Political Influence, Bank Capital, and Credit Allocation

June 2023

Online Appendix

Political Influence, Bank Capital, and Credit Allocation

ONLINE APPENDIX I: The Model

Consider an economy with three dates: $t = 0, 1, 2$. All agents are risk neutral and the riskless interest rate is zero. The main agents are banks, depositors, borrowers, and legislators/regulators. For simplicity, deposits are uninsured and available in elastic supply at an expected return of zero.[1] For each dollar of deposits, depositors enjoy a value of liquidity services of $\gamma \in (0,1)$.[2]

The sequence of events is as follows. At t=0, an election outcome is observed. The winning governor is either a Democrat or a Republican.[3] Each bank, after observing the election outcome, determines its capital structure and raises D in deposits/debt financing and E in equity such that:

$$D + E = L \tag{1}$$

where L is the size of the loan to be made at t=1.

At t=1, the winning governor observes the bank's capital, experiences the random realization of a strength of personal preference for the bank to make a politically-preferred loan, and determines whether to exert credit-allocation influence on the bank. This will be made precise shortly.

There are three types of (pairwise mutually exclusive) loans in the feasible set: $\{G, P, B\}$. A G loan is a socially-efficient loan that pays off x >0 with probability $q \in (0,1)$ at t=2 and zero with probability 1-q. If the loan pays off zero, then we view it as a loan default that leads to bank failure. P is the politically-preferred loan. It confers political benefits on the winning party. It pays off x with probability $p \in (0,1)$ at t=2 and zero with probability $1-p$. We assume:

$$qx > px > L. \tag{2}$$

This means that both G and P are positive-NPV loans for the bank, but G is more profitable than P.[4] However, the P loan also produces political benefits $\tilde{\beta} \in \{\beta_1, \beta_2\}$ with $0 < \beta_1 < \beta_2 < \infty$. At t=0, it is common knowledge that $\tilde{\beta} = \beta_1$ with probability $\delta \in (0,1)$ and $\tilde{\beta} = \beta_2$ with probability

[1] Partial deposit insurance, which is the case in practice, leaves the analysis unchanged.
[2] See Song and Thakor (2007) for example.
[3] For clearer identification, we exclude Independents from the analysis. See Section IV for more discussions on this.
[4] See the earlier discussion in Section II.B of the empirical evidence supporting the assumption that politically-preferred loans tend to be riskier and less profitable for banks than other loans.

$1-\delta$ at t=1. That is, the realization of $\tilde{\beta}$ occurs at t=1. Consistent with our previous discussion, we assume that the political benefit is enjoyed only by Democrat governors and not Republican governors. In general, we just need $\tilde{\beta}$ to be higher for Democrats.

The B loan is one that produces no contractible payoff at t=2, but yields the manager a random private benefit $\tilde{\pi} \in \{\tilde{\pi}_\ell, \tilde{\pi}_h\}$ with $0 < \pi_\ell < \pi_h < \infty$, and $\pi_h < L$.

That is, B is socially inefficient. Viewed at t=0, $\Pr(\tilde{\pi} = \pi_h) = \xi$ and $\Pr(\tilde{\pi} = \pi_\ell) = 1 - \xi$. The bank's loan choice is made after it *privately* observes the realized $\tilde{\pi}$.

The bank regulator exerted at t=1 the credit-allocation influence favored by the government, if there is any. The bank's choice set for loans is $c_1 \equiv \{G, B\}$ and $c_2 \equiv \{P, B\}$. The regulator can pressure the bank to choose c_2 — that is what we call *credit-allocation pressure*. However, within a choice set $c_i \left(i \in \{1,2\}\right)$, the bank can choose B unobservably, i.e., while the regulator can ensure that the bank lends from c_i, it cannot ensure with probability one that the bank will not choose B. The probability that regulatory supervision can prevent the bank from choosing B when it would like to is $\theta \in (0,1)$.

At t=2, the loan payoff is realized and depositors are paid off by the bank if its contractible cash flow (x) permits it. If the bank fails (contractible payoff of zero), depositors receive nothing. While realized payoffs on P and B are commonly observed at t=2, the realization of $\tilde{\pi}$ is privately observed by the bank and the realization of $\tilde{\beta}$ is privately observed by the politician (governor or state bank regulator appointed by the governor). The probability distributions of $\tilde{\beta}$ and $\tilde{\pi}$ are common knowledge. *Figure 1* summarizes the sequence of events.

[Figure I.A.1 goes here]

The *politician's objective function* is:

$$W_i = \begin{cases} \alpha_1 Pr \text{ (bank does not fail at t=2)} \\ +\alpha_2 \Pr \text{ (bank makes } P \text{ loan)} \beta \quad \text{if i = Democrat} \\ \\ \Pr \text{ (bank does not fail at t=2)} \quad \text{if i = Republican.} \end{cases} \tag{3}$$

where $\alpha_1 > 0$ and $\alpha_2 > 0$ are constants. We will also assume that:

$$px + \beta_2 < qx, \tag{4}$$

so G loan has a higher social efficiency than the P loan, including its political benefit.[5]

The *bank insider's objective function* is to maximize the sum of the private benefit from the loan and the net present value (NPV) of the bank's shareholders at t=0 (with its capital structure choice) and to maximizes the sum of the private benefit from the loan and the value of equity at t=1 (with the loan choice). The assumption is that G and P are mutually exclusive, and B is mutually exclusive with G as well as P. Thus, we are assuming that the bank has a capacity constraint and cannot make all loans that may be profitable.[6] This capacity constraint may either be justified based on incentive problems that generate an optimal finite size (as in Millon and Thakor (1985)) or limited bank equity capital in a general equilibrium setting (as in Allen, Carletti, and Marquez (2015)).[7] That is, we take bank size as fixed and then examine its loan portfolio and capital structure decisions, as in previous capital structure theories of banks and non-banks. Alternatively, P may have a negative NPV for the bank, with the regulator's political or social welfare benefit from P being large enough to override the bank's loss from the loan. Our analysis goes through with either specification.

In reality, banks make both the loans they prefer to make and the loans they make with regulatory nudging. Our set-up readily accommodates this. To see this, suppose that a regulatory mandate to invest in P takes the form of the bank investing in a fraction $\lambda \in (0,1)$ of its portfolio in P loans and the rest in either P or G (the bank clearly prefers G). Assume that the bank's loan portfolio payoffs are linear in the investment made in the loan for all types of loans, and that the probability of success of P is $\hat{p} < p$, with $\lambda\hat{p} + [1-\lambda]q \equiv p$. Thus, the expected payoff to the bank on a *loan portfolio* consisting of both P and G is px, which satisfies (2) and (3), while its expected payoff when it faces no credit-allocation pressure and chooses G is qx. The analysis that follows is entirely consistent with this specification.[8] Thus, our maintained assumption throughout the analysis is that both G and P are positive-NPV loans for the bank, but G is more profitable.

---

[5] This assumption is not crucial to the analysis in the following sense. Suppose $px < qx$ but $px + \beta_2 > qx$. Then, taking into account political benefits, P has higher social efficiency than G when $\tilde{\beta} = \beta_2$. In this case, the political credit-allocation pressure is also welfare enhancing. None of our results is affected by this change. With (4), our analysis implies that politics will influence bank lending even when it is not welfare enhancing.

[6] Such mutual exclusivity is standard in models in which bank capital acts as an incentive device for prudent lending, e.g., Holmstrom and Tirole (1997) and Mehran and Thakor (2011).

[7] Thus, in our model, credit-allocation pressure induces changes in bank lending at the intensive margin, not the extensive margin. In addition to capacity constraints, bank managers may have incentives to avoid P because these loans are less profitable and lead to lower ROE, reducing executive bonus.

[8] This specification is an example of a more general setting in which we can think of the payoffs on P and G as the overall payoffs on the bank's asset portfolio when it invests in P and G respectively. That is, these payoffs would also include income from other sources like fee income and returns on security investments. The bank would then make a loss on P and yet be profitable on the portfolio that contains P. if having a license to operate necessitates investing in P, the

Results

Throughout the analysis, we will impose the following restrictions on the deep parameters.

Restriction 1: $\pi_h - \pi_\ell > x[q-p]$ (-5)

That is, the spread between π_h *and* π_ℓ *is greater than the difference in the expected values of G and P.*

This restriction simply means that the high private benefit associated with *B* is higher than the sum of the low private benefit and the expected value difference between the *G* and *P* loans. This ensures that higher (equity) capital is needed to induce the bank to choose *G* when *B* has a high private benefit than to choose *P* when *B* has a low private benefit.

Restriction 2: $qx\xi[1-\theta][\xi\theta+1-\xi]^{-1} > \pi_h$ (-6)

That is, the expected value of G sufficiently exceeds π_h.

This restriction is sufficient to ensure that when there is no political influence on credit allocation, the bank will prefer *G* in all states of the world in the second best.

Restriction 3: $\theta < \min\{\theta^0, \hat{\theta}\}$ (-7)

where θ^0 is the solution to

$$\theta[1-\xi^2\theta-2\xi[1-\xi]]-[1-\xi]^2 = 0 \quad (-8)$$

and

$$\hat{\theta} \equiv \{1+2\xi[1-\xi]\}[2\xi^2]^{-1}. \quad (-9)$$

Note that if $\theta < \hat{\theta}$, then the derivative of the left-hand side of (A-8) with respect to θ is increasing in θ.

That is, the regulatory probability of preventing the bank from choosing B when the bank prefers to do so, θ*, is small enough.*

The purpose of this restriction is to ensure that the politician/regulator is sufficiently concerned about risk shifting by the bank that low bank capital will deter credit-allocation pressure with positive probability. For example, if $\theta = 1$, then all risk-shifting moral hazard vanishes and there would be credit-allocation pressure regardless of bank capital.

bank's participation constraint for operating will be satisfied even with *P* because the bank is profitable overall, even though it has a lower profitability with *P* than with *G*. Of course, *P* could just as well be a positive-NPV loan in this case.

We now begin by stating the bank's capital structure choice in the first best case in which the bank's loan choice is observable and the socially-efficient loan *G* is chosen. For expositional continuity, all proofs are placed right after the model.

Lemma 1: *The first best involves the bank choosing an all-deposit capital structure at t=0 and investing in G at t=1.*

The intuition is straightforward. Since *G* has the highest value among all three loans, it is chosen by the bank at *t*=1. Deposits have associated with them liquidity services that depositors value, which reduces the interest rate banks have to pay on deposits. This makes deposits preferred over equity, leading to an all-debt capital structure at *t*=1.[9]

We now turn to the second best and analyze how the bank's preferences for the different types of loans change with its capital level.

Proposition 1: *There exist four bank capital levels in the second best* $\hat{E}_h^* > E_h^* > \hat{E}_\ell^* > E_\ell^* > 0$ *chosen at t=0:*

(i) *If* $\tilde{\pi} = \pi_h$*, then the bank prefers P to B if* $E \geq \hat{E}_h^*$*, and B to P if* $E < \hat{E}_h^*$*. It prefers G to B if* $E \geq E_h^*$*, and B to G if* $E < E_h^*$.

(ii) *If* $\tilde{\pi} = \pi_\ell$*, then the bank prefers P to B if* $E \geq \hat{E}_\ell^*$*, and B to P if* $E < \hat{E}_\ell^*$*. It prefers G to B if* $E \geq E_\ell^*$*, and B to G if* $E < E_\ell^*$.

To see the intuition, note first that equity capital is needed in the second-best case to give the bank skin-in-the-game to make prudent loan choices. Consider the bank's private benefit realization $\tilde{\pi} = \pi_h$. In this case, the temptation to choose *B* is the greatest. So the highest amount of capital is needed to deter the bank from doing so. This is $\hat{E}_h^*$ if the bank's choice set is $\{P, B\}$, and it is E_h^* if the bank's choice set is $\{G, B\}$. The reason why $\hat{E}_h^* > E_h^*$ is that *G* is a higher-valued loan than *P*, so the moral hazard in the bank being tempted to choose *B* is greater with *P* than with *G*.

When the bank's private benefit realization is $\tilde{\pi} = \pi_\ell$, the moral hazard of the bank choosing *B* is smaller. Thus, $\hat{E}_\ell^* < \hat{E}_h^*$ and $E_\ell^* < E_h^*$. The reason why $E_\ell^* < \hat{E}_\ell^*$ is the same as the reason why $E_h^* < \hat{E}_h^*$. The reason why $E_h^* > \hat{E}_\ell^*$ is Restriction 1.

[9] Subsidized deposit insurance or taxes will also lead to the same all-debt capital structure.

Proposition 2: *In the second best, if the bank is free to choose its lending from either* ς_1 *or* ς_2*, it will choose a capital structure with* $E = E_h^*$ *and make the G loan.*

The intuition is that *G* has the highest expected value and in equilibrium this loan surplus accrues to the bank, so *G* is chosen. Choosing *P* is dominated for two reasons: (i) It requires the bank to keep higher capital to persuade depositors that it will not choose *B*; (ii) it is less profitable.

Proposition 3: *(Regulatory Policy) There exists a set* $\left(\underline{\beta}, \overline{\beta}\right)$ *of positive measure such that if* $\beta_1 \in \left(\underline{\beta}, \overline{\beta}\right)$ *and* $\beta_2 > \overline{\beta}$*, then the regulator will pressure the bank to invest in loan P at t=1 with probability 1 if* $E \geq \hat{E}_\ell^*$ *was chosen at t=0, and with positive probability less than 1 if* $E \in [E_\ell^*, \hat{E}_\ell^*)$ *was chosen at t=0.*

The intuition is as follows. When the bank chooses $E \geq \hat{E}_\ell^*$ at *t*=0, the regulator knows that the bank will prefer *P* to *B* if $\tilde{\pi} = \pi_\ell$. If $\tilde{\pi} = \pi_h$, the bank will prefer *B*, but the regulator can prevent this choice with probability θ, so credit-allocation pressure is attractive if β_2 is large enough. When $E < \hat{E}_\ell^*$, the regulator knows that the bank will always prefer *B* to *P*, so it must rely exclusively on its own auditing to prevent *B* from being chosen. However, if $E \in [E_\ell^*, \hat{E}_\ell^*)$, the bank will prefer *G* to *B* if $\tilde{\pi} = \pi_\ell$, so the probability of bank failure is lower *without* credit-allocation pressure than with such pressure. In this case, if $\tilde{\beta} = \beta_1$, the regulator prefers not to impose credit-allocation pressure, but if the political benefit of *P* is high ($\tilde{\beta} = \beta_2$), the credit-allocation pressure is imposed.

Proposition 4: *(Bank's Capital Structure) In a Nash equilibrium, given the regulator's behavior, the bank chooses* $E = E_\ell^*$ *at t=0.*

This is our central result. The bank knows that any $E \geq \hat{E}_\ell^*$ will result in credit-allocation pressure with probability one. If $E \in [E_\ell^*, \hat{E}_\ell^*)$, then we know from our earlier analysis that $E_\ell = E_\ell^*$ is the best choice for the bank in this set. By choosing $E = E_\ell^*$, the bank reduces the probability of being pressured to choose *P* below 1. Dropping *E* below E_ℓ^* is not optimal for the bank because then there is no cost to the regulator of imposing credit-allocation pressure (since the bank prefers *B* in all states regardless of whether it is free to choose *G* or being pressured to choose *P*), so credit-allocation pressure will occur with probability 1. Moreover, if θ is low enough, the bank may be unable to raise financing in this case. *Figure 2* presents the probability of credit-allocation pressure as a function of bank capital.

[Figure I.A.2 goes here]

PROOFS OF THE MODEL:

Proof of Lemma 1: The NPV of G to insiders at t=0 is:

$$q\left[x - D_R\right] - E \quad (\text{-10})$$

where the repayment obligation on deposits, D_R, solves:

$$q\left[D_R + \gamma D\right] = D$$

yielding

$$D_R = D\left[1-\gamma q\right]\left[q\right]^{-1}. \quad (\text{-11})$$

Substituting (-11) back in (-10) gives us:

$$q\left[x - D\left[1-\gamma q\right]\right]\left[q\right]^{-1} - E \quad (\text{-12})$$

which upon simplification (recognizing that $D+E=L$) yields:

$$qx - L\left[1-\gamma q\right] - E\gamma q \quad (\text{-13})$$

which is strictly decreasing in E. Thus, if the bank intends to choose G at t=1, it will choose to be all-debt financed at t=0.

Next, B can never be chosen when depositors can observe the bank's loan choice because they receive no repayment. The insiders will not self-finance because of the negative NPV of B, which implies

$$\xi\pi_h + \left[1-\xi\right]\pi_\ell < L.$$

The NPV of P to insiders at t=0 is

$$px - L\left[1-\gamma q\right] - E\gamma q \quad (\text{-14})$$

which is positive but less than the expression in (-13). ■

Proof of Proposition 1: We will solve for the capital cutoffs that ensure that the bank will prefer not to invest in B.

First, the incentive compatibility condition for the bank to prefer G to B at t=1 for any realization of π is:

$$q\left[x - D_r\right] \geq \pi_h \,. \tag{-15}$$

Since this constraint will bind in equilibrium, we can solve for (-15) as an equality and derive:

$$E_h^* = \frac{\pi_h - qx + L\left[1 - \gamma q\right]}{1 - \gamma q}\,. \tag{-16}$$

Proceeding similarly, we can derive:

$$\hat{E}_h^* = \frac{\pi_h - px + L\left[1 - \gamma q\right]}{1 - \gamma q}\,. \tag{-17}$$

Now suppose we want the bank's incentive compatibility (IC) condition to only be satisfied when $\tilde{\pi} = \pi_\ell$. Then the IC constraint for the bank to prefer *P* to *B* is:

$$p\left[x - D_R\right] \geq \pi_\ell \tag{-18}$$

where D_R solves

$$\{\xi\theta + 1 - \xi\}\, p\left[D_R + \gamma D\right] = D \tag{-19}$$

where we recognize that if π_h occurs (probability ξ), then the bank will choose *G* only when the regulator can prevent the choice of *B* (probability θ). Thus,

$$D_R = DB_1 p^{-1} \tag{-20}$$

where

$$B_1 \equiv \frac{1 - \gamma p\{\xi\theta + 1 - \xi\}}{\xi\theta + 1 - \xi}\,. \tag{-21}$$

Substituting for D_R in (-18) and solving it as an equality yields:

$$\hat{E}_\ell^* = \frac{\pi_\ell - px + LB_1}{B_1}\,. \tag{-22}$$

Similarly, the IC constraint for the bank to prefer *G* to *B* when $\tilde{\pi} = \pi_\ell$ yields:

$$E_\ell^* \equiv \frac{\pi_\ell - qx + LA_1}{A_1} \tag{-23}$$

where

$$A_1 \equiv \frac{1 - \gamma q\{\xi\theta + 1 - \xi\}}{\xi\theta + 1 - \xi}\,. \tag{-24}$$

By inspection, it is obvious that $\hat{E}_h^* > E_h^*$, $\hat{E}_h^* > \hat{E}_\ell^*$, $\hat{E}_\ell^* > E_\ell^*$, and $E_h^* > E_\ell^*$. This is because $B_1 > 1-\gamma p$ and $A_1 > 1-\gamma q$. What remains to be proved is that $E_h^* > \hat{E}_\ell^*$. This requires showing

$$\frac{\pi_h - qx + L[1-rq]}{1-\gamma q} > \frac{\pi_\ell - px + LB_1}{B_1} \tag{-25}$$

with some algebra, it can be shown that (-25) is satisfied because (A-5) holds. ■

Proof of Proposition 2: Suppose the bank chooses *G* at *t*=1 and E_h^* at *t*=0. Then the NPV of its shareholders at *t*=0 is:

$$qx - L[1-\gamma q] - E_h^* rq\,. \tag{-26}$$

Substituting for E_h^* from (-16) and simplifying, we get:

$$\frac{q[x-\gamma\pi_h]}{1-\gamma q} - L\,. \tag{-27}$$

Now suppose the bank chose E_ℓ^* at *t*=0 and then *G* at *t*=1. Then the NPV to its shareholders at *t*=1 is:

$$[\xi\theta + 1 - \xi]\left[qx - A_1 L + A_1 E_\ell^* - E_\ell^*\right] + \xi[1-\theta]\left[\pi_h - E_\ell^*\right] \tag{-28}$$

where A_1 is defined in (-24) and we recognize that the bank will choose *B* with probability $\xi[1-\theta]$. Substituting for E_ℓ^* from (-23) and simplifying (-28) yields:

$$\frac{qx}{A_1} + \xi[1-\theta]\pi_h - L - \pi_\ell[\xi\theta + 1 - \xi]\left\{\frac{\gamma q[\xi\theta+1-\xi]}{1-\gamma q[\xi\theta+1-\xi]}\right\}\,. \tag{-29}$$

Tedious algebra shows that (A-6) is a sufficient (not necessary) condition for the expression in (-27) to be strictly greater than the expression in (-29).

So we have proved that the bank prefers *G* with E_h^* to *G* with E_ℓ^*. It is obvious that the bank prefers *G* with E_h^* to *P* with $\hat{E}_h^*$ (since $\hat{E}_h^* > E_h^*$). Moreover, given that *G* with E_h^* dominates *G* with E_ℓ^*, it also follows that *G* with E_h^* dominates *P* with $\hat{E}_\ell^*$. Note that *B* is not an option. If $E < E_\ell^*$, no financing is available for θ low enough. ■

Proof of Proposition 3: Case 1: *First consider* $\hat{E}_h^*$.

Now,

$$\Pr(\text{bank will not fail}) = p\,. \tag{ -30}$$

Using (3) we can write (using "d" for "Democrat"):

$$W_d = \alpha_1 p + \alpha_2 \tilde{\beta} \tag{ -31}$$

as the value of the politician's objective function if choice of P is forced. If the bank is free to choose its loan, then

$$\Pr(\text{bank will not fail}) = q$$

since the bank will choose G (given that $\hat{E}_h^* > E_h^*$), , and

$$W_d = \alpha_1 q\,. \tag{ -32}$$

For the politician to prefer to impose credit-allocation pressure, we need

$$\alpha_2 \beta_1 > \alpha_1 [q - p]\,. \tag{ -33}$$

Case 2: $E = E_h^*$

If the choice of P is forced, then:

$$\Pr(\text{bank will not fail}) = \xi\theta p + [1-\xi]\, p \tag{ -34}$$

and

$$W_d = \alpha_1 \{\xi\theta p + [1-\xi]\, p\} + \alpha_2 [\xi\theta + 1 - \xi]\tilde{\beta}\,. \tag{ -35}$$

If the choice of P is not forced, then:

$$\Pr(\text{bank will not fail}) = q \tag{ -36}$$

and

$$W_d = \alpha_1 q\,. \tag{ -37}$$

For the politician to prefer to impose credit-allocation pressure, we need the expression in (-35) to exceed that in (-37). This will happen if:

$$\beta_1 > \frac{\alpha_1 [q - \theta\xi p - [1-\xi]\, p]}{\xi\theta + 1 - \xi}\,. \tag{ -38}$$

Now since

$$\frac{q - \xi\theta p - [1-\xi]\, p}{\xi\theta + 1 - \xi} > q - p\,,$$

we can say that if (-38) holds, so will (-33). So (-33) is redundant.

Case 3: $E = \hat{E}_\ell^*$

If the choice of P is forced:

$$\Pr(\text{bank will not fail}) = \xi\theta p + [1-\xi]\,p \qquad (\text{-39})$$

$$W_d = \alpha_1\left\{\xi\theta p + [1-\xi]\,p\right\} + \alpha_2\left[\xi\theta + 1 - \xi\right]\tilde{\beta}\,. \qquad (\text{-40})$$

If the choice of P is not forced:

$$\Pr(\text{bank will not fail}) = \theta\xi q + [1-\xi]\,q \qquad (\text{-41})$$

$$W_d = \alpha_1\left\{\theta\xi q + [1-\xi]\,q\right\}. \qquad (\text{-42})$$

For the politician to prefer to pressure credit allocation with P, we need the expression in (-40) to exceed that in (-42). This will be true if

$$\alpha_2\beta_1 > \alpha_1[q-p]$$

which obviously holds given (-38).

Case 4: $E = E_\ell^*$

If the politician forces a choice of P, the bank always prefers B. So:

$$\Pr(\text{bank will not fail}) = \theta p \qquad (\text{-43})$$

and

$$W_d = \alpha_1\theta p + \alpha_2\theta\tilde{\beta}\,. \qquad (\text{-44})$$

If the choice of P is not forced:

$$\Pr(\text{bank will not fail}) = \xi\theta q + [1-\xi]\,q \qquad (\text{-45})$$

and

$$W_d = \alpha_1\left[\xi\theta q + \{1-\xi\}\,q\right]. \qquad (\text{-46})$$

For the politician to prefer to pressure credit allocation with P, we need the expression in (-44) to exceed that in (-46) for $\beta = \beta_2$ and for the expression in (-46) to exceed that in (-44) for $\tilde{\beta} = \beta_1$. This will happen if

$$\beta_2 > \frac{\alpha_1\left[\xi\theta q + [1-\xi]\,q - \theta p\right]}{\alpha_2\theta} \qquad (\text{-47})$$

and

$$\beta_1 < \frac{\alpha_1\left[\xi\theta q + [1-\xi]q - \theta p\right]}{\alpha_2\theta}. \tag{-48}$$

To ensure that (-38) and (-48) can be simultaneously satisfied, we need:

$$\frac{\xi\theta q + [1-\xi]q - \theta p}{\theta} > \frac{q - \xi\theta p - [1-\xi]p}{\xi\theta + 1 - \xi}. \tag{-49}$$

Simplifying, we see that this requires that

$$\theta\left\{1 - \xi^2\theta - 2\xi(1-\xi)\right\} - [1-\xi]^2 < 0. \tag{-50}$$

Now as long as $\theta < \hat{\theta}$, we can show that the left-hand side of (-50) is strictly increasing in θ. Let θ^0 be the solution to . Then, we know that if $\theta < \hat{\theta}$ and $\theta < \theta^0$, (-50) will hold. Thus, (A-7) guarantees that (-49) holds. Given this, define

$$\underline{\beta} \equiv \frac{\alpha_1\left[q - \xi\theta p - [1-\xi]p\right]}{\xi\theta + 1 - \xi}, \tag{-51}$$

$$\overline{\beta} \equiv \frac{\alpha_1\left[\xi\theta q + [1-\xi]q - \theta p\right]}{\xi\theta + 1 - \xi} \tag{-52}$$

and we know that when (-49) holds, $\left(\underline{\beta}, \overline{\beta}\right)$ has positive measure.

Thus, if $\beta_1 \in \left(\underline{\beta}, \overline{\beta}\right)$ and $\beta_2 > \overline{\beta}$, then the politician will impose a choice of *P* with probability one in Cases 1, 2 and 3 (i.e., for $E \geq \hat{E}_\ell^*$), and will impose a choice of *P* with $E = E_\ell^*$ only when $\tilde{\beta} = \beta_2$ (probability $1-\delta \in (0,1)$).

Proof of Proposition 4:

For any $E \geq \hat{E}_\ell^*$, the politician always chooses to impose a choice of *P*. Given this, we know that $\hat{E}_\ell^*$ dominates either or E_h^* or $\hat{E}_h^*$ since $\hat{E}_\ell^* < E_h^* < \hat{E}_h^*$. . So we just need to compare E_ℓ^* and $\hat{E}_\ell^*$.

The bank's NPV at *t*=0 with E_ℓ^* is:

$$q\left[x - D_R^0\right]\left[\xi\theta + 1 - \xi\right] + \xi[1-\theta]\pi_h - E_\ell^* \tag{-53}$$

and with $\hat{E}_\ell^*$ it is

$$p\left[x - \hat{D}_R\right]\left[\xi\theta + 1 - \xi\right] + \xi[1-\theta]\pi_h - \hat{E}_\ell^* \tag{-54}$$

where

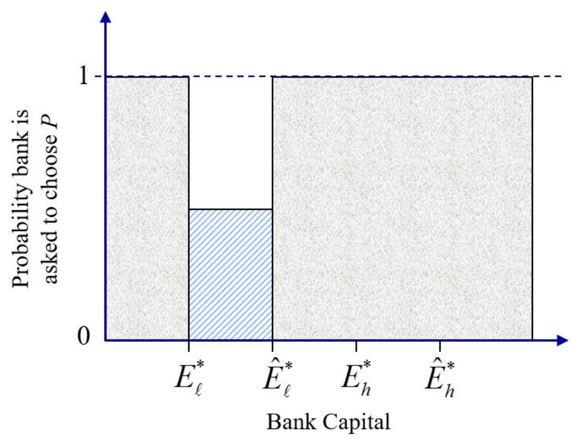
$$D_R^0 = DA_1 q^{-1} \tag{ -55}$$

and $\hat{D}_R$ is given by (-20), i.e., $\hat{D}_R = DB_1 p^{-1}$. Thus, $D_R^0 < \hat{D}_R$. Since $E_\ell^* < \hat{E}_\ell^*$, it follows that the expression in (-49) exceeds that in (-50) ■

Figure I.A.1: Sequence of Events

t=0	t=1	t=2
• Election outcome is revealed. • Banks choose capital structure and raise debt (deposits) and equity financing.	• Winning politician observes realized value of $\hat{\beta}$, observes bank capital structure and decides whether to impose credit-allocation pressure. • Bank chooses loan from C_1 or C_2 after receiving (real or perceived) regulatory pressure. • Regulator is able to prevent choice of *B* with probability θ in states in which bank prefers *B*.	• All payoffs realized and depositors and bank shareholders paid off.

Figure I.A.2. Probability of Credit-allocation Pressure as a Function of Bank Capital



ONLINE APPENDIX II: Examples of Formal and Informal Political Influence on Banks Exerted by Democratic Politicians

A. Examples of Formal Legislations

According to the release of The Illinois Department of Financial and Professional Regulation on May 19, 2022, Governor Pritzker (D) signed House Bill 5194, the Illinois Banking Development Districts Act, into law. This legislation creates a new incentive program for the creation of bank branches in underserved communities. The program uses public linked deposits and Community Reinvestment Act (CRA) examination standards to attract bank branches to underserved communities, similar to a program in New York. Like the New York program, banks and local governments in Illinois will jointly create a plan for a new banking development district in an area of need. The Illinois Department of Financial and Professional Regulation will evaluate these plans in consultation with the Illinois State Treasurer and approve plans that create consumer friendly bank options in underserved areas. The New York Banking Development Districts program has been active since 1997 and has led to over 30 new banking development districts, over 60,000 new banking accounts, and generated over $500 million in new credit to underserved households.

See also the press release of The Office of the Governor of New Mexicans on March 1, 2022 that Governor Grisham (D) signed House Bill 132, reforming predatory lending practices by lowering the cap on small loan interest rates from 175% to 36%. "As we continue to grow our economy and create quality jobs for New Mexicans across the state, protecting New Mexico consumers remains critically important," said Governor Grisham, "After many years of effort by advocates and legislators, I am glad to finally sign this legislation into law and deliver common-sense protections to vulnerable New Mexicans in rural and urban communities statewide."

B. Examples of Direct Guidance

Example 1: New York Governor Hochul (D) announced on April 15, 2022 that she was issuing guidance to expand access to low-cost bank accounts for New Yorkers in recognition of National Financial Literacy Month. The new DFS (Department of Financial Services) guidance encourages state-regulated banks to offer "Bank On" certified accounts to fulfill the state's affordable banking requirements. Bank On accounts eliminate overdraft fees and are critical to attracting individuals from underserved communities into the banking system. These reforms are critical to help low-income New

Yorkers access affordable, FDIC-insured banking options that protect and grow hard-earned savings. This builds on the Governor's financial inclusion agenda that includes tackling debt and surprise billing, helping families and those with student loans, strong consumer protection and transparency requirements for financial products and other recent actions to help New Yorkers gain financial security. "Financial literacy is an essential life skill for everyone's financial wellbeing, and that is why New York State continues to take bold steps to increase access to affordable banking services," Governor Hochul said. Superintendent of Financial Services Adrienne A. Harris said, "The ability to have a bank account is fundamental to the idea of financial health. Through both Bank On and Basic Banking accounts, more New Yorkers can have access to safe, affordable banking services that eliminate a number of fees, including overdraft, inactivity and low balance fees."

Example 2: New York Governor Hochul (D) announced actions on September 26, 2022 to engage New York's financial services industry to support the residents of Puerto Rico in the aftermath of Hurricane Fiona. The Department of Financial Services issued guidance calling on New York state-chartered banks to take all reasonable steps to assist consumers and businesses affected by the hurricane, including waiving ATM and late fees, increasing ATM withdrawal limits, and facilitating and expediting the transmission of funds. "These actions will help ease financial burdens for the many New Yorkers seeking to support family and friends in Puerto Rico, as well as anyone in Puerto Rico with New York bank accounts," Governor Hochul said.

Example 3: The PA CARE Package launched by Pennsylvania Attorney General Josh Shapiro on March 30, 2020, a voluntary consumer-relief initiative asking banks and other lenders to offer additional financial support to people across the Commonwealth. Lenders that joined the PA CARE Package initiative pledged to offer consumers relief that went beyond the protections required by the federal CARES Act.

C. Examples of Implicit Pressure or Informal Influence

C.1. Examples of lawmakers, government administrations, and activists pushing for a state-owned bank

Example 1: According to the report titled "N.J. considers setting up nation's second public bank" by Associate Press on November 13, 2019, "New Jersey would become the second state with a publicly run bank — after North Dakota and its century-old institution — under the aims of an executive order Democratic Gov. Phil Murphy signed on Wednesday. Murphy campaigned on creating a state-run bank that uses some state deposits for projects considered worthwhile, like low-income housing and student loans……. The idea is that state deposits currently sitting in large international banking institutions would instead go into the public bank, which could then provide what Murphy described as 'below market rate capital' to 'creditworthy and socially beneficial projects,' like infrastructure and small business lending, along with affordable housing and higher education loans. Murphy said any state deposits already in community banks could stay there."

Example 2: In support of House Bill 41 – Maryland State Bank Task Force – Establishment that established the Maryland State Bank Task Force to review and evaluate the creation of a Maryland State Bank, Peter Franchot, Comptroller of Maryland, stated in his testimony on March 23, 2021 that "Most of our tax dollars are held in banks that are not focused on our communities. A state bank could hold tax dollars focused on investing in projects that benefit low income, underbanked Marylanders that are commonly overlooked. Exploring this idea, at the very least, is good government and just common sense."

Example 3: According to a media article titled "Activists, lawmakers say Massachusetts public bank is solution to lending disparities" by Sam Turken on February 3, 2022, "As recently as 2011, after the Great Recession, Massachusetts lawmakers created a commission to consider the feasibility of setting up a public bank to help people access credit. The commission ultimately argued against the idea, and support fizzled out after a report from the Federal Reserve Bank of Boston said it would cost $3.6 billion for Massachusetts to create a public bank similar in size to North Dakota's bank. The idea has become popular again as the COVID-19 pandemic has highlighted gaps in affordable financing. 'This public bank will make sure that the resources are available not only to the community, but also to financial institutions for partnership and to make sure that they can provide the services to the community members that they are trying to integrate into the broader economy and financial system in Massachusetts,' state Rep. Nika Elugardo said during a recent press conference……. 'We're seeing in the state [a] climate crisis, housing crisis,' said state Sen. Jamie Eldridge, who backs the public bank legislation. 'This bill would really provide a boost of support for a lot of important projects that would help the commonwealth as a whole.' The State House and Senate's Joint Committee on Financial Services is currently considering the proposal. Supporters want the state to fund the bank with $50 million annually for four years with federal pandemic relief money. Then, the bank would become self-sufficient, like a private bank."

C.2. Examples of events that honor some banks for making loans to underserved communities and special loan programs for minority groups

Example 1: Oregon Governor Brown (D) lauded Wells Fargo's investment of $5.4 million worth of grants aimed at helping Oregon's minority-owned small businesses. The bank awarded grants to two Community Development Financial Institutions and a chamber of commerce. The money came through Wells' Open for Business Fund, a broader $420 million initiative the bank says is meant to help small businesses recover. "This $5.4 million investment in our state will help local CDFIs and nonprofits provide much needed access to capital, as well as technical assistance and experts who can help Black, Indigenous, Latino, Latina, Latinx, Asian, Pacific Islander and Native American entrepreneurs adapt and sustain their business," Brown is quoted as saying in a statement. "I appreciate Wells Fargo's efforts and am proud to support its commitment to Oregon's small businesses."

Example 2: Oregon Governor Brown (D) proclaimed October 17-22 of 2022 as "Community Bank Week". The week honored local banks and their employees for their economic and civic contributions in communities across the state. Oregon's community banks, most of which are chartered by the Division of Financial Regulation, play an essential role in promoting the economic health and prosperity of the state. In some communities, they are the sole provider of banking products and services and sometimes the largest employer. Community banks donate millions of dollars each year to nonprofits and local organizations. "Our state banks continue to support small businesses and agriculture in Oregon, as well as provide banking services and create thousands of jobs," said TK Keen, administrator for the Oregon Division of Financial Regulation. "State banks are also invested in their communities through their 64,000 volunteer hours each year and the millions of dollars they have pledged to support nonprofits and other endeavors throughout the state."

Example 3: In November 2020, Washington Governor Inslee (D) approved a foundational investment of $30 million for the state Department of Commerce to create a recovery loan program. Commerce is partnering with several financial institutions and community-based organizations to lend $100 million or more to small businesses and nonprofits with fewer than 50 employees and annual revenues of less than $3 million. Small business owners and nonprofits across Washington can apply for low interest loans of up to $150,000 in 60- or 72-month loan terms through the newly-launched Small Business Flex Fund. The Fund is a public-private partnership aimed at helping small businesses and nonprofits – particularly those in low-income communities – recover and grows as communities across the state reopen for business. "Reopening our economy is an incredible milestone and we want to ensure that our smallest businesses and nonprofits have equitable access to flexible financial support to get back on their feet," said Inslee. "The Small Business Flex Fund will not only aid in our businesses' recovery from the pandemic, but it will allow them to plan ahead, grow and thrive. And this is a tool that will remain available over many years, to bolster our smallest businesses and nonprofit organizations in times of economic hardship."

Example 4: We now provide an example of a Democrat mayor celebrating a bank making more minority loans. According to a news report titled "TCF announces $1 billion investment in loans for minority-owned businesses" reported in Bridge Michigan on July 24, 2020: : "TCF Bank and Detroit Mayor Mike Duggan announced Thursday that the bank will try to address long-standing racial discrimination in lending by making it possible for more people of color to receive financing. TCF is creating a $1 billion loan program for minority and women-owned businesses in Detroit and several other cities. Start-ups and existing businesses can apply for loans as small as $10,000 and up to $1 million. Duggan said he asked business leaders in Detroit to do something major to help fight systemic racism in the city and in the country. 'For a corporate leader, many of whom are running publicly traded corporations, it's a lot easier to write a check than to make a clear moral statement at a time of political tension, yet every one of them did it,' Duggan said. Duggan believes drastic steps — which include putting up a billion dollars in loan funds -— is the best way for Black Detroiters to gain the capital they have been denied for decades."

C.3. Opinions of state politicians in social media

Example: Here is a quote from Oregon Governor Brown's Facebook post on March 19, 2020: "Every Oregonian should have access to loans that can keep their small business afloat through this storm – but research shows that nationally, women- and minority-owned businesses are getting less aid."

ONLINE APPENDIX III: Tests of Alternative Explanations

A. Alternative Explanation 1: Change in Investment Opportunities?

To see whether the documented decline in bank equity is due to changes in banks' investment opportunities, we check whether such changes occur during the six-year window around gubernatorial elections. Specifically, we use a state's GDP growth, housing price, and income inequality in a given year to measure investment opportunities in the state-year. For housing price, we take the FHFA (Federal Housing Finance Agency) House Price Index (HPI), a broad measure of the movement of single-family house prices. For income inequality, we use the Gini coefficient from U.S. State-level Income Inequality Data provided by Mark W. Frank on his website.[10] We then run the DID regressions of Specification (1) with the dependent variables being the three measures. The results are presented in *Table I.A.5* of this online Appendix. We find that none of the DID coefficients β_2 is statistically significant across all measures. Hence, our finding is unlikely due to changes in banks' investment opportunities.

B. Alternative Explanation 2: Change in State Income Tax?

To see whether our finding is due to changes in state tax, we examine how the changes, if any, varies during the six-year window around gubernatorial elections. We take the maximum state income tax rates provided by the NBER; these are calculated from a run of the TAXSIM model.[11] For any given year for a state, we categorize it into one of the following three groups and assign to it a value of 1 (-1) if there is an increase (decrease) in the state income tax rate from the prior year and 0 if there is no change. We then run an ordered logit regression using the same benchmark DID regressions of Specification (1) as in our tests of bank decisions with the dependent variable being the category variable just defined. State-level characteristic variables such as GDP, GDP growth, and unemployment rate are included as controls, together with both election and year fixed effects. If the state income tax rate is more likely to increase under a Democrat governor, we would expect a positive coefficient β_2. The results are presented in *Table I.A.6* of this online Appendix. We find that the DID coefficients β_2 are not significant. That is, there is no significant difference in the change in state income taxes across different election scenarios. It suggests that our main finding is unlikely to be driven by a significant difference in income tax rate changes following elections.

[10] https://www.shsu.edu/eco_mwf/inequality.html

[11] Here is the website for the data: http://users.nber.org/~taxsim/state-rates/. For more details, see Feenberg and Coutts (1993) and the website http://users.nber.org/~taxsim/ for more on the TAXSIM model.

C. Alternative explanation 3: Difference in Regulatory Forbearance?

This alternative explanation for our findings that Democrats are more likely to exercise regulatory forbearance which engenders moral hazard runs into two difficulties. First, Republicans are considered more business-friendly than Democrats,[12] so they may actually be viewed as being more likely to bail out failing banks, implying that the issue of which party is more prone to bailouts is theoretically somewhat unclear. There is no empirical evidence that one party has been more inclined to bail out failed banks than the other.

Second, state banks, the focus of our study, are unlikely to be TBTF. Third, even if Democrats have a great proclivity for bailout due to TBTF concerns, the effects should be more evident for larger banks. We conduct a test of this prediction by regressing bank capital based on Specification (1) in the two subsamples of large vs. small banks, respectively. Specifically, we classify a bank as a small bank if its asset size is below the yearly sample median, and as a large bank otherwise.

The results, presented in *Table I.A.7* in this online Appendix, show that our main finding holds only for the subsample of small banks. Therefore, this further evidence suggests that the regulatory forbearance explanation is unlikely to account for our main finding. Instead, the evidence is more consistent with small banks being more susceptible to political influence possibly due to their lower bargaining power. For instance, small banks are more likely to have their business concentrated within a state, while large banks can have more cross-border business (or more credibly threat to expand beyond state borders).

[12] For example, see the 2016 Republican and Democratic Party Platforms discussed earlier.

Table I.A.1 The Effect of Democrat Governors on Federal-state Spread in CAMELS

This table presents results of OLS regressions that examine the effect of Democrat governors on the state-level federal-state spread in CAMELS (reported in Figure IV in Agarwal, Lucca, Seru, and Trebbi (2014)), labeled as *State lenience*. Columns (1) and (2) are for the full sample, while Columns (3) and (4) are for the subsample of states that did not experience any change in the ruling gubernatorial party during 1996-2011. *Democrat* is an indicator for a Democrat governor in the state-year. For each variable starting with "Bank", it is the median of the respective measure of all sample banks in the state-year. For instance, *Bank equity* is the median *Book equity* of banks in the state-year, where *Book equity* is defined in the Appendix. All other variables are defined in the Appendix. Robust standard errors are clustered at the calendar year level, and t-statistics are reported in parentheses below. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.

VARIABLES	(1) State lenience	(2) State lenience	(3) State lenience	(4) State lenience
Democrat	0.021***	0.021***	0.104***	0.096***
	(3.569)	(3.881)	(16.569)	(11.641)
State GDP(log)	0.007***	0.005***	0.013***	-0.004
	(8.836)	(7.179)	(5.429)	(-1.464)
State GDP growth	0.055	-0.019	0.071	0.124
	(0.700)	(-0.234)	(0.355)	(1.217)
State unemployment	0.006***	0.004***	-0.002	0.011***
	(5.764)	(3.206)	(-0.441)	(3.773)
Bank equity		-1.663***		-0.116
		(-5.048)		(-0.228)
Bank loan loss allowance		-2.658***		-5.289
		(-3.263)		(-1.446)
Bank ROA		1.187***		-3.198***
		(3.411)		(-7.241)
Bank non-performing loans		0.810*		-1.678
		(2.045)		(-1.503)
Observations	658	656	137	137
R-squared	0.057	0.107	0.513	0.794
Year FE	Yes	Yes	Yes	Yes

Table I.A.2 The Effect of Democrat Governors: Evidence from Geographically Close Banks across State Borders

This table presents results of the diff-in-diff (DID) regressions that examine the effect of Democrat governors on various bank decisions in different panels for the sample of state commercial banks that operate exclusively within 50 miles of their state borders 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 & 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 below. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.

Panel A: Bank capital decisions (DID)

	(1)	(2)	(3)
VARIABLES	Book equity	Dividend	Stock sale
After	0.011	-0.018	0.488***
	(0.218)	(-1.124)	(2.681)
After*Democrat	-0.080*	0.007	0.030
	(-1.843)	(0.936)	(0.276)
Other control variables	Yes	Yes	Yes
Observations	52,277	51,977	26,657
R-squared	0.134	0.156	0.082
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)

	(1)	(2)	(3)	(4)	(5)
VARIABLES	Mortgage	Real Estate	Commercial & Industrial	Individual	Agriculture
After	-0.456	-0.330	0.715	-0.642	-11.892***
	(-0.420)	(-0.445)	(0.254)	(-0.563)	(-3.458)
After*Democrat	0.000	0.885**	0.596	0.443	0.211
	(0.000)	(2.248)	(0.500)	(0.846)	(0.150)
Other control variables	Yes	Yes	Yes	Yes	Yes
Observations	50,772	51,174	25,800	51,207	40,694
R-squared	0.070	0.100	0.036	0.070	0.013
Bank FE	Yes	Yes	Yes	Yes	Yes
Election 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	-1.198	0.043
	(-1.503)	(1.523)
After*Democrat	1.226*	-0.028**
	(1.943)	(-2.066)
Other control variables	Yes	Yes
Observations	39,929	12,735
R-squared	0.030	0.108
Bank FE	Yes	Yes
Election FE	Yes	Yes
Year FE	Yes	Yes

Panel D: Loan quality and bank Performance (DID)

VARIABLES	(1) LLA	(2) Earnings Growth
After	-0.040***	0.040
	(-2.918)	(0.075)
After*Democrat	0.051***	-0.460**
	(3.784)	(-2.232)
Other control variables	Yes	Yes
Observations	52,125	51,623
R-squared	0.276	0.302
Bank FE	Yes	Yes
Election FE	Yes	Yes
Year FE	Yes	Yes

Table I.A.3 The Effect of Democrat Governors: Single- vs. Multi-state banks

This table presents results of the diff-in-diff (DID) regressions that examine the effect of Democrat governors on various bank decisions in different panels in the three years prior to gubernatorial elections and in the three years after gubernatorial elections during 1990-2012 for the subsamples of state banks that operate only in their home states (single-state, in the odd columns) and state banks that have cross-state operations in a year (multi-state banks, in the even columns). 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 & 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 control variables are included but not tabulated. Robust standard errors are clustered at the bank level, and t-statistics are reported in parentheses below. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.

Panel A: Bank capital decisions (DID)

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Book equity	Book equity	Dividend	Dividend	Stock sale	Stock sale
Bank operation	Single-state	Multi-state	Single-state	Multi-state	Single-state	Multi-state
After	0.052*	-0.326*	-0.004	-0.019	0.190**	-0.853
	(1.884)	(-1.689)	(-0.469)	(-0.301)	(2.421)	(-1.033)
After*Democrat	-0.057**	0.116	0.009**	0.007	0.010	0.132
	(-2.469)	(0.657)	(2.265)	(0.230)	(0.210)	(0.413)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	221,223	9,033	218,126	8,762	122,308	4056
R-squared	0.115	0.205	0.127	0.155	0.086	0.152
Bank FE	Yes	Yes	Yes	Yes	No	No
Election FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes

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

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
Bank operation	Single-state	Multi-state	Single-state	Multi-state	Single-state	Multi-state	Single-state	Multi-state	Single-state	Multi-state
After	-0.856	6.239**	-1.143***	2.343	0.006	-16.908*	-0.116	6.914*	-4.287**	-16.642
	(-1.554)	(2.286)	(-2.820)	(1.051)	(0.005)	(-1.676)	(-0.177)	(1.806)	(-2.264)	(-1.593)
After*Democrat	0.448	-3.009	0.999***	0.051	0.685	3.400	0.566*	-0.158	-0.792	11.954
	(1.637)	(-1.526)	(4.953)	(0.035)	(1.212)	(0.771)	(1.917)	(-0.072)	(-1.023)	(1.558)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	216,167	8,393	217,322	8,518	119,223	3,681	216,778	8,533	155,681	5,970
R-squared	0.061	0.155	0.098	0.189	0.028	0.076	0.055	0.095	0.009	0.066
Bank FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Election FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Panel C: Nature of lending (DID)

	(1)	(2)	(3)	(4)
VARIABLES	Branching	Branching	CRA Rating	CRA Rating
Bank operation	Single-state	Multi-state	Single-state	Multi-state
After	0.682	-0.516	0.024	-0.082
	(1.581)	(-0.381)	(1.503)	(-1.326)
After*Democrat	0.303	0.149	-0.019***	0.060
	(0.988)	(0.128)	(-2.605)	(1.511)
Other controls	Yes	Yes	Yes	Yes
Observations	159,568	7,443	45,062	2,022
R-squared	0.012	0.079	0.085	0.185
Bank FE	Yes	Yes	Yes	Yes
Election FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

Panel D: Bank Performance (DID)

	(1)	(2)	(3)	(4)
VARIABLES	LLA	LLA	Earnings Growth	Earnings Growth
Bank operation	Single-state	Multi-state	Single-state	Multi-state
After	-0.016**	0.034	0.590*	-1.973
	(-2.143)	(0.730)	(1.957)	(-1.162)
After*Democrat	0.038***	-0.002	-0.439***	-0.597
	(5.534)	(-0.058)	(-3.782)	(-0.762)
Other controls	Yes	Yes	Yes	Yes
Observations	220,218	8,791	218,338	8,773
R-squared	0.282	0.454	0.259	0.358
Bank FE	Yes	Yes	Yes	Yes
Election FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes

Table I.A.4 The Effect of Democrat Governors on Mortgage Decisions by State Banks

Panels A (Diff-in-diff) and B (Regression discontinuity design) present results of regressions that examine the effect of Democrat governors on banks' mortgage decisions. The dependent variables in each column are indicated at the top, where *Mortgage application* is the proportion of low-income mortgage applicants among all applicants and *Mortgage size* is the size of a bank's mortgage lending to low-income households relative to its total mortgage asset origination in the year. An applicant is classified as low-income if his/her income provided in the application is below the state per capita personal income in the year. 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 1998-2012. 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 1998-2012. 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 below. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.

Panel A: Mortgage lending decisions (DID)

	(1)	(2)
VARIABLES	Mortgage application	Mortgage size
After	0.623	0.157
	(1.066)	(0.588)
After*Democrat	0.898***	-0.000
	(2.711)	(-0.002)
ROA	-11.855	-6.837
	(-0.641)	(-0.796)
ROA growth	13.921	-1.257
	(0.879)	(-0.153)
Asset(log)	-0.810*	-0.370**
	(-1.804)	(-2.053)
State GDP(log)	-3.023	0.593
	(-0.927)	(0.401)
State GDP growth	21.316***	2.319
	(4.209)	(0.890)
State unemployment	0.120	-0.030
	(0.643)	(-0.334)
Mortgage applicant income		0.999***
		(122.606)
Observations	51,438	42,729
R-squared	0.027	0.752
Bank FE	Yes	Yes
Election FE	Yes	Yes
Year FE	Yes	Yes

Panel B: Mortgage lending decisions (RD)

VARIABLES	(1) Mortgage application	(2) Mortgage application	(3) Mortgage size	(4) Mortgage size
Democrat	1.782**	3.500***	0.177	0.785*
	(2.044)	(3.102)	(0.496)	(1.672)
Observations	22,373	22,373	18,340	18,340
R-squared	0.061	0.062	0.808	0.808
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

Table I.A.5 The Effect of Democrat Governors on State GDP Growth, Housing Price, and Income Inequality

This table presents results of regressions that examine the effect of Democrat governors on state GDP growth, housing price, and income inequality during 1990-2012. All variables are defined as in the Appendix. Robust standard errors are clustered at the election level, and t-statistics are reported in parentheses below. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.

State-level GDP growth, housing price, and income inequality

VARIABLES	(1) State GDP growth	(2) Home price index	(3) Gini index
After	0.003	5.088	-0.234
	(0.659)	(0.959)	(-0.887)
After*Democrat	-0.000	-3.534	0.175
	(-0.082)	(-0.350)	(0.427)
State GDP(log)	0.173***	288.480***	-3.132
	(4.380)	(4.877)	(-1.300)
State GDP growth		-217.834***	4.217*
		(-3.746)	(1.669)
State unemployment	-0.000	-15.970***	0.222*
	(-0.106)	(-4.113)	(1.700)
Observations	1,172	1,172	1,172
R-squared	0.666	0.947	0.868
Election FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes

Table I.A.6 The Effect of Democrat Governors on State Income Tax

This table presents results of regressions that examine the effect of Democrat governors on state income tax. An ordered logit regression is run where the dependent variable is 1 (-1) when a state experiences an increase (decrease) in state income tax in a year from the prior year, and 0 when the state income tax does not change from the prior year. All other variables are defined in the Appendix. Robust standard errors are clustered at the election level, and t-statistics are reported in parentheses below. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.

VARIABLES	Change in state income tax
After	-0.116
	(-0.310)
After*Democrat	0.094
	(0.303)
State GDP(log)	0.855
	(0.376)
State GDP growth	-0.883
	(-0.296)
State unemployment	0.277*
	(1.913)
Observations	1,706
R-squared	0.101
Election FE	Yes
Year FE	Yes

Table I.A.7 The Effect of Democrat Governors on Bank Capital: Subsamples Based on Bank Size

This table presents results of the Diff-in-diff (DID) regressions that examine the effect of Democrat governors on bank capital in two subsamples of small and large banks. The whole sample, which 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, is divided into two subsamples – small vs. large banks. Large banks are defined as banks with their total assets being greater than (or equal to) the yearly sample median, and small banks are defined otherwise. The dependent variable, *Book equity*, is the ratio of book value of equity to book value of total assets. It is multiplied by 100 to scale up the estimated coefficients of the independent variables. All control variables are defined in the Appendix. Robust standard errors are clustered at the bank level, and t-statistics are reported in parentheses below. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.

VARIABLES	Small banks	Large banks
After	0.116***	-0.026
	(2.908)	(-0.663)
After*Democrat	-0.073**	-0.017
	(-2.212)	(-0.562)
ROA	45.955***	58.751***
	(14.046)	(20.091)
ROA growth	-11.747***	-22.438***
	(-5.657)	(-11.218)
Asset(log)	-1.888***	-0.414***
	(-16.252)	(-5.227)
State GDP(log)	-0.869**	0.362
	(-2.331)	(1.065)
State GDP growth	-0.287	-0.144
	(-0.651)	(-0.354)
State unemployment	-0.093***	0.003
	(-5.150)	(0.175)
Observations	114,278	115,978
R-squared	0.126	0.134
Bank FE	Yes	Yes
Election FE	Yes	Yes
Year FE	Yes	Yes

Table I.A.8 The Effect of Democrat Governors on Bank Capital, Loan Making and Performance: Controlling for Political Connection

This table presents results of the diff-in-diff (DID) regressions that examine the effect of Democrat governors on various bank decisions in different panels for the sample that 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 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 & 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. *Senate banking committee* is a dummy variable 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. All other variables are defined in the Appendix. Robust standard errors are clustered at the bank level, and t-statistics are reported in parentheses below. *, **, and *** indicate significance at 10%, 5%, and 1%, respectively.

Panel A: Bank capital decisions (DID)

	(1)	(2)	(3)
VARIABLES	Book equity	Dividend	Stock sale
After	0.039	-0.004	0.188**
	(1.420)	(-0.504)	(2.420)
After*Democrat	-0.047**	0.009**	-0.011
	(-2.062)	(2.386)	(-0.243)
Senate banking committee	0.015	-0.000	-0.060
	(0.924)	(-0.001)	(-1.585)
Observations	230,256	226,888	126,364
R-squared	0.110	0.128	0.083
Other control variables	Yes	Yes	Yes
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)

	(1)	(2)	(3)	(4)	(5)
VARIABLES	Mortgage	Real Estate	Commercial & Industrial	Individual	Agriculture
After	-0.617	-1.100***	-0.247	0.188	-4.469**
	(-1.148)	(-2.759)	(-0.177)	(0.292)	(-2.398)
After*Democrat	0.372	1.030***	0.592	0.551*	-0.670
	(1.371)	(5.115)	(1.058)	(1.874)	(-0.858)
Senate banking committee	-0.210	-0.668***	-0.548	-0.345	-0.678
	(-0.775)	(-3.420)	(-1.020)	(-1.170)	(-0.836)
Observations	224,560	225,840	122,904	225,311	161,651
R-squared	0.061	0.098	0.028	0.055	0.008
Other control variables	Yes	Yes	Yes	Yes	Yes
Bank FE	Yes	Yes	Yes	Yes	Yes
Election 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	0.553	0.024
	(1.326)	(1.574)
After*Democrat	0.324	-0.017**
	(1.090)	(-2.335)
Senate banking committee	-0.275	0.004
	(-1.245)	(0.651)
Observations	167,011	47,084
R-squared	0.012	0.084
Other control variables	Yes	Yes
Bank FE	Yes	Yes
Election FE	Yes	Yes
Year FE	Yes	Yes

Panel D: Loan quality and bank Performance (DID)

VARIABLES	(1) LLA	(2) Earnings Growth
After	-0.015**	0.509*
	(-2.028)	(1.708)
After*Democrat	0.037***	-0.461***
	(5.550)	(-4.019)
Senate banking committee	-0.019***	0.077
	(-3.911)	(0.624)
Observations	229,009	227,111
R-squared	0.285	0.260
Other control variables	Yes	Yes
Bank FE	Yes	Yes
Election FE	Yes	Yes
Year FE	Yes	Yes