Dodd-Frank and the Closure of Virginia Community Banks

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ABSTRACT

- Differences between community banks and large financial institutions have long been discounted in regulatory legislation, such as Dodd-Frank.
- The "One Size Fits All" philosophy of Dodd-Frank failed to avert Too Big to Fail (TBTF) from endangering economic stability. Instead it led to the disproportional closure of community banks.
- This paper uses the sample population of banks in Virginia to reveal a statistical causation of Dodd-Frank on community bank closure.

BACKGROUND

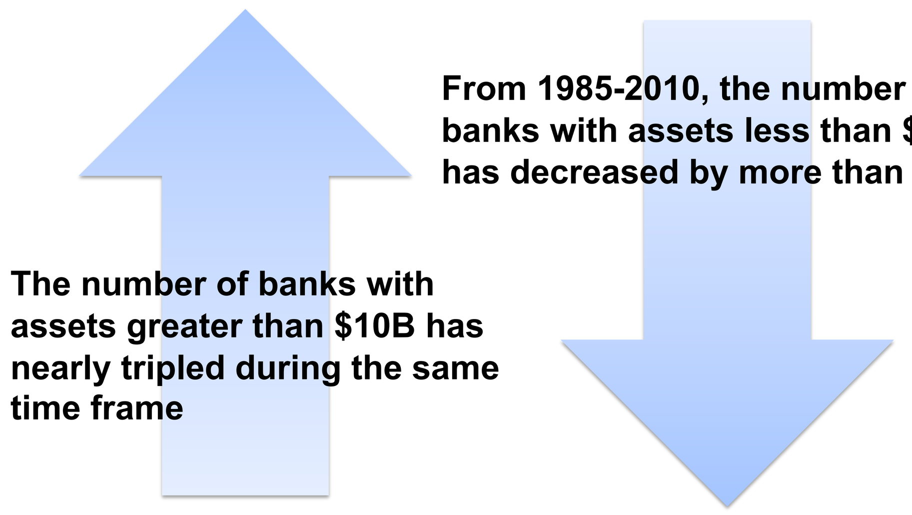
Community Banks will be defined as those financial institutions with less than $10B in assets.

- Community banks differ from larger financial institutions because they overwhelmingly lend to members of their own community, most notably through **relationship banking.**
- Relationship banking is based on longstanding community bonds rather than hard data, and facilitates greater stability to less financially literate and apt areas of the nation, like Virginia.

Key Facts: Community Banks provide 77% of agricultural and over 50% of small business loans.

Why Virginia: Virginia has large regions of relative income homogeneity and an extensive rural population. The state also remained free from external factors such as natural disasters and turmoil during the experimental time period.

Too Big to Fail Banks:



- Big Four banks currently hold **44.6%** of all commercial assets and the largest 20 banks hold **66.4%** of all financial assets.

OBJECTIVE

- Explore the unintended regulatory burden to community banks and determine the causality of Dodd-Frank upon community bank closure that is ultimately detrimental to its key clientele.

DATA AND METHODS

- After researching previous literature, data was gathered using publicly available FDIC information, which includes the location of the bank, classification, net income, return on assets (ROA) and return on equity (ROE).
- Data was gathered from June 2009-2010 (control group) and again from June 2010-2013 (treatment group) to cross reference the number of bank closures or merging.
- Because Dodd-Frank was officially passed in July 2010, it is important that the treatment effect extends sufficiently to account for implementation and regulatory inspection. A control group was maintained which factored in the negative impact of the financial crisis on most community banks prior to the passage of Dodd-Frank.
- The key variables in this regression will include: **"Outcome"**, denoted as 1 if the bank is closed or merged and 0 if it remained solvent; **"treatment effect" (TE),** denoted as 1 if the bank is examined between 2010-2013, and 0 between 2009-2010; **"asset size in thousands"**, to account for the scaled-size of a bank that may impact its strength; "**ROA",** a generally accepted measure of a financial institutions stability and rank among its peer group.

MODEL AND HYPOTHESIS

- *H0: the treatment effect (the passage of Dodd-Frank) is not significant and has no effect on the closing or merging of community banks in Virginia between 2009-2013.*
- *H1: the treatment effect (the passage of Dodd-Frank) has a significant and positive effect on the closing or merging of community banks in Virginia between 2009-2013.*
- **Regression:** ***Outcome = b0 + b1(Treatment Effect) + b2(ROA) + b3(AssetSizeinThousands) + error***

RESULTS

1 Results

	Dependent variable:		
	Closing or Merging of Community Banks in Virginia		
	(1)	(2)	(3)
Treatment Effect: Passage of Dodd-Frank	0.187***	0.180***	0.186***
	(4.52)	(4.39)	(4.50)
Asset Size in Thousands	-1.12e-12	-1.17e-12	
	(-0.65)	(-0.67)	
Return on Assets (ROA)	-0.0122		-0.0124
	(-1.27)		(-1.29)
Constant)	0.0290	0.0333	0.0289
	(1.00)	(1.15)	(1.00)
R^2	0.0826	0.0762	0.0809
Adjusted R^2	0.0708	0.0684	0.0731
F Statistic	7.02***	9.70***	10.35 ***

Note: $^{*}p<0.1$; $^{**}p<0.05$; $^{***}p<0.01$

- The treatment effect (TE) is statistically significant, consistent with H1 at the 99th% for each regression run and the claim that Dodd-Frank did indeed lead to the closure of community banks in Virginia between 2010-2013.
- Neither "asset size in thousands" nor "ROA" appear to be statistically significant.
- In an analysis of the data itself, one notes that not a single financial institution with more than $10B assets was closed during the time period studied, nor was a single community bank was created during this time period either.
- Nearly three years after the passage of Dodd-Frank, then, TBTF institutions were on the rise in Virginia at the expense of community banks.

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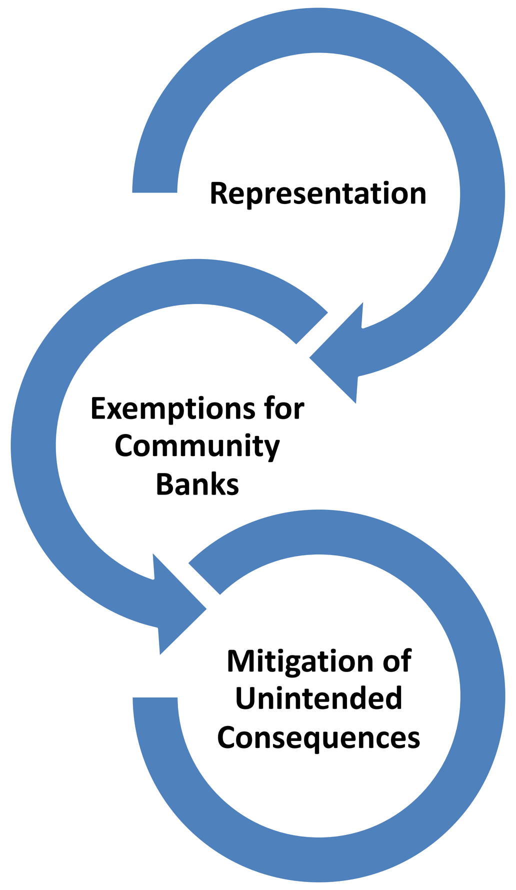
SOLUTIONS



Future legislation should involve a deliberate consideration of all players, not just those at the top, in order to create more sustainable foundations across all communities.

Regulators should do more to expand upon exemptions for community banks, as lowering compliance requirements for relationship bankers is not only less risky to the American economy than for TBTF banks, but is less costly for regulators as well.

A deeper understanding of the large scale economic consequences before implementation is necessary.

LIMITATIONS

- The results and analysis of this paper are important steps towards understanding the negative consequences of Dodd-Frank.
- These results are specific to Virginia. A more conducive experiment would include data from all 50 states, tracking trends and local factors of the most relevant geographic regions.
- This study also uses the ROA as a substantive measure, whereas a more conclusive ranking measure would be the FDIC scalar ranking. However, these bank scores (1-5) are confidential.
- Finally, including the bank's geographic location within the state may help one understand the role of regional economies on bank status given a financial crisis.

ACKNOWLEDGEMENTS

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