european corporate governance institute

Political Influence, Bank Capital, and Credit Allocation

Finance Working Paper N° 864/2022
Revised February 2024

Sheng Huang
China Europe International Business School
Anjan Thakor
Washington University in St Louis, FTG, MIT LFE and ECGI

© Sheng Huang and Anjan Thakor 2024. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

This paper can be downloaded without charge from:
https://doi.org/10.67929/ecgi-fin-864-2022

european corporate governance institute

ECGI Working Paper Series in Finance

Political Influence, Bank Capital, and Credit Allocation

Working Paper N° 864/2022
February 2024

Sheng Huang
Anjan Thakor

© Sheng Huang and Anjan Thakor 2024. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Abstract

Political influence on bank credit allocation is often viewed as being necessary to address social problems like income inequality. We hypothesize that such influence elicits bank capital responses. Our hypothesis yields three testable predictions, for which we find supporting evidence. First, when banks observe election outcomes that suggest greater impending political credit-allocation influence, they reduce capital to increase fragility and deter political influence. Second, banks subject to greater political influence nonetheless increase lending that politicians favor, and household consumption consequently increases. Third, these banks exhibit poorer post-lending performance. Our study has implications for the interaction between politics, household consumption and bank risk through a specific channel – the interplay between credit-allocation regulation and bank capital structure.

Keywords: Politics, bank regulation, capital requirements

JEL Classifications: G21, G28

Sheng Huang
Professor of Finance
China Europe International Business School
#8, Dongbeiwang West Road
Beijing 100193, China
phone: (+86)10-82966804
e-mail: shenghuang@ceibs.edu

Anjan Thakor*
John E. Simon Professor of Finance
Washington University in St. Louis, Olin Business School
One Brookings Drive
St Louis, MO 63130, United States
phone: +1 314-935-7197
e-mail: thakor@wustl.edu

*Corresponding Author

This article was downloaded by: [40.83.123.45] On: 17 February 2024, At: 20:52
Publisher: Institute for Operations Research and the Management Sciences (INFORMS)
INFORMS is located in Maryland, USA

Management Science

Publication details, including instructions for authors and subscription information:
http://pubsonline.informs.org

Political Influence, Bank Capital, and Credit Allocation

Sheng Huang, Anjan V. Thakor

To cite this article:
Sheng Huang, Anjan V. Thakor (2024) Political Influence, Bank Capital, and Credit Allocation. Management Science

Published online in Articles in Advance 08 Feb 2024

. https://doi.org/10.1287/mnsc.2022.04056

Full terms and conditions of use: https://pubsonline.informs.org/Publications/Librarians-Portal/PubsOnLine-Terms-and-Conditions

This article may be used only for the purposes of research, teaching, and/or private study. Commercial use or systematic downloading (by robots or other automatic processes) is prohibited without explicit Publisher approval, unless otherwise noted. For more information, contact permissions@informs.org.

The Publisher does not warrant or guarantee the article's accuracy, completeness, merchantability, fitness for a particular purpose, or non-infringement. Descriptions of, or references to, products or publications, or inclusion of an advertisement in this article, neither constitutes nor implies a guarantee, endorsement, or support of claims made of that product, publication, or service.

Copyright © 2024 The Author(s)

Please scroll down for article—it is on subsequent pages

With 12,500 members from nearly 90 countries, INFORMS is the largest international association of operations research (O.R.) and analytics professionals and students. INFORMS provides unique networking and learning opportunities for individual professionals, and organizations of all types and sizes, to better understand and use O.R. and analytics tools and methods to transform strategic visions and achieve better outcomes.
For more information on INFORMS, its publications, membership, or meetings visit http://www.informs.org

Electronic copy available at: https://ssrn.com/abstract=4311512

https://pubsonline.informs.org/journal/mnsc

MANAGEMENT SCIENCE
Articles in Advance, pp. 1–29
ISSN 0025-1909 (print), ISSN 1526-5501 (online)

Political Influence, Bank Capital, and Credit Allocation

Sheng Huang,[a] Anjan V. Thakor[b,c,*]

[a] China Europe International Business School (CEIBS), Pudong, Shanghai 201206, China; [b] WFA Center for Finance and Accounting Research, Olin School of Business, Washington University, St. Louis, Missouri 63130; [c] European Corporate Governance Institute (ECGI), 1000 Bruxelles, Belgium

*Corresponding author

Contact: shenghuang@ceibs.edu, https://orcid.org/0000-0002-3626-1726 (SH); thakor@wustl.edu, https://orcid.org/0000-0002-3919-6456 (AVT)

Received: June 5, 2021
Revised: June 19, 2023
Accepted: June 21, 2023
Published Online in Articles in Advance: February 8, 2024

https://doi.org/10.1287/mnsc.2022.04056

Copyright: © 2024 The Author(s)

Abstract. Political influence on bank credit allocation is often viewed as being necessary to address social problems like income inequality. We hypothesize that such influence elicits bank capital responses. Our hypothesis yields three testable predictions for which we find supporting evidence. First, when banks observe election outcomes that suggest greater impending political credit-allocation influence, they reduce capital to increase fragility and deter political influence. Second, banks subject to greater political influence nonetheless increase lending that politicians favor, and household consumption consequently increases. Third, these banks exhibit poorer post-lending performance. Our study has implications for the interaction between politics, household consumption, and bank risk through a specific channel—the interplay between credit-allocation regulation and bank capital structure.

History: Accepted by Victoria Ivashina, finance.

Open Access Statement: This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. You are free to download this work and share with others, but cannot change in any way or use commercially without permission, and you must attribute this work as "*Management Science*. Copyright © 2024 The Author(s). https://doi.org/10.1287/mnsc.2022.04056, used under a Creative Commons Attribution License: https://creativecommons.org/licenses/by-nc-nd/4.0/."

Supplemental Material: The online appendix and data files are available at https://doi.org/10.1287/mnsc.2022.04056.

Keywords: politics • bank regulation • capital requirements

1. Introduction

It is well known that politicians influence economic outcomes (see, e.g., Nordhaus 1975, Lindbeck and Weibull 1987, Rogoff 1990, Cohen et al. 2011). Nowhere is this more evident than in banking (see, e.g., Brown and Dinc 2005), and political desire to influence the credit market is not a radical idea. Politics has influenced banking for centuries, and many have written about how politics and career concerns shape the actions of legislators and bank regulators.[1] In their book, Calomiris and Haber (2014) made a powerful case that politics has always been front and center stage in banking.

In banking, politics often influences credit allocation. Because the profit-maximizing lending decision of banks may not maximize social welfare, laws may be enacted to require banks to make loans they otherwise may not make.[2] This has become an increasingly pressing issue in light of growing income inequality that has been the subject of much public debate. As politicians grapple with how to deal with the social problems it creates, there is also research evidence that an increase in bank credit supply helps to reduce income inequality (see, e.g., Brei et al 2018). Therefore, politicians may wish to enact regulations that encourage banks to increase lending, especially to disadvantaged groups. In some instances, credit allocation regulation may also serve political goals, so the motives for political influence may transcend at least the conventional notion of social welfare (see Calomiris and Haber 2014). Safety net-protected banks may be willing to accept such credit allocation directives as part of the "Game of Bank Bargains" discussed by Calomiris and Haber (2014).

Politicians also care about the safety and soundness of banking. If credit allocation directives expose banks to greater risk, then politicians face a tradeoff between the benefits of increasing bank credit supply and the cost of higher bank risk, so they may choose not to require banks to make politically favored loans. Of course, bank risk is also affected by the bank's capital. For any (risky) lending, the risk of failure is higher the lower the bank's capital. This will affect the bank's capital choice.[3] The above discussion leads to our research question: How does political influence on credit allocation affect the capital structure and lending decisions of banks?

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

We address this question by capturing the tradeoffs discussed above in a simple model of bank capital structure with political influence on credit allocation. The bank makes its capital structure decision after it knows the outcome of a political (state governor) election. The outcome reveals to the bank whether it is likely to be subject to pressure to lend to politically favored groups. This revelation may be through a formal legislative change, but it need not be. Possibly more often, it could be either informal communication or simply greater regulatory influence on banks to make certain types of loans (say, inferred from pronouncements of winning politicians). It may not even be actual political pressure but simply political preferences perceived by banks—perhaps because of subtle cues or public announcements by politicians—without politicians explicitly asking banks to do anything.[4] Our analysis and conclusions do not depend on the specific manner in which political influence (real or perceived) manifests itself. Once the bank learns about whether there is political pressure to engage in some types of lending, it chooses its capital structure to balance the value of deposit financing against the increased moral hazard from lowering capital. At the next date, the politician observes the bank's capital structure and the political or social welfare benefit of exerting credit-allocation influence and decides whether to exert the influence. Lending then occurs. We show that the ex ante probability that the politician will influence future credit allocation is increasing in the bank's capital ratio. Recognizing this, the bank chooses a lower capital ratio ex ante than it would absent the political influence. Nonetheless, in equilibrium the probability of credit-allocation influence remains positive, so the bank does sometimes make politically favored, riskier loans.

This model generates three predictions. First, politically pressured banks will reduce their capital ratios. Second, banks subject to greater political pressure will make more politically favored loans. Third, relative to other banks, these banks will exhibit higher lending risk and poorer post-lending performance. That is, although politically favored loans are positive-NPV investments for banks in our model, they are nonetheless riskier and less profitable.[5]

Our theoretical analysis assumes that political parties are different in the emphasis they put on influencing bank credit allocation. In the tradition of empirical tests of theoretical models, we do not test this assumption but rather its predictions. Political influence, by its very nature, is not possible to measure directly because it is typically informally communicated and not documented. Moreover, to the extent that it may not even be informally communicated but simply perceived by banks based on their assessment of the preferences of those in power, its direct measurement becomes additionally elusive. Thus, a standard approach in papers that examine the interaction of politics and banking is to focus on the implications of this political influence—based on a theory or hypothesis—rather than attempt to directly document the influence.[6] This is one reason why we instrument for potential political influence by using the political ideology of the party to which the winner in state gubernatorial elections in the United States belongs.

Although both parties mix politics and banking, Democrats typically attach greater importance than Republicans to the role of the government in addressing perceived distributional inequities through credit allocation (see, e.g., Levy 2006, Sullivan 2009, Dymski et al. 2015). In Section 2.1, we provide an extensive discussion of the platforms of the two parties. This discussion reveals that the publicly stated positions of the two parties reflect precisely the policy differences in the role of the government in bank credit allocation that we model. This implies that state-chartered banks ("state banks" hereinafter) are subject to greater political influence to allocate credit in states following the election of Democratic governors. Whereas federal regulators are the only regulatory and supervisory authority of federally chartered banks, state and federal regulators work jointly in monitoring state banks, and federal regulators often rely on state regulators for local information (see, e.g., Agarwal et al. 2014). State governors can thus influence state banks (not federally chartered banks) through their appointments of the state banking department heads and other personnel as well as by affecting regulatory policymaking.[7]

Our empirical analysis uses all gubernatorial elections during 1990−2012 and focuses on state-chartered commercial banks in all states of the United States. While focusing on state banks, as part of our identification strategy, we also exploit the within-state differences in regulatory pressures and examine the corresponding differing influences on federally chartered banks versus state banks. Our baseline analysis relies on a difference-in-difference regression of bank behavior and performance across banks in Democratic versus Republican states in a time window from three years prior to gubernatorial elections to three years after gubernatorial elections.[8] To account for the impact of any time-invariant bank-specific factors and unobserved heterogeneities across elections, we include bank and election fixed effects in all regressions wherever appropriate, in addition to time fixed effects to capture any time trend in bank behavior/performance.

The empirical analysis strongly supports our predictions. First, relative to state banks in Republican states, state banks in Democratic states reduce capital post-election. We also document that this decline in capital is through higher dividend payments and stock repurchases.

Second, political pressure significantly affects bank lending. Relative to state banks in Republican states,

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

state banks in Democratic states increase politically favored lending postelection. Banks view such lending as riskier ex ante; we document greater expected losses, as reflected in a significant increase in the loan loss allowances that the banks allocate.

We also provide additional evidence that the increased lending is indeed more politically favored. (i) We show that the higher lending addresses household consumption needs, ostensibly a political goal. Specifically, bank loans to individuals increase in states following the election of Democratic governors. (ii) State banks increase branches in low-income counties following the election of Democratic governors, consistent with the role of branch networks in facilitating credit access for disadvantaged communities. (iii) Lastly, CRA (Community Reinvestment Act) ratings improve for these banks, consistent with their lending and branching serving socioeconomic goals. All of these results are consistent with the notion that politicians care about income inequality and address it by helping to increase household consumption via an increased supply of bank credit, especially to low-income households. This is further confirmed when we examine transaction-level data on mortgage lending; we find that mortgage lending to low-income households increases significantly following the election of Democratic governors.

Third, with higher politically favored lending, state banks in Democratic states exhibit a decline in operating performance after gubernatorial elections relative to state banks in Republican states. Our model implies that this performance decline is not something that banks seek (for example, to achieve an intertemporal trade-off between lower earnings now and higher earnings in the future). This speaks to the issue of banks' attitudes toward credit-allocation influence, something that is hard to establish empirically, but we provide some evidence in support.

We show that the above results hold for banks with within-state operations only (single-state banks) but not for banks with out-of-state operations (multistate banks). This is likely because single-state banks possess less bargaining power to push back against political influence. The finding hence provides further support for our hypothesis.

Lastly, we document that state banks are more likely to switch to a national charter following the election of Democratic governors. Agarwal et al. (2014) showed that state regulators are more lenient with banks than federal regulators, so banks should prefer state regulators to federal regulators ceteris paribus. They call for future research to better understand why some banks switch to a national charter despite this. Our finding suggests a possible reason; the ceteris paribus condition does not hold because there is greater political pressure on state banks under Democratic governors, pressure that federally chartered banks do not face.

One might be concerned that unobserved economic factors may be driving both the gubernatorial election outcomes and bank decisions, introducing an omitted variable bias. We employ three identification strategies to address this. First, we use a regression discontinuity (RD) design in exploiting the discontinuity in election outcomes at the winning vote threshold and testing for discontinuities in banks' decisions and performance around this threshold. We confirm that all of our results remain significant with this RD estimation.

Second, we conduct a falsification test and exploit differences among banks based on whether they have federal or state charters and the corresponding differences in regulatory pressure on them by state regulators. According to our theory, state-level political influence on federally chartered banks should be insignificant. However, if unobserved economic factors are driving our findings, we should expect the documented effect of state-level political influence to also be significant for federal banks in the same state. We thus repeat all the benchmark empirical analyses for federal banks and find that the impact of the gubernatorial election outcomes is insignificant in most cases.

Third, we examine a subsample of state banks operating exclusively in counties that are geographically close to either side of a state border. The idea is that geographically proximate counties located on two different sides of a state border have more similar macroeconomic environments than do counties far away from the border. Therefore, our estimate of the impact of political influence is less likely to be confounded by any unobservable differences in macroeconomic environments across states. Our findings generally hold for this restricted subsample.

We then proceed to examine the merits of some alternative explanations for our main finding. First, the decline in bank equity under Democratic governors might be due to changes in banks' investment opportunities. However, we do not find evidence to support this conjecture. Second, the party affiliation of the elected governor may affect post-election tax rates, and this may cause changes in bank capital structure that differ across Democratic and Republican governors. The literature has used the state income tax rate as an instrument for bank capital (see, e.g., Ashcraft 2008 and Berger and Bouwman 2009, 2013), arguing that higher tax rates favor debt financing. However, we find that Democrat victories were not followed by a greater change in state income tax rates. Third, we examine whether possible differences in regulatory forbearance across Democratic and Republican governors may explain our results and whether Democrats are more inclined to practice forbearance, especially for banks considered "too big to fail" (TBTF). This would generate moral hazard, leading to lower capital and riskier lending. This hypothesis suggests that our results should be stronger for larger banks

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

that are systemically more important. However, we find that the documented effects are concentrated in smaller banks. Our findings seem consistent with the greater influence of state governors on smaller banks who possess less bargaining power vis a vis state regulators. Lastly, we study whether banks' political connections can affect political influence on banks' behavior. Using a measure of banks' political connection following Kostovetsky (2015), we find that our results remain robust after controlling for it.

Most relevant is the empirical literature on the influence of politics on bank lending (see, e.g., Brown and Dinc 2005 and Khwaja and Mian 2005). We discuss this in more detail in the next section.

One marginal contribution of our paper is documenting a link between government influence on bank credit allocation and the bank's response to this—lowering its capital ratio. Moreover, our analysis also illuminates how political influence induces changes in bank lending and affects bank performance. Because bank capital and lending play key roles in determining safety and soundness, our analysis sheds light on how the interplay between politics and banking—which may be engendered by the desire to use banks to address important social problems—has potential ramifications for banking risk through the credit-allocation channel.

This result notwithstanding, we cannot make welfare statements, because we do not know what motivates politicians to influence credit allocation. It could well enhance social welfare, say, because of enhanced consumption from better access to individual loans, or the potential welfare gains from reducing distributional inequalities in bank credit.[9] That is, we cannot view bank performance and risk as the sole determinants of social welfare, especially in light of the earlier-mentioned evidence of the role of expanded bank credit in reducing income inequality. On the other hand, it is also possible that political motives may be driven more by the self-interest of politicians than by social welfare. That is, the analysis implies a trade-off between higher welfare because of higher household consumption and the lower welfare because of reduced safety and soundness.

2. The Related Literature

2.1. The Influence of Politics on Banking

It is well known that politicians try to influence economic outcomes—like employment, bank bailouts, etc.—for political gain (see, e.g., Nordhaus 1975, Lindbeck and Weibull 1987, Rogoff 1990, Faccio et al. 2006). Cohen et al. (2011) provided evidence that federal funds allocated to sates have a "crowding out" effect, causally diminishing corporate investments and reducing overall employment.

The point that politicians may attempt to influence the credit allocation decisions of banks is even more compelling. See, for example, the theory in Thakor (2021) and the evidence in Pagano and Volpin (2001), Brown and Dinc (2005), Norden et al. (2021), Chu and Zhang (2022), and Lopez and Siegel (2023). Becker and Ivashina (2018) showed that European governments can pressure domestic banks to buy local sovereign debt through direct government ownership and government influence on banks' boards of directors. Such holdings of domestic government debt crowd out corporate lending by these banks. Braun and Raddatz (2010) examined international data to examine how frequently former high-ranking politicians become bank directors. At the country level, they showed that this connectedness is strongly negatively related to economic development, which is difficult to reconcile with a benign public-interest view of bank regulation. Related to this, numerous papers have documented that politicians in emerging markets use state-owned banks to achieve political goals, and this imposes costs on the economy. See, for example, Khwaja and Mian (2005) and Cole (2009).

This problem is not limited to government-owned banks or banks in emerging markets. Kane (forthcoming) and Rajan (2010) have highlighted the role of politics in U.S. banking regulation. Agarwal et al. (2014) documented that state and federal regulators in the United States implement identical rules differently and suggest (but do not test) that this may be explained by different degrees of political pressure on regulators. Liu and Ngo (2014) provided evidence suggesting strategic political manipulation of U.S. bank closures. Peek and Rosengren (2005) argued that the misallocation of credit in Japan during its economic crisis was due to the perverse incentive of a government faced with a growing budget deficit. Dinc (2005) examines banking data in many emerging markets and developed economies and finds strong evidence of political influence on bank lending. Iannotta et al. (2013) used cross-country data on large European banks to show that government-owned banks have higher operating risk than private banks and that this risk increases in election years; see Anginer et al. (2014) for similar results. Agarwal et al. (2012) provided evidence that the Community Reinvestment Act (CRA) led to riskier lending by U.S. banks. Shen and Lin (2012) provided evidence that sheds light on how politics affects bank performance and why government-owned banks underperform.[10] Their analysis shows that governments have numerous levers that they can pull to try and influence the lending policies of banks, so the credit-allocation decision analyzed in this paper is only one of those levers.

Perhaps the most extensive and historically compelling account of the manner in which politics affects the design of banking systems and the regulation of banks has been provided by Calomiris and Haber (2014). They studied centuries of bank regulation in many countries, most notably the United States and Canada, and argued that politics is an integral part of banking in all countries

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

and determines whether societies suffer repeated banking crises repeatedly (as in Argentina and the United States) or never (as in Canada). Their book provides a rich set of institutional facts that are consistent with and further illuminate the empirical evidence cited above.[11]

The existing literature thus provides empirical support and motivation for the assumption underlying our theory that the regulator may adopt formal regulations or less-formal regulatory practices—including jawboning—that pressure banks to make politically favored loans, which are riskier with lower expected payoffs. Such regulations are typically presented as seeking to correct distributional inequities because of credit-market frictions or simply to serve the broad political objective of expanded credit access. The recent research of Brei et al. (2018) supports the idea that politicians who wish to address income inequality may be interested in providing inducements to banks to expand credit supply to households. Moreover, these papers also provide evidence supporting our premise that state governors significantly influence banking outcomes (see, e.g., Liu and Ngo 2014).[12]

2.2. Politics and Banking: Democrats versus Republicans

Although both parties mix politics and banking, Democrats emphasize more the government's role in addressing distributional inequities through credit allocation. Dymski et al. (2015), liberal economists with views aligned with labor unions and Democrats, have viewed government influence over bank credit allocation as desirable and advocate how to do it. Levy (2006) and Sullivan (2009) pointed out the greater emphasis Democrats put on socioeconomic equality, with government-assisted expansion of credit availability to low-income and minority groups.

Perhaps the contrast between Republicans and Democrats on this issue is most starkly expressed in the debate over a bill proposed in 1975 by Rep. Henry Reuss (D-WI) that would have required the 200 largest U.S. banks to report to Congress how they were allocating credit. The bill was defeated in the House, and Rep. Chalmers Wylie (R-OH) said, "A rose by any name would smell just as sweet. This is a disguise for the beginning of a credit allocation system." Another important example is the Community Reinvestment Act that was signed into law by President Jimmy Carter (D) and strengthened substantially in 1995 during President Bill Clinton's (D) term, although it had bipartisan support; see Calomiris and Haber (2014) for more on this. Furthermore, in the aftermath of the 2007 – 2009 financial crisis, not only were banks that were accused of misdeeds required to pay fines by the Barack Obama administration, but they were also required to invest billions of dollars in new loans to low-income and minority neighborhoods. Republicans strongly disagreed with the notion that banks were to blame for the crisis and needed to be thus "punished."[13]

Getting banks to increase consumer credit is an important mechanism by which politicians can elevate wealth accumulation and household consumption in underserved groups, and doing this helps politicians address income and consumption inequality concerns. Empirical evidence that increased borrowing facilitates greater household consumption was provided by Jagannathan et al. (2013), who documented that per capita household consumption in the United States grew at a dramatically higher rate during 2001 – 2007 and was financed substantially by borrowing against home equity (see also Mian and Sufi 2014). Republicans and Democrats are divided on the government's role in this. Democrats have long advocated aggressive government intervention in the housing market to expand opportunities for minorities and low-income residents.[14] The architect of the 1992 bill that created "affordable housing" requirements on Fannie Mae and Freddie Mac was Rep. Barney Frank (D-MA). Under this law, these government-sponsored enterprises (GSEs) were required to have at least 30% of the loans they purchased to be those made to people at or below the median income in their communities.[15] This requirement was later raised to 50% under President Clinton (D). These legislative initiatives were not intended to increase total mortgage lending per se. Rather, they were intended to induce changes in the composition of lender portfolios, so a greater fraction of lending would be to underserved communities. Our study indeed provides important supporting evidence by showing that more mortgage lending by state banks goes to low-income borrowers following elections of Democrats (more details are in Section 6).

This approach to the government's role is also reflected in the *2016 Democratic Party Platform*:

> "Disparities in wealth cannot be solved by the free market alone, but instead, the federal government must play a role in eliminating systematic barriers to wealth accumulation for different racial groups and improving opportunities for people from all racial and ethnic backgrounds to build wealth."

In sharp contrast, the *2016 Republican Party Platform* stated:

> "We must scale back the federal role in the housing market … … We will end the government mandates that required Fannie Mae, Freddie Mac, and federally-insured banks to satisfy lending quotas to specific groups."

A noteworthy point is that, although politically favored loans may be positive-NPV projects for banks, the empirical evidence discussed earlier indicates that they tend to result in poorer loan performance and higher operating risks for banks.[16]

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

2.3. The Impact of Bank Capital on Bank Risk and Value

Our paper is also related to how bank capital affects bank risk and value. The previous theoretical literature includes Holmstrom and Tirole (1997) and Mehran and Thakor (2011). Peek and Rosengren (2005) provided evidence that (exogenous) negative shocks to capital reduce bank lending. Berger and Bouwman (2009) showed that large banks with higher capital create more liquidity, whereas Berger and Bouwman (2013) documented that banks with higher capital are more likely to survive financial crises and gain market share. Thakor's (2014) review of the literature concluded that higher bank capital, relative to current levels, will lower systemic risk and improve financial stability.

Our contribution to this literature is that we document the influence of politics on bank capital structure, which highlights a previously unexplored factor in the bank's capital structure decision. Moreover, we also show that this influence leads to effects on bank loan quality and performance that are consistent with the predictions of the theories discussed above.

3. Hypotheses Development

To provide a theoretical foundation for the main hypotheses we test, we present a simple model of political influence on bank credit allocation with endogenous bank capital structure. To conserve space, this model is presented in Online Appendix I; we discuss the main intuition here.

Our main hypothesis is that the influence of politics on banks' credit allocation can trigger an optimal response of the banks in their capital decisions. Specifically, politics often influences credit allocation ostensibly to improve social welfare, but this might not be profit-maximizing for banks. Even if the politically favored loans are positive NPV for banks, if banks view themselves as capacity constrained (i.e., there is some optimal finite size at which the bank chooses to operate), then these loans may not be preferred by the bank because there are other loans that are more profitable and allow the bank to reach its desired asset portfolio size. If credit-allocation pressure exposes banks to greater risk and lower profits, then they will have an incentive to reduce the probability of being subjected to such pressure. Banks that recognize that, in addition to their desire to influence bank credit allocation, politicians also care about the safety and soundness of banks will then want to increase their own fragility in order to make it less attractive for politicians to impose credit-allocation pressure that imperils banks further. One salient way to increase fragility is to reduce the bank's capital ratio. Thus, there will be an incentive for banks to lower their capital levels when they anticipate greater credit-allocation political pressure.[17] This (formally, Proposition 4 of the model) leads to the following.

Hypothesis 1. *The greater the political pressure banks anticipate to make politically favored loans, the more they will reduce their capital.*

The null hypothesis is that potential political influence on credit allocation is not significant enough to affect banks' capital structure decisions.

Our theoretical analysis also shows that the probability that banks will be pressured to make politically favored loans is positive despite the lower bank capital choice. This happens because there is ex ante uncertainty—at the time the bank chooses its capital ratio—about the value that politicians will assign to politically favored loans; that is, the politician's trade-off between the social/political value of some forms of lending and the cost of increased bank fragility is uncertain ex ante for the bank. This means that when the bank chooses a particular capital ratio, it cannot be certain that it will not be pressured to make a politically favored loan. Because any choice of capital ratio intended to reduce the likelihood of credit-allocation pressure distorts the bank's choice away from the unconstrained capital structure optimum, the bank trades off this distortion against the probability of being subject to credit-allocation pressure. Consequently, in equilibrium the bank chooses a capital ratio that reduces, but does not eliminate, the probability of credit-allocation pressure. This implies that more politically favored loans will be made on average in the presence of greater political influence. This leads to the following.

Hypothesis 2. *Banks subject to greater political pressure will make more politically favored loans.*

However, making these loans will adversely affect bank performance. The reason is that we assume that banks are profit-maximizing and are capacity-constrained, so any pressure to make lower-profitability loans comes at the expense of more profitable loans.[18] This leads to the following.

Hypothesis 3. *Banks subject to greater political pressure will exhibit poorer performance.*

4. Data and Empirical Methodology

In this section, we describe the data, the summary statistics, and the empirical methodology used.

4.1. Nature of Political Influence and Its Empirical Proxy

Testing the three predictions discussed above requires an empirical proxy for political influence. Our proxy is the outcome of state gubernatorial elections. Specifically, we instrument for the pending political influence on banks in a given state with the political ideology of the party to which the winner in the state gubernatorial election belongs. We focus on state governors because of their greater influence on policymaking and regulations

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

than other state rule makers, like senators. We also examine the impact of the potential interaction between state governors and senators.

As discussed earlier, because the Democratic Party puts greater emphasis on government regulation in the pursuit of socioeconomic goals, we expect banks to be more likely to allocate credit to politically favored sectors when a Democrat wins the gubernatorial election than when a Republican does. We note that governors with a given party affiliation may have different views and policies, and hence, they may not be monolithic. However, our empirical identifications (explained below) exploit the difference between Democrats and Republicans within a state; this diminishes the concern about potential differences between governors in the same political party for our study. We exclude from our analysis cases where either the predecessor governor or the winning governor (or both) is an Independent because of the ambiguity about their political ideology.

Our analysis focuses on state-chartered commercial banks in all states of the United States. Under the dual banking system in the United States, banks can choose between a federal charter issued by the Office of the Comptroller of the Currency (OCC) and a state charter issued by a state government. The choice of charter determines the supervisor of a bank. For federally chartered banks, OCC is the primary regulatory and supervisory authority. For state-chartered banks, they are regulated and supervised jointly by their state chartering authority and a federal regulator. A state-chartered bank's membership in the Federal Reserve System determines its federal regulator. Specifically, the Fed regulates state member banks (SMBs), and the FDIC regulates nonmember banks (NMBs).[19] Although enforcement cooperation between state and federal regulators—depending on interagency agreements—is the norm in monitoring state-chartered banks, federal regulators often rely on information from state regulators, who have a local informational advantage relative to federal regulators, to reduce regulatory and supervisory costs. For example, for the key "safety and soundness" bank examinations that culminate in the assignment of CAMELS ratings,[20] in the 1970s the FDIC began the experiment of having these examinations alternate between state banking departments and FDIC examiners. The Fed followed suit in the early 1980s. The exam-alternating policies were more standardized in the 1990s (see Agarwal et al. 2014 for more details). CAMELS ratings are a key input in many regulatory decisions, such as licensing, branching, and merger approvals. State banking departments thus significantly influence federal regulators when it comes to state banks and are consequently significant in the regulation and supervision of state-chartered banks.

This implies that state governors can influence state-chartered banks through appointments of the state banking department heads and other personnel as well as their influence on regulatory policymaking. More generally, as discussed earlier, although political influence can be exerted formally (e.g., through legislations or direct guidance), it is more often indirect, informal, or implicit. We next present evidence of the various ways in which this influence manifests itself in practice.

4.1.1. Evidence on Personnel Appointments. First, we examine whether Democratic governors have a stronger preference than Republican governors to appoint state banking department heads who share their political ideology. Specifically, for each state, we manually search the personnel information of its banking department from its website. For many states, information of only the current officers is available, with no information of the past officers. Out of the 304 gubernatorial elections in our sample (to be discussed below in Section 4.1), we found information of banking department heads for 69 Democratic and 76 Republican governors in 21 states during the sample period. The archived information includes the banking department heads' names, titles, dates of appointment, and dates of end of service. There is heterogeneity across states in the names of their banking departments and the titles of their heads. For convenience, we take the mostly adopted title "Commissioner" for all the heads. During the terms of the 69 Democratic and 76 Republican governors, there were 114 and 140 commissioners, respectively.[21]

We next follow the literature (see, e.g., Lee et al. 2014) to identify the commissioners' political orientation using their political campaign donation records from the Federal Election Commission (FEC).[22] Among the 73 (90) commissioners under Democratic (Republican) governors for whom we can find donation records, 50 (47) exhibit Democratic (Republican) orientation. That is, 68.5% of commissioners under Democratic governors are perfectly aligned in political orientation with their governors, whereas this number is 52.2% for Republican governors. Because the tenure of a commissioner can span multiple governors, we further investigate those commissioners who were appointed by incumbent governors. The finding is even more striking; 78.8% of commissioners appointed by incumbent Democratic governors are Democrats, whereas only 20% of those appointed by Republican governors are Republicans, with the affiliations inferred from political donations.[23] The evidence appears to be consistent with Democratic governors' stronger preference to influence state banks through appointments of the state banking department heads. Our finding echoes Becker and Ivashina (2018), who found that European governments have pressured banks for politically motived lending through their influence on banks' boards of directors.

4.1.2. Evidence on State Regulation of Banks. Second, the influence of politics on regulatory policymaking, as

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

documented in previous research (Section 2), can be underpinned by local political interests (e.g., as in Agarwal et al. 2014). Consistent with this, we find that the laxity of state regulators relative to federal regulators is greater under Democratic governors than Republicans.[24] Specifically, we regress the state-level federal-state spread in CAMELS (reported in Figure IV in Agarwal et al. 2014) for the period of 1996 – 2011 on an indicator of Democratic governors, state characteristics that include GDP, GDP growth, and the unemployment rate, as well as aggregate bank characteristics such as bank equity, loan loss allowance, and nonperformance loan ratio.[25] In results tabulated in Table 1.A.1 of the Online Appendix, we find that the coefficients on the Democratic indicator are significantly positive in both Columns (1) and (2) for the full sample of all states.

We note that the state-level federal-state spread is time invariant, but in many states the governorship switched parties during the sample period, which may introduce noise in the estimated effect of Democratic governors. To address this, we repeat the regressions in Columns (3) and (4) of Table 1.A.1 for the subsample of states that had not experienced any change in the ruling gubernatorial party throughout the period. The estimated effect of Democratic governors for this subsample cleanly identifies the difference between Democratic and Republican governors in terms of their impact on the laxity of state regulators. We find that the effect of Democratic governors is not only statistically significant but also substantially larger in economic magnitude than that estimated from the full sample. The estimated coefficients on the Democratic indicator in Columns (3) and (4) are about five times as large as those in Columns (1) and (2).

The economic significance of such political influence is underscored by the fact that state-chartered banks account for 70% of all U.S. commercial banks and more than 27% of total commercial bank assets, with state chartering still the most common form of chartering for new banks. Of course, such state-level influence is unlikely to have a material impact on federally chartered banks because they are regulated by the OCC, and they enjoy preemption from certain state laws as a special feature of the dual banking system. Therefore, we examine whether state-chartered banks reduce their capital ratios and exhibit an increase in politically favored lending and poorer performance in the years that follow a Democrat being elected governor in that state, relative to the election of a Republican.

4.1.3. Evidence of Other Formal and Informal Political Influence. Lastly, we present evidence of other formal and informal political influence. It can be exerted in three ways: (i) formally, in the form of legislations; (ii) non-legislatively, through guidance; and (iii) informally, through the expression of opinions. For examples of influence through formal legislative changes, see House Bill 5194 signed into law by Gov. J. B. Pritzker (D) of Illinois in 2022 and a similar program in New York that has been active since 1997, both aiming for the creation of bank branches in underserved communities and the increase of new credit to underserved households, as well as House Bill 132 signed by Gov. Michelle Lujan Grisham (D) of New Mexico that reforms predatory lending.

For examples of non-legislative political influence through guidance, see the guidance to all state banks, announced by Gov. Kathy Hochul (D) of New York on April 15, 2022, to expand access to low-cost bank accounts for New Yorkers. Gov. Hochul also issued guidance on September 26, 2022, to all state banks, calling on them to support residents of Puerto Rico in the aftermath of Hurricane Fiona, including waiving ATM and late fees, increasing ATM withdrawal limits, and facilitating and expediting the transmission of funds. As another example of direct guidance, see also the PA CARE package launched by Pennsylvania on March 30, 2020, a voluntary consumer-relief initiative urging lenders to offer additional financial support to people across the Commonwealth.

In addition to this, and possibly more frequently, the third form of political influence manifests itself in rather indirect, informal, or implicit ways. By its very nature, neither banks nor their regulators (or politicians) would record it in traceable form. Hence, as acknowledged by Becker and Ivashina (2018), some government pressure "might be too subtle to capture with standard types of data." Nevertheless, we present some anecdotal evidence of the ways in which implicit pressure is exerted on state banks through either voice, actions, or both.[26]

First, regulators do not have to issue direct guidance to banks but can just make public announcements and also entertain proposals that reflect dissatisfaction with banks' minority lending. For example, in a few states, lawmakers, government administrations, and activists have been pushing for establishing state-owned banks, arguing that private banks do not serve minorities well. These are examples of pressure/implicit threats to banks that either banks lend more to disadvantaged groups or some alternatives will be created to compete with banks. In Democrat-controlled states, such voices are likely to be more credible with banks because the Democratic party platform supports these initiatives, as we have discussed earlier.

Second, government officials can attend events that honor some banks for their contribution to local economy and underserved communities. They can also form a public-private partnership by setting up special funds jointly with some banks, which provide low-interest loans to small businesses and nonprofits, particularly in those low-income communities. Events (and the politicians' remarks during them) and special loan programs of this kind speak loudly to banks.

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

Third, some state politicians may simply express their opinions on social media to promote financial inclusiveness and call for more loan access for minority groups. These will be heard by local banks that are subject to state regulation in the states these politicians operate in.

For brevity, details of the above examples are presented in the Online Appendix II with Section A for formal legislations, Section B for direct guidance, and Section C for implicit pressure.

4.2. Data and Descriptive Statistics

4.2.1. Data. We collect the results of gubernatorial and senate elections during 1990–2012 from the Federal Election Committee (FEC) website, the National Governors Association (NGA) website, and media sources like *The Washington Post*. Our sample period starts in 1990 because detailed data on election results such as voting margins first became available only then, and it ends in 2012 to ensure that bank data are available in the postelection three-year period. Bank financial statement data are from Reports of Condition and Income (Call Reports). For every gubernatorial election state-year during the sample period, we obtain year-end (from December CALL) capital structure, annual cash dividends, net stock sale, loan growth, loan loss allowance, operating income, net income, and other accounting information of all commercial banks chartered in the state for the seven-year window [−3, +3] around the election year 0. We require information on a bank's book value of equity, book value of total assets, operating income, and net income in the year to be available for a bank-year observation to be included in the sample. Data on bank branching are from the FDIC, and data on mortgage applications and originations since 1998 are from the Home Mortgage Disclosure Act (HMDA) data set.[27] We focus on conventional loans that banks have the greatest discretions over.[28] We merge the HMDA data with Call Reports using lender identity. Those unmatched banks from the HMDA data set are manually matched using the bank's name and location. All variable definitions are in the Appendix.

4.2.2. Summary Statistics. Table 1 presents the distribution of gubernatorial elections (Panel A) and summary statistics of bank and state characteristics as of the year prior to gubernatorial elections (Panel B). To reduce the impact of outliers, all bank-level continuous variables, except those for which we take the natural logarithm of the variable, are winsorized at the first and 99th percentiles. As shown in the left part of Table 1, Panel A, there are totally 304 elections, 140 won by Democrats and 164 by Republicans during 1990–2012.[29] The average (median) vote margin (the difference in the percentage of votes won by the winning candidate and by the losing candidate) is 17% (14.5%).

Our sample consists of 11,709 state-chartered commercial banks and 40,913 bank-years as of the year prior to gubernatorial elections. As presented in Table 1, Panel B, the average capital ratio (*book equity*) of sample banks is around 10%, whereas the median is 9.2%. On average, the annual ratio of total cash dividend payment to prior-year-end total assets (*dividend*) for sample banks is 0.005, whereas the annual *ROA* and *earnings* (the ratios of net income and operating income to prior-year-end total assets, respectively) are 0.009 and 0.082, respectively. The average (median) ratios of loan loss allowance and provision to total loans are 0.016 (0.013) and 0.006 (0.003), respectively. Sample banks, on average, have experienced a growth in loans at a rate of 9.6% but a decrease in ROA (*ROA growth*) and earnings (*earnings growth*). The amounts of net stock sale in sample banks are skewed, and thus an indicator variable (*stock sale*) is created, with −1 indicating a negative net stock sale (stock repurchase), 1 indicating a positive net stock sale, and 0 otherwise. The positive average *stock sale* of 0.049 suggests that the average sample bank has a net stock sale. Lastly, the median sample bank is rated as "satisfactory" in the CRA rating (rating = 2).

4.2.3. Time Series of Bank Equity. Figure 1 plots the time series behavior of the annual average *book equity* of sample banks for the seven-year window [−3, +3] around gubernatorial elections in year 0, in which one plot pertains to banks in states in which Democrats won and the other plot pertains to banks in states in which Republicans won. For New Hampshire and Vermont, where the governor's term is two years, we limit the examination window to three years [−1, +1].[30] Although both groups exhibit slight upward trends in book equity over time that are consistent with the secular upward trend in bank equity ratios during this time, the noteworthy point is that the parallel trends assumption over the [−3, 0] time period is satisfied for the two groups, with a sharp divergence after year 0. In the postelection period, the equity ratios of banks in Republican states experience an increase that far exceeds the increase in Democratic states. We will conduct a more rigorous regression analysis below that accounts for various factors related to bank capital decisions. In all the regressions, we include calendar year fixed effects to control for the secular time trend in bank equity.

4.3. Empirical Methodology

4.3.1. Difference-in-Difference Regressions. To formally examine the impact of potential influence under governors of different parties, we first build a panel of bank election years for the six-year window [−3, +3] around each gubernatorial election and run OLS regressions based on the following difference-in-difference

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

Table 1. Summary Statistics

Panel A: Gubernatorial elections

	All elections			
Election year	No. of elections	No. of elections Democrats won	Vote margin (mean)	Vote margin (median)
1990	34	19	0.163	0.140
1991	3	2	0.183	0.223
1992	12	8	0.193	0.173
1993	2	0	0.092	0.092
1994	33	10	0.177	0.146
1995	3	1	0.134	0.111
1996	11	7	0.276	0.177
1997	2	0	0.071	0.071
1998	34	11	0.189	0.163
1999	3	2	0.241	0.326
2000	11	8	0.098	0.101
2001	2	2	0.099	0.099
2002	34	13	0.113	0.080
2003	4	0	0.110	0.101
2004	11	5	0.132	0.077
2005	2	2	0.081	0.081
2006	36	20	0.191	0.164
2007	3	1	0.232	0.174
2008	11	7	0.308	0.329
2009	2	0	0.105	0.105
2010	36	13	0.149	0.123
2011	4	2	0.232	0.212
2012	11	7	0.162	0.121
Total	304	140	0.170	0.145

Panel B: State-chartered bank characteristics and state characteristics as of the year prior to gubernatorial elections

	Mean	Median	Std	N
Assets (log)	11.26	11.13	1.308	40,913
Book equity	0.100	0.092	0.034	40,913
Dividend	0.005	0.003	0.006	40,332
Stock sale	0.049	0	0.276	22,554
ROA	0.009	0.011	0.01	40,913
ROA growth	−8.76 e-06	2.08 e-06	0.008	40,913
Earnings	0.082	0.081	0.024	40,913
Earnings growth	−0.04	−0.03	0.184	40,903
Loan loss allowance	0.016	0.013	0.009	40,727
Loan loss provision	0.006	0.003	0.01	40,719
Loan growth	0.096	0.067	0.182	40,728
Branching (%)	35	0	43.40	25,920
Mortgage application (%)	22.61	20	18.33	7,947
Mortgage size (%)	13.99	9.64	15.73	6,564
CRA rating	1.888	2	0.416	7,268
State GDP(log)	12.04	12.05	1.01	40,913
State GDP growth	0.045	0.049	0.033	40,913
State unemployment rate	5.64	5.30	1.837	40,913

Notes. Descriptive statistics for the sample. Panel A presents the distribution of gubernatorial elections from 1990 to 2012. Panel B presents the summary statistics of the sample state-chartered commercial banks in the year end prior to gubernatorial elections. All variables are defined in the Appendix.

(DID) specification,

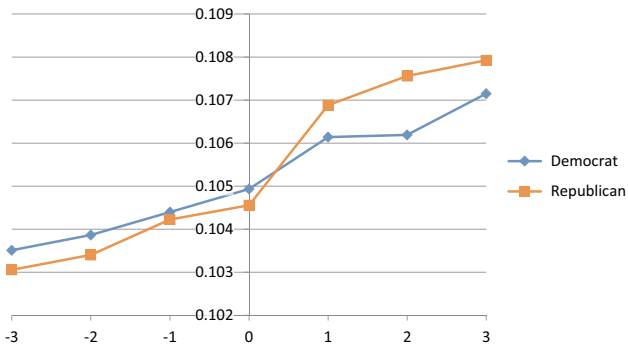
$$Y_{iet} = \beta_0 + \beta_1 After_{et} + \beta_2 After_{et} * Democrat_e + \beta_3 X_{it-1} + \beta_4 S_{jt-1} + \mu_i + \mu_e + \mu_t + \epsilon_{iet}, \tag{1}$$

where subscript i denotes the state bank, subscript e denotes the election in state j where state bank i is located, and subscript t denotes the year in the six-year window [−3, +3] around gubernatorial election e.[31] To avoid the potential confounding impact of elections, we exclude the election year 0 from the analysis. Y_{iet} represents bank capital and lending behavior as well as outcome variables such as banks' CRA ratings and earnings that we examine in more detailed analyses that follow. $After_{et}$ is a dummy that equals one if year t is in the

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

Figure 1. (Color online) Yearly Plot of Average Equity Ratios of State-Chartered Banks in Democratic States versus Republican States Around Gubernatorial Elections



Notes. This figure plots the time-series of the annual average *book equity* of sample banks for the seven-year window [−3, +3] around gubernatorial elections in year 0. One plot pertains to banks in states in which Democrats won, and the other plot pertains to banks in states in which Republicans won.

postelection-e year window [+1, +3] and zero if it is in the pre-election-e year window [−3, −1]. $Democrat_e$ is a dummy that equals one if a Democrat candidate wins gubernatorial election e and zero otherwise. We estimate the regressions with bank (μ_i) and election (μ_e) fixed effects to eliminate the possible impact on Y_{iet} of any time-invariant bank-specific characteristics and unobserved heterogeneities across elections, respectively. In addition, we include year fixed effects (μ_t) to account for the potential time trend in Y_{iet} and cluster robust standard errors at the bank level. Therefore, the DID coefficient β_2 captures the effect of a Democratic governor on Y_{iet} relative to the effect of a Republican governor in the three years after the election compared with the three years before the election.[32]

One concern is that the three-year postelection window [+1, +3] may not be long enough to fully capture the effect of governors and their political influence. Although this concern is legitimate, its main impact should be to create a bias against us finding significant results. Moreover, as discussed in Section 5.4, we use loan loss allowances (a bank's estimate of loan losses expected at the time of loan origination), rather than actual loan charge-offs, as an ex ante measure of loan quality. This should partially alleviate the concern. Lastly, note that the decline in bank earnings on these regulation-motivated loans may also be underestimated.

We include two sets of time-varying control variables, one at the bank level (X_{it-1}) and the other at the state level (S_{jt-1}). The first, which varies depending on Y_{iet}, will be explained in individual regressions later. The latter includes *state GDP* (in natural logarithm), *state GDP growth rate*, and *state unemployment rate*, which help to control for differing levels of economic development in different states.

4.3.2. Regression Discontinuity Design. Election outcomes are not exogenous because the assignment to treatment (a Democratic governor being elected) versus control (a Republican governor being elected) groups may not be random. Unobservables (e.g., economic uncertainty in a state that shifts public opinion) that affect an election outcome may also affect banks' decisions and performance, causing our estimates to be biased. The inclusion of election fixed effects can mitigate this issue if the unobservables are time invariant throughout the six-year window around an election. We further address this concern with three identification strategies, the one discussed below and the other two in Section 7.

The function that assigns a state to treatment is discontinuous at the winning vote threshold in elections. This allows us to use a regression discontinuity (RD) design to clearly identify the treatment effect. Intuitively, the estimation exploits the discontinuity in election outcomes at the vote threshold and tests for discontinuities in banks' decisions and performance around this threshold. In other words, the assignment of an individual state to be treated is assumed to be random around the winning vote threshold (also see Lee 2008). The underlying assumption that generates the local random assignment result is that relevant actors do not have precise control over the election results, although imprecise influence is allowed (Lee and Lemieux 2010). Eggers et al. (2015) examined a wide variety of electoral settings, including statewide elections in the Unites States, and concluded that the assumptions behind the RD design were satisfied.

Our RD estimation is based on the empirical model

$$Y_{iet} = \beta_0 + \beta_1 Democrat_e + \sum_{n=1}^{N} \delta_{nw}(VM_e)^n + \sum_{n=1}^{N} \delta_{nl}(-VM_e)^n + \beta_2 X_{it-1} + \beta_3 S_{jt-1} + \mu_t + \epsilon_{iet}, \quad (2)$$

where subscript i denotes the state bank, subscript e denotes the election in state j where state bank i is located, and subscript t denotes the year in the three-year window [+1, +3] following gubernatorial election e. The dependent variable Y_{iet} and $Democrat_e$ as well as other explanatory variables X_{it-1} and S_{jt-1} are the same as in the model specification (1). In addition, we include an indicator variable, $Predecessor_e$, which equals one if the predecessor governor for election e is a Democrat and zero otherwise. This should allow us to identify the effect of the potential change in regulation brought by the change in the governor's political party. We also include calendar year fixed effects (μ_t) as before. We do not include bank fixed effects here, because including individual fixed effects is not necessary for identification

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

in an RD design (Lee and Lemieux 2010).[33] Instead, following Lee and Lemieux (2010), we account for within-bank correlation of the errors over time using clustered standard errors.

We control for the vote margin of an election (VM_e) with a high-order polynomial. We also allow for a different polynomial for observations on the winning side (w) and on the losing side (l) for Democratic candidates. As our benchmark, we restrict our sample to elections with a vote margin not greater than 0.2. Note that this sampling choice deals with the classic trade-off between noise and potential bias in fitting observations far from the winning vote threshold while estimating the discontinuities in Y_{iet} around the threshold. We also show the robustness to varying the size of our sample by increasing vote margins to fit more observations (results not tabulated for brevity). The parameter of main interest, β_1, is a consistent estimate of the effect of a Democratic governor being elected, that is, how elected Democratic governors affect banks differently from Republican governors.

5. The Effect of Politics on Bank Capital Decisions

5.1. Bank Capital

5.1.1. Empirical Support for Hypothesis 1. Table 2 shows the DID (Panel A) and RD (Panel B) analyses results that are consistent with Hypothesis 1 about the impact of political influence on bank capital. We start with banks' capital structure decisions and then discuss the channels through which banks change their capital structure. Model (1) of Panel A in Table 2 presents the main result estimated with the DID model using Specification (1), where the dependent variable is *book equity* (note that the level of it in all regressions throughout the paper is multiplied by 100 to scale up the estimated coefficients on the independent variables). The reported DID coefficient β_2 is negative and statistically significant. It suggests that banks reduce equity in response to the election of a Democratic governor. To gauge the economic magnitudes of these within-bank estimates, it is important to account for the within-bank low variation in its equity level for a bank. Specifically, the relative reduction is about 3.07% of the within-bank standard deviation of bank equity or, in absolute term, amounts to about 70.8% of the annual growth in the level of equity for the median bank.[34]

Models (1) and (2) of Panel B in Table 2 present the results of the RD estimation for *book equity* using Specification (2) with the polynomial in the vote margin of order two and three, respectively. They are consistent with the results of the DID analysis in Model (1) of Panel A in Table 2. Note that in the RD estimation throughout the paper, we include all control variables as in the corresponding DID regressions, but for brevity, we report the estimated coefficient β_1 on $Democrat_e$ only. The estimated coefficients β_1 are negative and statistically significant in both models, indicating that banks reduce their capital ratio following a Democratic candidate's victory in a close election as compared with a Republican's victory. The impact is also economically substantial; based on Model (2), the reduction in bank capital is more than one-third of the within-bank standard deviation of bank equity or, in absolute terms, amounts to about 8.2 times of the annual growth in the level of equity for the median bank in the sample. Note that the estimated coefficients in the RD estimation (in absolute terms) are much larger than those in the DID estimation. This indicates that unobserved omitted factors that affect both election outcomes and bank capital decisions may be biasing our DID estimates downward, and our RD estimates are more appropriate in gauging the economic magnitudes of political impact.

In examining banks' capital structure decisions, we control for the following bank characteristics: size (*asset(log)*), profitability measured by net income (*ROA*), and growth in profitability (*ROA growth*). The results show that *ROA* contributes positively to bank capital, whereas banks with higher *ROA growth* appear to have lower capital. Furthermore, larger banks and banks in states with higher unemployment have lower capital ratios.

5.2. Capital Reduction Channels: Dividends and Share Repurchase

We next explore the channels through which banks reduce capital. Our hypothesis is that bank capital is reduced through payouts and not through asset expansion financed with additional borrowing.[35] Therefore, we examine whether banks are more likely to increase dividends and share repurchases following a Democratic governor being elected. We employ the same model Specification (1) while changing the dependent variable to *dividend* and *stock sale*. When *dividend* is the dependent variable, we estimate a partial adjustment model of dividends, which includes contemporaneous *earnings* and one-year lagged *dividend* as control variables, following Lintner (1956) and more recent studies (e.g., Skinner 2008 and Michaely and Roberts 2012). When *stock sale* is the dependent variable, we estimate an ordered logistic model with contemporaneous *earnings* and *earnings growth* as well as one-year lagged *assets* (in natural logarithm) as control variables. We use *earnings growth* to proxy for a bank's growth opportunities. Estimation with bank fixed effects in an ordered logistic model is not applicable, and thus we include state fixed effects in this case.

The results reported in the last two models of Panel A (DID) and the last four models in Panel B (RD) in Table 2 show that banks increase dividends and stock repurchases following the election of a Democratic governor. Specifically, in Model (2) of Panel A in Table on

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

Table 2. The Effect of Democratic Governors on Bank Capital Decisions

Panel A: Bank capital decisions (DID)

Variables	(1) Book equity	(2) Dividend	(3) Stock sale
After	0.037	−0.004	0.189**
	(1.363)	(−0.504)	(2.431)
After × Democratic	−0.046**	0.009**	−0.017
	(−2.005)	(2.400)	(−0.352)
ROA	44.464***		
	(19.898)		
ROA growth	−10.811***		
	(−7.329)		
Asset(log)	−0.961***		0.005
	(−17.020)		(0.206)
State GDP(log)	−0.419	0.120***	−0.561
	(−1.641)	(2.752)	(−1.075)
State GDP growth	−0.199	0.049	0.358
	(−0.659)	(0.601)	(0.426)
State unemployment	−0.037***	−0.002	0.034
	(−3.248)	(−1.022)	(1.403)
Earnings		0.049***	0.150***
		(23.455)	(12.329)
Prior-year dividends		26.690***	
		(42.326)	
Earnings growth			−5.437***
			(−4.840)
Observations	230,256	226,888	126,364
R^2	0.110	0.128	0.083
Bank FE	Yes	Yes	No
Election FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes

Panel B: Bank capital decisions (RD)

Variables	(1) Book equity	(2) Book equity	(3) Dividend	(4) Dividend	(5) Stock sale	(6) Stock sale
Democrat	−0.351***	−0.532***	0.037***	0.048***	−0.352**	−0.046
	(−3.302)	(−3.905)	(3.909)	(3.924)	(−2.453)	(−0.251)
Observations	81,014	81,014	80,018	80,018	35,926	35,926
R^2	0.099	0.099	0.364	0.364	0.046	0.047
Vote margin	0.2	0.2	0.2	0.2	0.2	0.2
Polynomial order	2	3	2	3	2	3
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes. This table presents results of regressions that examine the effect of Democratic governors on bank capital. The dependent variables are indicated on the top of each column, and both *book equity* and *dividend* are multiplied by 100. In Panel A (DID regressions), the sample includes all state-chartered commercial banks in the three years prior to gubernatorial elections and in the three years after gubernatorial elections during 1990−2012. In Columns (1) and (2) linear regressions are run, whereas in Column (3) an ordered logistic regression is run. In Panel B, estimations are done in a regression discontinuity (RD) design for a subsample of banks in states that hold gubernatorial elections with a winning vote margin within 20%, which includes all state commercial banks in the three years after those elections during 1990−2012. The first four models are estimated with OLS regressions in which *book equity* and *dividend* are the dependent variables, respectively, and the last two with ordered logistic regressions in which *stock sale* is the dependent variable. All variables are defined as in the Appendix. Robust standard errors are clustered at the bank level, and t-statistics are reported in parentheses.

*Significance at 10%; **significance at 5%; ***significance at 1%.

dividend (note that the level of it in all regressions throughout the paper is multiplied by 100 to scale up the estimated coefficients on the independent variables), the DID coefficient β_2 is positive and significant. The finding suggests that banks increase dividends following the election of a Democratic governor. In economic magnitudes, the DID coefficient is 3% of the dividends paid by the median bank as of the year prior to election. The within-bank increase in dividends is noteworthy because the median bank experiences no change in annual dividends during the sample period. As shown in Models (3) and (4) of Panel B in Table 2, the above finding continues to hold in the RD setting, and the economic magnitudes of the RD coefficient β_1 are much larger, as in the case of *book equity* discussed earlier. For example, in Model (4), the RD coefficient suggests that the

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

dividend increase by banks following a close election of a Democratic governor is 16% of the prior-year dividend paid by the median bank.

In Model (3) of Panel A (DID) in Table 2 on *stock sale*, we find that the DID coefficient β_2 has the expected negative sign, which suggests that banks are more likely to repurchase stock after a Democratic governor takes office, relative to a Republican governor taking office. Possibly because of little within-election variation in banks' stock activities, the coefficient is not statistically significant. Furthermore, data on stock sales are missing for many banks, resulting in a substantial reduction in the number of observations. However, in the RD setting as shown in Model (5) of Panel B in Table 2, the coefficient β_1 is negative and statistically significant, indicating that banks are more likely to repurchase stock following a close election of a Democratic governor.

In summary, the above results suggest that banks tend to reduce capital by increasing dividends and stock repurchases following a Democratic victory. And the findings from the RD setting suggest that the effect of a Democratic governor is causal.

5.3. The Impact of the State Legislature

In addition to the governor, the state legislature may also influence bank regulation. We now extend our analysis to examine how the gubernatorial impact on bank capital may depend on which party has the state senate majority. We focus on the Senate, rather than the House, for two reasons. First, it is empirically difficult to separate the impact of the Senate from that of the House when different parities hold the majorities in the two bodies. Second, (House) representatives serve for a much shorter term (two years) than senators (six years), so the Senate is a more stable and significant source of influence.

We divide the sample into two subsamples based on whether the senate has a Democratic majority in at least one of the three years following a gubernatorial election, the period in which we examine the impact of the governor on bank capital. We then repeat our benchmark DID analysis in Panel A of Table 2 on bank capital in these two subsamples. As for bank stock sales decision, we estimate with election and year fixed effects for bank equity and dividend decisions here too because of insufficient within-bank variations in shorter time series with bank fixed effects in the subsample analyses. We expect the effect of a Democratic governor on bank capital to be more pronounced in states where the Democrats have a Senate majority during the governor's tenure.

The results in Table 3 are consistent with this. In Models (1) and (2) on bank equity, the estimated DID coefficients β_2 are both significantly negative, indicating that banks reduce capital in a state in which a Democrat becomes governor, regardless of whether the Senate is also Democratic. However, it is more significant both economically and statistically in Model (2), so the reduction in bank capital is more pronounced in states with a Democratic governor and a Senate with a Democratic majority. In Models (3) and (4) in Table 3, we present evidence on dividends, and in Models (5) and (6) we present evidence on stock sales. We find that the estimated coefficients β_2 have consistent signs and are statistically significant (and also have substantially larger

Table 3. The Effect of Democratic Governors on Bank Capital Decisions in States with/Without Democratic Senates

Variables	(1) Non-democratic senate Book equity	(2) Democratic senate Book equity	(3) Non-democratic senate Dividend	(4) Democratic senate Dividend	(5) Non-democratic senate Stock sale	(6) Democratic senate Stock sale
After	0.005	0.084**	0.011	−0.012	0.080	0.276***
	(0.092)	(2.437)	(0.726)	(−1.136)	(0.676)	(2.861)
After × Democratic	−0.093**	−0.114***	−0.003	0.016***	0.127	−0.158**
	(−2.285)	(−3.585)	(−0.557)	(3.811)	(1.544)	(−2.536)
Observations	102,951	127,305	100,428	126,460	54,344	72,020
R^2	0.168	0.142	0.341	0.371	0.076	0.092
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Election FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes. This table presents results of regressions that examine the effect of Democratic governors on bank capital decisions in two subsamples of states with/without Democratic senates. The overall sample includes all state commercial banks in the three years prior to gubernatorial elections and in the three years after gubernatorial elections during 1990−2012. The subsample of states with Democratic senates (*Dem Senate*) is defined as those states that have Democratic senates in at least one of the three years following the gubernatorial elections, and the other subsample (*Non-Dem Senate*) is defined as the subsample of states without Democratic senates. OLS regressions are run in Models (1) to (4), with the dependent variable being *book equity* in the first two models and *dividend* in the last two models. Both *book equity* and *dividend* are multiplied by 100. Ordered logistic regressions are run in Models (5) and (6), with the dependent variable being *stock sale*. Other bank-level and state-level control variables are also included as in Table 2, although their estimated coefficients are not reported. Robust standard errors are clustered at the bank level, and t-statistics are reported in parentheses.

*Significance at 10%; **significance at 5%; ***significance at 1%.

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

magnitudes compared with those in Table 2) only in the subsample of states in which there is a Democratic governor and a Democratic majority in the senate.

6. The Effect of Politics on Bank Lending Behavior and Performance

We now test Hypotheses 2 and 3. Specifically, we find that growth in politically favored loans, accompanied by bank branching in politically favored areas, is significantly higher in banks in Democratic states than in Republican states. These loans contribute to higher CRA ratings for these banks, consistent with banks serving socioeconomic goals more effectively. However, we find that banks making these loans experience higher expected losses and poorer operating performance. As further evidence of banks' resistance against (real or perceived) political influence, we show that state banks are more likely to switch to a national charter in Democratic states.

6.1. Test of Hypothesis 2: Growth in Politically Favored Loans

Panels A and B in Table 4 present the DID and RD regression results, respectively, of our main analysis of growth in different types of bank loans—mortgage, real estate, commercial and industrial (C&I), individual, and agricultural. For the convenience of interpretation, we multiply the dependent variable, growth in different types of loans, by 100, and thus it is in percentage. Political pressure based on correcting perceived distributional inequities is likely to be linked to addressing household consumption needs[36] rather than providing more corporate credit. Our hypothesis thus predicts an increase in individual loans but not in C&I loans in Democratic states.[37]

Consistent with this prediction, following a Democratic governor being elected, loans to individuals (e.g., credit cards) grow significantly as indicated by the positive and statistically significant coefficient β_2 in Model (4) of the DID analysis in Panel A in Table 4. Economically, the DID coefficient suggests that growth in individual loans in banks in Democratic states outpaces banks in Republican states by 0.52%. The same finding holds in the RD setting (Panel B), with a larger economic magnitude related to the impact of Democratic governors. There is also evidence that mortgages increase following a close election of a Democratic governor, as suggested by the significantly positive coefficient β_1 in Models (1) and (2) of the RD setting in Panel B of Table 4 (although it is not statistically significant in the DID analysis in Panel A). The DID analysis in Panel A also shows that real estate loans grow significantly in Democratic states, and this finding holds in Model (3) of the RD analysis.

In contrast, banks do not significantly change their commercial and industrial (C&I) loans in either Democratic or Republican states.[38] The difference in the relative change in this type of loan between banks in Democratic states and banks in Republican states is insignificant. Neither the estimated coefficient β_2 in Model (3) of Panel A nor the estimated coefficient β_1 in both Models (5) and (6) of Panel B in Table 4 is significant. Similar findings can be seen for agricultural loans.

Overall, our finding is consistent with the evidence on the impact of politics on consumer credit, especially for underserved households (see, for example, Antoniades and Calomiris 2016 and Chavaz and Rose 2019).[39] In explaining banks' lending decisions, we also control for bank characteristics that include size (*asset(log)*), bank capital (*book equity*), and bank financial health variables, all of which are measured as of the prior year end. Following the literature (e.g., Berger and Udell 2004), we use the level of reserve allocation for loan losses (loan loss allowance, or *LLA*) and return on equity (*ROE*) to measure bank financial health. *LLA*, also known as the reserve for loan losses, is a calculated reserve that banks establish to reflect the estimated credit risk associated with their loans. Specifically, it is an estimate of uncollectible amounts used to reduce the book value of loans and leases to the amount that a bank expects to collect. The higher the estimated risk of uncollectable assets in the portfolio, the larger the reserve and thus the lower the additional lending by the bank to risky borrowers. Ceteris paribus, it follows that financially stronger banks with higher capital are more capable of making risky loans. On the other hand, risk-seeking incentives may be stronger among financially weaker banks because of moral hazard.

Empirically, we find that loan growth is positively related to *book equity* and negatively related to *LLA* and *asset(log)* for all types of loans. Similar to the idea that loan demand is higher in larger economies and faster-growing economies, we find that growth in most types of loans is greater in states with higher GDP and lower unemployment.

6.2. Nature of the Elevated Lending

Next, we examine whether the increased credit supply is indeed in the form of the kinds of loans that would be politically favored. Our earlier analysis of individual loans indicates an answer in the affirmative, but we provide two further tests here. Both are in line with the idea that politicians will address income inequality by having banks expand lending to low-income households.

6.2.1. Test 1: Branching in Low-Income Counties. In association with politically favored lending, politics may encourage bank branching in politically favored areas. Gilje et al. (2016) demonstrated that banks that are exposed to exogenous liquidity windfalls increase their

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

Table 4. The Effect of Democratic Governors on Bank Loan Growth

Panel A: Growth in different types of bank loans (DID)

Variables	(1) Mortgage	(2) Real estate	(3) Commercial & industrial	(4) Individual	(5) Agriculture
After	−0.596	−1.032***	−0.163	0.223	−4.382**
	(−1.109)	(−2.590)	(−0.117)	(0.348)	(−2.362)
After × Democratic	0.353	0.969***	0.535	0.520*	−0.736
	(1.308)	(4.854)	(0.966)	(1.784)	(−0.952)
Asset(log)	−11.820***	−11.309***	−18.842***	−12.081***	−14.594***
	(−24.943)	(−28.888)	(−13.147)	(−22.215)	(−11.264)
Loan loss allowance	−243.965***	−282.245***	−85.028**	−220.021***	−271.370***
	(−11.205)	(−16.956)	(−1.987)	(−9.782)	(−5.255)
Book equity	117.718***	103.220***	115.128***	98.495***	48.270**
	(14.516)	(16.466)	(6.102)	(11.283)	(2.528)
ROE	0.632	2.905**	20.193***	7.028***	8.913
	(0.361)	(2.174)	(6.162)	(3.756)	(1.613)
State GDP(log)	21.795***	16.639***	17.367**	0.666	−6.268
	(7.353)	(7.250)	(2.366)	(0.212)	(−0.657)
State GDP growth	−7.727	5.985	8.246	17.904***	−4.856
	(−1.395)	(1.510)	(0.685)	(3.205)	(−0.291)
State unemployment	−2.258***	−2.083***	−1.590***	−1.801***	−0.955
	(−12.445)	(−15.931)	(−4.081)	(−9.418)	(−1.503)
Observations	224,560	225,840	122,904	225,311	161,651
R^2	0.061	0.098	0.028	0.055	0.008
Bank FE	Yes	Yes	Yes	Yes	Yes
Election FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes

Panel B: Growth in different types of bank loans (RD)

Variables	(1) Mortgage	(2) Mortgage	(3) Real estate	(4) Real estate	(5) Commercial & industrial	(6) Commercial & industrial	(7) Individual	(8) Individual	(9) Agriculture	(10) Agriculture
Democratic	2.849***	2.381***	3.156***	0.325	0.372	2.062	3.097***	2.438**	2.178	2.455
	(3.999)	(2.622)	(5.616)	(0.450)	(0.236)	(0.939)	(4.165)	(2.503)	(0.983)	(0.834)
Observations	79,805	79,805	80,180	80,180	35,351	35,351	79,964	79,964	55,975	55,975
R^2	0.030	0.030	0.056	0.057	0.028	0.029	0.030	0.030	0.005	0.005
Vote margin	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Polynomial order	2	3	2	3	2	3	2	3	2	3
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes. Panels A (difference-in-difference) and B (regression discontinuity design) present the results of regressions that examine the effect of Democratic governors on bank loan growth. The sample in Panel A includes all state commercial banks in the three years prior to gubernatorial elections and in the three years after gubernatorial elections during 1990–2012. Panel B is for a subsample of banks in states that hold gubernatorial elections with a winning vote margin within 20%, which includes all state commercial banks in the three years after those elections during 1990–2012. In both panels, growth in loans of different types (mortgage, real estate, commercial and industrial, individual, and agriculture), indicated at the top, is in percentage and regressed in different columns, respectively. For each type of loan, growth in loans is measured as the difference between current-year loans and the lagged one-year loans divided by the lagged one-year loans. All other variables are defined in the Appendix. Robust standard errors are clustered at the bank level in both panels, and t-statistics are reported in parentheses.

*Significance at 10%; **significance at 5%; ***significance at 1%.

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

mortgage lending only in counties where they have branches and only for hard-to-securitize mortgages. They conclude that branch networks continue to be important despite securitization. We expect that state banks are more likely to expand into underserved areas through branching following the election of Democrats.

Specifically, we examine the change in the proportion of a bank's branches in low-income counties in a state around elections. A county is defined to be low-income in a year if its per capita personal income falls below its median level in the year among all counties in the state. The results, reported in Table 5, show that banks increase the proportion of their branches in low-income counties after Democratic governors are elected. The coefficient β_2 in the DID analysis (Model (1) of Panel A in Table 5) is positive, albeit statistically insignificant. The coefficient β_1 in the RD setting in Models (2) of Panel B in Table 5 is significantly positive, and its economic magnitude suggests that the proportion of branches in low-income counties increases by 3.25% after a Democrat becomes governor in a close election. Such a change is noteworthy because the median bank experiences no change in this proportion over the sample period.

6.2.2. Test 2: CRA Ratings. Because the CRA seeks to address distributional inequities, it fits our notion of politically favored lending well. Evidence that the CRA ratings of banks improve when they lend more would suggest that these banks are making more loans that politicians endorse. Compared with our evidence on specific loan types and branching decisions discussed above, it is suggestive of banks' overall behavior.

The CRA, passed by Congress in 1977, encourages financial institutions to meet the credit needs of the communities in which they operate. Federal regulatory agencies conduct periodic onsite examinations of banks' compliance with the CRA, and a composite rating is determined (1 = Outstanding, 2 = Satisfactory, 3 = Needs to Improve, 4 = Substantial Noncompliance). Regulators consider the bank's CRA performance in evaluating its application for various activities, like opening new branches, relocating existing branches, mergers and consolidations, etc.

The CRA rating is based on three performance tests: (i) a lending test, (2) an investment test, and (3) a service test, with the lending test most heavily weighted in the composite rating (about two-thirds). As summarized by Agarwal et al. (2012), "Among the factors considered are the geographic distribution of lending, the distribution of lending across different borrower income groups, the extent of community development lending, and lending practices to address the credit needs of lower-income geographies (census tracts) or individuals."[40]

Because loans to low- and moderate-income neighborhoods under the CRA standards are also politically favored by Democratic governors, we expect the lending behavior of banks in Democratic states to be more CRA compliant, with consequently higher CRA ratings (lower rating scores) for banks. This is likely given our finding that banks in Democratic states increase individual loans and mortgages to low-income households as

Table 5. The Effect of Democratic Governors on the Nature of Bank Lending

Panel A: Nature of lending (DID)

Variables	(1) Branching	(2) CRA rating
After	0.591	0.024
	(1.424)	(1.552)
After × Democratic	0.303	−0.017**
	(1.022)	(−2.296)
ROA	−36.499**	−1.361***
	(−2.293)	(−2.931)
ROA growth	−14.092	0.921**
	(−1.255)	(2.192)
Asset(log)	−1.196**	−0.008
	(−2.472)	(−0.840)
State GDP(log)	5.091	0.110
	(1.593)	(1.362)
State GDP growth	5.268	−0.132
	(1.290)	(−0.936)
State unemployment	0.110	0.006
	(0.676)	(1.416)
Observations	167,011	47,084
R^2	0.012	0.084
Bank FE	Yes	Yes
Election FE	Yes	Yes
Year FE	Yes	Yes

Panel B: Nature of lending (RD)

Variables	(1) Branching	(2) Branching	(3) CRA Rating	(4) CRA Rating
Democrat	−0.364	3.245*	−0.066***	−0.025
	(−0.242)	(1.719)	(−3.535)	(−1.065)
Observations	64,665	64,665	17,686	17,686
R^2	0.052	0.053	0.067	0.068
Vote margin	0.2	0.2	0.2	0.2
Polynomial order	2	3	2	3
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

Notes. Panels A (difference-in-difference) and B (regression discontinuity design) present the results of regressions that examine the effect of Democratic governors on the nature of bank lending. The sample in Panel A includes all state commercial banks in the three years prior to gubernatorial elections and in the three years after gubernatorial elections during 1990 – 2012. Panel B is for a subsample of banks in states that hold gubernatorial elections with a winning vote margin within 20%, which includes all state commercial banks in the three years after those elections during 1990–2012. The dependent variables in each column are indicated at the top, where *branching* is the proportion of branches in low-income counties for a bank in the year and *CRA rating* is rating of a bank's CRA (Community Reinvestment Act) performance assigned at the regulator's examination: 1 = Outstanding, 2 = Satisfactory, 3 = Needs to Improve, 4 = Substantial Noncompliance. All other variables are defined in the Appendix. Robust standard errors are clustered at the bank level, and t-statistics are reported in parentheses.

*Significance at 10%; **significance at 5%; ***significance at 1%.

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

well as increase branching in low-income counties. Model (2) of Panel A in Table 5 reports the DID regression results of our direct test of this hypothesis. Consistent with our hypothesis, the CRA ratings of banks improve significantly in states in which Democratic governors are elected relative to those of banks in states in which Republican governors are elected. The coefficient β_2 is negative and statistically significant. The RD results presented in Models (3) and (4) of Panel B in Table 5 confirm the robustness of the finding from the DID analysis, with greater economic magnitudes of the impact of Democratic governors. The coefficient β_1 in Model (3) of Panel B in Table 5 is −0.066 and statistically significant, suggesting that the change in the CRA rating following a close election of Democratic governors is noteworthy given the low frequency of CRA examinations.[41] The review cycle for the majority of our sample banks is two years.[42] The sample in this test is small because CRA ratings are available only for FDIC-insured banks.

To summarize, the findings on CRA ratings echo those on the increase in politically favored loans made and branches set by banks in Democratic states. Taken together, these findings provide strong evidence supporting Hypothesis 2 that banks subject to political influence make more politically favored loans, and these loans enable higher household consumption.

6.3. Test of Hypothesis 3: Loan Quality

We now test our hypothesis that the newly created politically favored loans are riskier, with higher expected losses. Specifically, we examine the effect of a Democratic governor on the change in the bank's loan loss allowance (*LLA*). The change in *LLA* captures changes in loan quality because it "is arguably the best indicator of the status of problems in (a bank's) loan portfolio" (Berger and Udell 2004), and it is superior to other measures, such as net charge-offs (charge-offs net of recoveries) and ROE/ROA, in capturing estimated credit losses cleanly. Charge-offs typically occur late in the problem loan resolution process. This issue is particularly relevant in our test because actual charge-offs can occur well beyond our three-year postelection time window. Moreover, banks also vary in when they write off delinquent loans (see Walter 1991). Furthermore, ROE/ROA reflects bank profitability not only from lending but also from other activities and transactions.

Model (1) of Panel A and Models (1) and (2) of Panel B in Table 6 display the DID and RD regression results, respectively, on the effect of Democratic governors on the change in bank-level *LLA* that strongly support the prediction of our hypothesis (the dependent variable *LLA* is multiplied by 100, and so it is in percentage).[43] Banks allocate more loan loss reserves while increasing politically favored credit supply following the election of a Democratic governor. The increased loans made by banks in Democratic states thus have higher expected losses. This finding holds after controlling for contemporaneous loan growth (*loan growth*), which mitigates the concern that the change in *LLA* is a mechanical result of the change in loan growth. Specifically, in the DID

Table 6. The Effect of Democratic Governors on Loan Quality and Bank Performance

Panel A: Loan quality and bank performance (DID)

Variables	(1) LLA	(2) Earnings growth
After	−0.013*	0.501*
	(−1.752)	(1.683)
After × Democrat	0.035***	−0.454***
	(5.311)	(−3.982)
Asset(log)	−0.129***	−3.688***
	(−10.580)	(−18.146)
Loan growth	−0.883***	31.279***
	(−48.716)	(57.459)
State GDP(log)	−0.413***	−8.295***
	(−5.752)	(−5.969)
State GDP growth	0.336***	10.947***
	(3.698)	(4.087)
State unemployment	0.033***	0.476***
	(9.409)	(5.880)
Loan loss provision	30.431***	
	(57.851)	
Loan loss allowance		35.004***
		(3.697)
Observations	229,009	227,111
R^2	0.285	0.260
Bank FE	Yes	Yes
Election FE	Yes	Yes
Year FE	Yes	Yes

Panel B: Loan quality and bank performance (RD)

Variables	(1) LLA	(2) LLA	(3) Earnings growth	(4) Earnings growth
Democratic	0.210***	0.104***	−1.265***	−1.478***
	(8.329)	(3.248)	(−4.255)	(−3.741)
Observations	80,595	80,595	80,610	80,610
R^2	0.266	0.266	0.203	0.203
Vote margin	0.2	0.2	0.2	0.2
Polynomial order	2	3	2	3
Controls	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

Notes. Panels A (Diff-in-diff) and B (Regression discontinuity design) present results of regressions that examine the effect of Democrat governors on bank loan loss allowance and performance. The dependent variables in each column are indicated at the top, where *LLA* is the ratio of loan loss allowance to total loans (net of unearned income) and *Earnings growth* is the growth in earnings which is defined as the ratio of operating income to book value of total assets as of the prior year end. Both *LLA* and *Earnings growth* are multiplied by 100. The sample in Panel A includes all state commercial banks in the three years prior to gubernatorial elections and in the three years after gubernatorial elections during 1990–2012. Panel B is for a subsample of banks in states that hold gubernatorial elections with a winning vote margin within 20%, which includes all state commercial banks in the three years after those elections during 1990–2012. All other variables are defined in the Appendix. Robust standard errors are clustered at the bank level, and t-statistics are reported in parentheses.

*Significance at 10%; ***significance at 1%.

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

analysis, the estimated coefficient β_2 is positive and statistically significant. In the RD analysis, the estimated coefficient β_1 is positive and significant with a much larger economic magnitude than that in the DID analysis. Based on Model (1) of Panel B in Table 6, it is 0.21%, which amounts to more than 16% of the median *LLA* in the sample. Such an increase in *LLA* by banks in Democratic states is in sharp contrast to the annual average decrease in *LLA* of 0.0028% by sample banks. Not surprisingly, loan loss provisions (*LLP*) are positively related to *LLA* because they add to *LLA*. Overall, the results are consistent with Hypothesis 2 that the increased politically favored loans in Democratic states are riskier.

6.4. More on Hypothesis 3: Bank Performance

Hypothesis 3 states that the political-pressure-induced higher lending results in poorer bank performance. Because the vast majority of our sample banks are not publicly listed, a market-based valuation is not available. We thus examine how growth in banks' operating income (*earnings growth*) is affected by the election outcome.[44] Model (2) of Panel A and Models (3) and (4) of Panel B in Table 6 present the DID and RD regression results, respectively. Consistent with our prediction, banks suffer a relative decline in earnings growth following a Democratic governor being elected.

Specifically, in the DID analysis, the coefficient β_2 is negative and significant. The finding is robust in the RD analysis. To ease interpretation, the dependent variable is expressed as a percentage. Economically, as shown in Model (4) of Panel B in Table 6, *earnings growth* in banks in Democratic states declines by an annual rate of 1.48%.

6.5. Further Evidence on Banks' Attitude Toward Political Influence: Charter Switching

Our theoretical argument implies that political influence on lending will lower bank profits and hence, is not sought by banks. Although our evidence on banks' profitability and loan risk supports this, we investigate this further by examining how the chartering decisions of banks are related to political influence. Agarwal et al. (2014) called for future research to understand why some state banks switch to a national charter despite more lenient state supervision. As discussed in Section 4, we have tested and found that the laxity of state regulators relative to federal regulators is greater under Democratic governors than under Republican governors. Hence, if state banks are more likely to switch to a national charter after a Democrat is elected (despite his or her more lenient supervision), it is strongly suggestive that banks are averse to political influence on their lending. To test this, we pool bank-years of state-chartered banks and federally chartered banks and examine the impact of the election of Democratic governors on a state bank's decision to switch to a national charter, using Specification (1) for the DID analysis and Specification (2) for the RD analysis. The dependent variable, *federal charter*, is a dummy that equals one if a bank is federally chartered in a year and zero otherwise. We estimate using a linear probability model in both the DID analysis and the RD analysis; this permits the use of bank fixed effects in the DID specification.

The results are presented in Table 7, with Panel A for the DID analysis and Panel B for the RD analysis. Specifically, the DID coefficient β_2 is insignificant both economically and statistically. The RD coefficient β_1 is positive and highly significant in both models of Panel B in Table 7, suggesting that state banks are more likely to switch to a federal charter following the election of Democratic governors. The coefficient β_1 in Model (2) of Panel B in Table 7 suggests that the probability of a state bank switching to a federal charter increases by 0.12% under Democrats. The economic impact is substantial given that the unconditional probability of a state bank switching to a federal charter in a given year for our sample is only 0.88%.

Overall, our finding of the higher likelihood of charter switching by state banks under Democratic governors is consistent with state banks shielding themselves against political influence. It also provides a possible reason for the documented persistence of federal charters noted by Agarwal et al. (2014): the greater political pressure on state banks.

7. Robustness Checks and Discussions

In this section, we conduct two additional tests—a falsification test and a test based on a subsample of geographically proximate banks across state borders—to address the issue of the confounding effect of economic conditions (especially the unobservables) on both election outcomes and bank capital decisions. We also exploit the heterogeneity among state banks related to whether a bank operates in its home state only or in multiple states and examine their differing implications for the strength of political influence. We then complement the bank-level analyses of the growth in different types of loans in Section 6.1 with loan-level evidence on the impact of political influence on bank lending by focusing on a specific type of loan: home mortgages. We further discuss and test several alternative explanations for the decline in bank equity following the election of Democratic governors.

7.1. Falsification Test: Federally Chartered Banks

In this falsification test, we exploit the within-state differences in regulation pressures on different banks because of their chartering differences. Federally chartered banks headquartered in a given state are subject to the same observable and unobservable economic factors as the state banks in that state. However, as discussed earlier, federally chartered banks are regulated only by federal

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

Table 7. The Effect of Democratic Governors on Charter Switching by Banks

Panel A: Switching to federal charter (DID)

Variables	(1) Federal charter
After	−0.000
	(−0.334)
After × Democratic	−0.000
	(−0.431)
ROA	−0.353***
	(−4.298)
ROA growth	0.067
	(1.392)
Asset(log)	−0.005*
	(−1.696)
State GDP(log)	−0.031**
	(−2.413)
State GDP growth	0.009
	(0.744)
State unemployment	−0.001*
	(−1.652)
Observations	313,846
R^2	0.035
Bank FE	Yes
Election FE	Yes
Year FE	Yes

Panel B: Switching to federal charter (RD)

Variables	(1) Federal charter	(2) Federal charter
Democratic	0.094***	0.116***
	(8.607)	(8.332)
Observations	224,247	224,247
R^2	0.040	0.040
Vote margin	0.2	0.2
Polynomial order	2	3
Controls	Yes	Yes
Year FE	Yes	Yes

Notes. Panels A (difference-in-difference) and B (regression discontinuity design) present results of regressions that examine the effect of Democratic governors on banks' chartering decisions. The dependent variable is *federal charter*, a dummy that equals one if a bank is federally chartered in a year and zero otherwise. The sample in Panel A includes all state commercial banks in the three years prior to gubernatorial elections and in the three years after gubernatorial elections during 1990−2012. Panel B is for a subsample of banks in states that hold gubernatorial elections with a winning vote margin within 20%, which includes all state commercial banks in the three years after those elections during 1990−2012. In both panels, all other variables are defined in the Appendix. Robust standard errors are clustered at the bank level, and t-statistics are reported in parentheses.

*Significance at 10%; **significance at 5%; ***significance at 1%.

agencies (OCC) and thus subject to minimal state-level political influence. Therefore, examining the differential impact of political pressure on federally chartered banks compared with state-chartered banks can help distinguish the impact of political pressure from that of unobservable economic factors.

We repeat the baseline DID regressions on banks' capital structure, loan-making decisions, and performance using federally chartered banks only. As Table 8 shows, the overall impact of the gubernatorial elections on federally chartered banks in the state is insignificant. Specifically, as shown in Panel A, none of the coefficients β_2 are statistically significant in all three models where bank capital, dividends, and stock sales are the dependent variables. That is, federally chartered banks do not increase dividends or buybacks or reduce capital following the election of Democratic governors.

Panel B in Table 8 presents results on the growth of different types of loans made by federally chartered banks. There is some evidence that, when Democrats become governors, banks increase real estate and C&I loans that are unlikely to be most politically favored. In contrast, there is no significant increase in mortgage and household loans. Also, as shown in Panel C in Table 8 on the nature of the increased lending by federally chartered banks, there is no evidence that federally chartered banks increase branches in low-income counties or have their CRA ratings improved after Democrats are elected governor. That is, new loans made by federally chartered banks do not appear to be politically favored.

Panel D in Table 8 presents results on the riskiness of new loans made by federally chartered banks and their impact on bank performance. We find that the new loans made by these banks in Democratic states somehow are riskier and result in a decline in these banks' earnings growth following the election of Democratic governors.

In summary, these findings help to rule out the possibility that some unobserved state-level economic factors may have led banks to make the capital structure and lending decisions that we have documented. The evidence is consistent with Liu and Ngo (2014), who documented a significant impact of state governors on bank failure for state banks but not for federally chartered banks.

7.2. Geographically Proximate Banks Across State Borders

Our second additional test to address the endogeneity issue follows Cheng et al. (2021) by restricting the sample to state banks operating exclusively in counties that are geographically close and lie on either side of a state border.[45] It is based on the rationale that, despite being in two different states, counties that are spatially located close to each other are more similar in their macroeconomic environments to each other than to counties far away from them. Hence, by focusing on the subsample of banks operating in these neighboring counties across state borders, our estimate of the impact of political influence is less likely to be confounded by any unobservable differences in the macroeconomic environments in different states.

Specifically, we obtain each county's distance to a state border from Holmes (1998) and include in the sample only banks that have all their operations (headquarters

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

Table 8. The Effect of Democratic Governors: Evidence from Federally Chartered Banks

Panel A: Bank capital decisions (DID)

Variables	(1) Book equity	(2) Dividend	(3) Stock sale
After	0.045	−0.010	−0.102
	(0.397)	(−0.418)	(−0.647)
After × Democratic	−0.065	0.010	−0.001
	(−0.945)	(1.186)	(−0.015)
ROA	66.571***		
	(7.476)		
ROA growth	−29.904***		
	(−4.399)		
Asset(log)	−2.174***		0.023
	(−8.042)		(0.807)
State GDP(log)	1.428*	0.245**	−1.033
	(1.958)	(2.496)	(−1.127)
State GDP growth	−3.024***	−0.037	−1.050
	(−2.967)	(−0.213)	(−0.706)
State unemployment	0.087**	−0.012**	−0.053
	(1.989)	(−2.284)	(−1.344)
Earnings		0.043***	0.025***
		(14.175)	(5.037)
Prior-year dividends		14.282***	
		(13.195)	
Earnings growth			0.932
			(0.841)
Observations	83,590	81,454	52,217
R^2	0.141	0.095	0.055
Bank FE	Yes	Yes	No
Election FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes

Panel B: Growth in different types of bank loans (DID)

Variables	(1) Mortgage	(2) Real Estate	(3) Commercial & industrial	(4) Individual	(5) Agriculture
After	0.043	−0.513	−0.730	0.462	0.483
	(0.035)	(−0.535)	(−0.392)	(0.402)	(0.097)
After × Democratic	0.665	0.751*	2.064**	0.589	2.432
	(1.273)	(1.921)	(2.467)	(1.205)	(1.410)
Asset(log)	−14.303***	−12.748***	−16.350***	−13.676***	−25.592***
	(−14.775)	(−17.198)	(−11.222)	(−16.357)	(−9.412)
Loan loss allowance	−170.034***	−212.409***	−42.745	−125.329***	−85.371
	(−4.901)	(−7.721)	(−0.898)	(−3.644)	(−0.802)
Book equity	66.879***	55.223***	60.719***	53.123***	14.134
	(4.349)	(4.565)	(2.707)	(3.804)	(0.297)
ROE	4.602	4.423**	17.097***	7.375***	7.973
	(1.634)	(2.110)	(5.340)	(2.618)	(0.792)
State GDP(log)	26.224***	16.161***	9.990	0.299	2.462
	(4.785)	(4.261)	(1.162)	(0.060)	(0.151)
State GDP growth	17.924*	23.973***	14.079	49.293***	23.875
	(1.868)	(3.305)	(0.871)	(5.201)	(0.670)
State unemployment	−2.781***	−2.238***	−1.665***	−1.208***	1.721
	(−8.045)	(−8.777)	(−3.566)	(−3.850)	(1.297)
Observations	80,178	80,408	52,104	80,769	59,159
R^2	0.055	0.078	0.044	0.063	0.014
Bank FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes

Panel C: Nature of lending (DID)

Variables	(1) Branching	(2) CRA Rating
After	−0.046	0.072
	(−0.054)	(1.547)

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

Table 8. (Continued)

Panel C: Nature of lending (DID)

Variables	(1) Branching	(2) CRA Rating
After × Democratic	−0.439	0.011
	(−0.784)	(0.671)
ROA	4.115	−1.959*
	(0.154)	(−1.796)
ROA growth	−15.275	2.526**
	(−0.990)	(2.441)
Asset(log)	−0.966	0.009
	(−1.238)	(0.467)
State GDP(log)	4.242	−0.078
	(0.771)	(−0.487)
State GDP growth	9.447	−0.364
	(1.348)	(−0.936)
State unemployment	0.413	0.001
	(1.318)	(0.051)
Observations	53,374	7,389
R^2	0.027	0.124
Bank FE	Yes	Yes
Year FE	Yes	Yes

Panel D: Bank performance (DID)

VARIABLES	(1) LLA	(2) Earnings growth
After	−0.026	1.748**
	(−1.519)	(2.451)
After × Democratic	0.067***	−0.699***
	(4.935)	(−3.037)
Asset(log)	−0.124***	−6.265***
	(−4.697)	(−14.086)
Loan growth	−0.837***	37.296***
	(−25.798)	(36.027)
State GDP(log)	−0.492***	−6.431**
	(−3.468)	(−2.291)
State GDP growth	−0.061	20.409***
	(−0.316)	(3.685)
State unemployment	0.043***	0.760***
	(5.400)	(4.449)
Loan loss provision	30.498***	
	(31.281)	
Loan loss allowance		55.460***
		(2.962)
Observations	81,436	81,488
R^2	0.295	0.260
Bank FE	Yes	Yes
Election FE	Yes	Yes
Year FE	Yes	Yes

Notes. This table presents results of the difference-in-difference (DID) regressions that examine the effect of Democratic governors on various bank decisions in different panels for the sample of all federally chartered commercial banks that operate in the states of the sample state banks in the three years prior to gubernatorial elections and in the three years after gubernatorial elections during 1990−2012. In Panel A, bank equity, dividends, and stock sale are the dependent variables as in Table 2. In Panel B, growth in loans of different types (mortgage, real estate, commercial and industrial, individual, and agriculture), indicated at the top, is regressed in different columns as in Table 4, respectively. In Panel C, bank branching decisions and CRA ratings are examined as in Table 5. In Panel D, bank loan loss allowance and earnings growth are the dependent variables as in Table 6, respectively. All other variables are defined in the Appendix. Robust standard errors are clustered at the bank level, and *t*-statistics are reported in parentheses.

*Significance at 10%; **significance at 5%; ***significance at 1%.

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

and branches) in counties within 50 miles of a state border.[46] The results of the baseline regressions, tabulated in Table 1.A.2 of the Online Appendix, continue to hold generally. There are two exceptions. When dividends and growth in individual loans are the dependent variables, the coefficient β_2 has a positive sign as expected but becomes insignificant in both cases (t-statistics = 0.936 and 0.846, respectively); see Panels A and B in Table 1.A.2. Overall, the finding for this subsample further alleviates the endogeneity concern.

7.3. Heterogeneity in Geographic Operations Among State Banks

We then examine how our findings differ across state banks that operate in their home states only ("single-state" banks) and state banks with cross-state operations in a year ("multi-state" banks). Intuitively, according to our hypothesis, single-state banks should be more susceptible to political influence than multistate banks because the latter can hedge with out-of-state operations, which generates bargaining power. Hence, gubernatorial elections should affect single-state banks more.

The results in Table 1.A.3 of the Online Appendix, where we repeat the baseline regressions for the subsample of single-state banks in the odd columns and the subsample of multistate banks in the even columns, confirm this. We note that most banks have their operations in their chartering states only. In the table, we tabulate only the coefficients β_1 and β_2 but not others for brevity, whereas other control variables are included in the regressions. The coefficient β_2 in Panels A–D is consistent with its counterparts in Tables 2, 4, 5, and 6 for the subsample of single-state banks both economically and statistically. In contrast, the coefficient β_2 for the subsample of multistate banks is mostly insignificant or in the opposite signs. These findings thus provide further support for our hypothesis.

7.4. Loan-Level Evidence of Political Influence: Mortgage Lending to Low-income Borrowers

We next provide loan-level evidence of the impact of political influence on bank lending by exploiting transaction-level data of mortgage lending to households. These data are more granular, with borrower characteristics that allow us to examine more closely whether politically influenced bank lending may be targeting a specific and politically favored group of borrowers. Access to mortgage credit is vital to home ownership for underserved households. Such lending thus helps to narrow the cross-sectional wealth accumulation gap and has frequently been mentioned by politicians. Our hypothesis, in light of the greater emphasis on equity and socioeconomic issues by Democrats, is that state banks increase mortgage lending to underserved households more following the election of Democrats than the election of Republicans as governors.

Specifically, we aggregate the individual mortgage originations to the bank-year level.[47] We then examine whether proportionally more low-income households apply for mortgages and whether banks allocate more of their mortgage lending to low-income households following a Democrat election win. That is, we investigate changes in the following variables around elections: (i) the proportion of mortgage applications to a bank from low-income households among all applicants of the bank (labeled as *mortgage application*) and (ii) the size of a bank's mortgage lending to low-income households relative to its total mortgage asset origination (*mortgage size*) in the year. An applicant is classified as low-income if his or her income is below the state per capita personal income in the year.

The results appear in Table 1.A.4 of the Online Appendix for brevity, where Panel A is for the differences-in-differences specification (DID) and Panel B the regression discontinuity (RD) design. The results from both the DID and RD settings show that the proportion of mortgage applications from low-income households increases significantly when a Democrat becomes governor. Moreover, the share to low-income households in banks' overall mortgage lending increases following a close election of a Democrat as governor; the coefficient β_1 is significantly positive in the RD setting when the polynomial order is three. The estimated coefficient on β_2 in the DID analysis (Panel A) of *mortgage size* is neither economically nor statistically significant. When *mortgage size* is the dependent variable, we control for the corresponding ratio of the accepted low-income applicants' income to all accepted applicants' income for the bank (*mortgage applicant income*) to account for the effect of applicants' income on loan size.

Overall, our finding is consistent with a noteworthy role of political influence on the mortgage market that has received increasing attention (see, for example, Agarwal et al. 2018, Chavaz and Rose 2019, Chu and Zhang 2022).

7.5. Tests and Discussions of Alternative Interpretations

We further discuss some alternative interpretations of banks' capital responses.

7.5.1. Change in Investment Opportunities? Could the bank equity decline following a Democrat's election win because of poorer investment opportunities for banks? In our baseline analysis, we have controlled for a set of state-year variables that capture the change in state economic conditions. Nonetheless, we conduct a further check of several factors that might reflect banks' investment opportunities, including GDP growth, house prices, and income inequality, all at the state-year level. We, however, do not find any significant differences in

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

them under Democratic governors (see the results in Table 1.A.5 of the Online Appendix).

7.5.2. Change in State Income Tax? Democrats are generally viewed as favoring higher taxes than Republicans. The literature has used the state income tax rate as an instrument for bank capital (see, e.g., Ashcraft 2008 and Berger and Bouwman 2009, 2013), arguing that a higher tax rate means lower capital.[48] So if a Democratic governor increases the state tax rate, then banks would reduce capital. However, we do not find evidence that state tax rates are higher under Democratic governors (results in Table 1.A.6 of the Online Appendix).

7.5.3. Difference in Regulatory Forbearance? Some argue that Democrats are more likely to exercise regulatory forbearance, with a greater propensity for bank bailouts. This engenders moral hazard; banks thus respond with lower capital ratios and greater risk taking. However, we are not aware of any evidence that one party has been more inclined than the other to bail out failed banks.[49] Also, state banks are unlikely to be too big to fail (TBTF). Furthermore, even if Democrats have a great proclivity for bailouts because of TBTF concerns, it should be more evident for larger banks. This means that the effects we document should be stronger for larger banks. The results, in Table 1.A.7 of the Online Appendix, are the opposite of this, however. In particular, our main finding holds only for the subsample of small banks. This evidence is more consistent with small banks being more susceptible to political influence than large banks, possibly because of their lower bargaining power.

7.5.4. Impact of Political Connection? Banks' responses to political pressure may depend on whether they are politically connected. The literature has provided some evidence on the impact of political connection on bank behavior. For instance, using a bank's headquarters in a state with a senator sitting on the influential Senate Committee on Banking, Housing, and Urban Affairs as an indicator of the bank's political connection, Kostovetsky (2015) showed that political connection increases banks' appetites for risk taking. Using the same measure of political connection, Cheng et al. (2021) found that although banks are more cautious when facing policy uncertainty, they are less so if they are politically connected. To check whether our findings are affected by whether a bank is politically connected, we follow Kostovetsky (2015) to create a dummy variable *Senate banking committee* for each bank-year that equals one if the state bank is headquartered in a state with a senator sitting on the Senate Committee on Banking, Housing, and Urban Affairs in the year and zero otherwise. We then augment the baseline DID specification of the regressions by including it as an additional control variable. The results, tabulated in Table 1.A.8 of the Online Appendix, show that our main findings remain almost intact.

To sum up, although it is impossible to completely rule out all alternative explanations for our results, we believe the decline in bank equity following the election of Democratic governors is less likely due to factors other than a rational response by banks to (real or perceived) political influence. In the interest of space, detailed discussions on the tests of the first three alternative explanations above are in the Online Appendix III.

8. Conclusion

This paper has theoretically and empirically examined the idea that legislators/regulators may be motivated to influence banks' credit allocation either through informal mechanisms like jawboning or by enacting regulations aimed at influencing bank lending. It may even be the case that banks are merely catering to what they perceive to be political pressure based on the stated preferences of the party in power. The political preference for such lending may arise from social efficiency considerations, fairness/equity concerns, the desire to address social problems like income inequality, and/or private benefits for politicians. Anticipation of such pressure may encourage banks to keep lower levels of capital in order to increase their fragility, which would then deter credit allocation pressure on banks. Nonetheless, political pressure is predicted to induce banks to make more politically favored loans that are riskier and lead to lower bank performance.

We find strong empirical support for these predictions. We proxy for political influence by linking it to the ideology of each of the two major parties and propose, based on the previous research, that Democrats are more likely than Republicans to favor political influence on bank credit allocation to achieve social welfare and political goals. Consistent with our theory, we find that when Democrats win gubernatorial elections, banks reduce capital levels, increase politically favored lending, exhibit poorer performance, and have a higher likelihood of switching to a national charter than when Republicans win; this effect is causal. We cannot make welfare statements, however. One reason is that the increased lending may boost household consumption, so it is possible that welfare is higher under Democratic governors despite the effect on bank performance. But our results do mean that political influence on bank credit allocation may make banks more fragile and increase systemic risk, calling for a previously unrecognized offsetting prudential regulation response. In this sense, it confirms the Calomiris and Haber (2014) hypothesis that politics and banking are inextricably linked and that politics influences bank leverage, lending, and risk.

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

Note that our analysis focuses on the implications of political influence on banks that lies outside of explicit changes in regulation that may result from a change in the party in the governor's mansion. If there was a legislative or regulatory change following the election of a governor from a party other than the predecessor, all banks would have little choice but to respond. But this would not be a change in bank behavior to real or perceived political pressure. Rather, it would be a response to a change in the law itself, with that change potentially attributable to a change in the political ideology of the governor. Although that is an interesting topic to study in future research, it is not the goal of this paper. An interesting question on that issue would be to examine whether there was a circumventing of the regulation through the exploitation of loopholes by some banks, but that would be a very different exercise from the one in our paper. Nonetheless, some may find it surprising that political ideology affects bank behavior in a statistically and economically significant way even in the absence of regulatory changes.

Acknowledgments

The authors thank Victoria Ivashina (editor), an anonymous associate editor, two anonymous referees, Sumit Agarwal (discussant), Nataliya Gerasimova (discussant), Marco Pagano (discussant), and participants in the 2017 Conference on "Banks, Systemic Risk, Measurement and Mitigation" and the 2017 China International Conference in Finance, the 2018 Financial Intermediation Research Society Annual Conference, as well as seminar participants at the Bank of Canada, Northeastern University, Singapore Management University, the Reserve Bank of India, Rutgers University, the Frankfurt Business School, the University of Miami, and the Federal Reserve Bank of Philadelphia for helpful discussions and comments. The authors also thank Meng Gao, Yuan Meng, Evelyn Toh, Huilin Yang, and Gaole Zhang for excellent research assistance.

Appendix. Variable Definitions

Variable	Definitions
After	A dummy that equals one for the three years following a gubernatorial election and zero for the three years prior to the election
Asset (log)	The natural logarithm of book value of total assets
Book equity	The ratio of book value of equity to book value of total assets
Branching	The proportion of branches in low-income counties for a bank
CRA rating	Rating of a bank's CRA (Community Reinvestment Act) performance assigned at the regulator's examination: 1 = Outstanding, 2 = Satisfactory, 3 = Needs to Improve, 4 = Substantial Noncompliance
Democrat	A dummy that equals one if a Democratic candidate wins the gubernatorial election in the state and zero otherwise
Dividend	The ratio of total cash dividends paid (common dividends and preferred dividends) to book value of total assets as of the prior year end
Earnings	The ratio of operating income to book value of total assets as of the prior year end
Earnings growth	The difference between the current-year earnings and the lagged one-year earnings divided by the lagged one-year earnings
Federal charter	A dummy that equals one if a bank is federally chartered in a given year and zero otherwise.
Loan growth	The difference between total loans and the lagged one-year total loans divided by the lagged one-year total loans
Loan loss allowance	The ratio of loan loss allowance to total loans (net of unearned income)
Loan loss provision	The ratio of loan loss provision to total loans (net of unearned income)
Mortgage applicant income	The ratio of the accepted low-income mortgage applicants' total income to all accepted mortgage applicants' total income for a bank (An applicant is classified as low-income if his or her income provided in the application is below the state per capita personal income in the year.)
Mortgage application	The proportion of low-income mortgage applicants among all applicants
Mortgage size	The size of a bank's mortgage lending to low-income households relative to its total mortgage asset origination
Predecessor	A dummy that equals one if the predecessor governor of a gubernatorial election is a Democrat and zero otherwise
ROA	The ratio of current-year net income to book value of total assets as of the prior year end
ROA growth	The difference between the current year ROA and the lagged one-year ROA divided by the lagged one-year ROA
State GDP(log)	The natural logarithm of nominal GDP of the state
State GDP growth	The ratio of the change in the nominal GDP of the state from the prior year to nominal GDP as of the prior year
State unemployment rate	Unemployment rate of the state (in percentage)
Stock sale	An indicator variable that equals −1 (+1) if the bank reports negative (positive) net stock sale and zero otherwise

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

Endnotes

[1] See, for example, Boot and Thakor (1993), Johnson and Kwak (2010), Rajan (2010), Stiglitz (2010), Lo (2012), Song and Thakor (2012), and Kane (forthcoming).

[2] An example is the Community Reinvestment Act (CRA) in the United States. Many other countries (e.g., India) have requirements that banks lend to underrepresented minorities and historically disadvantaged groups. The need for such regulation may reflect the classic divide between the private optima of banks and the social optimum in credit extension.

[3] This may also be an attempt by the bank to transfer more of the perceived losses from unprofitable loans from its shareholders to its insured and uninsured creditors.

[4] It is thus impossible for us as econometricians to directly observe or document political pressure, which, by its very nature, is something that neither banks nor their regulators (or politicians) would record in traceable form. Moreover, such informal or subtle pressure can be broadly perceived by all banks and not just be limited to any specific bank. Examples are statements like "banks should make more loans to underserved communities" or "banks should not make loans to smoke-stack companies." Such pronouncements are very commonly observed. In Section 4.1, we provide a more detailed discussion of this.

[5] Although the politically favored loans are positive-NPV investments for banks in our model, our argument also extends to these loans not being positive-NPV. If these (positive-NPV) loans were not riskier and less profitable, there would be no reason for political influence in the first place. That is, there may be a set of loans that unconstrained banks prefer and so do politicians. These loans would be chosen by banks independently of political pressure and are not the subject of our analysis.

[6] For example, in Kostovetsky (2015), the hypothesis is that banks' political connections to politicians with oversight powers over banks affect the risk exposure of banks. This hypothesis is based on the assumption that the "oversight powers provide [connected] committee members [of the U.S. Senate Banking Committee] with a great deal of leverage to influence government decisions that affect the financial industry, including bailout decisions" (page 148). This is, of course, an assumption. Kostovetsky (2015) did not provide any direct evidence that connected members of the U.S. Senate Banking Committee actually influence government decisions that affect the financial services industry.

[7] See Section 4 for a more detailed discussion on the potential influence of state governors on state banks.

[8] The use of this long examination window is to better capture the impact of political influence that may take time to materialize. Our main finding is robust to a shorter postelection window of one year or two years after gubernatorial elections.

[9] Lo and Thakor (2023) discussed how government influence on bank credit allocation can potentially improve welfare by enhancing investments in biomedical R & D.

[10] Several other papers have offered explanations for the underperformance of government-owned banks, including the view that such banks provide individual politicians with an opportunity to pursue political goals. See Beim and Calomiris (2000) and Sapienza (2004).

[11] Consistent with these institutional facts, Thakor (2021) developed a normative theory of political influence on bank capital and lending, which has implications for prudential bank regulation when there is political influence on credit allocation. The theory developed in that paper has a central premise similar to the motivation in this paper.

[12] Although not focused on state banks, Do et al. (2017) found that local firms that are connected with state governors are more likely to receive state subsidies, loans, and tax credits, and they also obtain better access to bank loans, borrow more, and pay lower interest. Do et al. (2014) suggested that state governors are less likely to be scrutinized as intensely as federal politicians and thus can enjoy more leeway in policymaking.

[13] See Wallison (2011).

[14] See Haldane (2016).

[15] Prior to this, these GSEs were required to buy only prime mortgages.

[16] One might ask why banks do not make these loans without political pressure if they are not negative-NPV investments. There may be many reasons, such as informational frictions that result in credit rationing (see, e.g., Stiglitz and Weiss 1981), or capacity constraints that limit the bank's ability to make all positive-NPV loans, so they prefer to make more profitable loans that are not politically favored. We return to this issue later.

[17] There is also a complementary risk-shifting effect that will reinforce the bank's desire to lower its capital ratio in anticipation of political influence on its lending. To the extent that such lending is riskier, the shareholders might prefer that this risk be shifted to the bank's creditors, which would then induce them to ask the bank to pay out dividends to the shareholders prior to engaging in this lending; this will cause the bank's capital ratio to drop.

[18] One might argue that banks might increase overall lending and make both the loans they would have made anyway by simply expanding lending to accommodate the politically favored loans. Although this is possible, it does not change the conclusion that overall bank profitability will decline as long as the politically favored loans are not as profitable as the loans an unconstrained bank would make.

[19] See Blair and Kushmeider (2006) for a detailed discussion of the dual banking system in the United States

[20] A CAMELS rating rates a bank's conditions in each of the following six components: capital adequacy, asset quality, management, earnings, liquidity, and sensitivity to market risk.

[21] There can be multiple commissioners appointed during one term of a governor. The tenure of a commissioner varies across states and governors.

[22] For individual political donations exceeding $200, the identities and contributions of donors and information about candidate or committee recipients, including their party affiliations, are all made public by the FEC. In our sample, the vast majority of commissioners made donations only to one party. In only two cases where commissioners donated to both parties, we measure their political orientation as the party to which they donated more.

[23] Among the 33 (40) commissioners appointed by incumbent Democratic (Republican) governors for whom we can find donation records, 26 (8) exhibit Democratic (Republican) orientation.

[24] Because regulators appear to be more lax under Democratic governors, one may argue that banks may take more risks (by decreasing their capital and increasing the proportion of riskier assets) under Democratic governors as hypothesized not because of political pressure but because of lesser regulatory constraints (or weaker regulatory oversight) under Democratic governors. However, if banks were exploiting this laxity to reduce capital ratios and make riskier loans, it has to be the case that by doing so they made higher profits. But this is not what we find. Rather, our finding is the exact opposite—banks make lower profits under Democratic governors. The combination of higher risk, lower profits, more politically favored lending, and better CRA scores seems more consistent with our theory that banks are responding to political pressure rather than with the alternative story that they are exploiting regulatory laxity to make more money.

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

[25] We thank Amit Seru for providing access to the federal-state spread data through his website.

[26] Implicit pressure on the large banks by the federal government is relatively better known, possibly because of its greater exposure in sources like national media. See Sorkin (2010) for several examples of it.

[27] Earlier data on mortgages are less complete, and thus we follow the literature to start our examination of banks' mortgage lending decisions from 1998.

[28] Thereforem we drop from the raw data set any nonconventional loan applications (Federal Housing Administration-insured, Veteran Administration-guaranteed, Farm Service Agency, or Rural Housing Service loans). Loans securitized through GSEs are dropped because they are typically underwritten with GSEs' own standards. We also disregard refinancing loans whose repayment history has been available to banks and thus less discretion is needed. Applications for investment purposes (i.e., not owner-occupied properties), for home improvement purposes, or for unusual products (manufactured houses or multi-family dwellings) are also excluded.

[29] As discussed, we exclude from our analysis cases where either the predecessor governor or the winning governor (or both) is an Independent.

[30] The results are not materially affected if we exclude banks chartered in New Hampshire and Vermont from our sample.

[31] As noted earlier, for New Hampshire and Vermont, where the governor's term is two years, we limit the examination window to two years [−1, +1]. The results are not affected if we exclude all commercial banks chartered in New Hampshire and Vermont from the sample. Moreover, the main results are robust to a shorter examination window of one year or two years following the election.

[32] The single term $Democrat_e$ is omitted in the specification because of the application of election fixed effects. Also, we have tested the parallel trend assumption of the DID approach and found that it is satisfied.

[33] According to Lee and Lemieux (2010), imposing a specific dynamic structure introduces more restrictions without any gain in identification because the source of identification is a comparison between those just below and above the threshold, which can be carried out with a single cross-section.

[34] The within-bank mean and standard deviation of *book equity* are 0.097 and 0.015, respectively. The annual growth in the level of equity for the median bank in the sample period is about 0.065%.

[35] This is consistent with Uluc and Wieladek (2018), who documented that banks make capital adjustments primarily through payout adjustments that affect retained earnings.

[36] The loans that most clearly fall in this category are individual loans. Mortgages are both residential and commercial, as is real estate.

[37] The predicted effect on agricultural loans is not clearcut. Most farmers have access to alternative funding from the Farm Credit System (FCS), so there is a lesser political need to address that sector. In Section 5.3, we will conduct a further examination of whether the increased loans are politically favored.

[38] Data on commercial and industrial loans are not available from 2001 and on, which results in a decrease in the number of observations in the regression.

[39] In results not tabulated for brevity, we also find a significant increase in the share of individual loans among the banks' loan portfolios following the election of Democratic governors. Our findings are also robust if we focus on a subsample of banks for which information on all types of loans is available.

[40] The investment test considers a banking institution's qualified investments that benefit the institution's assessment area or a broader statewide or regional area that includes its assessment area. The service test considers the scope of an institution's system for delivering retail-banking services and judges the extent of its community development services and their degree of innovativeness and responsiveness.

[41] Not surprisingly, the median bank in the sample does not experience any change in its annual CRA rating.

[42] The review cycle for smaller banks—those with less than $250 million in assets—is five years and for larger banks is two years. In our sample, most banks have assets of more than $250 million.

[43] The caveat of this analysis is that we do not have data on *LLA* for each individual type of loan and thus cannot examine the riskiness of them separately.

[44] A caveat is that banks' operating income may come not only from loan performance but also from banks' services and financial market operations, with the latter not relevant to their lending decisions. We have also examined banks' operation income, instead of its growth, and find that our results do not change qualitatively.

[45] A related identification strategy was used by Mian et al. (2015).

[46] To avoid any potential confounding effects, we exclude banks operating in counties that are within 50 miles of multiple border lines, especially those in smaller states.

[47] For those banks operating in multiple states, we aggregate the individual mortgage originations to the bank-state-year level.

[48] The idea is that a higher tax rate increases the value of the debt tax shield and encourages banks to keep lower equity capital.

[49] Indeed, both parties supported providing massive taxpayer funds for bailouts of various financial institutions during the 2007 – 2009 crisis, and TARP was approved while President George W. Bush (R) was in office. Ronald Reagan (R) was the President during the 1980s when numerous S & Ls were bailed out. Faced with the financial stresses associated with bank failures, bailouts appear to have bipartisan support.

References

Agarwal S, Amromin G, Ben-David I, Dinc S (2018) The politics of foreclosure. *J. Finance* 73(6):2677–2717.

Agarwal S, Benmelech E, Bergman N, Seru A (2012) Did the Community Reinvestment Act (CRA) lead to risky lending? NBER Working Paper No. 18609, National Bureau of Economic Research, Cambridge, MA.

Agarwal S, Lucca D, Seru A, Trebbi F (2014) Inconsistent regulators: Evidence from banking. *Quart. J. Econom.* 129(2):889–938.

Anginer D, Demirguc-Kunt A, Zhu M (2014) How does competition affect bank systemic risk? *J. Financial Intermed.* 23(1):1–26.

Antoniades A, Calomiris C (2016) Mortgage market credit conditions and U.S. presidential elections. NBER Working Paper No. 24459, National Bureau of Economic Research, Cambridge, MA.

Ashcraft AB (2008) Does the market discipline banks? New evidence from the regulatory capital mix. *J. Financial Intermed.* 17: 787–821.

Becker B, Ivashina V (2018) Financial repression in the European sovereign debt crisis. *Rev. Finance* 22(1):83–115.

Beim D, Calomiris C (2000) *Emerging Financial Markets* (McGraw-Hill, Irwin, NY).

Berger AN, Bouwman CH (2009) Bank liquidity creation. *Rev. Financ. Stud.* 22(9):3779–3837.

Berger AN, Bouwman CH (2013) How does capital affect bank performance during financial crises? *J. Financial Econom.* 109(1): 146–176.

Electronic copy available at: https://ssrn.com/abstract=4311512

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

Berger AN, Udell GF (2004) The institutional memory hypothesis and the procyclicality of bank lending behavior. *J. Financial Intermed.* 13:458–495.

Blair CE, Kushmeider RM (2006) Challenges to the dual banking system: The funding of bank supervision. *FDIC Bank. Rev.* 18:1–20.

Boot A, Thakor AV (1993) Self-interested bank regulation. *Amer. Econom. Rev.* 83(2):206–212.

Braun M, Raddatz C (2010) Banking on politics: When former high-ranking politicians become bank directors. *World Bank Econom. Rev.* 24(2):234–279.

Brei M, Ferri G, Gambacorta L (2018) Financial structure and income inequality. BIS WP # 756.

Brown CO, Dinc IS (2005) The politics of bank failures: Evidence from emerging markets. *Quart. J. Econom.* 120(4):1413–1444.

Calomiris CW, Haber SH (2014) *Fragile by Design: The Political Origins of Banking Crises and Scarce Credit* (Princeton University Press, Princeton, NJ).

Chavaz M, Rose A (2019) Political borders and bank lending in post-crisis America. *Rev. Finance* 23(5):935–959.

Cheng H, Gawande K, Ongena S, Qi S (2021) Connected banks and economic policy uncertainty. *J. Financial Stab.* 56:100920.

Chu Y, Zhang T (2022) Political influence and banks: Evidence from mortgage lending. *J. Financial Intermed.* 52:100982.

Cole S (2009) Fixing market failures or fixing elections? Agricultural credit in India. *Am. Econom. J. Appl. Econom.* 1(1):219–250.

Cohen L, Coval J, Malloy C (2011) Do powerful politicians cause corporate downsizing? *J. Political Econ.* 119(6):1015–1060.

Dinc IS (2005) Politicians and banks: Political influences on government-owned banks in emerging markets. *J. Financial Econom.* 77: 453–479.

Do QA, Lee YT, Nguyen BD (2014) Out of sight, out of mind: The value of political connections in social networks. Working paper, Singapore Management University, Singapore.

Do QA, Lee YT, Nguyen BD (2017) Directors as connectors: The impact of the external networks of directors on firms. Working paper, Centre for Economic Policy Research (CEPR), London.

Dymski G, Epstein G, Pollin R, eds (2015) *Transforming the US Financial System: Equity and Efficiency in the 21st Century* (Routledge, New York).

Eggers AC, Fowler A, Hainmueller J, Hall AB, Snyder JM Jr (2015) On the validity of the regression discontinuity design for estimating electoral effects: New evidence from over 40,000 close races. *Amer. J. Politcal Sci.* 59(1):259–274.

Faccio M, Masulis R, McConnell J (2006) Political connections and corporate bailouts. *J. Finance* 61:2597–2635.

Gilje EP, Loutskina E, Strahan PE (2016) Exporting liquidity: Branch banking and financial integration. *J. Finance* 71(3):1159–1184.

Haldane D (2016) Republican vs. democrats: Views on housing reform. *Smart with Your Money*, August 7.

Holmes TJ (1998) The effect of state policies on the location of manufacturing: Evidence from state borders. *J. Political Econom.* 106(4):667–705.

Holmstrom B, Tirole J (1997) Financial intermediation, loanable funds, and the real sector. *Quart. J. Econom.* 112(3):663–691.

Iannotta G, Nocera G, Sironi A (2013) The impact of government ownership on bank risk. *J. Financial Intermed.* 22(2):152–176.

Jagannathan R, Kapoor M, Schaumburg E (2013) Causes of the great recession of 2007–2009: The financial crisis was the symptom not the disease! *J. Financial Intermed.* 22(1):4–29.

Johnson S, Kwak J (2010) *13 Bankers: The Wall Street Takeover and the Next Financial Meltdown* (Random House, Pantheon Books, New York).

Kane E (forthcoming) Regulation and supervision: An ethical perspective. Berger A, Molyneaux P, Wilson J, eds. *Oxford Handbook on Banking*, 2nd ed., Chapter 12 (Oxford University Press, London).

Khwaja AI, Mian A (2005) Do lenders favor politically connected firms? Rent provision in an emerging financial market. *Quart. J. Econom.* 120(4):1371–1411.

Kostovetsky L (2015) Political capital and moral hazard. *J. Financial Econom.* 116:144–159.

Lee DS (2008) Randomized experiments from non-random selection in U.S. House elections. *J. Econometrics* 142(2):675–697.

Lee DS, Lemieux T (2010) Regression discontinuity designs in economics. *J. Econom. Lit.* 48(2):281–355.

Lee J, Lee KJ, Nagarajan NJ (2014) Birds of a feather: Value implications of political alignment between top management and directors. *J. Financial Econom.* 112:232–250.

Levy J (2006) *The State after Statism: New State Activities in the Age of Liberalization* (Harvard University Press, Cambridge, MA).

Lindbeck A, Weibull JW (1987) Balanced-budget redistribution as the outcome of political competition. *Public Choice* 52(3):273–297.

Lintner J (1956) Distribution of incomes of corporations among dividends, retained earnings, and taxes. *Amer. Econom. Rev.* 46:97–113.

Liu WM, Ngo PTH (2014) Elections, political competition and bank failure. *J. Financial Econom.* 112(2):251–268.

Lo AW (2012) Reading about the financial crisis: A twenty-one book review. *J. Econom. Lit.* 50(1):151–178.

Lo A, Thakor R (2023) Financial intermediation and the funding of biomedical innovation: A review. *J. Financial Intermed.* 54:101028.

Lopez J, Siegel M (2023) Small business lending and the PPP and PPPLF programs. *J. Financial Intermed.* 53:101017.

Mehran H, Thakor AV (2011) Bank capital and value in the cross-section. *Rev. Financial Stud.* 24(4):1019–1067.

Mian A, Sufi A (2014) *House of Debt* (University of Chicago Press, Chicago, IL).

Mian A, Sufi A, Trebbi F (2015) Foreclosures, house prices, and the real economy. *J. Finance* 70(6):2587–2634.

Michaely R, Roberts M (2012) Corporate dividend policies: Lessons from private firms. *Rev. Financial Stud.* 25:711–746.

Nordhaus WD (1975) The political business: Cycle 12. *Rev. Econom. Stud.* 42(2):169–190.

Pagano M, Volpin P (2001) The political economy of finance. *Oxford Review of Economic Policy* 17(4):502–519.

Peek J, Rosengren ES (2005) Unnatural selection: Perverse incentives and the misallocation of credit in Japan. *Amer. Econom. Rev.* 95(4):1144–1166.

Rajan RG (2010) *Fault Lines: How Hidden Fractures Still Threaten the World Economy* (Princeton University Press, Princeton, NJ).

Rogoff K (1990) Equilibrium political budget cycles. *Amer. Econom. Rev.* 80(1):21–36.

Sapienza P (2004) The effects of government ownership on bank lending. *J. Financial Econom.* 72(2):357–384.

Shen C-H, Lin C-Y (2012) Why government banks underperform: A political interference view. *J. Financial Intermed.* 21(2):181–202.

Skinner DJ (2008) The evolving relation between earnings, dividends, and stock repurchases. *J. Financial Econom.* 87(3):582–609.

Song F, Thakor AV (2012) Financial system development and political intervention. *World Bank Econom. Rev.* 26(1):1–36.

Sorkin AR (2010) *Too Big to Fail: The Inside Story of How Wall Street and Washington Fought to Save the Financial System–and Themselves* (Penguin Group, New York).

Stiglitz JE (2010) *Free Fall* (W.W. Norton and Company, New York).

Stiglitz JE, Weiss A (1981) Credit rationing in markets with imperfect information. *Amer. Econom. Rev.* 71(3):393–410.

Electronic copy available at: https://ssrn.com/abstract=4311512

Sullivan LE (2009) *The SAGE Glossary of Social and Behavioral Sciences* (SAGE Publications, Thousand Oaks, CA).

Thakor AV (2014) Bank capital and financial stability: An economic tradeoff or a Faustian bargain? *Annu. Rev. Financial Econom.* 6: 185–223.

Thakor AV (2021) Politics, credit allocation and bank capital requirements. *J. Financial Intermed.* 45:100820.

Uluc A, Wieladek T (2018) Capital requirements, monetary policy and risk shifting in the mortgage market. *J. Financial Intermed.* 35-B(July):3–16.

Walter J (1991) Loan loss reserves. *Econom. Rev.* (July/August): 20–30.

Wallison PJ (2011) Three narratives about the financial crisis. *Cato J.* 31(3):535–549.

Downloaded from informs.org by [40.83.123.45] on 17 February 2024, at 20:52 . For personal use only, all rights reserved.

Electronic copy available at: https://ssrn.com/abstract=4311512

european corporate governance institute

about ECGI

The European Corporate Governance Institute has been established to improve *corporate governance through fostering independent scientific research and related activities.*

The ECGI will produce and disseminate high quality research while remaining close to the concerns and interests of corporate, financial and public policy makers. It will draw on the expertise of scholars from numerous countries and bring together a critical mass of expertise and interest to bear on this important subject.

The views expressed in this working paper are those of the authors, not those of the ECGI or its members.

www.ecgi.global

european corporate governance institute

ECGI Working Paper Series in Finance

Editorial Board

Editor	Mike Burkart, Professor of Finance, London School of Economics and Political Science
Consulting Editors	Renée Adams, Professor of Finance, University of Oxford
	Franklin Allen, Nippon Life Professor of Finance, Professor of Economics, The Wharton School of the University of Pennsylvania
	Julian Franks, Professor of Finance, London Business School
	Mireia Giné, Associate Professor, IESE Business School
	Marco Pagano, Professor of Economics, Facoltà di Economia Università di Napoli Federico II
Editorial Assistant	Asif Malik, Working Paper Series Manager

www.ecgi.global/content/working-papers

european corporate governance institute

Electronic Access to the Working Paper Series

The full set of ECGI working papers can be accessed through the Institute's Web-site (www.ecgi.global/content/working-papers) or SSRN:

Finance Paper Series	http://www.ssrn.com/link/ECGI-Fin.html
Law Paper Series	http://www.ssrn.com/link/ECGI-Law.html

www.ecgi.global/content/working-papers