Assessing Targeted Macroprudential Financial Regulation: The Case of the 2006 Commercial Real Estate Guidance for Banks

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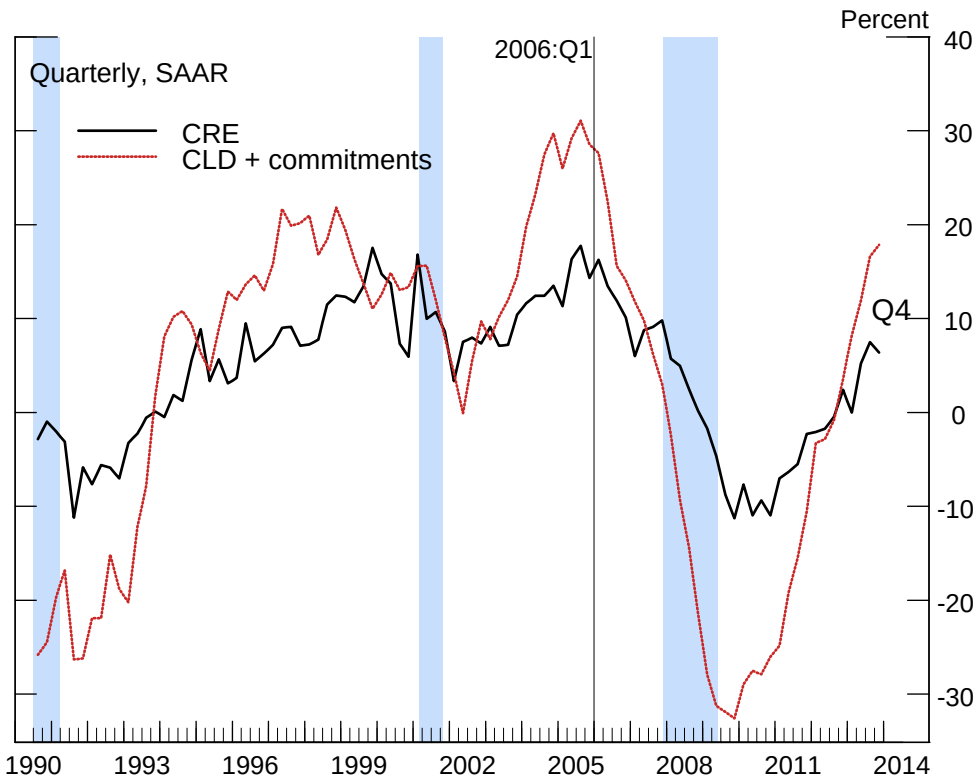
Growth of CRE Loans 1990:Q3 to 2013:Q4, by component

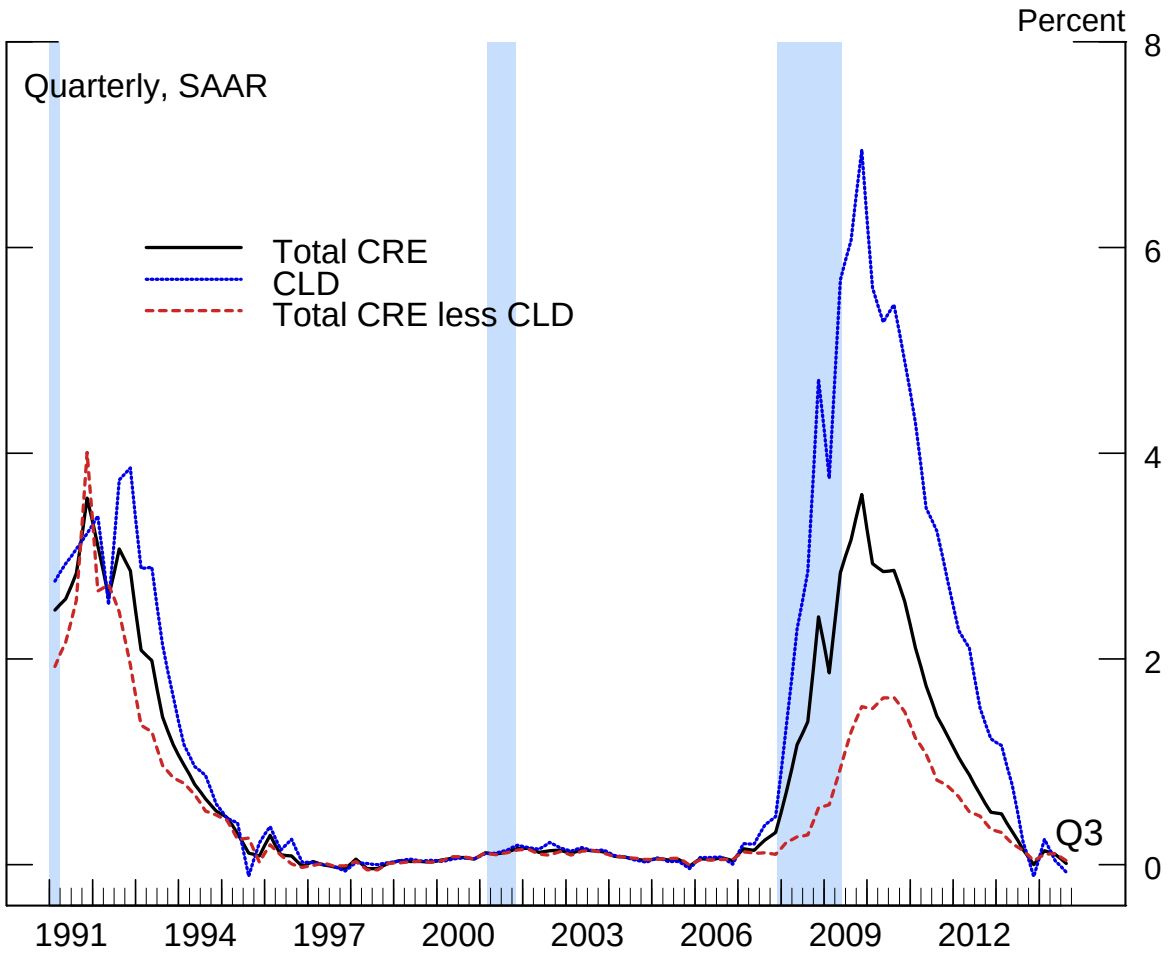
Commercial real estate lending is a volatile sector linked to periods of banking distress, such as early 1990s and late 2000s, and grew rapidly from 1995-2006, especially at community banks.



Note: CRE includes loans for construction and land development and off-balance sheet commitments to fund those loans, loans backed by multifamily housing, and loans secured by nonfarm, nonresidential structures.

Source: Call Reports

Charge-Off Rates for CRE Loans 1990:Q3 to 2013:Q4



Note: CRE includes loans for construction and land development and off-balance sheet commitments to fund those loans, loans backed by multifamily housing, and loans secured by nonfarm, nonresidential structures.

Source: Call Reports

Motivation for Guidance

- Recognizing risks, regulators announced and then imposed strict new supervisory policies on CRE loans in 2006 (just before financial strains emerged)
- Goal was to achieve changes in risk management and underwriting standards at all banks; diversification and capital levels at concentrated banks...
- ...thereby increasing resiliency and limiting bank failures in a future downturn.
- The final guidance indicated that regulators were concerned about "systemic problems that result from buildups of CRE loan holdings over time."

A Targeted Macroprudential Financial Policy Tool

- Increased focus on "Macroprudential Regulation" in financial reforms such as the Dodd-Frank Act and Basel III.
- Seeks to protect the stability of the U.S. financial system while promoting sustainable economic growth.
- Many approaches:
  - Build capital and liquidity during good times to cushion bad times.
  - Try to prevent excess debt growth or concentrations in specific asset classes – such as in the 2006 CRE Guidance.

Questions Addressed in This Paper

- **Research Question 1**: What were the effects of the CRE Guidance on credit availability?
- **Research Question 2**: Does targeting sectors have unintended consequences?

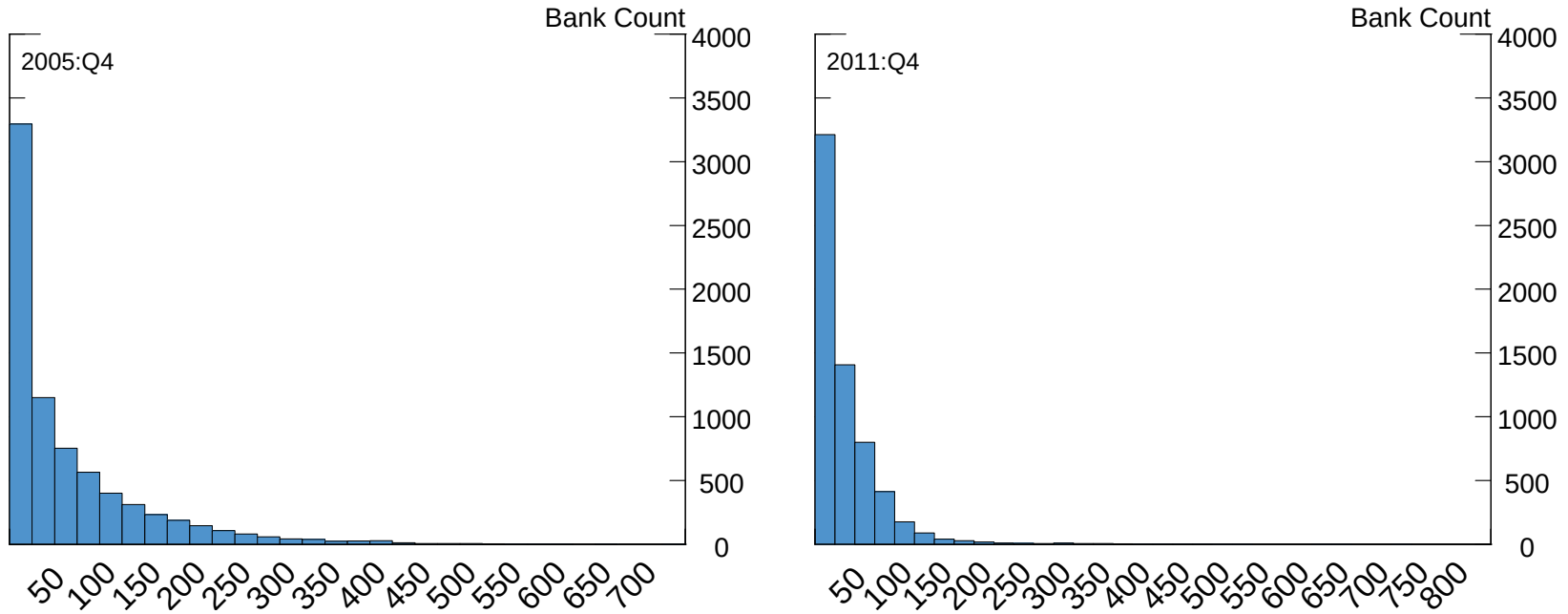
Literature Review

- Banking shocks propagate to the real economy
  - Bernanke (1983), Lown and Morgan (2006), Bassett et al. (2014)
- **Effect of supervisory actions:** Supervisory stringency, particularly during economic downturns, restricts loan supply
  - Peek and Rosengren (1995), Curry, Fissel, and Ramirez (2008), Bassett, Lee, and Spiller (2012)
- **Capital requirements:** Well-capitalized banks grow faster, but lending slows during transition to higher requirements
  - Bernanke and Lown (1991), Hall (1993), Furfine (2000,2001)
- **Assessments of Guidance:** Banks originated fewer non-performing loans but faced greater credit and liquidity risk due to their CRE concentrations
  - Lopez(2007), Pana (2010), Friend et al. (2013)

Description of CRE Guidance

- Issued for comment on Janaury 13, 2006 and made effective on December 12, 2006
- Applied **Unprecedented** and **unexpected** numerical thresholds to determine 'concentrated' banks.
  - Ratio of CRE to risk-based capital $> 300\%$ and 36 mo. CRE growth $> 50\%$
  - Ratio of CLD to risk-based capital $> 100\%$
- Final guidance stressed that thresholds were rough guidelines and did not constitute absolute limits on CRE lending, but...
- ...GAO Review said guidance was applied stringently and often incorrectly, with thresholds treated as strict caps

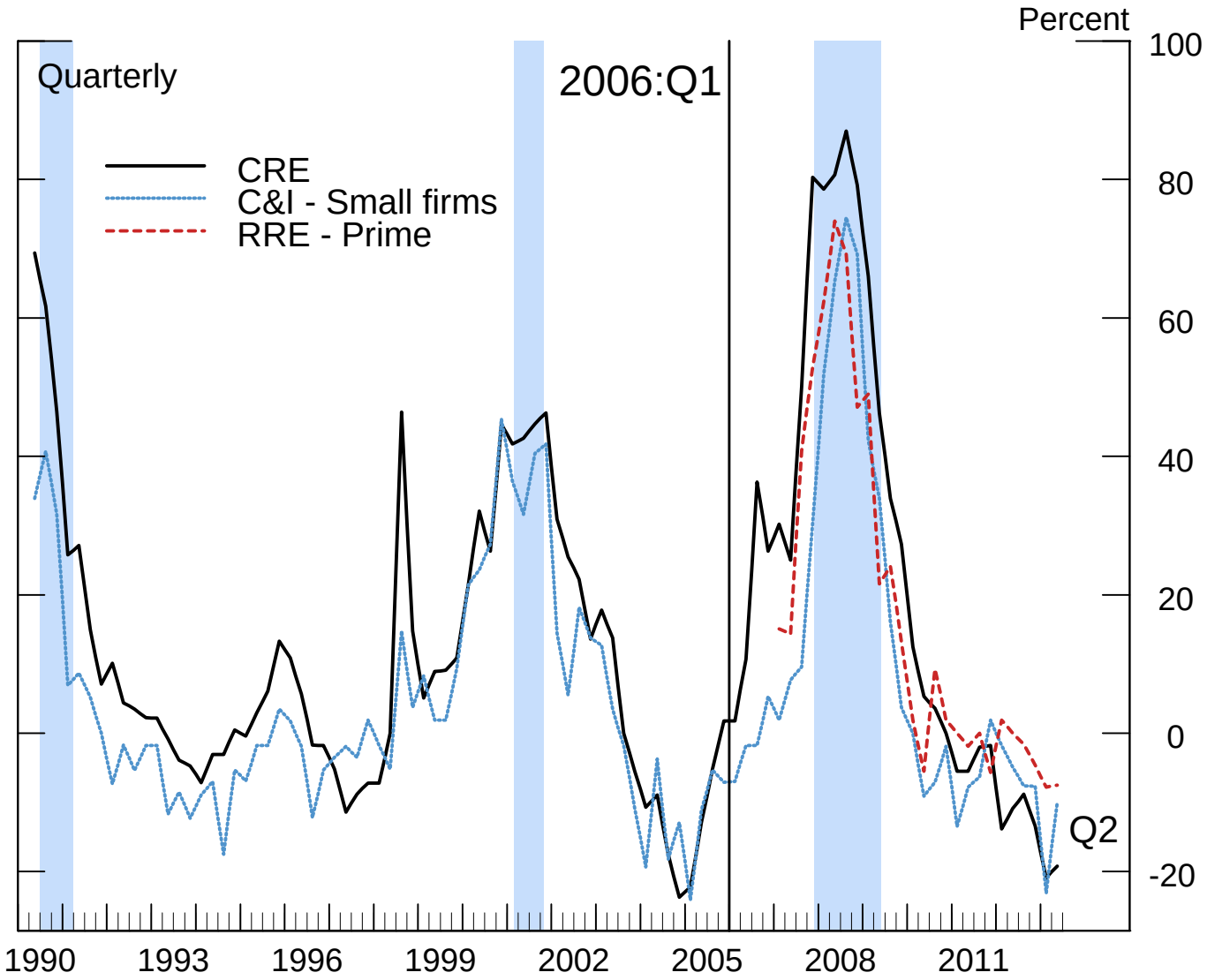
Distribution of Ratios of CLD to Risk-Based Capital



Note: A few banks with ratios greater than 850, negative risk-based capital, or without CLD holdings have been dropped from the graph.

Source: FFIEC Call Reports

Net Percentage of Domestic Banks Tightening Standards



Source: Senior Loan Officer Opinion Survey

Description of Identification Strategy

Key Assumption: Unanticipated numerical thresholds and inconsistent application yield 'natural experiment' and provide empirical identification.

Define indicator variables for Guidance and Threshold Variables:

- Comment: dates between 2006:Q1 and 2006:Q4
- Final: dates after 2006:Q4
- Threshold: banks with CRE concentrations in excess of those defined by guidance

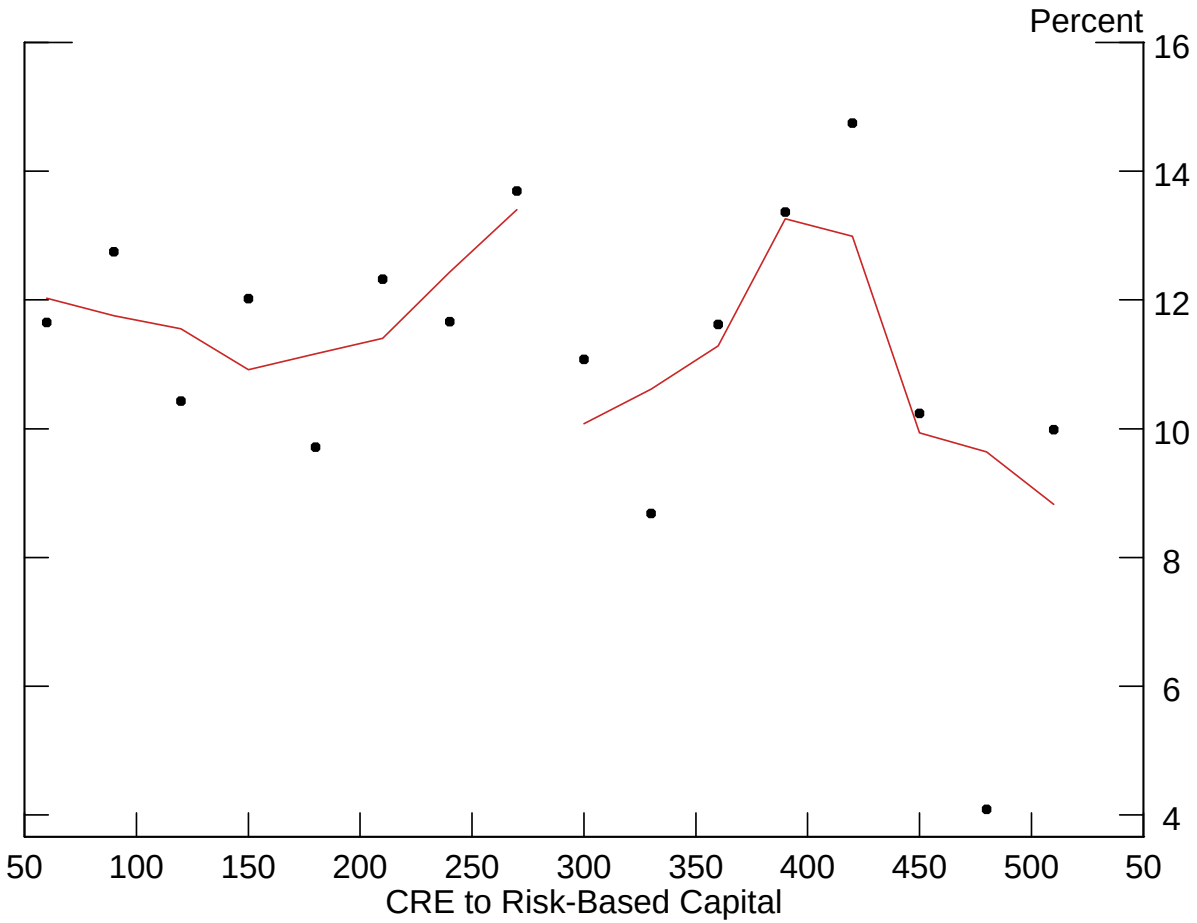
Key Variables:

- "Threshold" $\times$ "Comment" and
- "Threshold" $\times$ "Final"

Use multiple econometric techniques, alternative models, and time periods to see if effects are robust

Simple Regression Discontinuity Analysis for Growth in 2006

Dependent variable: merger-adjusted growth of CRE loans plus related undrawn commitments in 2006



Panel Regression: Controls for Supply and Demand for CRE loans

- Quarterly Call Reports for bank-specific financial variables and growth rates of loans
- Local economic variables: FDIC SOD data create bank-specific, deposit-weighted state-level conditions
  - Annualized quarterly percent change in CoreLogic HPI
  - One quarter difference in state unemployment rate (BLS)
  - Total charge-off rate at competing banks one-quarter ahead
  - Herfindahl-Hirschman Index of deposit concentration
- Macroeconomic and aggregate financial variables
  - Quarterly Real GDP growth (Commerce Department)
  - Quarterly change in CoStar national CRE price index
  - Quarter-end level of S&P 500 VIX
  - Treasury yield curve slope (10 yr - 2 yr) and target federal funds rate

Panel CRE Models with Threshold Variables†

	(1) CRE	(2) CLD	(3) CLD+cmt
$comment_t$	-0.447***	0.0466	0.650
	(-4.02)	(0.07)	(0.74)
$final_t$	-0.895***	-3.028***	-2.901***
	(-9.08)	(-6.33)	(-5.66)
$threshold_{i,j,t-1}$	-0.815***	-2.483***	-2.706***
	(-7.48)	(-8.67)	(-8.98)
$threshold_{i,j,t-1} \times comment_t$	-0.508**	-1.741*	-2.488**
	(-2.82)	(-2.37)	(-2.69)
$threshold_{i,j,t-1} \times final_t$	-0.927***	0.353	0.0600
	(-7.05)	(0.81)	(0.13)
Clusters	2829	539	548
Avg. Obs/Bank	51.52	38.30	38.02
R-Squared	0.0678	0.116	0.0962

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

† - Regressions include all bank-specific and macrofinancial variables.

Panel Non-CRE Models with Threshold Variables†

	(1) C&I	(2) RRE	(3) CONS
$comment_t$	-1.021***	-0.359***	-0.436***
	(-10.66)	(-8.68)	(-8.03)
$final_t$	-0.633***	-0.0505	0.252***
	(-7.67)	(-1.24)	(4.46)
$CRE\ threshold_{i,j,t-1}$	-0.00245	0.407***	-0.352
	(-0.02)	(4.08)	(-1.91)
$CRE\ threshold_{i,j,t-1} \times comment_t$	0.0688	-0.375*	0.642*
	(0.28)	(-2.50)	(2.31)
$CRE\ threshold_{i,j,t-1} \times final_t$	-0.661***	0.310**	0.644**
	(-3.76)	(2.64)	(3.08)
Clusters	5821	6779	4587
Avg. Obs/Bank	49.63	53.38	50.01
R-Squared	0.0240	0.0606	0.0683

t statistics in parentheses

$^{*}\ p < 0.05$, $^{**}\ p < 0.01$, $^{***}\ p < 0.001$

† - Regressions include all bank-specific and macrofinancial variables.

Multiple Tests for Robustness of Main Results

- Results are the same with continuous variables for ratio of CRE loans to tier 1 capital, and with four-quarter moving-averages of control variables
- Test the effect of own-category concentrations on loan growth in C&I, RRE, and Consumer categories
- Test the effect of CRE concentrations on loan growth during the 1999-2004 Business Cycle

Hypothetical Application to the 1999-2004 Cycle: CRE Loans

Table: Regressions for Growth of CRE Loans, by Type

	(1) CRE	(2) CLD	(3) CLD+cmt
$comment_t$	0.755***	1.288	0.431
	(5.26)	(1.93)	(0.63)
$final_t$	0.465***	1.469**	-0.310
	(4.01)	(2.82)	(-0.56)
$threshold_{i,j,t-1}$	-0.856**	-3.342***	-3.832***
	(-3.13)	(-7.83)	(-8.22)
$threshold_{i,j,t-1} \times comment_t$	-0.379	-0.612	-0.994
	(-0.89)	(-0.73)	(-1.21)
$threshold_{i,j,t-1} \times final_t$	-0.846**	-0.303	0.194
	(-2.86)	(-0.59)	(0.35)
Clusters	2570	449	457
Avg. Obs/Bank	35.82	29.15	29.01
R-Squared	0.0149	0.0353	0.0275

t statistics in parentheses. Sample period: 1991:Q3 to 2004:Q4. Source: Call Reports.
Hypothetical comment period is 1999:Q1 to 1999:Q4; final period is 2000:Q1 to 2004:Q4.
Thresholds are defined as CRE loans, 300 percent; CLD loans 100 percent.
Regressions include all control variables. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

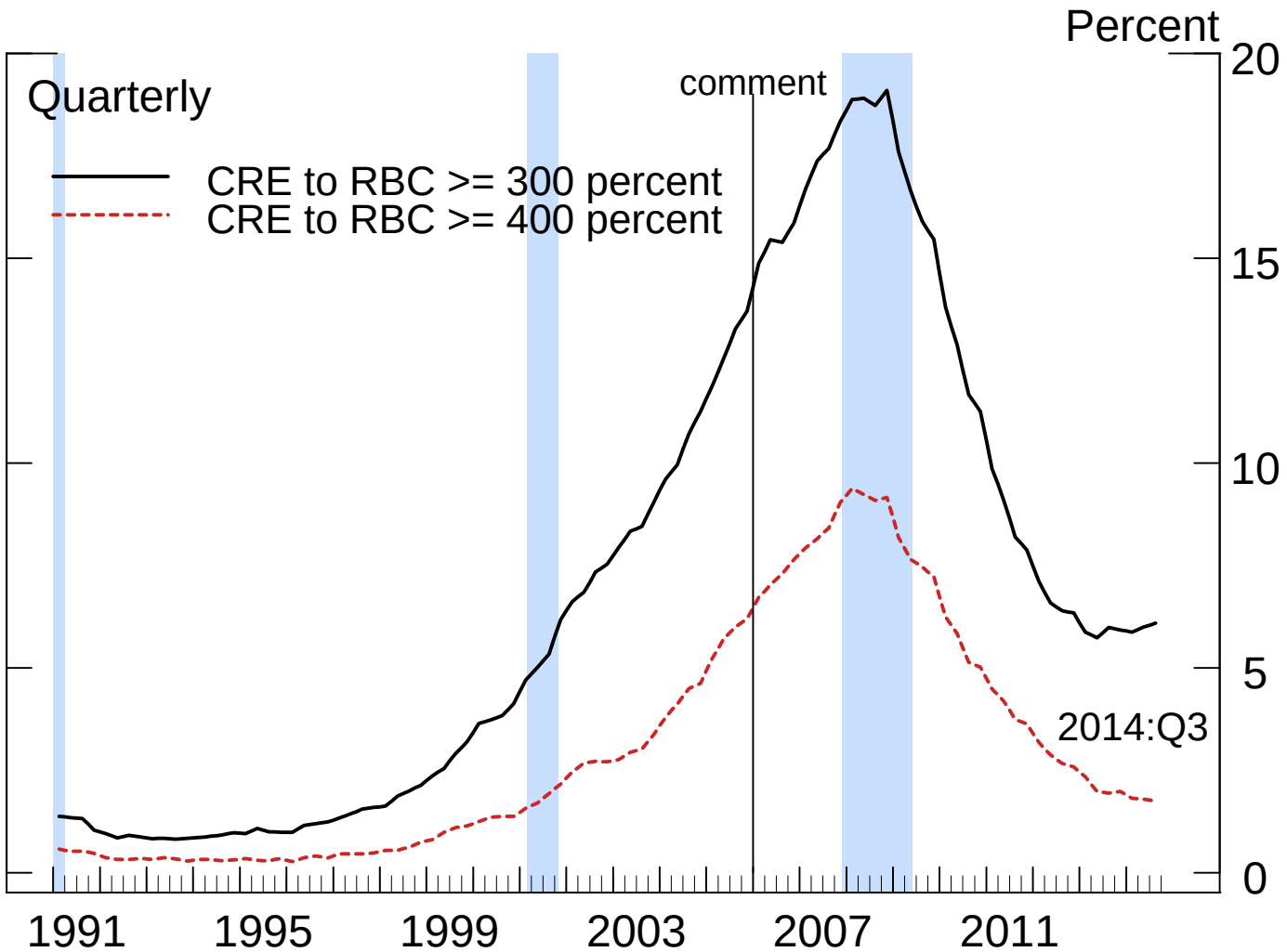
Hypothetical Application to the 1999-2004 Cycle: Non-CRE Loans

Table: Regressions for Growth of Other Loan Types with Controls for Total CRE Concentrations

	(1) C&I	(2) RRE	(3) CONS
$comment_t$	0.0934	0.482***	0.194**
	(0.97)	(10.52)	(3.06)
$final_t$	-0.397***	0.194***	-0.195***
	(-4.69)	(4.70)	(-3.33)
$CRE\ threshold_{i,j,t-1}$	-0.259	-0.0103	-0.747
	(-0.65)	(-0.04)	(-1.09)
$CRE\ threshold_{i,j,t-1} \times comment_t$	1.546*	0.484	0.944
	(2.39)	(1.29)	(0.77)
$CRE\ threshold_{i,j,t-1} \times final_t$	-0.0450	0.754**	0.541
	(-0.11)	(2.82)	(0.74)
Clusters	5415	6439	4338
Avg. Obs/Bank	37.01	39.17	36.26
R-Squared	0.0158	0.0484	0.0682

t statistics in parentheses. Sample period: 1991:Q3 to 2004:Q4. Source: Call Reports.
Hypothetical comment period is 1999:Q1 to 1999:Q4; final period is 2000:Q1 to 2004:Q4.
Thresholds are defined as CRE loans, 300 percent; CLD loans 100 percent.
Regressions include all control variables. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Updated Distribution of Ratios of CRE to Risk-Based Capital



Source: FFIEC Call Reports

Conclusion

Targeted macroprudential policy that reduced concentrations and growth, but may have had unintended spillovers.

We identified three consequences of the CRE regulation:

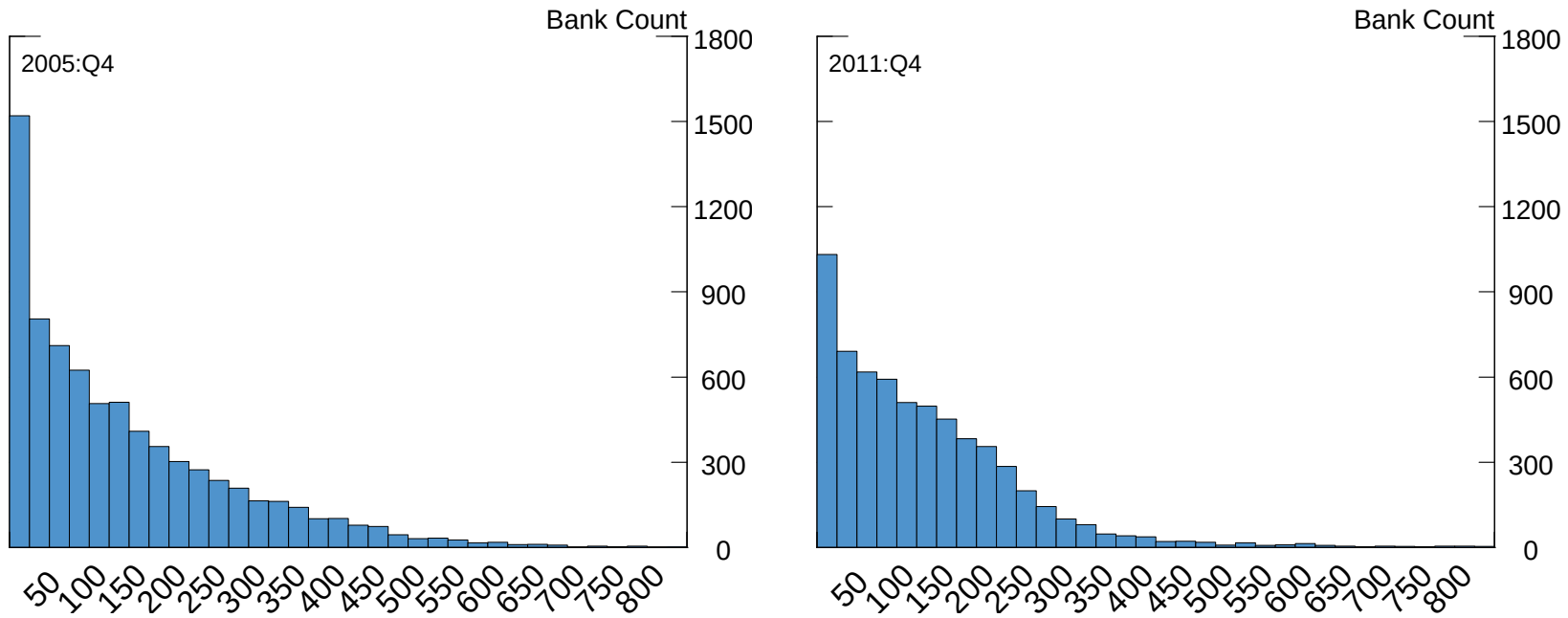
- Growth of CRE loans at banks over the thresholds was substantially slower than at banks below the thresholds
- The same banks also reduced C&I lending, which is often partially collateralized by property, more than expected.
- Residential real estate loans increased at banks over the thresholds, despite the weakness in that market; consumer loans also increased at those banks.

Moreover, the relationships between growth in those loan categories and concentrations of CRE loans were materially different than the relationships before the guidance was issued

Caveats and Future Research

- How best to control for sample selection and other enforcement actions.
- The results are dependent on adequate controls for macroeconomic and financial conditions.
- Importantly, our analysis does not examine the riskiness of banks over the thresholds.
- Future research could examine the riskiness and performance of banks over the threshold during the crisis.

Distribution of Ratios of CRE to Risk-Based Capital



Note: CRE includes loans for construction and land development, loans backed by multifamily housing, loans secured by nonfarm, nonresidential structures, and off-balance sheet commitments to fund CRE loans.
A few banks with ratios greater than 850, negative risk-based capital, or without CRE holdings have been dropped from the graph.

Source: FFIEC Call Reports

Sample Construction

Banks with the following characteristics are removed.

- Ratio of loans to total assets $< 2\%$ and average loans $<$ \$1B
- Dependent variable growth rates outside the 2.5 and 97.5 percentiles
- NIM and NIE ratios $> 10\%$
- Delinquency Rates $> 33\%$
- Charge-off rates $<$ 1st percentile or $> 20\%$
- Leverage ratios $< 4\%$ or $> 33\%$
- less than 30 remaining time series observations

	CRE	CLD+cmt	C&I	RRE	Consumer
Clusters	2829	548	5821	6779	4587
Avg. Obs/Bank	51.52	38.02	49.63	53.38	50.01

Panel Regression with Bank Fixed Effects

Dependent variable: merger-adjusted quarterly growth of loans at bank i in category j in quarter t

$$
\begin{aligned}
y_{i,j,t} &= \beta_0 + \sum_{n=1}^{2} \beta_n y_{i,j,t-n} + \beta_5 COMMENT + \beta_6 FINAL_{i,j,t-1} + \beta_7 THRESHOLD_{i,j,t} \\
&+ \beta_8 (threshold_{i,j,t-1} \times comment_t) + \beta_9 (threshold_{i,j,t-1} \times final_t) \\
&+ \sum_{n=1}^{2} \boldsymbol{\chi}_{i,t-n} \boldsymbol{\beta}_{9+n} + \sum_{n=1}^{2} \boldsymbol{\Gamma}_{i,t-n} \boldsymbol{\beta}_{11+n} + \sum_{n=1}^{2} \boldsymbol{\delta}_{t-n} \boldsymbol{\beta}_{13+n} \\
&+ \sum_{n=1}^{3} \beta_{15+n} Q_n + \psi_i + \varepsilon_{i,j,t}
\end{aligned}
$$

Key Variables:

- "Threshold" $\times$ "Comment" and
- "Threshold" $\times$ "Final"

Construct Hypothetical Thresholds for Non-CRE Loan Categories

Define hypothetical thresholds for non-CRE loan categories approximately one standard deviation above their long-run mean.

	CRE	CLD	C&I	RRE	CONS
Mean	166.86	126.39	121.76	197.07	97.57
Std.Dev.	115.83	86.89	78.66	116.86	79.11
Threshold			200	300	200

Roughly equivalent to those issued in the guidance for CRE loans.

Marginal Effects in Fully Interacted Model

$$\frac{\partial y_{i,j,t-1}}{\partial comment_t} = \beta_7 + \beta_8 threshold_{i,j,t-1} + \beta_9 threshold_{i,j,t-1} \times \frac{loans_{i,j,t-1}}{RBC_{i,t-1}}$$

$$\frac{\partial y_{i,j,t-1}}{\partial final_t} = \beta_{10} + \beta_{11} threshold_{i,j,t-1} + \beta_{12} threshold_{i,j,t-1} \times \frac{loans_{i,j,t-1}}{RBC_{i,t-1}}$$

Marginal Effects: Hypothesized Thresholds

	(1) CRE	(2) CLD+cmt	(3) C&I	(4) RRE	(5) Consumer
$\frac{\partial y_{i,t}}{\partial comment_t}$	-1.245***	-1.007	-2.391***	-0.840***	-1.648***
	(-5.02)	(-1.61)	(-8.16)	(-7.88)	(-4.90)
$\frac{\partial y_{i,t}}{\partial comment_t} - \beta_{comment_t}$	-1.223***	-1.699	-1.462***	-0.399***	-1.164***
	(-4.72)	(-1.67)	(-4.86)	(-3.61)	(-3.44)
$\frac{\partial y_{i,t}}{\partial final_t}$	-2.141***	-2.695***	-2.059***	-0.656***	-0.174
	(-11.03)	(-5.28)	(-9.75)	(-7.57)	(-0.70)
$\frac{\partial y_{i,t}}{\partial final_t} - \beta_{final_t}$	-1.752***	-0.0478	-1.327***	-0.575***	-0.321
	(-9.44)	(-0.09)	(-6.63)	(-7.04)	(-1.31)

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Fully Interacted Model of Thresholds and Ratios†

	(1) CRE	(2) CLD+cmt	(3) C&I	(4) RRE	(5) Consumer
$comment_t$	-0.0220	0.692	-1.005***	-0.424***	-0.384***
	(-0.20)	(0.79)	(-10.45)	(-10.21)	(-7.04)
$final_t$	-0.390***	-2.647***	-0.618***	-0.119**	0.303***
	(-3.84)	(-5.07)	(-7.43)	(-2.89)	(5.34)
$threshold_{i,j,t-1}$	1.371***	-1.147**	0.114	-0.0712	0.100
	(9.51)	(-3.30)	(0.69)	(-0.65)	(0.51)
$threshold_{i,j,t-1} \times comment_t$	-2.888***	-1.778	-0.364	0.351	-0.345
	(-3.85)	(-1.47)	(-0.33)	(0.54)	(-0.24)
$threshold_{i,j,t-1} \times final_t$	-3.687***	-0.584	-0.817	-0.212	0.249
	(-6.89)	(-0.79)	(-1.19)	(-0.49)	(0.33)
$\frac{loans_{i,j,t-1}}{RBC_{i,t-1}}$	-0.0156***	-0.0244***	-0.000795	0.00343***	-0.00304***
	(-22.86)	(-9.33)	(-1.49)	(11.58)	(-6.52)
$comment_t \times threshold_{i,j,t-1} \times \frac{loans_{i,j,t-1}}{RBC_{i,t-1}}$	0.00555**	0.000787	0.00110	-0.00186	0.00270
	(3.04)	(0.21)	(0.40)	(-1.15)	(0.73)
$final_t \times threshold_{i,j,t-1} \times \frac{loans_{i,j,t-1}}{RBC_{i,t-1}}$	0.00645***	0.00536	0.000381	0.00139	0.00109
	(4.89)	(1.61)	(0.22)	(1.26)	(0.56)
Clusters	2829	548	5821	6779	4587
Avg. Obs/Bank	51.52	38.02	49.63	53.38	50.01
R-Squared	0.0737	0.103	0.0240	0.0612	0.0686

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

† - Regressions include all bank-specific and macrofinancial variables.

Marginal Effects: Fully Interacted Models

	(1) CRE	(2) CLD+cmt	(3) C&I	(4) RRE	(5) Consumer
$\frac{\partial y_{i,t}}{\partial comment_t}$	-1.245***	-1.007	-1.040**	-0.631**	0.0804
	(-5.02)	(-1.61)	(-3.00)	(-3.05)	(0.19)
$\frac{\partial y_{i,t}}{\partial comment_t} - \beta_{comment_t}$	-1.223***	-1.699	-0.0345	-0.207	0.465
	(-4.72)	(-1.67)	(-0.10)	(-0.99)	(1.10)
$\frac{\partial y_{i,t}}{\partial final_t}$	-2.141***	-2.695***	-1.320***	0.0843	0.879***
	(-11.03)	(-5.28)	(-5.69)	(0.57)	(3.48)
$\frac{\partial y_{i,t}}{\partial final_t} - \beta_{final_t}$	-1.752***	-0.0478	-0.702**	0.203	0.576*
	(-9.44)	(-0.09)	(-3.12)	(1.39)	(2.30)

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Estimated Coefficients on Macro and Deposit-Weighted State-Level Control Variables

	(1) CRE	(2) CLD+cmt	(3) C&I	(4) RRE	(5) Consumer
$HPI_{i,t-1}^{growth}$	0.0686***	0.113***	0.0160**	0.00111	0.0312***
	(11.87)	(5.16)	(2.98)	(0.39)	(7.15)
$\Delta Unemp_{i,t-1}$	1.324***	0.182	-0.854***	0.583***	-0.497***
	(10.57)	(0.35)	(-8.80)	(13.24)	(-8.03)
$St\text{-}Chargeoffs_{k\neq i,t+1}$	-2.892***	-5.931***	-1.745***	-0.320***	-0.400**
	(-9.41)	(-5.81)	(-8.52)	(-3.51)	(-2.72)
$HHI_{i,t-1}$	13.95***	20.21	14.85***	10.84***	30.41***
	(4.52)	(1.85)	(5.77)	(7.44)	(14.04)
$\Delta \ln GDP_{t-1}$	0.0330	-0.0856	-0.273***	0.293***	-0.166***
	(0.78)	(-0.48)	(-8.00)	(17.52)	(-7.62)
$\Delta \ln CRE_{t-1}^{Price}$	0.0202***	0.0324			
	(3.75)	(1.49)			
VIX_{t-1}	-0.00637	-0.0318*	-0.000982	-0.00728***	0.00357
	(-1.73)	(-2.19)	(-0.33)	(-4.86)	(1.78)
$slope_{t-1}$	-0.833***	-1.675***	-0.781***	0.236***	-0.372***
	(-13.31)	(-6.30)	(-15.08)	(9.01)	(-10.14)
$FedFunds_{t-1}^{target}$	-0.292***	-0.651***	-0.0561*	0.251***	0.0548**
	(-9.46)	(-4.79)	(-2.15)	(19.59)	(3.04)
Clusters	2829	548	5821	6779	4587
Avg. Obs/Bank	51.52	38.02	49.63	53.38	50.01
R-Squared	0.0737	0.103	0.0240	0.0612	0.0686

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

CRE Models with Loan-to-Capital Ratio Variables†

	(1) CRE	(2) CLD	(3) CLD+cmt
$comment_t$	-0.0255	-0.936	-0.284
	(-0.14)	(-1.44)	(-0.37)
$final_t$	-0.135	-3.111***	-2.936***
	(-1.03)	(-5.74)	(-5.06)
$\frac{loans_{i,j,t-1}}{RBC_{i,t-1}}$	-0.0119***	-0.0268***	-0.0283***
	(-19.12)	(-10.48)	(-11.47)
$\frac{loans_{i,j,t-1}}{RBC_{i,t-1}} \times comment_t$	-0.000922	0.00161	-0.00174
	(-1.39)	(0.56)	(-0.54)
$\frac{loans_{i,j,t-1}}{RBC_{i,t-1}} \times final_t$	-0.00268***	0.00545*	0.00391
	(-5.48)	(2.19)	(1.43)
Clusters	2829	539	548
Avg. Obs/Bank	51.52	38.30	38.02
R-Squared	0.0732	0.121	0.101

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

† - Regressions include all bank-specific and macrofinancial variables.

Non-CRE Models with Loan-to-Capital Ratio Variables†

	(1) C&I	(2) RRE	(3) CONS
$comment_t$	-0.927***	-0.343***	-0.600***
	(-6.75)	(-6.02)	(-7.99)
$final_t$	-0.266**	-0.169***	0.162*
	(-2.77)	(-3.56)	(2.58)
$\frac{CRE\ loans_{i,j,t-1}}{RBC_{i,t-1}}$	0.000407	0.00336***	-0.00358***
	(0.80)	(11.15)	(-7.02)
$\frac{CRE\ loans_{i,j,t-1}}{RBC_{i,t-1}} \times comment_t$	-0.000843	-0.000892*	0.00260***
	(-1.26)	(-2.55)	(4.63)
$\frac{CRE\ loans_{i,j,t-1}}{RBC_{i,t-1}} \times final_t$	-0.00338***	0.000576*	0.00186***
	(-7.36)	(2.17)	(4.35)
Clusters	5821	6779	4587
Avg. Obs/Bank	49.63	53.38	50.01
R-Squared	0.0242	0.0611	0.0686

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Regression with Hypothesized Thresholds

	(1) CRE	(2) CLD+cmt	(3) C&I	(4) RRE	(5) Consumer
$comment_t$	-0.0220	0.692	-0.929***	-0.442***	-0.483***
	(-0.20)	(0.79)	(-9.89)	(-10.20)	(-8.95)
$final_t$	-0.390***	-2.647***	-0.732***	-0.0815	0.147**
	(-3.84)	(-5.07)	(-8.85)	(-1.94)	(2.63)
$threshold_{i,j,t-1}$	1.371***	-1.147**	1.014***	0.436***	0.221*
	(9.51)	(-3.30)	(10.14)	(9.00)	(2.06)
$threshold_{i,j,t-1} \times comment_t$	-2.888***	-1.778	-3.456***	-1.046***	-1.773**
	(-3.85)	(-1.47)	(-3.92)	(-3.49)	(-2.60)
$threshold_{i,j,t-1} \times final_t$	-3.687***	-0.584	-3.351***	-1.204***	-0.754
	(-6.89)	(-0.79)	(-6.24)	(-4.26)	(-1.69)
$\frac{loans_{i,j,t-1}}{RBC_{i,t-1}}$	-0.0156***	-0.0244***	-0.0198***	-0.0107***	-0.00664***
	(-22.86)	(-9.33)	(-26.85)	(-34.03)	(-8.56)
$threshold_{i,j,t-1} \times comment_t \times \frac{loans_{i,j,t-1}}{RBC_{i,t-1}}$	0.00555**	0.000787	0.00997**	0.00216**	0.00304
	(3.04)	(0.21)	(3.07)	(2.98)	(1.41)
$threshold_{i,j,t-1} \times final_t \times \frac{loans_{i,j,t-1}}{RBC_{i,t-1}}$	0.00645***	0.00536	0.0101***	0.00210**	0.00216
	(4.89)	(1.61)	(5.13)	(2.81)	(1.65)
Clusters	2829	548	5875	6825	4658
Avg. Obs/Bank	51.52	38.02	50.80	54.99	51.42
R-Squared	0.0737	0.103	0.0294	0.0669	0.0668

t statistics in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$