Leverage without Risk Weights: A Double-Edged Reform for Community Banks

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Community Bank Leverage Ratio

Traditional capital frameworks were designed for large institutions, but often impose a disproportionate burden on small banks:

- Higher compliance costs
- Simpler business models
- Geographically constrained

The Community Bank Leverage Ratio (CBLR) was introduced in 2019 to address this gap:

- Voluntary adoption for qualifying small U.S. banks (<$10B)
- Simplified compliance: One flat 9% leverage ratio, no RWA or stress tests

	CBLR	**Basel Framework**			
	CBLR Ratio (a)	Tier 1 Leverage (b)	CET1 Capital (c)	Tier 1 Capital (d)	Total Capital (e)
Numerator	Tier 1 Cap.	Tier 1 Cap.	CET1 Cap.	Tier 1 Cap.	Total Cap.
Denominator	Avg. Assets	Avg. Assets	RWA	RWA	RWA
Min. Req.	9%	5%	7%	8.5%	10.5%

Research Question

1. **Research Question:**
   How did the introduction of the Community Bank Leverage Ratio (CBLR) affect **bank behavior** among eligible community banks?

Data & Sample

Sample: 2017Q1 – 2023Q4

Main Data Sources

- **Call Reports (FFIEC):** Bank-level financials
- **RateWatch:** Deposit and loan pricing
- **SBA 7(a) Loans:** Small business lending
- **HMDA LAR:** Mortgage origination

Key Measures

- Capital Ratios
- Lending Behavior
- Risk-Taking
- Profitability

Empirical Strategy

Step 1. Propensity Score Matching

- Objective: Create a comparable control group of non-CBLR banks by matching them with similar CBLR banks based on observable characteristics.

Step 2. DID Regression

$$Y_{it} = \beta_0 + \beta_1 CBLR_i + \beta_2 Post_t + \beta_3 (CBLR_i \times Post_t) + \gamma X_{it} + \delta_i + \lambda_t + \varepsilon_{it}$$

Where:

- Y_{it} = Outcome variable (e.g., loan growth, risk-weighted assets, capital ratio)
- $CBLR_i$ = Dummy variable (1 if bank opts into CBLR, 0 otherwise)
- $Post_t$ = Dummy variable (1 for post-adoption period, 0 otherwise)
- $CBLR_i \times Post_t$ = Interaction term capturing the **treatment effect of CBLR adoption**
- X_{it} = Control variables (e.g., bank size, profitability, loan composition)
- δ_i, λ_t = fixed effects

Effect of CBLR Adoption on Bank Balance Sheets

CBLR is voluntary — yet banks restructure their balance sheets.

- Unlike prior capital requirements, banks can opt in or not. The results reveal strategic financial restructuring rather than passive compliance.
- The result implies that CBLR-adopting banks shrink their non-core assets while maintaining nominal lending levels, raising concerns in liquidity.

	Leverage	**Log(Asset)**	**Log(Equity)**	**Loan Amount**	**Loan / Asset**
	(1)	(2)	(3)	(4)	(5)
Treated × Post	0.2884***	-0.0141***	0.0221**	0.0024	0.4649***
	(3.50)	(-4.35)	(2.35)	(0.46)	(3.19)
Controls	Y	Y	Y	Y	Y
Bank FE	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y
Observations	77,237	77,237	77,237	77,237	77,237
Adj. R^2	0.869	0.995	0.975	0.993	0.946

CBLR Adoption Increases Bank Risk-Taking

CBLR adopters show signs of elevated credit risk and relaxed lending standards.

- Nonperforming loans increase 2–6 quarters after adoption.
- Subprime mortgage share (by number and dollar) also rises.
- Together, these reflect both balance sheet and origination-side risk.

Panel A: Nonperforming Loans (Quarterly)

	T+2	T+4	T+6
	(1)	(2)	(3)
Treated × Post	0.6385*	0.7747**	0.7500**
	(1.95)	(2.15)	(2.04)
Controls	Y	Y	Y
Bank FE	Y	Y	Y
Year FE	Y	Y	Y
Obs.	72,379	67,521	62,665
Adj. R^2	0.515	0.523	0.540

Panel B: Subprime Mortgages (Annual)

	%Num Sub Loan	%Amt Sub Loan
	(4)	(5)
Treated × Post	1.2015***	0.6757***
	(2.81)	(3.13)
Controls	Y	Y
Bank FE	Y	Y
Year FE	Y	Y
Obs.	2,670	2,670
Adj. R^2	0.742	0.621

Pricing Behavior Post-CBLR

CBLR adopters improve margins via deposit repricing and higher loan rates.

- Net interest margins (NIM) increase after adoption, suggesting stronger spread management.
- CD rates decline, implying reduced funding costs.
- Small business loan rates rise, consistent with repricing risk and targeting riskier borrowers.

	NIM	**CD Rate**	**MM Rate**	**Loan Rate (SBL)**
	(1)	(2)	(3)	(4)
Treated × Post	0.0324**	-0.0398***	-0.0018	0.0754**
	(2.05)	(-2.89)	(-0.24)	(1.98)
Bank Controls	Y	Y	Y	Y
Bank FE	Y	Y	Y	Y
Year FE	Y	Y	Y	Y
Observations	77,237	52,424	49,093	7,832
Adj. R^2	0.781	0.646	0.520	0.864

Direct Expense Effects of CBLR Adoption

No evidence that CBLR reduces regulatory compliance or operating costs.

- No significant change in inefficiency ratio, noninterest expense, or employee salary expenditure.
- Question the policy's intention that CBLR would materially reduce compliance burden.

	Noninterest Expense	**Employee Salary**	**Inefficiency Ratio**
	(1)	(2)	(3)
Treated × Post	-0.0060	-0.0057	0.3263
	(-1.42)	(-0.84)	(0.86)
Bank Controls	Y	Y	Y
Bank FE	Y	Y	Y
Year FE	Y	Y	Y
Observations	77,237	77,237	77,237
Adj. R^2	0.965	0.985	0.779

Conclusion and Policy Implications

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- **CBLR adopters shrink non-core assets**, not raise equity, to boost leverage.
- **Risk-taking increases post-adoption**: more subprime lending, nonperforming loans, and charge-offs.
- **Profitability improves via pricing**, not cost reduction ($\downarrow$ deposit rates, $\uparrow$ loan rates).
- **No evidence of compliance relief** — noninterest costs and operating efficiency remain unchanged.
- **Policy concern:** A simple leverage rule may encourage riskier behavior across banks. But it may help borrowers who cannot get loans from large banks.