

Is there a Benefit from Reduced Regulation on Small Banks?

Abhishek Srivastav (University of Edinburgh) Francesco Vallascas (University of Leeds)

Community Banking in the 21st Century Research and Policy Conference October 1-2, 2019







Too Much Regulation on Small Banks?

"And while we often get lost in lofty discussions about capital adequacy ratios, risk weights, buffers and stress testing, we must not lose sight of why community banks matter."

Jelena McWilliams, FDIC Chair

"[Regulations] have come at such a pace that we are drowning ... in what most of us believe is nonsense."

Community Bankers in the CSBS National Survey 2017

"Regulation is killing community banks"

Stephen Mnuchin (Treasury Secretary, 2017)







Why does it matter?



- Small banks play a key role in the financial system architecture, particularly with respect to small business lending (Berger et al. 2014; Stein 2002).
- Better able to form relationships with small businesses based on local knowledge and lower screening costs (Berger et al., 2017; DeYoung et al., 2015; Petersen and Rajan, 2002).
- Small banks (<\$1 billion in assets) held more than 25% of small business loans, while just representing 7% of the assets of the financial system.
- Still four times more likely to serve the rural market.







Question of Interest



- What are the effects of a reduced regulation on small bank activity?
- Does a reduced regulation on small banks boost lending?
- What are the channels to fund these loans?
- To answer these questions, we exploit a change in US banking regulation on small banks in 2015.



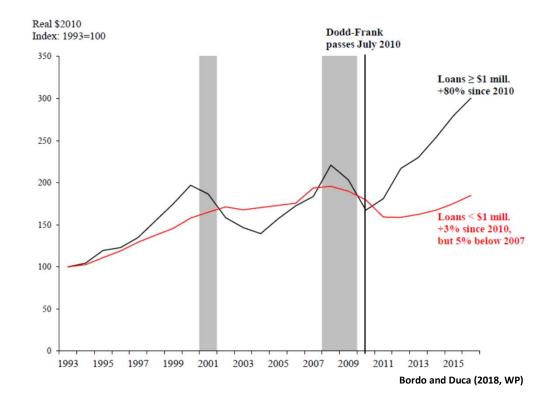




Motivation



- Small loans trend differently than large loans post-2010.
- 80% rise in in the real aggregate volume of loans over \$1 million in size since 2010.
- From 1993-2010, small and large size real loan series trended together (79% and 67%).





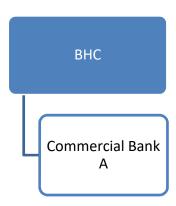




Institutional Background



- Exogenous decrease in regulation for some US small Bank Holding Companies (BHCs).
- Small Bank Holding Company Policy Statement signed into law in December 2014.
- Before 2015: Small banks < \$500 million were exempt from various regulatory procedures.
- After 2015: Increased the asset threshold to \$1 billion.
- Small BHC status confers various regulatory benefits...





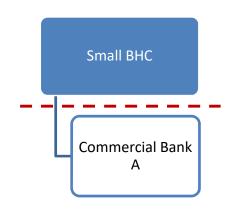




Reduced Regulation



- <u>Capital Standards</u>
- A small BHC is exempt from complex capital standards and increases debt-carrying capacity to 3:1 debt-toequity.
- Allows BHCs to use debt to finance their credit expansion.
- Only applicable at HC level: subsidiary banks still subject to capital rules.
- Debt issuance by BHCs under \$1 billion threshold has increased by more than 200% from \$104 million in 2014 to \$317 million in 2015 (S&P MI, 2016).





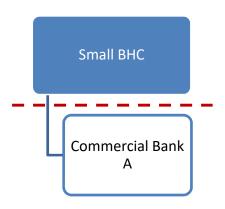




Reduced Regulation



- Reduced quantity and frequency of regulatory reporting
- 95% reduction in the number of items reported to the regulator.
- Before Shock: Treated BHCs were required to file quarterly FR-Y9C regulatory reports (over 2600 items and a length of 60 pages) + FR-Y9LP (over 186 items and 9 pages)
- After Shock: Exempt from quarterly reporting. Treated BHCs had to just file semi-annual FR-Y9SP (178 items and 9 pages)
- Treated BHCs had to no longer report complex capital items in these regulatory call reports.











Research Design



- Lending Policy_{i,t+1} = θ Small Banks_i * Post-Shock_t + $\gamma C_{i,t}$ + δ Fixed Effects + ε
- Lending Policy: Loans less than \$1 million scaled by total assets.
- Consistent with academic/regulatory definition (Berger et al. (2017b) and the CSBS-Federal Reserve 2017 National Survey).
- Over 92% of small businesses looking for loans of < \$1,000,000 (Small Business Credit Survey, 2019).
- Bank Fundamentals: Equity Capital, Deposits, ROA, Risk, Size.
- State Controls: State GDP, Per Capita Income, % unemployment rate, change in unemployed persons.









Contributions



- Assess the effect of friendlier regulatory environment on small banks.
- Increases in regulatory burden associated with contraction in loan supply (Acharya et al., 2018; Buchak et al. 2018; Gropp et al. 2018).
- Bisetti (2019) focuses on the shareholder implications from a previous regulatory change. Lower regulatory monitoring and consequently negative value effects for the shareholders of treated listed BHC.
- Observe if regulatory benefits at the parent-level are transferable to subsidiaries.
- Parent HC financial position affects subsidiary loan growth (Holod and Peek, 2010; Gijle, 2019).









Data



- Sample period: 2013-2018.
- All commercial banks that have a BHC.
- Treated Banks: Identify 295 treated commercial banks where the parent BHC had consolidated assets in excess of \$500 million but below \$ 1 billion.
- Full Control group consists of all BHCs that are above the \$ 1 billion threshold, but below \$ 5 billion.
- Matched control group forms matches based on typical bank characteristics (eg size, ROA, deposits, equity, risk).









Results Preview



- Treated small BHCs increase small business lending relative to the control group after the shock.
- Impact of regulatory changes on lending may be a function of supply and demand (Agarwal et al., 2018).
- Channels: ability to expand loans should be closely related to the funding opportunities to support this expansion.
- Equity Channel and Deposit Channel.
- Treated small BHCs are associated with local economic benefits in the form of more small establishments per capita and wages per capita at county-level.







Reduced Regulation and Lending UNIVERSITY OF LEEDS

Table 1: Impact on Bank Lending

	Full Untreated Sample		Matched Untreated Sample	
Ln (Small Loans/TA)	(1)	(2)	(3)	(4)
Small Bank * Post-Shock	0.065***	0.057***	0.057**	0.049**
	(0.017)	(0.017)	(0.023)	(0.024)
Controls	NO	YES	NO	YES
Bank FE, County FE	YES	YES	YES	YES
Time FE	YES	YES	NO	YES
Observations	5,200	5,200	2,475	2,475
Within R-squared	0.096	0.138	0.079	0.107

Eco Sig: Increase of 5% in our dependent variable post regulatory change







SBA 7a Loans



SBA 7a loans granted to meet external financing needs of small businesses (Brown and Earle, 2017; Schuwer et al., 2018). The SBA guarantees 50%-85% of the loan. Data available for 55 treated banks.

Table 2: Impact on Small Business Loan Originations using SBA 7a loans

	Full Untreated Sample		Matched Untreated Sample	
Ln (SBA Loans)	(1)	(2)	(3)	(4)
Small Bank * Post-Shock	0.184**	0.176***	0.212**	0.206**
	(0.072)	(0.065)	(0.104)	(0.094)
Controls	YES	YES	YES	YES
Loan Characteristics	YES	YES	YES	YES
Bank & Time FE	YES	YES	YES	YES
Borrower Industry & County FE	NO	YES	NO	YES
Observations	18,513	18,513	5,063	5,063
Within R-squared	0.650	0.678	0.618	0.679

Economic importance: regulatory change results in an increase in new small loans by 21%



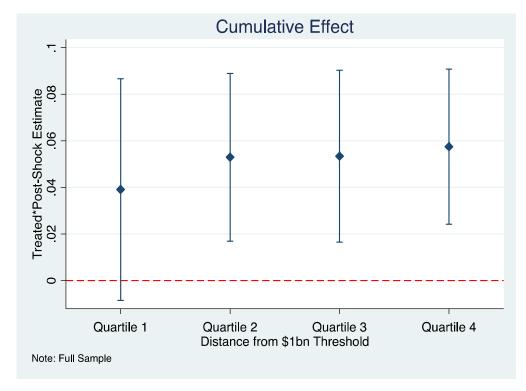




Strategic Behaviour



• Banks that were nearer to the \$ 1 billion threshold (Quartile 1) did not exhibit (statistically) significant impact on small business lending.









Bank Funding



- Ability to extend loans depends on bank funding opportunities (Carlson et al. 2013; de Haas and Lelyveld 2010).
- **Equity Channel**: Regulatory change has favored the flow of equity from the parent bank to the subsidiary (growth in bank equity infusions).
- **Deposit Channel**: Growth in branch-wise deposits (\$) and branch-wise deposit rates (%).

Potential Costs? Do not find any material impact on credit risk measures.







Real Outcomes



Table 3: Impact on Real Economic Outcomes

	Small Establishments per capita		Annual Wages per capita	
	Full Sample	Matched Sample	Full Sample	Matched
				Sample
	(1)	(2)	(3)	(4)
Market Share Treated * Post	0.021**	0.015***	0.018***	0.021***
	(800.0)	(0.005)	(0.006)	(0.006)
Controls	YES	YES	YES	YES
County & Time FE	YES	YES	YES	YES
Observations	8,432	8,432	4,577	4,577
Within R-squared	0.033	0.503	0.043	0.513







Conclusions



- Policy debates on the potential benefits of granting regulatory relief to small banks.
- Using a diff-in-diff approach that relies on the small BHC shock, regulatory relief has benefits for small banks
- Admittedly, the task is far from cut out for regulators: Balance too-manyto-fail problem under common shocks vs. role of community banks in small business lending market







Thank you





