Records, Forgeries, Incompetent Grantors, Incorrect Marital Statements, Improperly Delivered Deeds, and Unrecorded Liens

Does NOT Cover:

- Defects and Liens Stated in Policy
- Defects Known to the Buyer
- Environmental and Zoning Changes
- Eminent Domain

Goal: Identify and Eliminate Risk Upfront

Sources of Title Claims



Source: First American Financial.

Industrial Organization

Two Insurance Policies

- Owner Policy Covers Personal Equity; Optional
- Lender Policy Covers Title Related Losses Following Foreclosure; Required for Federally Related Loans

Local Title Agent or Lawyer at Closing

- May or May not Affiliated w/ Insurer
- Corrects Minor Deficiencies; Provides Opinion
- Receives 70-90% of Insurance Premium
- Charges Borrower Other Related Closing Fees

Industry Cost Structure



Source: Goldman Sachs Global Investment Research.

Prior Research on TI

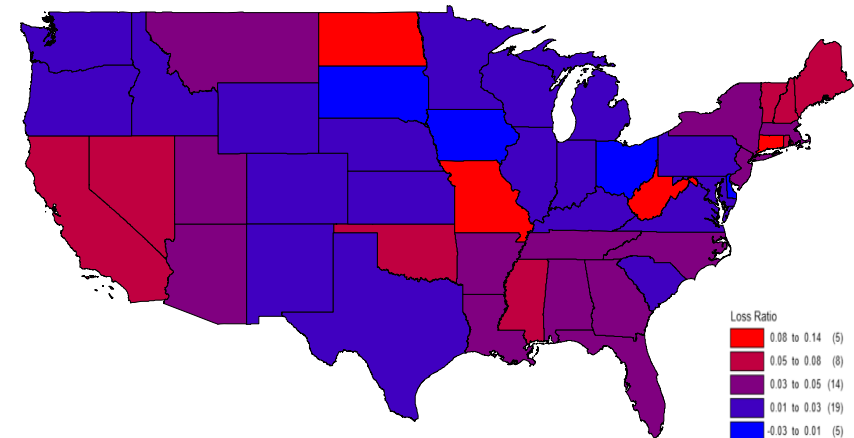
Highly Concentrated Industry

- 4 Insurers Represent 86% of Industry
- Single Companies Represent +50% in States
- Fidelity (34%) Acquired Stewart (11%) in '18
- No Direct Evidence Acting Like Monopolist

Limited Losses from Actual Claims

- Average of 3%; Range from 1-to-14%
- Only Aggregate Data Available from NAIC
- Profitability Unclear Given Upfront Mitigation and Compensation of Local Agents & Brokers

Loss Ratios from NAIC



Other Related Literatures

Importance of Strong Title

- Torrens System Provides Stronger Property Rights and Values (Micelli *et al.*, 2007).

Affordability of Home Ownership

- Large Literature on Discriminatory Practices
- Benefits of Shopping (Woodward & Hall, 2012)

Reverse Competition

- Pharmaceutical Industry (Alpert *et al.*, 2013)

Role of State Government

Direct Intervention

- Iowa has Centralized Insurance Pool
- Torrens System of Land Registration

Rate Regulation

- 3 Main Categories

Limiting Affiliated Business Arrangements

- Prevention of Reverse Competition

Data

National Association of Insurance Commissioners (NAIC)

- 2017 State Aggregated Data by Company
- Net Premiums Earned and Adjusted Losses

Uniform Closing Disclosures (UCD) Data

- 24m Title Fees from 4m Loan Originations
- October 2017-September 2018
- Focus on Fees from 950k Purchase Loans
- Exclude Iowa from Most Regressions

Title Agent Fees as % of Price



TI Premiums as % of Price



Types of State Regulation

File & Use (17 States)

- Publicly Reveal Premium Rate Schedule
- Regulators May Ask for Revisions (Rare)

Prior Approval (23 States)

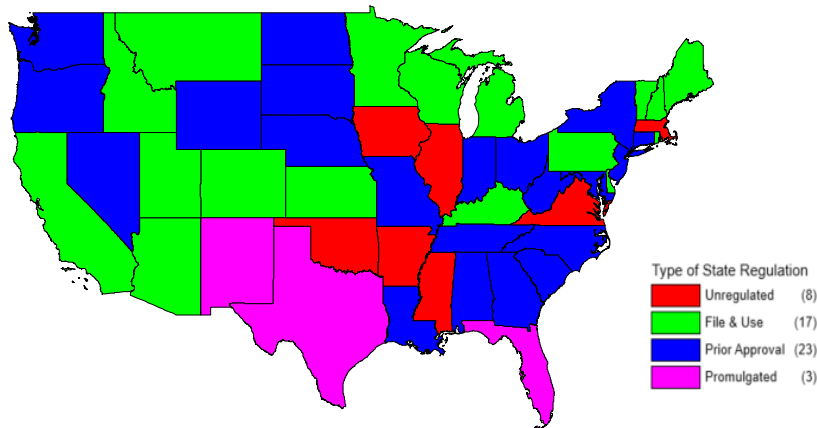
- Regulator Must Approve Premiums Upfront

Promulgated (3 States)

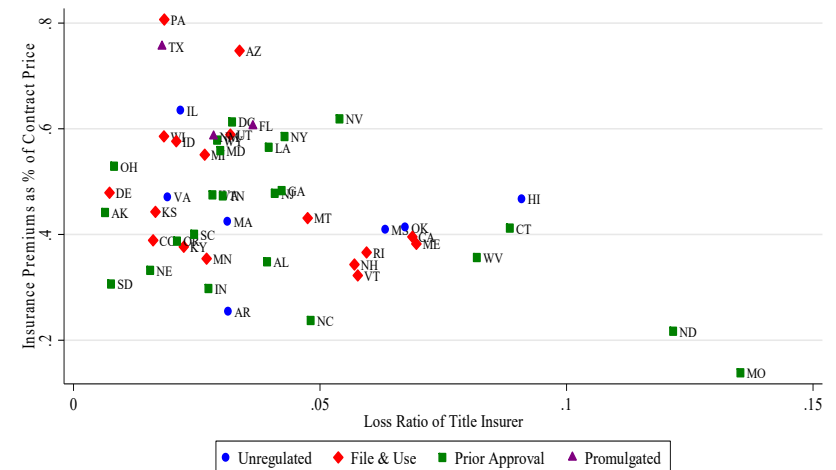
- Regulator Directly Sets Rate Schedule

8 States Have No Regulation of Rates

Map of Rate Regulation



Average Insurance Premiums



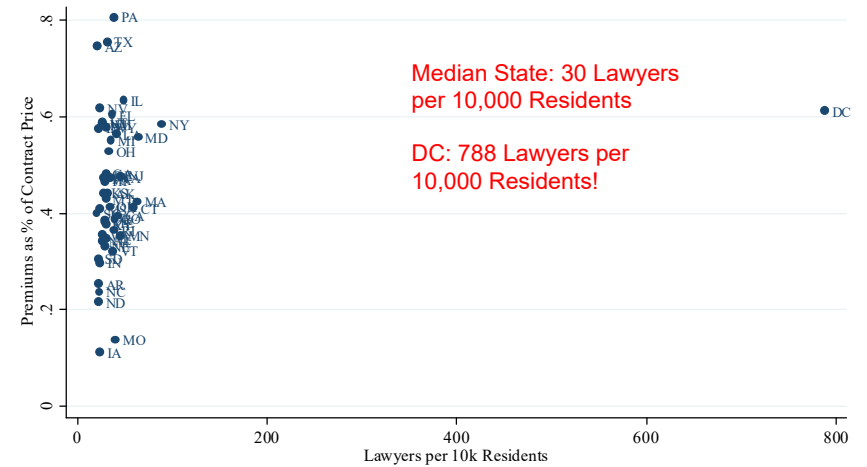
Note: Regressions do not include Originations in Iowa

State Regulation of Premiums

	(1) Insurance Premiums	(3) ln(Insurance Premiums)	(4)
Regulation of TI Premiums			
File & Use	33.346 (132.269)	0.106 (0.108)	
Prior Approval	-138.738 (116.212)	-0.119 (0.128)	
Promulgated	484.717*** (153.691)	0.373*** (0.111)	
ln(loan amount)	171.262*** (40.045)	0.237*** (0.026)	
ln(Purchase Price)	758.357*** (93.509)	0.517*** (0.057)	
Observations	950.177	950.177	
R-Squared	0.28	0.30	

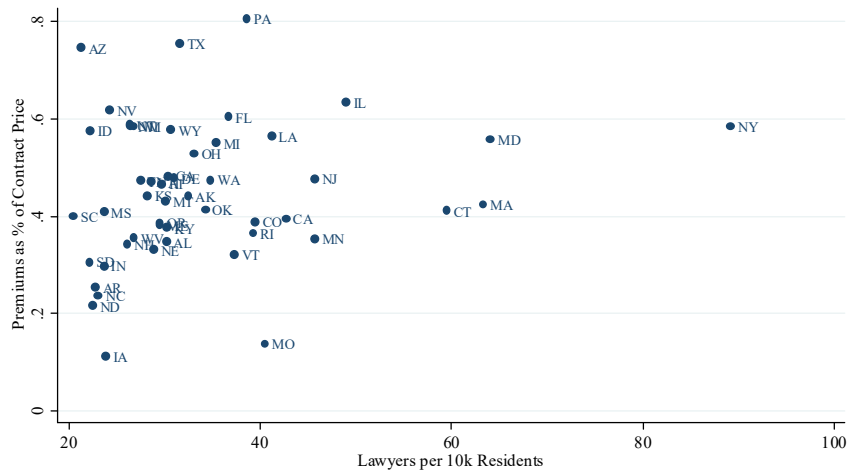
Note: State-Clustered Standard Errors in parentheses

Lawyers per 10k Residents



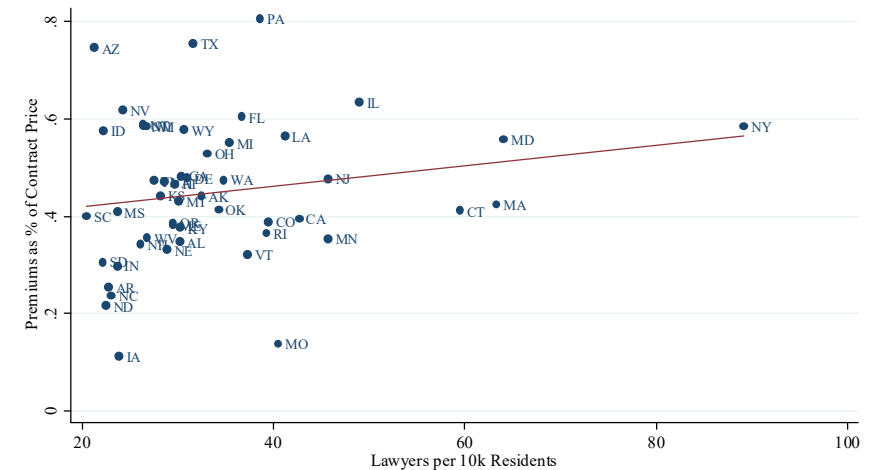
Source: lawschoolbubble.com

Lawyers per 10k Residents



Source: lawschoolbubble.com

Lawyers per 10k Residents



Source: lawschoolbubble.com

State Regulation of Premiums

	(1) Insurance Premiums	(2)	(3) ln(Insurance Premiums)	(4)
Regulation of TI Premiums				
File & Use	33.346 (132.269)		0.106 (0.108)	
Prior Approval	-138.738 (116.212)		-0.119 (0.128)	
Promulgated	484.717*** (153.691)		0.373*** (0.111)	
In(loan amount)	171.262*** (40.045)		0.237*** (0.026)	
In(Purchase Price)	758.357*** (93.509)		0.517*** (0.057)	
Observations	950.177		950.177	
R-Squared	0.28		0.30	

Note: State-Clustered Standard Errors in parentheses

Affiliated Business Agreements

Real Estate Settlement & Procedures Act

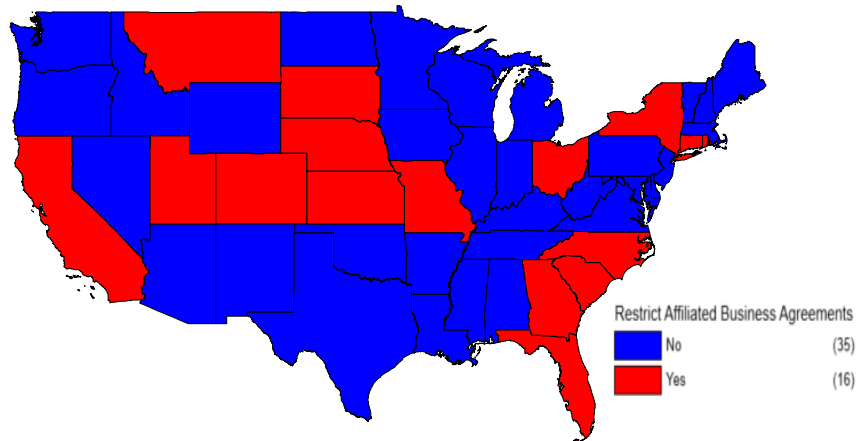
- Prohibits Referral Fees to Brokers and Agents
- Kickbacks Thought Harmful to Consumers

Affiliated Business Agreements (ABAs) are allowed under RESPA if Following:

- Disclosure to Buyer within 3 days of Referral
- Buyer is not Required to Use Services
- Equity Interest; Fees "Reasonable" for Services

16 States Place Add'l Restrictions on ABAs

Map of ABA Restrictions



Affiliated Business Agreements

	(1) Insurance Premiums	(2)	(3)	(4) ln(Insurance Premiums)	(5)	(6)
Restrict ABA	-277.128*** (98.699)			-0.261** (0.099)		
Regulation of TI Premiums						
File & Use	150.256 (139.611)			0.216* (0.112)		
Prior Approval	0.600 (107.831)			0.012 (0.108)		
Promulgated	622.033*** (102.611)			0.503*** (0.086)		
Price and Loan Amount	Yes			Yes		
Include Iowa	No			No		
Observations	921,763			921,763		
R-Squared	0.294			0.325		

Note: State-Clustered Standard Errors in parentheses

What Happens in Iowa?

Title Insurance Made Illegal in 1947

- Local Attorney Still Provides Title Opinion
- Public Investment in Registration System
- Prevented Participation in Secondary Markets

Iowa Title Guaranty

- Created in 1980's as State Monopoly
- \$110 per Policy up to \$500,000
- Required Unless Out of State Lender
- Profits Invested in Affordable Housing

Iowa Guarantee Corporation

	(1)	(2)	(3)	(4)	(5)	(6)
	Insurance Premiums			ln(Insurance Premiums)		
Restrict ABA	-277.128*** (98.699)			-0.261** (0.099)		
Iowa						
Regulation of TI Premiums						
File & Use	150.256 (139.611)			0.216* (0.112)		
Prior Approval	0.600 (107.831)			0.012 (0.108)		
Promulgated	622.033*** (102.611)			0.503*** (0.086)		
Price and Loan Amount	Yes			Yes		
Include Iowa	No			No		
Observations	921,763			921,763		
R-Squared	0.294			0.325		

Note: State-Clustered Standard Errors in parentheses

Affiliated Business Agreements

	(1)	(2)	(3)	(4)	(5)	(6)
	Insurance Premiums			ln(Insurance Premiums)		
Restrict ABA	-277.128*** (98.699)			-0.261** (0.099)		
Iowa		-835.486*** (78.893)	-828.115*** (79.092)		-1.721*** (0.069)	-1.714*** (0.068)
Regulation of TI Premiums						
File & Use	150.256 (139.611)	32.928 (132.065)	150.502 (139.489)	0.216* (0.112)	0.105 (0.108)	0.216* (0.112)
Prior Approval	0.600 (107.831)	-139.854 (116.611)	0.184 (107.743)	0.012 (0.108)	-0.120 (0.129)	0.012 (0.108)
Promulgated	622.033*** (102.611)	481.241*** (153.475)	621.536*** (102.587)	0.503*** (0.086)	0.371*** (0.111)	0.503*** (0.086)
Price and Loan Amount	Yes	Yes	Yes	Yes	Yes	Yes
Include Iowa	No	Yes	Yes	No	Yes	Yes
Observations	921,763	927,714	927,714	921,763	927,714	927,714
R-Squared	0.294	0.282	0.299	0.325	0.328	0.351

Note: State-Clustered Standard Errors in parentheses

Role of Market Power

4 Companies Represent 86% of Industry

- Fidelity, First American, Stewart, Old Republic
- 27 Other Unaffiliated Insurance Companies

Do More Concentrated Markets Have Higher Title Insurance Premiums?

- State-Level w/ Other Attributes
- County-Level w/ State Fixed Effects

Herfindahl Index of Market Concentration

$$Herfindahl = \sum_{i=1}^k s_i^2 \quad \text{where } s \text{ represents market share of firm } i$$

State-Level Herfindahl

	(1)	(2)	(3)	(4)
	Insurance Premiums		ln(Insurance Premiums)	
ln(State Herfindahl Index)	-260.165 (460.491)	72.416 (144.065)	-0.087 (0.380)	0.159 (0.157)
Restrict ABA		-274.662*** (97.758)		-0.256** (0.096)
Regulation of TI Premiums				
File & Use		150.504 (138.518)		0.217* (0.113)
Prior Approval		1.431 (106.093)		0.014 (0.108)
Promulgated		640.094*** (115.644)		0.543*** (0.112)
Property Price and Loan Amount	Yes	Yes	Yes	Yes
Include Iowa	No	No	No	No
Observations	921,763	921,763	921,763	921,763
R-Squared	0.236	0.294	0.254	0.327

County-Level Herfindahl Index

	(1)	(2)	(3)	(4)
	Insurance Premiums		ln(Insurance Premiums)	
ln(County Herfindahl Index)	22.319 (28.672)	203.239*** (72.812)	0.036* (0.021)	0.192** (0.089)
Interaction of State Regulation				
File & Use w/ ln(County Herfindahl Index)		-153.689* (83.777)		-0.147 (0.097)
Prior Approval w/ ln(County Herfindahl Index)		-228.884** (98.280)		-0.202** (0.094)
Promulgated w/ ln(County Herfindahl Index)		-229.282** (99.542)		-0.151 (0.099)
Property Price and Loan Amount	Yes	Yes	Yes	Yes
Level of Fixed Effects	State	State	State	State
Observations	921,763	921,763	921,763	921,763
Within R-Squared	0.220	0.221	0.240	0.242

Note: State-Clustered Standard Errors in parentheses

Transaction-Level Indicators

Market Share of Insurer in County

- Greater Concentration in Some Counties

Share of Lenders Transactions w/ Insurer

- Lenders May Own up to 49% of Agencies

Credit Score of Borrower

- Range from 620-837; Higher is Better
- Hypothesis: Should Have No Effect

Transaction-Level Indicators

	(1)	(2)	(3)	(4)
	ln(Insurance Premiums)			
ln(Market Share of Insurer in County)	0.007*** (0.001)		-0.001 (0.001)	-0.001 (0.001)
ln(Lender Share w/ Insurer in County)		0.015*** (0.002)	0.016*** (0.003)	0.016*** (0.003)
ln(Credit Score of Borrower)				-0.091*** (0.014)
Property Price and Loan Amount	Yes	Yes	Yes	Yes
Level of Fixed Effects	County	County	County	County
Observations	921,763	921,763	921,763	920,967
Within R-Squared	0.196	0.197	0.197	0.197

Note: County-Clustered Standard Errors in parentheses

Summary of Results

I. Effect of State Regulation

- Lower Rates in Unregulated & Prior-Approval
- Higher Rates in Promulgated States
- Lower Rates in States that Restrict ABAs

II. Effect of Market Power

- No Effect of Concentration at State Level
- Higher Rates in Counties w/ Less Competition
- Positive Effect of Lender Share on Rates

Impact of Blockchain

Will Create More Secure Chain of Title

- Easier to Identify Owners (w/ Password)
- Encumbrances Still Possible without Torrens

Reduced Labor Costs for Insurers

- Easier to Validate Chain of Title
- Effect on Consumer Premiums Unclear

Public Challenges to Address

- Possible Harm of Private Transactions
- Address Lost or Stolen Passwords