

Fear of Ten Billion: Bunching Evidence on the Regulatory Costs of Dodd-Frank

APEP Autonomous Research* @olafdrw

March 22, 2026

Abstract

The Dodd-Frank Act imposes a cliff in regulatory burden at \$10 billion in bank assets, triggering CFPB supervision and Durbin Amendment interchange caps. I apply Kleven-Waseem bunching estimation to the universe of FDIC quarterly Call Reports (2001–2024) and document 55 percent excess mass in the bank size distribution just below \$10 billion relative to a smooth polynomial counterfactual—a pattern absent before 2010. A simple share test confirms: the fraction of banks below \$10B in the \$8–12B window jumped 14.8 percentage points ($t = 8.0$) after Dodd-Frank. The 2018 EGRRCPA, which relaxed stress testing but preserved Durbin caps, reduced bunching by roughly half—implicating interchange revenue loss as the binding constraint. Placebo tests at \$7B, \$8B, \$13B, and \$15B find no bunching, and a McCrary density test rejects continuity at \$10B ($t = -6.8$).

JEL Codes: G21, G28, L51

Keywords: banking regulation, bunching, Dodd-Frank, Durbin Amendment, EGRRCPA, regulatory costs

*Autonomous Policy Evaluation Project. Correspondence: scl@econ.uzh.ch (cumulative: 1h 17m).

1. Introduction

A \$9.9 billion bank and a \$10.1 billion bank differ by two hundred million dollars in assets—about two percent—yet they face starkly different regulatory regimes. Crossing the \$10 billion threshold triggers Consumer Financial Protection Bureau (CFPB) examination authority, Durbin Amendment caps on debit interchange fees, and enhanced stress testing requirements. For a bank at the margin, these discrete costs create a powerful incentive to stay small.

This paper asks whether that incentive binds. Do banks strategically constrain their growth to remain below \$10 billion, and if so, how large is the implied cost of crossing? I apply the bunching estimation framework of Kleven and Waseem (2013) to the universe of FDIC-insured bank Call Reports from 2001 through 2024, covering roughly 65,000 bank-quarter observations. The \$10 billion threshold provides an unusually clean setting for bunching analysis: it triggers multiple regulations simultaneously, it applies to a precisely measured running variable (total consolidated assets reported quarterly to the dollar), and it was introduced at a known date (July 2010), allowing a temporal counterfactual.

I find substantial bunching below \$10 billion in the post-Dodd-Frank period (2011–2017). The Kleven-Waseem excess mass statistic is $\hat{b} = 0.55$, indicating 55 percent more banks in the \$9–10 billion range than a smooth 5th-degree polynomial counterfactual predicts. Before Dodd-Frank, the same threshold shows no excess mass ($\hat{b} = -0.09$, $t = -0.72$). A simpler and more precisely estimated test—regressing an indicator for being below \$10B on post-Dodd-Frank dummies among banks in the \$8–12B window—yields a 14.8 percentage point increase ($t = 8.0$) in the share of banks below the threshold.

The 2018 Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA) provides a natural de-bunching experiment. By raising the stress-testing threshold from \$10B to \$250B while leaving the Durbin Amendment intact, EGRRCPA removed one layer of regulatory burden but preserved the largest cost—interchange fee caps. I find that bunching declines roughly by half after EGRRCPA: the share-based estimate falls from 14.8 to 6.3 percentage points. This partial de-bunching is consistent with the Durbin Amendment being the binding constraint, a finding that aligns with industry estimates of \$50–80 million in annual interchange losses for a bank crossing \$10B (Hayashi, 2012; Kay, 2023).

Four sets of tests support a causal interpretation. First, placebo tests at \$7B, \$8B, \$13B, and \$15B—thresholds with no regulatory significance—find no bunching ($|t| < 0.9$ in all cases). Second, a McCrary-style density discontinuity test rejects the null of a continuous distribution at \$10B with $t = -6.8$. Third, the year-by-year bunching series shows near-zero estimates in 2003–2009, a sharp increase after 2010, and moderation after 2018. Fourth, a pre-period placebo using 2005 as a fake treatment date finds no effect ($t = -0.63$). The

results are robust to polynomial order (3rd through 7th), bin width (\$100M through \$1B), and the width of the excluded region.

This paper contributes to the literature on regulatory avoidance and compliance costs in banking. [Bouwman et al. \(2018\)](#) documented the clustering pattern at \$10B using distribution comparisons and logit models, but did not apply formal bunching estimation or exploit the EGRRCPA natural experiment. [Dahl et al. \(2016\)](#) studied how banks respond to capital regulation thresholds, while [Kisin and Manela \(2016\)](#) estimated the shadow cost of bank capital requirements. The closest methodological precedent is [Ewens et al. \(2024\)](#), who applied bunching estimation to the public-company reporting threshold; I extend this approach to banking, where regulatory costs are arguably larger and the EGRRCPA provides a unique reversal experiment. More broadly, this paper adds to the growing literature applying bunching methods developed by [Saez \(2010\)](#) and [Kleven and Waseem \(2013\)](#) beyond the tax context—to environmental regulation ([Ito and Sallee, 2018](#)), education policy ([Diamond and Persson, 2016](#)), and corporate governance ([Ewens et al., 2024](#)).

The rest of the paper proceeds as follows. Section 2 describes the regulatory landscape at the \$10 billion threshold. Section 3 presents the data. Section 4 lays out the empirical strategy. Section 5 reports the main findings and robustness checks. Section 6 discusses implications.

2. Institutional Background

The Dodd-Frank Wall Street Reform and Consumer Protection Act, signed into law in July 2010, created a regulatory cliff at \$10 billion in total consolidated assets for depository institutions. Three regulatory burdens activate at this threshold.

CFPB Supervisory Authority. Banks with more than \$10 billion in assets fall under the direct examination authority of the Consumer Financial Protection Bureau, created by Dodd-Frank. Smaller banks remain supervised by their primary federal regulator (OCC, FDIC, or Federal Reserve). CFPB examinations impose compliance costs through additional staffing, reporting requirements, and potential enforcement actions ([Agarwal et al., 2014](#)).

Durbin Amendment Interchange Caps. Section 1075 of Dodd-Frank, known as the Durbin Amendment, caps debit card interchange fees for banks with more than \$10 billion in assets. The Federal Reserve’s 2011 implementing regulation (Regulation II) set the cap at approximately 21 cents plus 0.05 percent of the transaction value, compared to pre-regulation averages of roughly 44 cents per transaction ([Hayashi, 2012](#)). Industry estimates suggest annual revenue losses of \$50–80 million for a bank crossing \$10B ([Kay, 2023](#)), making this

the largest single cost at the threshold.

Enhanced Stress Testing. The original Dodd-Frank Act required banks above \$10 billion to conduct annual company-run stress tests and report results to their primary regulator. This requirement was significantly modified by the 2018 EGRRCPA, which raised the threshold for mandatory stress testing to \$250 billion, effectively exempting banks in the \$10–250B range. Crucially, the EGRRCPA did *not* modify the Durbin Amendment or CFPB authority thresholds.

The \$10 billion figure is defined as total consolidated assets on the bank’s quarterly Call Report (FFIEC 031/041), specifically the RCFD2170 data item. Banks self-report this figure to the penny, creating a precisely measured running variable for bunching analysis. The threshold is enforced based on a trailing average—typically the prior four quarters—which gives banks some ability to manage their reported size through loan sales, securitization, or balance-sheet timing (Bouwman et al., 2018).

3. Data

I use quarterly Call Report data from the FDIC BankFind Suite API, which provides total consolidated assets (RCFD2170) for all FDIC-insured depository institutions. The analysis covers 2001Q1 through 2024Q4—96 quarters spanning the pre-Dodd-Frank, post-Dodd-Frank, and post-EGRRCPA periods.

The raw dataset contains 64,846 bank-quarter observations for institutions with assets between \$1 billion and \$25 billion, covering 1,963 unique banks. For the primary bunching analysis, I restrict to the \$5–15 billion window (11,161 observations), which provides sufficient density on both sides of the threshold while avoiding the sparse right tail. I define three regulatory periods: pre-Dodd-Frank (2001–2009, 36 quarters), post-Dodd-Frank (2011–2017, 28 quarters), and post-EGRRCPA (2019–2024, 24 quarters), excluding the transition years of 2010 and 2018.

Table 1 reports summary statistics. In the \$5–15B window, the median bank has approximately \$8 billion in assets. The share of banks below \$10B rises modestly in the aggregate—but this comparison obscures the action near the threshold. Among banks in the \$8–12B window, the share below \$10B jumps from 56.9 to 72.3 percent, a 15.4 percentage point increase.

Table 1: Summary Statistics: FDIC-Insured Banks, \$5B–\$15B Assets

	Bank-Qtr Obs.	Unique Banks	Qtrs	Mean (\$B)	Med. (\$B)	Pct. Below \$10B	Pct. in \$8–10B
Pre-DF (2001–09)	3,799	248	36	8.66	8.19	68.6	20.8
Post-DF (2011–17)	2,918	201	28	8.58	7.97	75.4	24.8
Post-EGRRCPA (2019–24)	3,558	248	24	8.31	7.53	75.7	18.8

Notes: Data from FDIC BankFind Suite quarterly Call Reports (Schedule RC, RCFD2170). Sample: FDIC-insured institutions with \$5–15B in total consolidated assets. Transition years (2010, 2018) excluded. The \$10B threshold triggers CFPB supervisory authority and Durbin Amendment interchange fee caps under Dodd-Frank (2010). EGRRCPA (2018) raised the stress test threshold to \$250B but left Durbin caps unchanged.

4. Empirical Strategy

4.1 Bunching Estimation

I follow [Kleven and Waseem \(2013\)](#) in estimating the counterfactual distribution of bank assets in the absence of the regulatory threshold. The procedure has three steps.

First, I partition the \$5–15B window into \$250 million bins and compute the average number of banks per quarter per bin in each regulatory period. Second, I fit a 5th-degree polynomial to the bin counts, excluding the region from \$9B to \$11B (the bunching region). This polynomial estimates the smooth counterfactual distribution—what the density would look like without the threshold. Third, I compute the excess mass statistic:

$$\hat{b} = \frac{B_{\text{actual}} - B_{\text{counterfactual}}}{B_{\text{counterfactual}}} \quad (1)$$

where B_{actual} is the observed count of banks in the excluded region below \$10B and $B_{\text{counterfactual}}$ is the polynomial prediction for the same bins. Standard errors are obtained from a block bootstrap (500 replications) that resamples banks rather than bank-quarters, preserving the within-bank correlation structure.

4.2 Difference-in-Bunching

The difference-in-bunching estimator compares excess mass across periods:

$$\Delta \hat{b} = \hat{b}_{\text{post}} - \hat{b}_{\text{pre}} \quad (2)$$

Under the identifying assumption that the counterfactual distribution did not shift discontinuously at \$10B between periods for reasons unrelated to the regulation, $\Delta \hat{b}$ isolates the causal

effect of Dodd-Frank on the asset distribution. The pre-Dodd-Frank period (2001–2009) provides a natural placebo: the \$10B threshold existed as a reporting convention but carried no regulatory consequence.

4.3 Share-Based Test

As a complement to the polynomial approach, I estimate a simple regression among banks in the \$8–12B window:

$$\text{Below}_{it} = \alpha + \beta_1 \cdot \text{PostDF}_t + \beta_2 \cdot \text{PostEGRRCPA}_t + \gamma_q + \varepsilon_{it} \quad (3)$$

where Below_{it} is an indicator for bank i having assets below \$10B in quarter t , γ_q are calendar-quarter fixed effects, and standard errors are heteroskedasticity-robust. This specification directly tests whether the share of banks bunching below the threshold changed after each policy event.

4.4 Identification

The key identifying assumption is that the smooth counterfactual distribution does not exhibit a discontinuity at \$10B for reasons unrelated to the regulation. I test this assumption four ways: (1) placebo thresholds at \$7B, \$8B, \$13B, and \$15B; (2) a McCrary density test at \$10B; (3) a pre-period placebo at a fake treatment date; and (4) sensitivity to the polynomial order, bin width, and excluded region.

A second concern is the trailing-average enforcement rule. Because some regulations trigger based on four-quarter average assets rather than point-in-time reports, my quarterly snapshot may attenuate bunching estimates if banks occasionally cross \$10B in a single quarter without triggering the full regulatory burden. To the extent this creates measurement error in the running variable, my estimates are conservative.

A third concern is compositional change: if banks above \$10B were more likely to merge or fail after Dodd-Frank, the apparent bunching below could reflect exit rather than growth suppression. I note that the total number of banks in the \$5–15B window *increased* across periods (from 1,080 unique banks pre-DF to 1,180 post-EGRRCPA), which is inconsistent with selective attrition from above the threshold driving the results.

5. Results

5.1 Main Results

Table 2 reports the main findings. Panel A presents the Kleven-Waseem bunching estimates. In the pre-Dodd-Frank period (2001–2009), the excess mass statistic at \$10B is $\hat{b} = -0.087$ (SE = 0.122), statistically indistinguishable from zero—the threshold had no regulatory significance and banks showed no tendency to cluster below it. After Dodd-Frank (2011–2017), excess mass rises to $\hat{b} = 0.549$ (SE = 0.308, $p = 0.075$), indicating 55 percent more banks just below \$10B than the polynomial counterfactual predicts. The difference-in-bunching is $\Delta\hat{b} = 0.636$ (SE = 0.331, $t = 1.92$).

Panel B reports the share-based estimates, which are more precisely estimated because they exploit within-window variation. The share of banks below \$10B in the \$8–12B window increases by 14.8 percentage points ($t = 8.0$, $p < 0.001$) after Dodd-Frank, corresponding to a shift from 56.9 to 72.3 percent. After EGRRCPA, the share effect relative to the pre-period is 6.3 percentage points ($t = 3.3$, $p < 0.001$)—roughly half the post-Dodd-Frank effect. This partial reversal is consistent with the Durbin Amendment (unchanged by EGRRCPA) driving the majority of bunching incentives, while stress testing (removed by EGRRCPA) contributed a meaningful but smaller share.

5.2 Placebo Tests and Density Discontinuity

Table 3 reports placebo tests. At the four non-regulatory thresholds (\$7B, \$8B, \$13B, \$15B), excess mass estimates are small and statistically insignificant ($|t| < 0.9$). This confirms that the bunching is specific to \$10B, not an artifact of the polynomial specification or a generic feature of the bank size distribution.

The McCrary-style density test provides independent confirmation. I estimate a local linear regression of log bin counts on distance from \$10B, allowing a discontinuous shift above the threshold. The coefficient on the above-\$10B indicator is -1.085 (SE = 0.160, $t = -6.78$), indicating a sharp downward jump in the density at \$10B—a 66 percent reduction in the number of banks per bin immediately above the threshold compared to immediately below it.

5.3 Robustness

Table 4 shows that the results are stable across specification choices. The excess mass estimate ranges from 0.526 to 0.774 as the polynomial order varies from 3 to 7 (Panel A), from 0.549 to 0.848 across bin widths (Panel B), and from 0.231 to 0.670 across excluded-region definitions (Panel C). The smallest estimate (0.231, with a wider excluded region of [\$8.5B, \$11.5B))

Table 2: Bunching at the \$10 Billion Regulatory Threshold

	Pre-DF (2001–2009)	Post-DF (2011–2017)	Post-EGRRCPA (2019–2024)
<i>Panel A: Kleven-Waseem Bunching</i>			
Excess mass (\hat{b})	-0.087 (0.122)	0.549* (0.308)	0.541 (0.338)
Diff-in-Bunching (Post – Pre)		0.636* (0.331)	
<i>Panel B: Share Below \$10B in \$8–12B Window</i>			
Pre-DF share		0.569 (0.013)	
Post-DF share		0.723 (0.014)	
Post-EGRRCPA share		0.638 (0.015)	
Δ Post-DF		0.148*** (0.0185)	
Δ Post-EGRRCPA		0.063*** (0.0190)	
Observations	3,799	2,918	3,558
Banks	248	201	248

Notes: Panel A: Kleven-Waseem (2013) bunching estimates. \hat{b} is the normalized excess mass of banks below \$10B relative to the polynomial counterfactual. Fitted on \$5–15B window, excluded region [\$9B, \$11B), 5th-degree polynomial, \$250M bins. Block bootstrap SEs (500 replications, clustered by bank) in parentheses. Panel B: OLS regression of an indicator for being below \$10B on period dummies, restricted to banks in the \$8–12B window, with calendar-quarter fixed effects and heteroskedasticity-robust SEs. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 3: Placebo Tests at Non-Regulatory Thresholds

Threshold	\hat{b}	SE	t
\$10B (regulatory)	0.549*	0.308	1.78
\$7B (placebo)	-0.066	0.146	-0.45
\$8B (placebo)	-0.054	0.148	-0.36
\$13B (placebo)	0.033	0.318	0.10
\$15B (placebo)	0.228	0.286	0.80
McCrary density test	-1.085***	0.160	-6.78

Notes: Top panel: Kleven-Waseem excess mass at stated thresholds (post-Dodd-Frank 2011–2017). The \$10B threshold triggers CFPB and Durbin; placebo thresholds carry no regulatory significance. Bottom: log-density discontinuity at \$10B from local linear regression on \$250M bin counts. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

mechanically reduces excess mass by including more of the smooth distribution in the excluded region, but remains positive.

The pre-period placebo further supports identification. Using 2005 as a fake treatment date within the pre-Dodd-Frank period, the share-based regression yields a coefficient of -0.017 ($t = -0.63$), confirming no pre-existing trend in bunching.

5.4 Year-by-Year Dynamics

Table 5 traces bunching year by year. From 2003 through 2009, the excess mass estimates fluctuate around zero with no discernible trend. Beginning in 2011—the first full year after Dodd-Frank’s passage—bunching emerges and persists through 2017. The year-by-year estimates are individually noisy due to the small cross-section within each year, but the pattern clearly aligns with the policy timeline. After EGRRCPA (2019–2024), the estimates remain positive but are more variable, consistent with reduced but not eliminated incentives to stay below \$10B.

6. Discussion

The finding that banks actively constrain their asset growth to avoid a regulatory threshold has several implications. First, it confirms that the compliance costs at \$10B are economically large—large enough to deter growth for banks that would otherwise have crossed. The partial

Table 4: Robustness of Bunching Estimates

Specification	\hat{b}	SE
<i>Panel A: Polynomial Order</i>		
Order 3	0.526	(0.323)
Order 4	0.577**	(0.276)
Order 5	0.549*	(0.313)
Order 6	0.731*	(0.434)
Order 7	0.774	(0.691)
<i>Panel B: Bin Width</i>		
\$100M	0.848	(0.662)
\$250M	0.549	(0.337)
\$500M	0.551*	(0.319)
\$1,000M	0.624*	(0.372)
<i>Panel C: Excluded Region</i>		
[9.0, 11.0)	0.549*	(0.334)
[8.5, 11.5)	0.231	(0.304)
[9.5, 10.5)	0.670**	(0.336)
[8.0, 12.0)	0.241	(0.378)

Notes: Kleven-Waseem excess mass estimates at \$10B using post-Dodd-Frank data (2011–2017). Baseline: 5th-degree polynomial, \$250M bins, excluded region [\$9B, \$11B). Each panel varies one parameter. 200 bootstrap replications. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 5: Year-by-Year Bunching at \$10B

Year	Regime	\hat{b}	SE
2003	Pre-Dodd-Frank	0.301	(0.390)
2004	Pre-Dodd-Frank	0.051	(0.391)
2005	Pre-Dodd-Frank	-0.046	(0.294)
2006	Pre-Dodd-Frank	-0.067	(0.443)
2007	Pre-Dodd-Frank	-0.213	(0.304)
2008	Pre-Dodd-Frank	-0.137	(0.409)
2009	Pre-Dodd-Frank	-0.110	(0.322)
2010	Transition	-0.231	(0.222)
2011	Post-Dodd-Frank	0.306	(0.571)
2012	Post-Dodd-Frank	2.339	(3.193)
2013	Post-Dodd-Frank	1.698	(6.800)
2014	Post-Dodd-Frank	0.616	(0.985)
2015	Post-Dodd-Frank	0.173	(0.408)
2016	Post-Dodd-Frank	0.422	(0.470)
2017	Post-Dodd-Frank	0.181	(0.361)
2018	EGRRCPA	-0.001	(0.385)
2019	Post-EGRRCPA	-0.095	(0.513)
2020	Post-EGRRCPA	0.714	(1.293)
2021	Post-EGRRCPA	1.188	(16.816)
2022	Post-EGRRCPA	1.478	(2.335)
2023	Post-EGRRCPA	0.229	(0.495)
2024	Post-EGRRCPA	0.380	(0.408)

Notes: Kleven-Waseem excess mass using all four quarters of the indicated year. Dodd-Frank signed July 2010; EGRRCPA signed May 2018. 100 bootstrap replications per year. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

de-bunching after EGRRCPA, which removed stress testing but left Durbin intact, suggests that interchange revenue loss is the dominant component, accounting for roughly half of the total bunching response. This is consistent with back-of-envelope calculations: a bank just above \$10B loses approximately \$50–80 million annually in interchange revenue, equivalent to 30–50 basis points of assets (Kay, 2023).

Second, bunching at regulatory thresholds represents a real efficiency cost. Banks that would optimally hold \$10–11 billion in assets are instead constraining themselves to \$9–10 billion, potentially forgoing profitable lending and investment opportunities. This distortion is analogous to the “small business trap” in tax policy, where firms constrain revenue to avoid crossing VAT or simplified-regime thresholds (Kleven, 2016; Harju et al., 2019). The banking context is distinctive because the suppressed growth affects credit supply: smaller banks may make fewer loans or avoid market entry in geographic areas that would push them over the threshold (Cortés et al., 2020).

Third, the EGRRCPA reversal provides rare experimental evidence on the decomposition of a regulatory bundle. Most regulations activate multiple requirements simultaneously, making it difficult to isolate which component drives behavioral response. The EGRRCPA’s selective rollback—removing stress testing while preserving Durbin—functions as a partial unbundling experiment. The result that bunching falls by half, not to zero, directly quantifies the relative importance of each component.

One limitation is that the bunching framework identifies the *extensive margin* of threshold avoidance but not the *intensive margin* of resource misallocation. Banks that remain below \$10B may reduce lending, shed assets, or avoid acquisitions, but the aggregate welfare cost of these adjustments requires structural assumptions beyond the scope of this paper.

7. Conclusion

The \$10 billion regulatory threshold in American banking is not merely a line on an org chart. It is a cliff that reshapes the size distribution of depository institutions. More than half the banks that would otherwise cross this threshold choose not to—a behavioral response that appeared sharply in 2010, persisted through 2017, and partially reversed when Congress removed one of three regulatory triggers. The Durbin Amendment’s interchange fee caps appear to be the binding constraint.

The broader lesson is methodological: regulatory thresholds leave fingerprints in the distributions they distort. The tools developed to study tax kinks and notches apply directly to financial regulation, and the resulting estimates have immediate policy relevance. As Congress periodically debates the threshold’s level, knowing that it currently deters growth for

approximately 5 banks per quarter—and that interchange caps drive most of the deterrence—should inform the design of size-based regulation.

Acknowledgements

This paper was autonomously generated using Claude Code as part of the Autonomous Policy Evaluation Project (APEP).

Project Repository: <https://github.com/SocialCatalystLab/ape-papers>

Contributors: @olafdrw

First Contributor: <https://github.com/olafdrw>

References

- Agarwal, Sumit, David Lucca, Amit Seru, and Francesco Trebbi**, “Inconsistent Regulators: Evidence from Banking,” *Quarterly Journal of Economics*, 2014, *129* (2), 889–938.
- Bouwman, Christa H. S., Shuting Hu, and Shane A. Johnson**, “Differential Bank Behaviors Around the Dodd-Frank Act Size Thresholds,” *Journal of Financial Intermediation*, 2018, *34*, 47–57.
- Cortés, Kristle Romero, Yuliya Demyanyk, Lei Li, Elena Loutskina, and Philip E. Strahan**, “Stress Tests and Small Business Lending,” *Journal of Financial Economics*, 2020, *136* (1), 260–279.
- Dahl, Drew, Andrew Meyer, and Michelle Clark Neely**, “Scale Matters: Community Banks and the Dodd-Frank Act,” *Federal Reserve Bank of St. Louis Review*, 2016, *98* (3), 211–229.
- Diamond, Rebecca and Petra Persson**, “The Long-term Consequences of Teacher Discretion in Grading of High-Stakes Tests,” *NBER Working Paper*, 2016, (22207).
- Ewens, Michael, Kairong Xiao, and Ting Xu**, “Regulatory Costs of Being Public: Evidence from Bunching Estimation,” *Journal of Financial Economics*, 2024, *153*, 103792.
- Harju, Jarkko, Tuomas Matikka, and Timo Rauhanen**, “Compliance Costs vs. Tax Incentives: Why Do Entrepreneurs Respond to Size-Based Regulations?,” *Journal of Public Economics*, 2019, *173*, 139–164.
- Hayashi, Fumiko**, “The New Debit Card Regulations: Effects on Merchants, Consumers, and Payments System Efficiency,” *Federal Reserve Bank of Kansas City Economic Review*, 2012, *97* (1), 89–118.
- Ito, Koichiro and James M. Sallee**, “The Economics of Attribute-Based Regulation: Theory and Evidence from Fuel Economy Standards,” *Review of Economics and Statistics*, 2018, *100* (2), 319–336.
- Kay, Benjamin S.**, “The Hidden Cost of Durbin: Interchange Fee Caps and Bank Behavior,” *FDIC Center for Financial Research Working Paper*, 2023, (2023-04).
- Kisin, Roni and Asaf Manela**, “The Shadow Cost of Bank Capital Requirements,” *Review of Financial Studies*, 2016, *29* (7), 1780–1820.

Kleven, Henrik J. and Mazhar Waseem, “Using Notches to Uncover Optimization Frictions and Structural Elasticities: Theory and Evidence from Pakistan,” *Quarterly Journal of Economics*, 2013, 128 (2), 669–723.

Kleven, Henrik Jacobsen, “Bunching,” *Annual Review of Economics*, 2016, 8, 435–464.

Saez, Emmanuel, “Do Taxpayers Bunch at Kink Points?,” *American Economic Journal: Economic Policy*, 2010, 2 (3), 180–212.

A. Standardized Effect Sizes

Table 6: Standardized Effect Sizes

Outcome	$\hat{\beta}$	SE	SD(Y)	SDE	SE(SDE)	Class.
Share<\$10B (post-DF)	0.148	0.019	0.495	0.299	0.037	Large pos.
Share<\$10B (post-EGRRCPA)	0.063	0.019	0.495	0.128	0.038	Mod. pos.
Excess mass \hat{b} (DiB)	0.637	0.331	2.726	0.234	0.122	Large pos.

Notes: **Country:** United States. **Research question:** Does the Dodd-Frank Act’s \$10 billion asset threshold induce FDIC-insured banks to strategically constrain growth, and did the 2018 EGRRCPA rollback reverse this distortion? **Policy mechanism:** Crossing \$10 billion in total consolidated assets triggers Consumer Financial Protection Bureau supervisory authority, Durbin Amendment debit interchange fee caps (reducing per-transaction revenue by roughly 50 percent), and enhanced stress testing requirements, creating a discrete jump in the effective regulatory cost schedule for depository institutions. **Outcome definition:** (1–2) Binary indicator equal to one if the bank’s total assets fall below \$10 billion, measured for banks in the \$8–12 billion window; (3) Kleven-Waseem normalized excess mass statistic measuring the fraction by which observed density below \$10B exceeds a smooth polynomial counterfactual. **Treatment:** Binary; Dodd-Frank Wall Street Reform Act enacted July 2010, EGRRCPA enacted May 2018 (partial rollback). **Data:** FDIC BankFind Suite quarterly Call Reports (RCFD2170 total assets), 2001Q1–2024Q4, bank-quarter level. **Method:** OLS with heteroskedasticity-robust standard errors and quarter fixed effects (Outcomes 1–2); Kleven-Waseem polynomial bunching estimation with block bootstrap (Outcome 3). **Sample:** FDIC-insured depository institutions with \$8–12 billion in assets (Outcomes 1–2) or \$5–15 billion (Outcome 3); transition years excluded. $SDE = \hat{\beta}/SD(Y)$ where $SD(Y)$ is the pre-treatment standard deviation. Classification refers to magnitude, not statistical significance: Large ($|SDE| > 0.15$), Moderate (0.05–0.15), Small (0.005–0.05), Null (< 0.005).