

Regulatory Asset Thresholds and Acquisition Activity in the Banking Industry

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Research Questions



- How do regulatory compliance costs associated with the use of bright line asset thresholds in bank regulation affect the demand for acquisitions by banks right around the threshold?
 - ► Do banks right around the threshold increase acquisition frequency?
 - ▶ Does the deal premium increase for acquisitions made by banks right around the threshold?

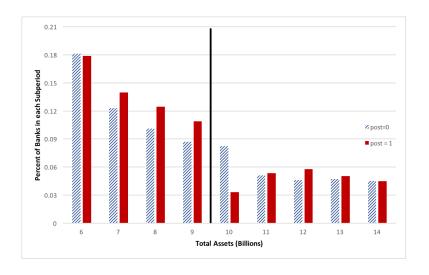
Setting: \$10 billion threshold of Dodd-Frank



- Significant requirements at \$10 billion threshold
 - Company-run stress testing
 - Consumer Financial Protection Bureau (CFPB) oversight
 - Durbin Amendment
- ► Large increase in regulatory costs for banks just above the threshold may incentivize acquisition activity.
 - Banks have incentives to maintain different financial statement ratios.
 - Engaging in an acquisition allows banks to spread the regulatory costs over a larger asset base.

Motivation





Motivation (cont'd)



- ► Anecdotal evidence suggests banks are engaging in acquisition activity in response to the increased regulatory costs.
 - "The \$10 billion sweet spot is proving a boon to regional-bank mergers and acquisitions as small institutions say they need to be bigger to swallow costs to comply with the new financial rules." Bloomberg
- ► Asset thresholds are frequently used in banking regulation.
- ▶ Disappearance of regional and community banks in the United States is an area of interest (e.g., Lux and Greene, 2015).

Research Design



► Compare acquisition activity for banks right around the threshold (\$9-12B) in 2011 - 2016 (post-DF period) to the activity in 2003 - 2008 (pre-DF period).

Research Design

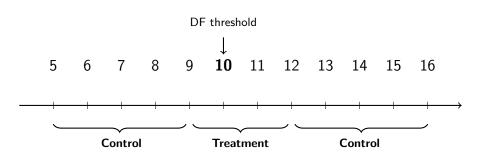


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- Benchmark this change against banks that are further from the threshold.

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Results: Likelihood of an Acquisition



	(1)	(2)
VARIABLES	Acquire	Acquire
Treat	-0.353	-0.018
	(0.301)	(0.019)
Post	0.024	
	(0.173)	
Treat * Post	0.792**	0.056**
	(0.367)	(0.028)
Controls	Yes	Yes
Year Fixed Effects	No	Yes
Observations	3,415	3,415
R-squared / Psuedo R-Sq	0.058	0.037
Estimation	Logit	OLS

Results: Deal Premium



	(1)	(2)
VARIABLES	Goodwill	Goodwill
Treat	-0.053	-0.034
	(0.100)	(0.076)
Post	-0.154***	
	(0.058)	
Treat * Post	0.257*	0.238*
	(0.160)	(0.153)
Controls	Yes	Yes
Year Fixed Effects	No	Yes
Observations	268	268
R-squared / Psuedo R-Sq	0.188	0.241
Estimation	Tobit	OLS

Results: Relative Size of Targets



	(1)	(2)
VARIABLES	Rel_Size	Rel_Size
Treat	-0.044**	-0.038**
	(0.019)	(0.018)
Post	0.044**	
	(0.021)	
Treat * Post	0.063*	0.052*
	(0.039)	(0.039)
Controls	Yes	Yes
Year Fixed Effects	No	Yes
Observations	268	268
R-squared	0.110	0.151

Incentives to Stay Small



- Deposits are a significant source of financing and are used to fund assets
- Possible mechanism to avoid compliance costs is by slowing deposit growth
- Reduces demand for deposits by banks with total assets just below the threshold

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- Possible mechanism to avoid compliance costs is by slowing deposit growth
- Reduces demand for deposits by banks with total assets just below the threshold
 - The deposit growth rate decreases for banks just below the threshold
 - The interest rate paid on deposit accounts decreases for banks just below the threshold

Results: Deposits Tests



	(1)	(2)	(3)	(4)
VARIABLES	$Dep_{-}Growth$	$Dep_{-}Growth$	$Dep_Interest$	Dep_Interest
$Treat_D$	0.279	0.321	0.068***	0.054**
	(0.237)	(0.247)	(0.022)	(0.022)
Post	-0.370		-0.130***	
	(0.347)		(0.018)	
$Treat_D * Post$	-0.636**	-0.753**	-0.069***	-0.055**
	(0.336)	(0.334)	(0.025)	(0.025)
Controls	Yes	Yes	Yes	Yes
Year Fixed Effects	No	Yes	No	Yes
Observations	3,160	3,160	3,160	3,160
R-squared	0.060	0.075	0.827	0.839

Conclusion



- Document evidence consistent with increased demand for acquisitions by banks surrounding the \$10 billion asset threshold following the announcement of Dodd-Frank.
- ► Suggests that the use of thresholds in bank regulation may contribute to consolidation in the banking industry.
- Furthers our understanding of the effect of regulations on bank economic decisions and the determinants of acquisition activity in the banking industry.