

# Mimicking Regulatory Peers

Minjae Kim

University of Minnesota

## Summary

Bank regulators' disclosure and use of peer information through the Uniform Bank Performance Report (UBPR) affect banks' decisions regarding regulatory capital.

- Banks' regulatory capital ratios become more sensitive to the peer group average in the UBPR regime.
- Banks use either loan loss provisions (LLPs) or risk-weighted assets (RWAs) to manage their regulatory capital ratios depending on their capital levels relative to the peer group average.
- Bank lending decisions become sensitive to their regulatory capital ratio rankings in the peer group.
- The recognition of expected losses is delayed.

## Uniform Bank Performance Report (UBPR)

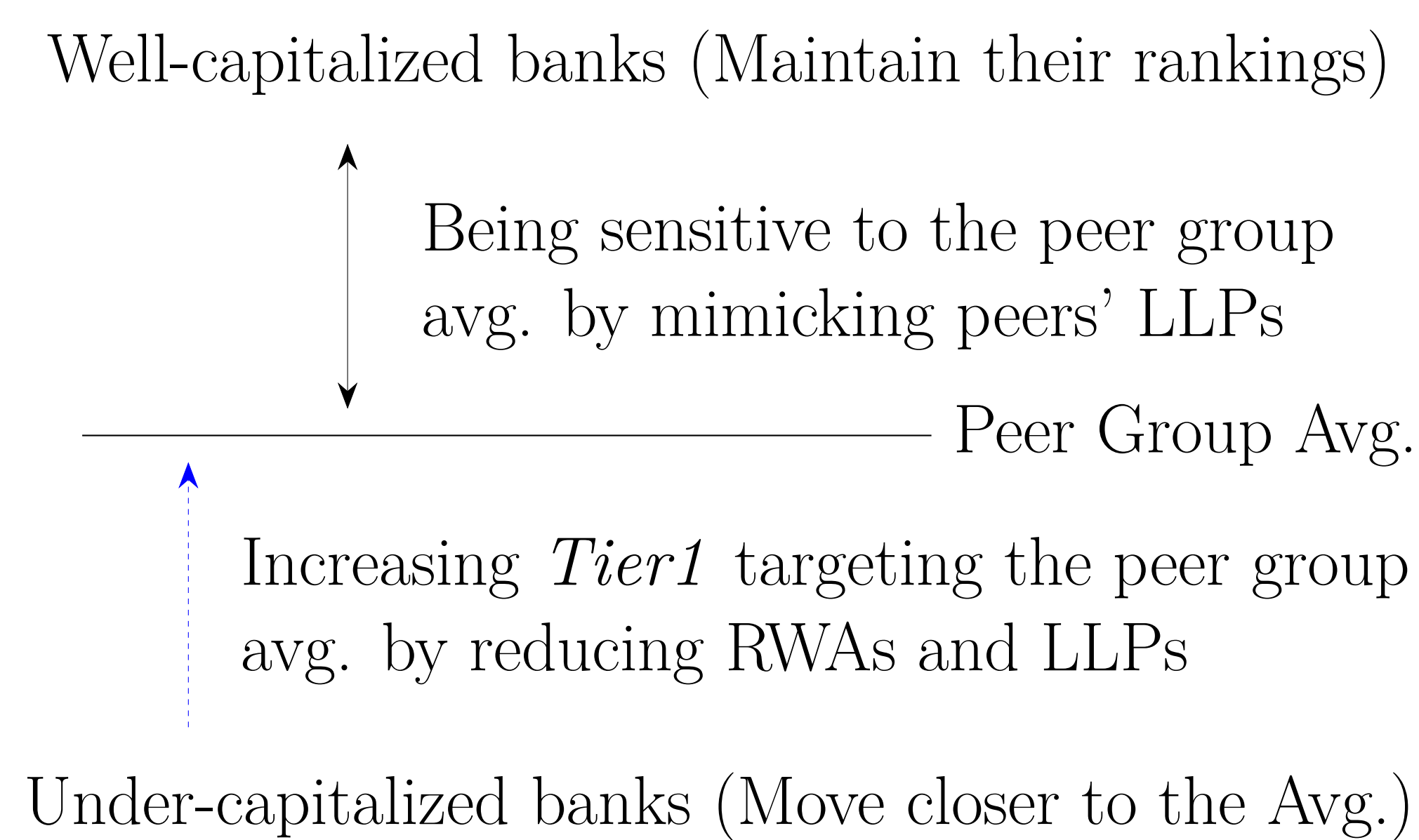
- To facilitate the evaluation of bank conditions, the Federal Financial Institutions Examination Council (FFIEC) introduced the UBPR in 2004
- The FFIEC defined bank peer groups and made the peer information publicly available
- Bank examiners should compare a bank's capital ratio with the UBPR peer group averages
- Peer group averages are not considered supervisory targets, but intended to provide insight into performance of similar banks
- ▷ However, it may affect banks' decisions regarding regulatory capital ratios
- ▷ Banks may consider the UBPR peer group average a form of stricter capital requirements, since most banks hold capital well above the regulatory minimum.

## Why do banks mimic peers?

I predict and find that banks mimic the UBPR peer group average regulatory capital ratio to shape market participants' (e.g., bank regulators, depositors) perceptions of their stability

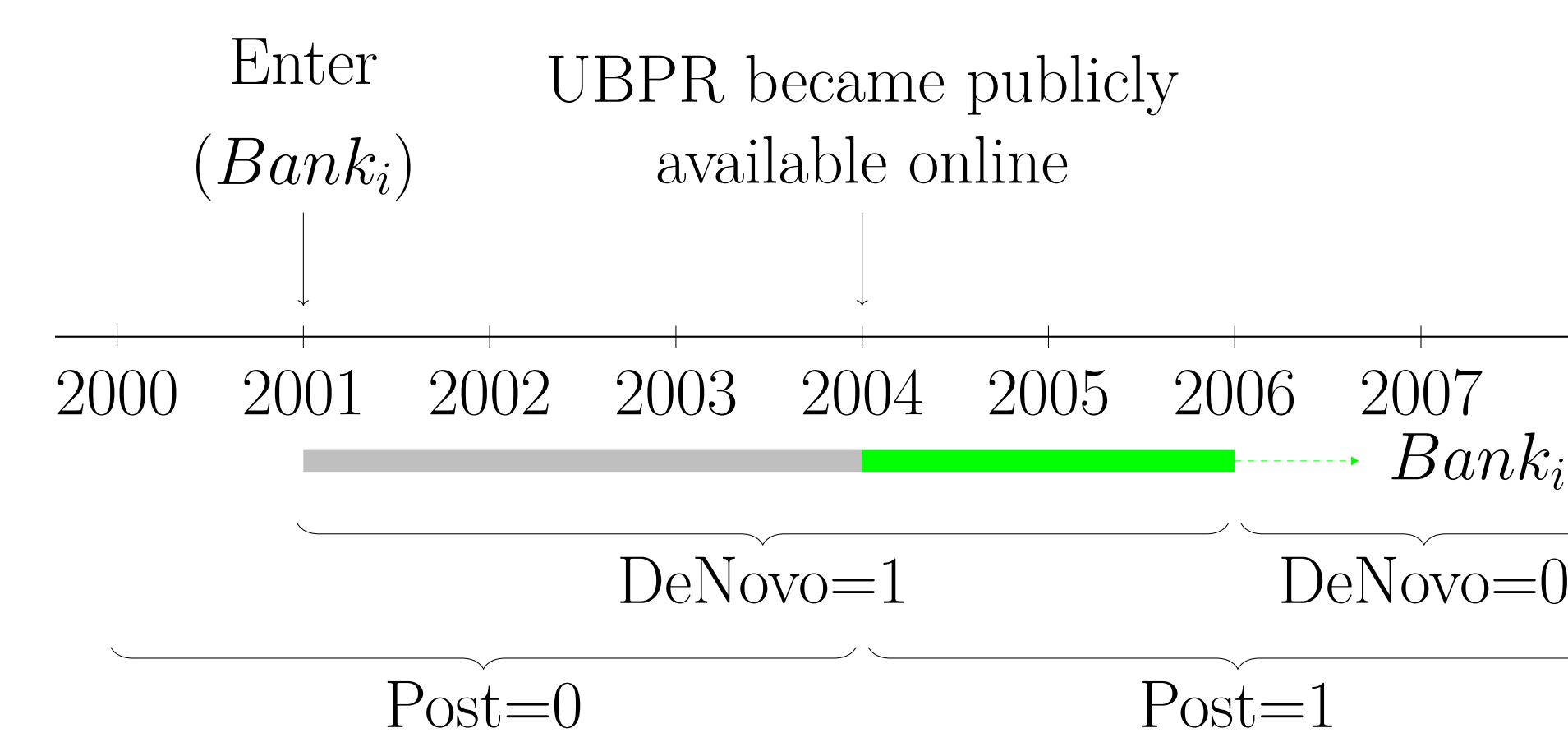
- Tier 1 capital ratio rankings in the UBPR peer group have predictive power for the likelihood that a bank will receive severe regulatory enforcement actions
- Tier 1 capital ratio rankings become more important determinants of deposit flows in the UBPR regime

## Banks' responses to UBPR



## Identification

- Estimating peer effects is challenging because of the reflection problem – if a bank's capital ratio is a function of the capital ratios of peer banks, then vice versa is also true
- The UBPR setting mitigates the reflection problem by permitting a difference-in-differences (DID) methodology
- Control: Existing banks – grouped based on size
- Treatment: *De novo* banks – grouped with cohorts for the first 5 years, then moved to sized based groups



$$y_{i,t} = \alpha + \beta_1 \bar{y}_{-i,t} \times DeNovo \times Post + \beta_2 \bar{y}_{-i,t} \times DeNovo + \dots + \gamma' X_{i,t-1} + \psi' \bar{X}_{-i,t-1} + \delta_i + \theta_t + \epsilon_{i,t}$$

- $\beta_1$  captures the changes in sensitivities to cohorts' decisions before and after the UBPR for *de novo* banks relative to control banks

## Mechanism

- Well-capitalized banks mimic their cohorts' average LLPs to maintain their tier 1 capital ratio rankings
- Under-capitalized banks reduce RWAs to increase tier 1 capital ratios
- Under-capitalized banks adjust their loan composition by decreasing the proportion of commercial and industrial (C&I) loans and increasing the proportion of real estate loans.

$$Tier\ 1\ Capital\ Ratio \uparrow = \frac{Tier\ 1\ Capital}{RWAs \downarrow}$$

## Consequences

- *DeNovo* banks' lending decisions become more sensitive to their tier 1 capital ratio rankings in the UBPR regime compared to control banks

Dependent:	$\Delta \ln(Loans)_{i,t}$	
	(1)	(2)
$Tier1\ Bottom_{i,t-1} \times DeNovo \times Post$	-0.013***	
	(-3.05)	
$Tier1\ Top_{i,t-1} \times DeNovo \times Post$	0.018***	
	(3.36)	
Observations	183,994	183,994
Adjusted $R^2$	0.279	0.279
Controls, Time FE, Bank FE	Y	Y

- The recognition of expected losses is delayed

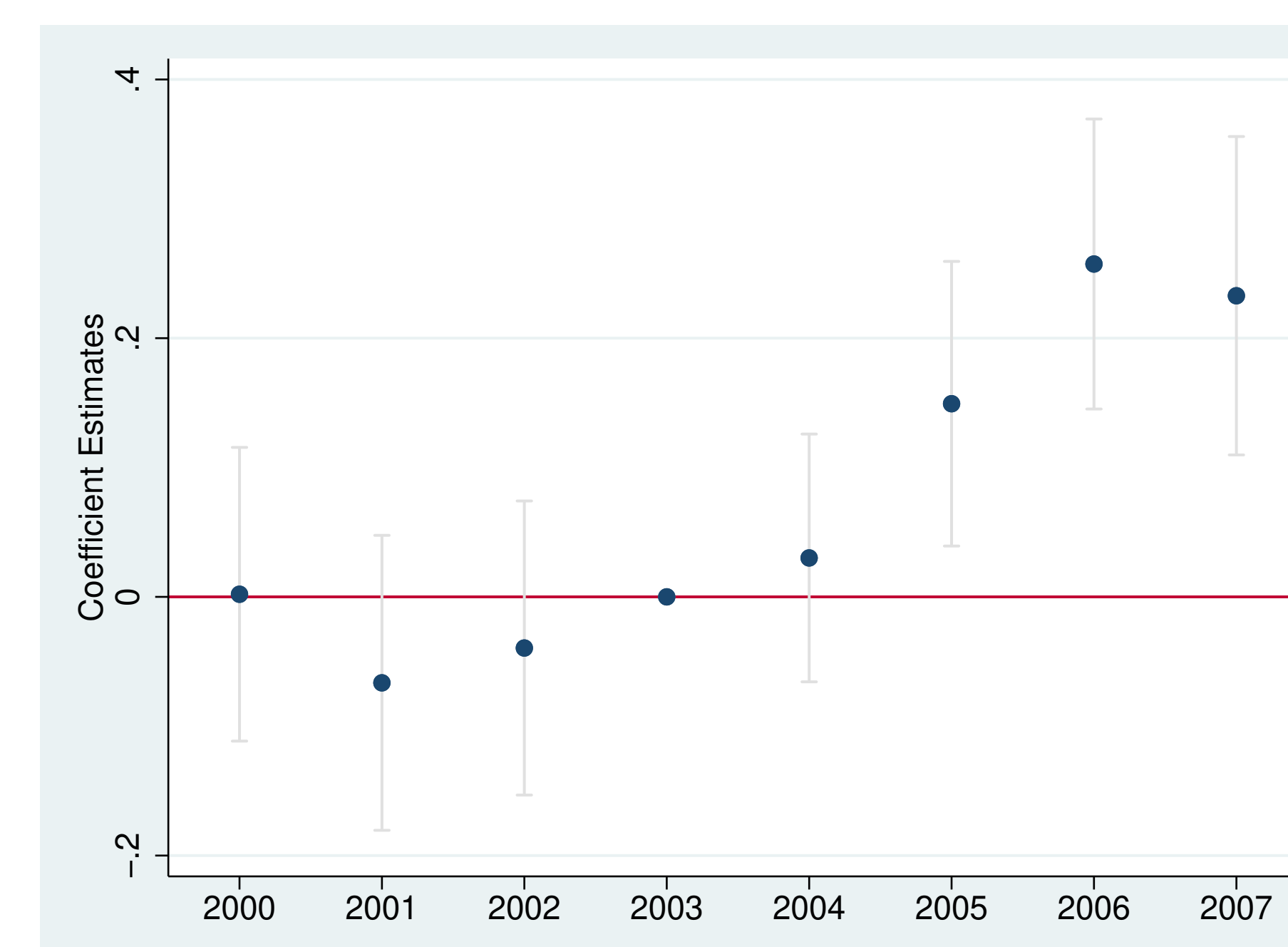
Dependent:	$LLP_{i,t}$		
	(1)	(2)	(3)
Tier1 Level	All	Bottom	Top
$\Delta NPL_{i,t+1} \times DeNovo \times Post$	-0.034***	-0.010	-0.046**
	(-2.59)	(-0.51)	(-2.14)
Observations	239,374	84,356	76,863
Adjusted $R^2$	0.453	0.492	0.499
Controls, Time FE, Bank FE	Y	Y	Y

## Main Results

- Tier 1 capital ratios of *DeNovo* banks become more sensitive to their cohorts' average tier 1 capital ratio in the post-UBPR period relative to control banks.

Dependent:	$Tier1_{i,t}$		
	(1)	(2)	(3)
$Tier1\ peer_{i,t} \times DeNovo \times Post$	0.166***	0.231***	0.188***
	(3.74)	(5.71)	(4.73)
$Tier1\ peer_{i,t} \times DeNovo$	0.839***	0.320***	0.396***
	(13.33)	(8.03)	(10.16)
Observations	245,748	243,129	243,129
Adjusted $R^2$	0.871	0.880	0.880
Peer Avg Characteristics	N	N	Y
Controls	N	Y	Y
Time FE, Bank FE	Y	Y	Y

- Parallel trends for Tier 1 Capital Ratios ( $Tier\ 1\ peer_{i,t} \times DeNovo \times Year\ dummies$ )



## Contact Information

Minjae Kim (kim00492@umn.edu)